Environment Agency
Permitting Support Centre
Quadrant 2
99 Parkway Avenue
Parkway Business Centre
Sheffield
S9 4WF

10th October 2024

Dear Sir/Madam

RE: PERMIT APPLICATION – EPR/FP3506EY/P001 – CLAYTON HALL FARM BIOENERGY LLP

Please find attached the application for a Bespoke Permit Variation on behalf of my client Clayton Hall Farm Bioenergy LLP.

Payment will be made, and confirmation sent to PSC payments.

Please do not hesitate to contact me further should you need any further information.

Kindest regards

Julie Dingwall

Julie Dingwall
Senior Consultant

07796 320634
julie.dingwall@olivecompliance.com

Section 1

Application for an environmental permit Part F1 – Charges and declarations

We recommend you use an Adobe Acrobat product to complete the form. You may not be able to complete the form using different software, such as the PDF reader built into your internet browser

Fill in this part for all applications for:

- installations (excluding new permit and variation applications for intensive farming. Use application form Part B3.5 or C3.5 instead)
- waste operations
- mining waste operations
- medium combustion plant
- specified generators
- water discharges (excluding treated domestic sewage effluent discharges of up to 15 cubic metres (15m^3) a day into ground or up to 20 cubic metres (20m^3) a day to surface water)
- groundwater activities (excluding small discharges of 15m^3 per day or less if using Part B6.5 OR existing small discharges to Source Protection Zone1 if using Part B6.6)

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.

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

We anticipate it will take less than 3 hours to fill in this form if you have all the necessary information available.

Contents

1 Working out charges

You must fill out this section for all applications except for waste mobile plant and Part B surrender notifications.

You have to submit an application fee with your application. For guidance on the fee and how to pay your charges, please see our charging guidance (**https://www.gov.uk/government/publications/environmental-permitting-charges-guidance**) and the current charging scheme **https://www.gov.uk/government/publications/environmental-permits-and-abstraction-licences-tables-of-charges**. You can also contact us for pre-application advice to help work out the charges.

Please note that there is an annual subsistence charge to cover the costs we incur in the ongoing regulation of the permit.

Table 1 – Type and number of facilities being applied for

For example, if you are submitting one installation application, enter the number one into the first column.

Installation	Waste	Mining waste	Medium Combustion Plant (MCP)/ Specified Generator (SG)	Water discharge	Groundwater activity

Table 2 – General application charge (A)

Charge activity reference from the charging scheme tables	Charge activity description from the charging scheme tables	What are you applying for? For example, a new permit, minor variation, normal variation, substantial variation, surrender, low risk surrender, transfer	Amount
e.g. 1.17.3	e.g. Section 5.2 – landfill for hazardous waste	e.g. transfer application	e.g. £5,561
1.16.2.1	Section 5.4 (a)(i) and (b)(i)	Substantial Variation	£12,586
	non - hazardous waste installation –		
	biological treatment.		
Total A			£12,586

1 Working out charges, continued

Table 3 – Additional assessment charges (B)

Part 1.19 Charges for plans and assessments			Tick appropriate
Reference	Plan or assessment	Charge	
1.19.1	Waste recovery plan or variation or revision of a waste recovery plan.	£1,231	☐
1.19.2	Habitats assessment (except where the application activity is a flood risk activity, water discharge or groundwater activity).	£779	☐
1.19.3	Fire prevention plan (except where the application activity is a farming installation).	£1,241	☐
1.19.4	Pests management plan (except where the application activity is a farming installation).	£1,241	☐
1.19.5	Emissions management plan (except where the application activity is a farming installation).	£1,241	☐
1.19.6	Odour management plan (except where the application activity is a farming installation).	£1,246	☑
1.19.7	Noise and vibration management plan (except where the application activity is a farming installation).	£1,246	☐
1.19.8	Ammonia modelling assessment	£620	☐
1.19.9	Dust and bio-aerosol management plan.	£620	☐
1.19.10	Habitats assessment for discharges to water and groundwater activities.	£2,035	☐
1.19.11	Specific Substances Assessment for a water discharge activity to surface water.	£3,774	☐
1.19.12	Specific Substances Assessment for a groundwater activity.	£1,546	☐
1.19.13	Advertising	£500	☐
Total B			

Total charges

Add the total charges from Table 1 to the total charges from Table 2 (total A plus total B)

£13832

2 Payment

You must fill out this section for all applications except for waste mobile plant and Part B surrender notifications.

Tick below to show how you have paid.

☐ Cheque

☐ Credit or debit card

☑ Electronic transfer (for example, BACS)

Cheques

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

2 Payment, continued

Please write the name of your company and application reference number on the back of your cheque. We will not accept cheques with a future date on them.

Credit/debit cards

If you are paying by credit or with debit card we will call you. We can accept payments by Visa, MasterCard or Maestro card only.

☐ Call me to arrange payment by debit or credit card

Electronic transfer BACS

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	PSCAPPXXXXXYYY

You need to create your own reference number. It should begin with PSCAPPWASTE (Waste), PSCAPPINST (Installation), PSCAPPWQ (Water Quality) (to reflect the facility type) 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@gov.sscl.com**.

If you are making your payment from outside the United Kingdom, it must be in sterling. Our IBAN number is GB23NWBK60708010014411 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.

Provide a unique reference number for the application, i.e. do not only use the company name only

PSCAPPWASTECHFBP0924

State who is paying (full name and whether this is the agent/applicant/other)

Applicant

Fee paid

£ 13832

Date payment sent (DD/MM/YYYY)

08/10/2024

3 Privacy notice

The Environment Agency runs the environmental permit application service.

See **https://www.gov.uk/guidance/environmental-permits-privacy-notice** for how we use your personal information in services to support environmental permitting.

4 Confidentiality and national security

Confidentiality

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. You can find guidance on confidentiality in 'Environmental permitting guidance: core guidance', published by Defra and available at **https://www.gov.uk/government/publications/environmental-permitting-guidance-core-guidance--2**.

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

☐ Please treat the specified information in my application as confidential

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 at **https://www.gov.uk/government/publications/environmental-permitting-guidance-core-guidance--2**

You cannot apply for national security via this application.

Now fill in section 5

5 Declaration

If you knowingly or recklessly 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.

A relevant person should make the declaration (see the 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'.

5 Declaration, continued

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.

☑ 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)

☐ 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 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

First name

George Alexander Depledge

Last name

Gemmel

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

CLAYTON HALL FARM BIOENERGY LLP

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

LLP Designated Member

Today's date (DD/MM/YYYY)

30/09/2024

For transfers only – declaration for person receiving the permit

A relevant person should make the declaration (see the 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.

5 Declaration, continued

☐ 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)

Name

Title

First name

Last name

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

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

Today's date (DD/MM/YYYY)

Now go to section 6

6 Application checklist

You must fill in this section.

If your application is not complete, we will return it to you. If you aren't sure about what you need to send, contact us before you submit your application. For further information on pre-application advice, see **https://www.gov.uk/guidance/get-advice-before-you-apply-for-an-environmental-permit.**

You must do the following:

☑ Complete legibly all parts of the application form that are relevant to you and your activities

☑ Identify relevant supporting information in the form and send it with the application

☑ List all the documents you are sending in the table below.

☐ For new permit applications or any changes to the site plan, provide a plan that meets the standards given in the guidance note on part F1

☐ Provide a supporting letter for any claim that information is confidential

☑ Get the declaration completed by a relevant person (not an agent)

☑ Send the correct fee

6 Application checklist, continued

Continue on an extra sheet if necessary.

Question reference	Document title	Document reference
Part C2 2b	Non - Technical Summary	NTS_CHFB
Part C2 3d	Environment Management System	EMS_CHFB
Part C2 5b	Proposed Permitted Site Boundary	Clayton Bioenergy 002A Proposed Permitted Site Boundary
Part C2 6	Environmental Risk Assessment	ERA_CHFB
Part C3 3a Table 3	Non - Technical Summary	NTS_CHFB
Part C3 3b Table 4	Non - Technical Summary	NTS_CHFB
Part C2 5a	Drawings	Drawings_CHFB
Part C3 2	Emission Points (Air)	C3 Q2

Document reference

7 How to contact us

If you have difficulty 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 422549 (Monday to Friday, 8am to 6pm)

Email: **enquiries@environment-agency.gov.uk**

Website: **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.

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 and supporting documents to:

For water discharges and groundwater activities by email to
PSC-WaterQuality@environment-agency.gov.uk

For waste, installations, medium combustion plant and specified generators by email to
PSC@environment-agency.gov.uk

For large electronic documents (too large for email attachment) you can upload your applications to file sharing sites and send us a link to download the documents. Alternatively, you can send more than one email with documents attached.

Or by post to:

Permitting Support, NPS Sheffield
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 the Part A form).

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.

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 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.

You can apply online for Waste standard rules environmental permits, bespoke waste permits and bespoke Medium combustion plant permits

Apply online for an environmental permit.

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 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

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 and if you are applying for a new permit or transferring a permit for an installation or waste activity please also fill in Appendix 1
An organisation of individuals (for example, a partnership)	☐ Now go to section 3 and if you are applying for a new permit or transferring a permit for an installation or waste activity please also fill in Appendix 1
A public body	☐ Now go to section 4
A registered company or other corporate body	☑ Now go to section 5 and if you are applying for a new permit or transferring a permit for an installation or waste activity please also fill in Appendix 1

2 Applications from an individual

2a Please give us the following details

Name

Title (Mr, Mrs, Miss and so on) _____

First name _____

Last name _____

Now go to section 6

3 Applications from an organisation of individuals or charity

3a Type of organisation

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

3b Details of the organisation or charity

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

Contact name

Title (Mr, Mrs, Miss and so on)

First name

Last name

Now go to question 3c or section 6

3c Details of charity

Full name of charity

This should be the full name of the legal entity not any trading name.

3d Company registration number

If you are registered with Companies House please tell us your registration number

3e Charity Commission number

If you are registered with the Charity Commission please tell us your registration number

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

5 Applications from companies or corporate bodies, continued

5c Please give details of the directors

If relevant, provide details of other directors and company secretary, if there is one, on a separate sheet and tell us the reference you have given this sheet.

Document reference

Details of company secretary (if relevant) and director/s

Title (Mr, Mrs, Miss and so on)

First name

Last name

Title (Mr, Mrs, Miss and so on)

First name

Last name

Now go to section 6

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) Mr

First name George

Last name Gemmell

Address Clayton Hall Farm Bioenergy Plant

Clayton West

Huddersfield

West Yorjshire

Postcode HD8 9QE

Contact numbers, including the area code

Phone

Fax

Mobile 07714307995

Email george@claytonhallfarm.co.uk

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 EPR/FP3596EY/P001

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

Contact name

Title (Mr, Mrs, Miss and so on)

First name

Last name

Address

Postcode

6 Your address, continued

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?

It will help us if there is someone we can contact if we have any questions about your application. The person you name should have the authority to act on your behalf.

Please add a second contact on a separate sheet if this person is not always available.

Document reference of this separate sheet

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

Contact name

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

First name Julie

Last name Dingwall

Address Olive Compliance Ltd
Planet House
Northumbrian Way
Newcastle-upon-Tyne

Postcode NE12 6EH

Contact numbers, including the area code

Phone 0191 8183341

Fax

Mobile 07796320634

Email julie.dingwall@olivecompliance.com

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?

Note: Please provide the name and address that all invoices should be sent to for your subsistence fees.

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)	Mr
First name	George
Last name	Gemmel
Address	Clayton Hall Farm
	Clayton West
	Huddersfield
	W Yorkshire
Postcode	HD8 9QE

Contact numbers, including the area code

Phone	07714307995
Fax	
Mobile	
Email	george@claytonhallfarm.co.uk

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

Website: 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. More information on how to do this is available at: 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.

9 Where to send your application

For how many copies to send see the guidance note on part A.

For water discharges by email to PSC-WaterQuality@environment-agency.gov.uk

For waste and installations by email to PSC@environment-agency.gov.uk

For flood risk activity permits send 1 copy only to enquiries@environment-agency.gov.uk or to the local Environment Agency office for where the work is proposed to be carried out.

Or

Permitting Support, NPS Sheffield
Quadrant 2
99 Parkway Avenue
Parkway Business Park
Sheffield
S9 4WF

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

£

Appendix 1 – Date of birth information for installation and waste activities (applications for a new permit or transferring a permit) only

Date of birth information in this appendix will not be put onto our Public Register

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

An individual ☐ Now go to 2

An organisation of individuals (for example, a partnership) ☐ Now go to 3

A registered company or other corporate body ☐ Now go to 4

2 Applications from an individual

Please give us the following details

Name

Date of birth (DD/MM/YY)

3 Applications from an organisation of individuals or charity

Details of the organisation or charity

If you are an organisation of individuals, please give the date of birth details of the main representative below. If relevant, provide details of other members on a separate sheet and tell us the document reference you have given this sheet.

Name

Date of birth (DD/MM/YY)

Document reference

4 Applications from companies or corporate bodies

Name of the company

Please give the date of birth details for all directors and company secretary if there is one. If relevant, provide those details of other directors on a separate sheet and tell us the document reference you have given this sheet.

Details of company secretary (if relevant) and director/s

Name

Date of birth (DD/MM/YY)

Name

Date of birth (DD/MM/YY)

Name

Date of birth (DD/MM/YY)

Document reference

Application for an environmental permit
Part C3 – Variation to a bespoke installation permit

Environment Agency

Fill in this part of the form, together with part A, part C2 and part F1, if you are applying to vary (change) the conditions or any other part of the permit.

Please check that this is the latest version of the form available from our website.

You only need to give us details in this application for the parts of the permit that will be affected (for example, if you are adding a new facility or making changes to existing ones).

You do not need to resend any information from your original permit application if it is not affected by your proposed changes.

Please read through this form and the guidance notes that go 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 activities are you applying to vary?

Fill in Table 1a below with details of all the activities listed in schedule 1 or other references (see note 1) of the Environmental Permitting Regulations (EPR) and all directly associated activities (DAAs) (in separate rows), that you propose to vary.

Note: if you want to add a Medium Combustion Plant or Specified Generator (MCP/SG) to your installation please use part C2.5 instead. If you want to vary an intensive farm permit please use part C3.5 instead.

Fill in a separate table for each installation you are applying to vary. 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 document.

Document reference: N/A

1 What activities are you applying to vary?, continued

Table 1a – Types of activities

Schedule 1 listed activities						
Installation name	Schedule 1 or other references (See note 1)	Description of the activity (See note 2)	Activity capacity (See note 3)	Annex I (D codes) and Annex II (R codes) and descriptions	Hazardous waste treatment capacity (if this applies) (See note 3)	Non-hazardous waste treatment capacity (if this applies) (See note 3)
If there are not enough rows, send a separate document and give the document reference number here	Put your main activity first			For installations that take waste only	For installations that take waste only	For installations that take waste only
Clayton Hall Farm Bioenergy	A23	Anerobic Digestion		R13/R3/R1/D10/D15	N/A	N/A
Directly associated activities (See note 4)						
Name of DAA If there are not enough rows, send a separate document and give the document reference number here		Description of the DAA (please identify the schedule 1 activity it serves)				
N/A						
For installations that take waste (See note 5 below)		Total storage capacity				
		Annual throughput (tonnes each year)				

1 What activities are you applying to vary?, continued

Notes

1. Quote the section number, part A1 or A2 or B, then paragraph and sub paragraph number as shown in EPR part 2 of schedule 1.
2. Use the description from schedule 1 of EPR. Include any extra detail that you think would help to accurately describe what you want to do.
3. By 'capacity', we mean:

- the total incineration capacity (tonnes every hour) for waste incinerators
- the total landfill capacity (cubic metres) for landfills
- the total capacity (cubic metres) for the recovery of hazardous waste on land
- the total treatment capacity (tonnes each day) for waste treatment operations
- the total storage capacity (tonnes) for waste storage operations
- the processing and production capacity for manufacturing operations, or
- the thermal input capacity for combustion activities

4. Fill this in as a separate line and give an accurate description of any other activities associated with your schedule 1 activities. You cannot have Directly Associated Activities (DAAs) as part of a mobile plant application.
5. By 'total storage capacity', we mean the maximum amount of waste, in tonnes, you store on the site at any one time.

Types of waste accepted

For those installations that take waste, for each line in Table 1a (including DAAs), fill in a separate document to list those wastes you will accept on to the site for that activity. Give the List of Wastes catalogue code and description (see https://www.gov.uk/government/publications/waste-classification-technical-guidance).

If you need to exclude waste 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.

Please provide the reference for each document.

You can use Table 1b as a template.

If you want to accept any waste with a code ending in *99*, you must provide more information and a full description of the waste in the document, (for example, detailing the source, nature and composition of the waste). Where you only want to receive specific wastes within a waste code you can provide further details of the waste you want to receive. Where a waste is dual coded you should use both codes for the waste.

Document reference of this extra information

1 What activities are you applying to vary?, continued

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

Waste code	Description of the waste
Example	Example
02 01 08*	Agrochemical waste containing hazardous substances
18 01 03*	Infectious clinical waste, not contaminated with chemicals or medicines – human healthcare (may contain sharps) for alternative treatment
17 05 03*/17 06 05*	Non-hazardous soil from construction or demolition contaminated with fragments of asbestos cement sheet

1c Recovery of hazardous waste on land

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

No ☑ Now go to question 2

Yes ☐

Have you written a waste recovery plan (WRP) that shows that you will use waste to perform the same function as non waste materials you would have used?

No You must write a WRP to support your application.

Yes

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

No

Yes

Have there been any changes to your proposal since the discussions?

No

Yes

Please send us a copy of your current waste recovery plan that complies with our guidance at https://www.gov.uk/government/publications/deposit-for-recovery-operators-environmental-permits/waste-recovery-plans-and-deposit-for-recovery-permits. You need to highlight any changes you may have made since your pre-application discussions.

Document reference

Please note that there is an additional charge for the assessment or re assessment of a waste recovery plan that must be submitted as part of this application. For the charge see https://www.gov.uk/government/publications/environmental-permitting-charges-guidance/environmental-permitting-charges-guidance

2 Point source emissions to air, water and land

Fill in Table 2 below with details of the point source emissions that result from the operating techniques at each of your installations.

Fill in one table for each installation, continuing on a separate sheet if necessary.

Table 2 – Emissions (releases)

Installation name	Clayton Hall Farm Bioenergy Plant			
Point source emissions to air				
Emission point reference and location	Source	Parameter	Quantity	Unit
Generator Exhaust				
See Supporting Document C3 Q2				
Point source emissions to water (other than sewers)				
Emission point reference and location	Source	Parameter	Quantity	Unit
No point source to water				
Point source emissions to sewers, effluent treatment plants or other transfers off site				
Emission point reference and location	Source	Parameter	Quantity	Unit
No point source to sewers				
Point source emissions to land				
Emission point reference and location	Source	Parameter	Quantity	Unit
No point source to land				

You will also need to complete application form part C6 if your variation includes changing or adding a point source emission(s) to:

- water
- groundwater or
- sewer

Supporting information

3 Operating techniques

3a Technical standards

Fill in Table 3a for each activity at the installation you refer to in Table 1a above and list the 'Best Available Techniques' you are planning to use. If you use the standards set out in the relevant BAT conclusion(s), BAT reference document(s) (BREF) and/or technical guidance(s) (TGN) there is no need to justify using them within your documents in Table 3a.

For Part A(2) activities refer to https://www.gov.uk/government/collections/integrated-pollution-prevention-and-control-sector-guidance-notes and for Part B and Schedule 14 activities see https://www.gov.uk/government/collections/local-air-pollution-prevention-and-control-lappc-process-guidance-notes

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 C2 (general bespoke permit) of the application form.

For each of the activities listed in Table 1a, the documents in Table 3a should summarise:

- the operations undertaken
- the measures you will use to control the emissions from your process, as identified in your risk assessment or the relevant BAT conclusions, BREF or technical guidance
- how you will meet other standards set out in the relevant BAT conclusions document, BREF or technical guidance

Table 3 – Technical standards

Fill in a separate table for each activity at the installation.

Installation name	Clayton Hall Farm Bioenergy Plant	
Description of the schedule 1 activity or directly associated activity	Best available technique (BATC, BREF or TGN reference) (see footnote below)	Document reference (if appropriate)
See NTS_CHFB		

* Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)

In all cases, describe the type of facility or operation you are applying for and provide site infrastructure plans, location plans and process flow diagrams or block diagrams to help describe the operations and processes undertaken. Give the document references you use for each plan, diagram and description.

Document reference: See NTS_CHFB

3a1 Does your permit (in Table 1.2 Operating Techniques or similar table in the permit) have references to any of your own documents or parts of documents submitted as part of a previous application for this site?

No ☑ Now go to 3b

Yes ☐ Please tell us in a separate document what document references are no longer valid or have been superseded and why

Please also tell us below the reference number you have given the document and send it in with your application

Document reference

3b General requirements

Fill in a separate Table 4 for each installation.

Table 4 – General requirements

Name of the installation	Clayton Hall Farm Bioenergy Plant
If the technical guidance 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 See NTS_CHBP
Where the technical guidance or your risk assessment shows that odours are an important issue, send us your odour management plan	Document reference or references See NTS_CHBP
If the technical guidance 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 N/A

For guidance on risk assessments for your environmental permit see https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit

3c Types and amounts of raw materials

Fill in Table 5 for all schedule 1 activities. Fill in a separate table for each installation.

Table 5 – Types and amounts of raw materials

Name of the installation		Clayton Hall Farm Bioenergy Plant		
Capacity (See note 1 below)				
Schedule 1 activity	Description of raw material and composition	Maximum amount (tonnes) (See note 2 below)	Annual throughput (tonnes each year)	Description of the use of the raw material including any main hazards (include safety data sheets)

Notes

1 By 'capacity', we mean the total storage capacity (tonnes) or total treatment capacity (tonnes each day).

2 By 'maximum amount', we mean the maximum amount of raw materials on the site at any one time.

Use a separate sheet if you have a long list of raw materials, and send it to us with your application form. Please also provide the reference of this extra sheet.

Document reference

3d 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 6 – Questions for specific sectors

Sector	Appendix
Combustion	See the questions in appendix 1
Chemicals	See the questions in appendix 2
Incinerating waste	See the questions in appendix 3
Landfill and recovery of hazardous waste on land	See the questions in appendix 4

General information

Complete section 4 if you are proposing to change or add an emission point(s).

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
- the procedures you follow to assess the measures

Document reference N/A

4b Point source emissions to air only

4b1 Has the sampling location been designed to meet BS EN 15259 clause 6.2 and 6.3?

No ☐

Yes ☐

4b2 Are the sample ports large enough for monitoring equipment and positioned in accordance with section 6 and appendix A of BS EN 15259?

No ☐

Yes ☐

4b3 Is access adjacent to the ports large enough to provide sufficient working area, support and clearance for a sample team to work safely with their equipment throughout the duration of the test?

No ☐

Yes ☐

4b4 Are the sample location(s) at least 5 HD from the stack exit

No ☐

Yes ☐

4b5 Are the sample location(s) at least 2 HD upstream from any bend or obstruction?

No ☐

Yes ☐

4b6 Are the sample location(s) at least 5 HD downstream from any bend or obstruction?

No ☐

Yes ☐

4b7 Does the sample plane have a constant cross sectional area?

No ☐

Yes ☐

4b8 If horizontal, is the duct square or rectangular (unless it is less than or equal to 0.35 m in diameter)

No ☐

Yes ☐

4b9 If you have answered 'No' to any of the questions 4b1 to 4b8 above, provide an assessment to how the standards in BS EN 15259 will be met.

Document reference of the assessment

5 Environmental impact assessment

5a Have your proposals been the subject of an environmental impact assessment under Council Directive 85/337/EEC of 27 June 1985 [Environmental Impact Assessment] (EIA)?

No ☑ Now go to question 6

Yes ☐ Please provide a copy of the environmental statement and, if the procedure has been completed:

- a copy of the planning permission
- the committee report and decision on the EIA

Document reference of the copy

6 Resource efficiency and climate change

If the site is a landfill or a recovery of hazardous waste on land activity, you only need to fill in this section if the application includes gas engines.

6a Describe the basic measures for improving how energy efficient your activities are

Document reference of the description

6b Provide a breakdown of any changes to the energy your activities use up and create

Document reference of the description

6c Have you entered into, or will you enter into, a climate change levy agreement?

No ☑ Describe the specific measures you use for improving your energy efficiency

Document reference of the description

Yes ☐ Please give the date you entered (or the date you expect to enter) into the agreement (DD/MM/YYYY)

Please also provide documents that prove you are taking part in the agreement.

Document reference of the proof

6d Explain and justify the raw and other materials, other substances and water that you will use

Document reference of the justification

6e Describe how you avoid producing waste in line with Council Directive 2008/98/EC on waste

If you produce waste, describe how you recover it. If it is technically and financially impossible to recover the waste, describe how you dispose of it while avoiding or reducing any effect it has on the environment.

Document reference of the description

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

Website: https://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 ☑

Crystal Mark 19107
Clarity approved by Plain English Campaign

For Environment Agency use only

Date received (DD/MM/YYYY)

Payment received?

No ☐

Yes ☐ Amount received

Our reference number

£

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

Appendix 1 – Specific questions for the combustion sector

1 Identify the type of fuel burned in your combustion units (including when your units are started up, shut down and run as normal). If your units are dual fuelled (that is, use two types of fuel), list both the fuels you use

Fill in a separate table for each installation.

Installation reference			
Type of fuel	When run as normal	When started up	When shut down
Coal	☐	☐	☐
Gas oil	☐	☐	☐
Heavy fuel oil	☐	☐	☐
Natural gas	☐	☐	☐
WID waste	☐	☐	☐
Biomass (see notes 1 and 2 below)	☐	☐	☐
Biomass (see notes 1 and 2 below)	☐	☐	☐
Biomass (see notes 1 and 2 below)	☐	☐	☐
Biomass (see notes 1 and 2 below)	☐	☐	☐
Biomass (see notes 1 and 2 below)	☐	☐	☐
Landfill gas	☐	☐	☐
Other	☐	☐	☐

Notes

1. Not covered by Industrial Emissions Directive 2010/75/EU.
2. 'Biomass' is referred to The Renewables Obligation Order 2002 (https://www.legislation.gov.uk/uksi/2002/914/contents/made)

Give extra information if it helps to explain the fuel you use.

Document reference

Appendix 1 – Specific questions for the combustion sector, continued

2 Give the composition range of any fuels you are currently allowed to burn in your combustion plant

Fill in a separate table for each installation, continuing on a separate sheet if necessary

Fuel use and analysis					
Installation reference					
Parameter	Unit	Fuel 1	Fuel 2	Fuel 3	Fuel 4
Maximum percentage of gross thermal input	%				
Moisture	%				
Ash	% wt/wt dry				
Sulphur	% wt/wt dry				
Chlorine	% wt/wt dry				
Arsenic	% wt/wt dry				
Cadmium	% wt/wt dry				
Carbon	% wt/wt dry				
Chromium	% wt/wt dry				
Copper	% wt/wt dry				
Hydrogen	% wt/wt dry				
Lead	% wt/wt dry				
Mercury	% wt/wt dry				
Nickel	% wt/wt dry				
Nitrogen	% wt/wt dry				
Oxygen	% wt/wt dry				
Vanadium	mg/kg dry				
Zinc	mg/kg dry				
Net calorific value	MJ/kg				

Appendix 1 – Specific questions for the combustion sector, continued

3 If NOx factors are necessary for reporting purposes (that is, if you do not need to monitor emissions), please provide the factors associated with burning the relevant fuels

Fill in a separate table for each installation.

Installation reference	
Fuel	NOx factor (kgt^{-1})
Fuel 1	
Fuel 2	
Fuel 3	
Fuel 4	

Note: kgt^{-1} means kilograms of nitrogen oxides released for each tonne of fuel burned.

4 Will your combustion plant be subject to Chapter III of the Industrial Emissions Directive 2010/75/EU?

No ☐ Now fill in application form part F

Yes ☐

5 What is your plant?

an existing one ☐ A plant licensed before 1 July 1987

a new one ☐ A plant licensed on or after 1 July 1987 but before 27 November 2002, or a plant for which an application was made before 27 November 2002 and which was put into operation before 27 November 2003

a new-new one ☐ A plant for which an application was made on or after 27 November 2002 If you run more than one type of plant or a number of the same type of plant on your installation, please list them in the table below

6 If you run more than one type of plant or a number of the same type of plant on your installation, please list them in the table below

Fill in a separate table for each installation.

Installation reference	
Type of plant	Number within installation
Existing	
New	
New-new	
Gas turbine (group A)	
Gas turbine (group B)	

Appendix 1 – Specific questions for the combustion sector, continued

7 If you run an existing plant, have you submitted a declaration for the 'limited life derogation' set out in Article 33 of Chapter III of the Industrial Emissions Directive?

No ☐ Now go to question 9

Yes ☐

8 Have you subsequently withdrawn your declaration?

No ☐

Yes ☐

9 List the existing large combustion plants (LCPs) which have annual mass allowances under the National Emission Reduction Plan (NERP), and those with emission limit values (ELVs) under the LCPD

Installation reference	
LCPs under NERP	LCPs with ELVs

10 Do you meet the monitoring requirements of Chapter III of the Industrial Emissions Directive?

No ☐

Yes ☐ Document reference

11 Are you substantially refurbishing an existing installation according to the meaning given in Article 14 of the Energy Efficiency Directive?

No ☐

Yes ☐ Now go to question 12

12 Have you carried out a cost–benefit assessment (CBA) of opportunities for cogeneration (combined heat and power) or district heating under Article 14 of the Energy Efficiency Directive?

No ☐ Please provide supporting evidence of why a CBA is not required (for example, an agreement from us)

Document reference of this evidence

Yes ☐ Please submit a copy of your CBA

Document reference of the CBA

Appendix 2 – Specific questions for the chemical sector

1 Please provide a technical description of your activities

- The description should be enough to allow us to understand:
- the process
- the main plant and equipment used for each process
- all reactions, including significant side reactions (that is, the chemistry of the process)
- the material mass flows (including by products and side streams) and the temperatures and pressures in major vessels
- the all emission control systems (both hardware and management systems), for situations which could involve releasing a significant amount of emissions – particularly the main reactions and how they are controlled
- a comparison of the indicative BATs and benchmark emission levels standards: technical guidance notes (TGNs) (see https://www.gov.uk/government/collections/technical-guidance-for-regulated-industry-sectors-environmental-permitting); additional guidance 'The production of large volume organic chemicals' (EPR 4.01); 'Speciality organic chemicals sector' (EPR 4.02); 'Inorganic chemicals sector' (EPR 4.03); and best available techniques reference documents (BREFs) for the chemical sector

Document reference

2 If you are applying for a multi-purpose plant, do you have a multi-product protocol in place to control the changes?

No ☐

Yes ☐ Provide a copy of your protocol to accompany this application

Document reference

3 Does Chapter V of the Industrial Emissions Directive (IED) apply to your activities?

No ☐

Yes ☐ Fill in the following

3a List the activities which are controlled under the IED

Installation reference	
Activities	

3b Describe how the list of activities in question 3a above meets the requirements of the IED

Document reference

Appendix 3 – Specific questions for the waste incineration sector

If you are proposing to accept clinical waste, please complete your answer to question 3a 'Technical standards' with reference to relevant parts of our healthcare waste appropriate measures guidance (see https://www.gov.uk/guidance/healthcare-waste-appropriate-measures-for-permitted-facilities)

1a Do you run incineration plants as defined by Chapter IV of the Industrial Emissions Directive (IED)?

No ☐ You do not need to answer any other questions in this appendix

Yes ☐ IED applies

1b Are you subject to IED as

An incinerator? ☐

A co-incinerator? ☐

2 Do any of the installations contain more than one incineration line?

No ☐ Now go to question 4

Yes ☐

3 How many incineration lines are there within each installation?

Fill in a separate table for each installation.

Installation reference		
Number of incineration lines within the installation		
Reference identifiers for each line		

You must provide the information we ask for in questions 4, 5 and 6 below in separate documents. The information must at least include all the details set out in section 2 ('Key Issues') of S5.01 'Incineration of waste: additional guidance' (under the sub heading 'European legislation and your application for an EP Permit'). See https://www.gov.uk/government/collections/technical-guidance-for-regulated-industry-sectors-environmental-permitting.

You must answer questions 7 to 13 on the form below.

4 Describe how the plant is designed, equipped and will be run to make sure it meets the requirements of IED, taking into account the categories of waste which will be incinerated

Document reference

5 Describe how the heat created during the incineration and co-incineration process is recovered as far as possible (for example, through combined heat and power, creating process steam or district heating)

Document reference

Appendix 3 – Specific questions for the waste incineration sector, continued

6 Describe how you will limit the amount and harmful effects of residues and describe how they will be recycled where this is appropriate

Document reference

For each line identified in question 3, answer questions 7 to 13 below

Question 3 identifier, if necessary

7 Do you want to take advantage of the Article 45 (1)(f) allowance (see below) if the particulates, CO or TOC continuous emission monitors (CEM) fail?

No ☐

Yes ☐ This allows 'abnormal operation' of the incineration plant under certain circumstances when the CEM for releases to air have failed. Annex VI, Part 3(2) sets maximum half hourly average release levels for particulates (150 mg/m3), CO (normal ELV) and TOC (normal ELV) during abnormal operation.

Describe the other system you use to show you keep to the requirements of Article 13(4) (for example, using another CEM, providing a portable CEM to insert if the main CEM fails, and so on).

8 Do you want to replace continuous HF emission monitoring with periodic hydrogen fluoride (HF) emission monitoring by relying on continuous hydrogen chloride (HCl) monitoring as allowed by IED Annex VI, Part 6 (2.3)?

Under this you do not have to continuously monitor emissions for hydrogen fluoride if you control hydrogen chloride and keep it to a level below the HCl ELVs.

No ☐

Yes ☐ Please give your reasons for doing this

Appendix 3 – Specific questions for the waste incineration sector, continued

9 Do you want to replace continuous water vapour monitoring with pre-analysis drying of exhaust gas samples, as allowed by IED Annex VI, Part 6 (2.4)?

Under this you do not have to continuously monitor the amount of water vapour in the air released if the sampled exhaust gas is dried before the emissions are analysed.

No ☐

Yes ☐ Please give your reasons for doing this

10 Do you want to replace continuous hydrogen chloride (HCl) emission monitoring with periodic HCl emission monitoring, as allowed by IED Annex VI, Part 6 (2.5), first paragraph?

Under this you do not have to continuously monitor emissions for hydrogen chloride if you can prove that the emissions from this pollutant will never be higher than the ELVs allowed.

No ☐

Yes ☐ Please give your reasons for doing this

Appendix 3 – Specific questions for the waste incineration sector, continued

11 Do you want to replace continuous HF emission monitoring with periodic HF emission monitoring, as allowed by IED Annex VI, Part 6 (2.5), first paragraph?

Under this you do not have to continuously monitor emissions for hydrogen fluoride if you can prove that the emissions from this pollutant will never be higher than the ELVs allowed.

No ☐

Yes ☐ Please give your reasons for doing this

12 Do you want to replace continuous SO_2 emission monitoring with periodic sulphur dioxide (SO_2) emission monitoring, as allowed by IED Annex VI, Part 6 (2.5), first paragraph?

Under this you do not have to continuously monitor emissions for sulphur dioxide if you can prove that the emissions from this pollutant will never be higher than the ELVs allowed.

No ☐

Yes ☐ Please give your reasons for doing this

Appendix 3 – Specific questions for the waste incineration sector, continued

13 If your plant uses fluidised bed technology, do you want to apply for a derogation of the CO WID ELV to a maximum of 100 mg/m³ as an hourly average, as allowed by IED Annex VI, Part 3?

No ☐

Does not apply ☐

Yes ☐ Please give your reasons for doing this

14 Are you substantially refurbishing an existing installation according to the meaning given in Article 14 of the Energy Efficiency Directive?

No ☑

Yes ☐ Please go to question 15

Document reference of the CHP-ready assessment

15 Have you carried out a cost–benefit assessment (CBA) of opportunities for cogeneration (combined heat and power) or district heating under Article 14 of the Energy Efficiency Directive?

No ☑ Please provide supporting evidence of why a CBA is not required (for example, an agreement from us)

Document reference of this evidence

Yes ☐ Please submit a copy of your CBA

Document reference of the CBA

Appendix 4 – Specific questions for the landfill sector and recovery of hazardous waste on land activities

1. For the landfill sector, provide your Environmental Setting and Installation Design (ESID) report and any other risk assessments to control emissions.

For recovery of hazardous waste on land activities, provide your Environmental Setting and Site Design (ESSD) report and any other risk assessments to control emissions

Document reference

2. For recovery of hazardous waste on land activities, provide your Waste Acceptance Procedures (including Waste Acceptance Criteria)

Document reference

Refer to our guidance at
https://www.gov.uk/government/publications/deposit-for-recovery-operators-environmental-permits/waste-acceptance-procedures-for-deposit-for-recovery

3. Provide your hydrogeological risk assessment (HRA) for the site

Document reference

4. Provide your outline engineering plan for the site

Document reference

5. Provide your stability risk assessment (SRA) for the site

Document reference

6. Provide your landfill gas risk assessment (LFGRA) for the site

Document reference

We have developed guidance on these assessments and their reports which can be found at
https://www.gov.uk/government/collections/environmental-permitting-landfill-sector-technical-guidance

7. For recovery of hazardous waste on land activities, have you completed a monitoring plan for the site?

No ☐ Please refer to the section of your ESSD that explains why this is unnecessary for your site

Document reference of this evidence

Yes ☐ Document reference

8. Have you completed a proposed plan for closing the site and your procedures for looking after the site once it has closed?

No ☐ If you have answered 'no' for recovery of hazardous waste on land activities, refer to the section of your ESSD that explains why this is unnecessary for your site

Document reference of this evidence

Yes ☐ For landfill you must provide a closure and aftercare plan

Document reference

Application for an environmental permit
Part C2 – General – varying a bespoke permit

Fill in this part of the form, together with part A and the relevant parts of C3 to C7 and part F1 or F2, if you are applying to vary (change) the conditions or any other part of the permit. Please check that this is the latest version of the form available from our website.

You only need to give us details in this application for the parts of the permit that will be affected (for example, if you are adding a new facility or changing existing ones).

Waste operation changing to installation or vice versa?

If your changes mean that a waste operation becomes an installation (or vice versa) you also need to fill in either part C3 (waste to installation) or part C4 (installation to waste).

You do not need to resend any information from your original permit application if it is not affected by your proposed changes.

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

Note: If you are applying to convert your existing permit to a standard permit or add a standard facility you need to fill out form C1.

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: FP3506EY/P001

1b Permit number

What is the permit number that this application relates to? EPR/FP3596EY/V002

1c Site details

What is the name, address and postcode of the site?

Site name: Clayton Hall Farm Bioenergy Plant

Address: Clayton West
Huddersfield
West Yorkshire

Postcode: HD8 9QE

2 About your proposed changes

2a Type of variation

What type of variation are you applying for?

Minor technical ☐
Normal variation ☐
Substantial ☑

2 About your proposed changes, continued

2b Changes or additions to existing activities

Please give us brief details in the box below. More detailed information can be given in Table 1 below.

See NTS_CHFB

Fill in Table 1 with details of all the proposed changes to current activities. In the final column of the table, give us the document reference for the proposed changes and send them to us with your filled in application form.

Fill in a separate table for each activity you are applying to vary or add. 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 this document.

Document reference: See NTS_CHFB

You only need to fill in one table for your mining waste operations.

2c Consolidating (combining) or updating existing permits

If your proposed change is to modernise (update) your permit, now answer 2c1; otherwise go to 2d.

If your proposed change is to consolidate (combine) a number of permits, now answer 2c2; otherwise go to 2d.

Note: In both cases we may require additional information from you about, for example, your management system. Therefore we would always advise you to talk to us before you submit any application to modernise or consolidate permits.

2c1 Do you want to have a modern style permit?

No ☐

Yes ☑

2c2 Identify all the permits you want to consolidate (combine) by listing the permit numbers in Table 2 below

Table 2 – Permit numbers

2d Treating batteries

2d Are you proposing to treat batteries?

No ☐

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

Document reference for the explanation

2e Ship recycling

2e1 Is your activity covered by the Ship Recycling Regulations 2015? (See the guidance notes on part C2.)

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

2e2 Is this a renewal of an existing authorisation covered by the Ship Recycling Regulations 2015?

No ☑

Yes ☐ Tell us the expiry date of your existing authorisation (DD/MM/YYYY)

2 About your proposed changes, continued

Table 1 – Changes to existing activities

Fill in Table 1 with details of all the proposed changes to current activities. In the final column of the table, give us the document reference for the proposed changes and send them to us with your filled in application form.

Name	Installation schedule 1 references	Description of the installation activity	Description of waste operation	Description of the mining waste operations	Description of water discharge activity	Description of groundwater activity	Proposed changes document reference
i.e. name of installation, waste operation, mining waste operation, water discharge activity or groundwater activity							
Example – effluent unique name					Example – treated sewage effluent		
If you do not have enough room, go to the line below or send a separate document and give us the document reference here							
Clayton Hall Farm	1.16.2.1	Section 5.4 (a)(i) and					See NTS_CHFB
		and (b)(i) -					
		non-hazardous waste					
		installation-biological					
		treatment x 1					

2 About your proposed changes, continued

2f Low impact installations (installations only)

2f1 Will any changes mean that any of the regulated facilities will become low impact installations?

No ☑ Now go to section 3

Yes ☐ If yes, tell us how you meet the conditions for a low impact installation (see the guidance notes on part C2 – 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 ☐

3 Your ability as an operator

If you are applying to add waste installations or waste operations to a permit that has not previously had them, you need to fill in all of section 3.

If you are applying to consolidate (combine) two or more permits or have an updated permit you must fill in question 3d.

This section does not apply for applications to surrender a permit.

3a Relevant offences

Installations and waste operations only (see the guidance notes on part C2).

3a1 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

Position held at the time of the offence

Name of the court where the case was dealt with

Date of the conviction (DD/MM/YY)

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

Now go to question 3b

Please also complete the details in Appendix 2.

3b Technical ability

Specified waste management activities and waste operations only (see the guidance notes on part C1).

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

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

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

3 Your ability as an operator, continued

- 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 if there is evidence of a 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 ☑

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) Mr

First name David

Last name Riley

Phone

Mobile 07889592512

Email dave@djrec.co.uk

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
	To be provided upon determination fo the permit - sites subject to change due to	
	consultancy role	

Document reference

Now go to question 3c

Please also complete the details in Appendix 2.

3c Finances

Installations, waste operations and mining waste operations only (see the guidance notes on part C2).

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.

3 Your ability as an operator, continued

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)?

Renewable bonds ☐

Cash deposits with the Environment Agency ☐

Other – provide comprehensive details ☐

Document reference

Provide a cost profile and expenditure plan of your estimated costs throughout the aftercare period of your site.

Document plan reference

Now go to question 3d

3d Management systems

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 need to be able to explain what happens at each site and which parts of the overall management system apply. For example, at some sites you may need to show you are carrying out additional measures to prevent pollution because they are nearer to sensitive locations than others.

You can find guidance on management systems on our website at 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?

ISO 14001 ☐

BS 8555 (Phases 1–5) ☐

Acorn ☐

Green dragon ☐

Own management system ☑

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

Document reference/s: See EMS_CHFB

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 Directly into relevant territorial waters or coastal waters within the sea fisheries district of a local fisheries committee?

No ☑

Yes ☐ Please name the fisheries committee

4 Consultation, continued

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

See the guidance notes on part C2 for what needs to be marked on the plan.

Clearly mark the site boundary or discharge point, or both. Also include site drainage plans, site layout plans, and plant design drawings/process flow diagrams (as required). (See the guidance notes on part C2.)

Document reference/s of the plans: See Drawings_CHFB

5b Do any of the variations you plan to make need extra land to be included in the permit?

No ☐

Yes ☑ Please provide a site report for the extra land

Document report reference/s: See Drawing 002a

5c Provide a non-technical summary of your application

Document reference of the summary: See NTS_CHFB

5d Risk of fire from sites storing combustible waste

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

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

No ☑ Go to question 5f

Yes ☐ Go to question 5e

5e Will your variation increase the risk of a fire occurring or increase the environmental risk if a fire occurs?

See the guidance notes on part C2.

No ☐

Yes ☐ Provide a fire prevention plan. You need to highlight any changes you have made since your pre-application discussions

Document reference of the plan:

5f Adding an installation

If you are applying to add an installation, tick the box to confirm that you have sent in a baseline report and provide a reference ☐

Document reference of the report:

6 Environmental risk assessment

If you need one, see the guidance notes on part C2.

Provide an assessment of any additional risks the proposed changes or additions to your regulated facilities poses to the environment as part of your application to vary this permit. The risk assessment must follow the methodology set out in 'Risk assessments for your environmental permit' at https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit or an equivalent method.

Document reference for the assessment: See ERA_CHFB

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

Website: 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

Installation reference				
Condition	Response			Do you meet this?
A – Management techniques	Provide references to show how your application meets A			Yes ☐ No ☐
	References			
B – Aqueous waste	Effluent created		m^3/day	Yes ☐ No ☐
C – Abatement systems	Provide references to show how your application meets C			Yes ☐ No ☐
	References			
D – Groundwater	Do you plan to release any hazardous substances or non-hazardous pollutants into the ground?		Yes ☐ No ☐	Yes ☐ No ☐
E – Producing waste	Hazardous waste		Tonnes per year	Yes ☐ No ☐
	Non-hazardous waste		Tonnes per year	
F – Using energy	Peak energy consumption		MW	Yes ☐ No ☐
G – Preventing accidents	Do you have appropriate measures to prevent spills and major releases of liquids? (See 'How to comply'.)		Yes ☐ No ☐	Yes ☐ No ☐
	Provide references to show how your application meets G			
	References			
H – Noise	Provide references to show how your application meets H			Yes ☐ No ☐
	References			
I – Emissions of polluting substances	Provide references to show how your application meets I			Yes ☐ No ☐
	References			
J – Odours	Provide references to show how your application meets J			Yes ☐ No ☐
	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 ☐ No ☐	

Appendix 2 – Date of birth information for Relevant offences and/or Technical ability questions only

Date of birth information in this appendix will not be put onto our Public Register

Have you filled in the Relevant Offences question?

Yes ☑

No ☐

Have you filled in the Technical ability question?

Yes ☑

No ☐

2 Relevant Offences - date of birth information

Please give us the following details

Name N/A

Date of birth (DD/MM/YY)

3 Technical ability - date of birth information

Name David Riley

Date of birth (DD/MM/YY) [redacted]

Section 2

Non-Technical Summary

CLAYTON HALL FARM BIOENEGY LLP

Clayton Hall Farm Bioenergy Plant

Clayton Hall Farm
Clayton West
Huddersfield
West Yorkshire
HD8 9QE

Olive Compliance Ltd
Planet House
Northumbrian Way
Killingworth
NE12 6EH
Company Number:12861220

CONTENTS

1.0 Introduction

Clayton Hall Farm Bioenergy LLP (CHF) has instructed Olive Compliance Limited (OCL) to prepare an application for a variation of their Environmental Bespoke Permit EPR/FP3596EY into an installations Bespoke Permit for their site Clayton Hall Farm Bioenergy Plant at Clayton Hall Farm, Clayton West, Huddersfield, West Yorkshire, HD8 9QE

This non-technical summary provides a summary of the regulated facility, an explanation of exactly what is being applied for, and a summary of the key technical standards and control measures that will be implemented at the site as a result of the application.

1.1 The Site

The site is located at an existing farmstead and is accessed by from the A636 highway via an approximate 800 metres farm track. The farmstead is set on high ground overlooking the village of Clayton West and the River Dearne. National Grid Reference SE 2621 1048.

The site is principally bounded as shown below in Image 1.

Image 1 – Site Setting

The site is principally bounded as shown below in Table 1.

Table 1

Boundary	Description
North	Utilities/Rural/Agricultural
East	Rural/Agricultural
South	Rural/Agricultural
West	Rural/Agricultural

The site is operated in accordance with the following Environmental Permit Ref EPR/FP3596EY/V002.

1.2 Current Environmental Permit

The current permit allows to carry out anaerobic digestion of wastes and also use of the biogas in compression and spark ignition engines with an aggregate rated thermal input of up to 3 megawatts. The permit also allows the use of standard commercial gas turbines, fuel cells (e.g. Molten Carbonate or Solid Oxide) or treatment followed by injection into the gas grid.

The permit reference is EPR/FP3596EY.

Currently the site accepts up to 49,000 tonnes per year. Any wastes controlled by the Animal By-Products Regulations must be treated and handled in accordance with any requirements imposed by those Regulations.

2.0 Proposed changes

The Environment Agency is required by primary legislation to review permits to ensure that permit conditions continue to reflect the activities undertaken and make sure that appropriate standards are used. The Environmental Permitting (England and Wales) Regulations 2016 implemented the Industrial Emissions Directive. In order to continue operating the anaerobic digestion activities on site with a tonnage over 100 tonnes per day, the operator/permit holder is required to apply for an installations permit by varying their current bespoke permit.

If the current bespoke permit is not varied into an installations permit the Environment Agency will restrict the permitted activity to a capacity to treat less than 75 tonnes per day for composting or less than 100 tonnes per day for anaerobic digestion.

The variation application seeks to make the following changes to the site's operations:

Site Boundary

The permitted boundary will be extended to include the new silage clamp and solid biowaste storage.

All wastes shall be treated and stored on an impermeable surface with a sealed drainage system.

There are no changes to site point emission points.

Waste Tonnages

The Operator intends to increase waste acceptance and to treat 100 tonnes per day or up to 100,000 tonnes of waste per annuum.

Process Activity

Solid, semi solid and liquid organic matter is delivered to site and stored under cover in the incoming waste processing building. Liquids are stored in mobile tanks located within the building. If any, packaged waste food materials are accepted they are de-packaged prior to treatment. Solid and liquid material is fed into one of the two digesters by screw pumps and warmed by heat from the gas engines on the generators. Methane is given off and digested matter is drawn off and run through a Pasteuriser to kill off harmful pathogens. It then transfers into one of the two concrete panelled tanks where it's stored awaiting transfer to farm land for use.

A large earth banked lined lagoon has been recently replaced with a new concrete lagoon built to CIRIA 736 standard. This lagoon receives rainwater from the perimeter bunds around the two digesters. Initially the rainwater is collected in a smaller intermediate tank and drained into the lagoon. In the event of the rainwater becoming contaminated (by for example spilled digestate), the material can be drained into the round concrete digestate tank. In the event of a major failure of one of the digesters there is sufficient capacity to contain the contents in one or other of the tanks or the lagoon.

As required, digestate in one of the tanks is drawn off and spread onto farmland as a fertiliser and soil improver.

Digestate can also be de-watered and spread as a fertiliser onto farm land. This is stored on an impermeable concrete surface before being transferred for use onto land. The digestate complies with the QP standard that satisfies the End of Waste PAS110 criteria.

Incoming wastes and other materials must be delivered directly into the incoming waste processing building and not placed outside. The only exception is for the solid wastes to be delivered and temporarily placed on the concreted surface external to the reception storage shed with the intention to transfer indoors with immediate effect.

The site is permitted to accept up to 10 tonnes per day of animal by-products, of the total incoming waste and invokes a separate set of regulations: Animal By-Products (Enforcement) (England) Regulations 2013. The regulations are designed to prevent biological contamination of foodstuffs and staff. A requirement of these regulations is that a Hazard and Critical Control Point (HCCP) plan is produced and adhered to.

Only Category 3 Animal By-Product (Low Risk) materials are permitted**,** which consists of the following:

- carcasses or body parts passed fit for humans to eat, at a slaughterhouse
- products or foods of animal origin originally meant for human consumption but withdrawn for commercial reasons, not because it's unfit to eat
- domestic catering waste
- shells from shellfish with soft tissue
- eggs, egg by-products, hatchery by-products and eggshells
- aquatic animals, aquatic and terrestrial invertebrates
- hides and skins from slaughterhouses
- animal hides, skins, hooves, feathers, wool, horns, and hair that had no signs of infectious disease at death
- processed animal proteins (PAP)

The digestion process takes place in one of two sealed tanks. The digesters have small bunds around the base which are directed into an intermediate tank. The main principle is to divert clean rain water to the new concrete panel lagoon, but if a leak or spill occurred at the digesters, the matter would be contained.

Digestate is drawn off into one of the two concrete tanks. It is critical that the tank and lagoon structures are inspected and maintained as stated in the Environment Management System.

EWC Waste description

Additional EWC waste codes to be included in the permit variation:

02 06 02	Wastes from preserving agents (AN)
02 07 05	sludges from onsite effluent treatment (AN)
03 03 11	wastes not otherwise specified (AN)
07 07 12	sludges from on-site effluent treatment other than those mentioned in 07 07 11 (MN)
16 03 05	organic wastes containing hazardous substances (MH)
16 03 06	organic wastes other than those mentioned in 16 03 05 (MN)
19 05 99	wastes not otherwise specified (AN)
20 01 25	edible oil and fat (AN)
20 03 02	waste from markets (AN)

3.0 Application Contents

In view of the foregoing, the application comprises the following elements:

1. Application forms (Parts A, C2, C3 and F1)
2. Non-Technical Summary (CHFB_NTS)
3. Management System (CHFB_EMS)
4. Environmental Risk Assessment (CHFB_ERA)
5. WAMITAB certification
6. Operator Information
7. BAT (CHFB_BAT)
8. Drawings
9. Operating Techniques (CHFB_OT)
10. Site Condition Report (CHFB_SCR) and
11. Odour Management Plan (CHFB_OMP)
12. Pre-application

3.1 Application Forms

Parts A, C2, C3 and F1 of the Environment Agency's application forms have been completed in support of the application and are enclosed as Section 1 of the application.

3.2 Non-Technical Summary

As part of the application this non-technical summary (NTS) is a concise document that provides a description of the application process should also provide an effective outline of all the key points set out in an Environmental Statement.

The Non-Technical Summary has been included in Section 2 of this application.

3.3 Environmental Management System

Clayton Hall Farm Bioenergy Plant operate their own in-house management system which ensures that:

- The risks that the activities pose to the environment are identified
- The measures that are required to minimise the risks are identified
- The activities are managed in accordance with the management system

- Performance against the management system is audited at regular intervals; and
- The Environmental Permit is complied with

A copy of the management system is included as Section 3 with a supporting Operating Techniques Document of the application and a summary of the key technical standards for the management of the recycling facility is included in Section 4.0 of this non-technical summary.

3.4 Environmental Risk Assessment

An Environmental Risk Assessment (ERA) has been undertaken and submitted with the permit variation application to assess and mitigate risks associated with the proposed changes on the site. There will be no point source emissions to groundwater or surface water from the waste activity, and neither will there be any site waste arisings or global warming potential.

Therefore only 'Amenity and Accidents' remains applicable for assessment in this instance, and includes the consideration of odour, noise and vibration, fugitive emissions (including dust, mud, litter and pests) and accidents.

The ERA concludes that with the implementation of risk management measures, as described in the ERA, potential hazards from the facility are unlikely to be significant.

The Environmental Risk Assessment is included in Section 4 of this application.

3.5 Wamitab

Operations at the site will be under the overall control of a technically competent person who holds the relevant Certificate of Technical Competence (COTC) under the Waste Management Industry Training and Advisory Board (WAMITAB) scheme. Evidence of competence is supplied within the application in Section 5.

3.6 Operators Information

Operator's information supplied in Section 6 of this application.

3.7 BAT

A BAT Assessment has been carried out as part of this application, which is included in Section 7.

3.8 Drawings

Drawing 001	Site Location Plan
Drawing 002	Permit Boundary
Drawing 003	Site Layout Plan
Drawing 004	Receptor Plan
Drawing 005	Site Drainage Plan
Drawing 005A	Process Pipework Plan
Drawing 006	AD Process Flow
Drawing 007	Emission Points and Abatement Systems
Drawing 008	Food Waste Shed Layout Plan

All drawings are included in Section 8.

3.9 Operating Techniques

An Operating Techniques document (OT) has been produced as part of this application.

The OT is included within Section 9 of this application.

3.10 Site Condition Report

In line with EA guidance:

“It is in your own interest as an operator to produce a site condition report. An alternative approach would be for you to assume that the site is completely uncontaminated, irrespective of its previous history, but that would mean that any contamination by substances used at, produced or released from the installation that is discovered when you applied to surrender your permit would be considered to have resulted from your operation of your installation. You would then potentially be liable for remediation work, and would be unable to surrender your permit until you had completed it satisfactorily “

A Site Condition Report (SCR) has been produced in respect to this application and is included within Section 10 of this application.

3.11 Odour Management Plan

An Odour Management Plan has been produced as part of this application.

The OMP is included within Section 11 of this application.

3.12 Pre-application

Pre-application advice was requested from the EA.

A copy of this advice is included within Section 12 of this application.

4.0 Key Technical Standards

The key technical standards which will be employed to ensure that the proposed activities do not give rise to a significant environmental impact are summarised below:

- The Environmental Permitting (England and Wales) Regulations 2016.
- Develop a management system: environmental permits, February 2016.
- Control and monitor emissions for your environmental permit, February 2016.
- Risk assessments for your environmental permit, February 2016.
- Sector Guidance Note S5.06: recovery and disposal of hazardous and non-hazardous waste, May 2013.
- Biological waste treatment: appropriate measures for permitted facilities

In summary, the rules and operating procedures employed at the site will ensure that:

- All waste is managed in accordance with the Environmental Permit and legal requirements.
- The storage and treatment of waste is undertaken on impermeable surfacing with sealed drainage.
- Any storage vessels, tanks or containers used for the storage of any liquid fuel oil or other potentially polluting liquids/materials shall at all times be labelled as to the contents and will be fit for purpose.
- Vehicles and plant will be appropriately maintained to ensure that operation will not give rise to unacceptable noise or vibration levels; and
- The risk of fugitive emissions (dust, noise, odour, pest and litter) is minimised.

Procedures are in place for the regular inspection and maintenance of storage areas and associated infrastructure, including site surfacing, drainage systems and containment measures. Records will be

maintained detailing any action taken to repair infrastructure and faults. An Accident Management Plan is maintained and regularly reviewed to assess and minimise environmental risks and hazards of accidents and their consequences.

5.0 Conclusion

The overall conclusion from the studies undertaken in support of the permit variation application is that there is unlikely to be a significant environmental impact upon potentially sensitive receptors as a result of the proposed Environmental Permit application.

CHFB is fully committed to ensuring the highest standards are met and will undertake its activities in a manner consistent with best industrial practices and with the implementation of the company's management system.

Section 3

CLAYTON HALL FARM BIOENERGY LLP

ENVIRONMENT MANAGEMENT SYSYTEM

CLAYTON HALL FARM BIOENERGY PLANT

Clayton Hall Farm

Clayton West

Huddersfield

West Yorkshire

HD8 9QE

Olive Compliance Ltd
Planet House
Northumbrian Way
Killingworth
NE12 6EH
Company Number:12861220

Issue and Revision Record

Revision	Date	Originator	Description of Change
VO.1	July 2024	Olive Compliance	New for permit application
VO.2			
VO.3			

BASIS OF REPORT

This report has been prepared by Olive Compliance Ltd 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 Clayton Hall Farm Bioenergy LLP 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 Olive Compliance Ltd.

Olive Compliance Ltd disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

Information reported herein may be based on the interpretation of public domain data collected by Olive Compliance Ltd, and/or information supplied by the Client and/or its other advisors and associates. The data has been accepted in good faith as being accurate and valid.

CONTENTS

Section 4

CLAYTON HALL FARM BIOENERGY LLP

Environmental Risk Assessment

CLAYTON HALL FARM BIOENERGY PLANT

Clayton Hall Farm

Clayton West

Huddersfield

West Yorkshire

HD8 9QE

EPR/FP3596EY

Olive Compliance Ltd, Planet House,
Northumbrian Way, Killingworth, NE12 6EH
Company Number: 12861220

Issue and Revision Record

Revision	Date	Originator	Description of Changes
V0.1	July 2024	Olive Compliance Ltd	Draft document produced for Permit Variation Application

Basis of` Report

This report has been prepared by Olive Compliance Ltd 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 Clayton Hall Farm Bioenergy LLP 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 Olive Compliance Ltd.

Olive Compliance Ltd disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

Information reported herein may be based on the interpretation of public domain data collected by Olive Compliance Ltd, and/or information supplied by the Client and/or its other advisors and associates. The data has been accepted in good faith as being accurate and valid.

CONTENTS

REFERENCED DRAWINGS

Drawing 001	Site Location Plan
Drawing 002	Current Permitted Site Boundary Plan
Drawing 002A	Proposed Site Boundary Plan
Drawing 004	Site Receptor Plan
Drawing 005	Drainage Plan
Drawing 005A	Process Pipework Plan
Drawing 006	AD Process Flow Chart Plan
Drawing 007	Emission Points and Abatement Systems Plan
Drawing 008	Food Waste Site Layout Plan

APPENDICIES

Appendix 1 – Envirocheck Report and MAPs

Appendix 2 – Environment Agency flood map for planning

Appendix 3 – HACCP_2024

1.0 Introduction

Clayton Hall farm Bioenergy LLP has instructed Olive Compliance Limited (OCL) to prepare an application for a Bespoke Environmental Permit Variation Application for their site Clayton Hall Farm Bioenergy Plant located at Clayton Hall Farm, Clayton West, Huddersfield, West Yorkshire, HD8 9QE.

The Permit is issued under Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010.

This ERA has been undertaken in accordance with the Environment Agency (EA) *Risk assessments for your environmental permit*[1] (2016) and is a simple assessment of the risks to the environment and human health from accidents, noise and fugitive emissions that may be associated with the proposed operations at the site.

The aim of the assessment is to identify any significant risks and demonstrate that the risk of pollution or harm will be acceptable by taking the appropriate measures to manage these risks.

The above guidance requires all receptors that are near the site and could reasonably be affected by the proposed activities to be identified and considered as part of the ERA.

[1] https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit

2.0 Site Setting and Receptors

2.1 Site Setting

The site (Clayton Hall Farm Bioenergy Plant) is located at Clayton Hall Farm, Clayton West, Huddersfield, West Yorkshire, HD8 9QE. Clayton Hall Farm is located approximately 14km (9 miles) south-east of Huddersfield and approximately 11km (7 miles) north-west of Barnsley. The village of Clayton West lies 0.8km (0.5 mile) of the site. Clayton West is located between the villages of High Hoyland, Scissett and Skelmanthorpe. The River Dearne runs through the village.

Clayton Hall Farm is situated on top of a hill at an elevation of about 50m above the sewage works to the north. An electricity sub-station is located to the north-west of the site with agricultural land surrounding the site to the north, east and south.

The National Grid Reference for the site is SE 27040 11388.

A summary of the immediate environmental site setting is provided in Table 1 below and show in Image 1 (Site Setting).

Table 1
Surrounding Land Uses

Boundary	Description
North	**Sewage Treatment Works/Rural/Agricultural**
East	**Rural/Agricultural**
South	**Rural/Agricultural**
West	**Rural/Agricultural**

Image 1 – Site Setting

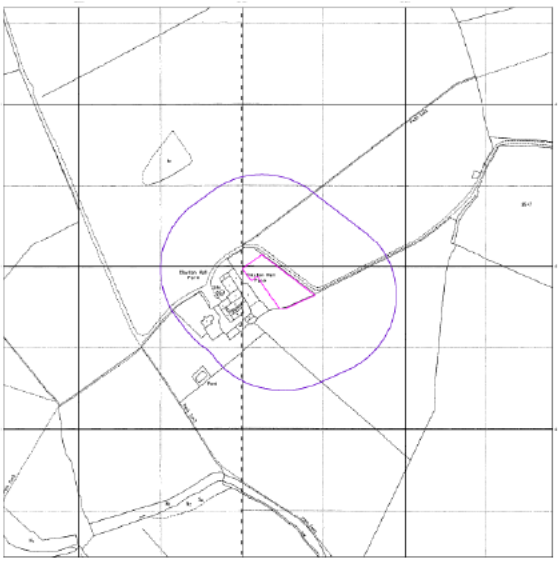


Image 2 – Aerial View of Site

2.1.1 Hydrology

Table 2
Local Water Courses

NGR	Watercourse Name	Type	Distance (m) from site
426977 411132	Toad Hole Dike	Inland River	158m
426648 411897	River Dearne	Inland River	512m
427597 412226	Bretton Lakes	Lake	852m
427479 412403	Bentley Brook	Inland River	972m

2.1.2 Flood Risk Zone

Kirklees Council, the Lead Local Flood Authority, published the Kirklees Surface Water Management Plan following incidents of fluvial flooding, in 2010. The River Spen at Liversedge and the River Dearne at Clayton West and Scissett overtopped, but the majority of property flooding was caused by either surcharging surface water systems or the Fluvial (River) flooding. However, the Site is located on top of a hill, with the nearest surface water course being the River Dearne, approximately 512m in distance.

Checks made on the Environment Agency (EA) Long Term Flood Risk Assessment website [2] shows that the Site is not at risk of flooding from surface waters, groundwater, reservoirs, rivers or sea without defences. The Site location lies within Flood Zone 1.

The area around Clayton Hall Farm Plant, Clayton West, Huddersfield, HD8 9QE has a

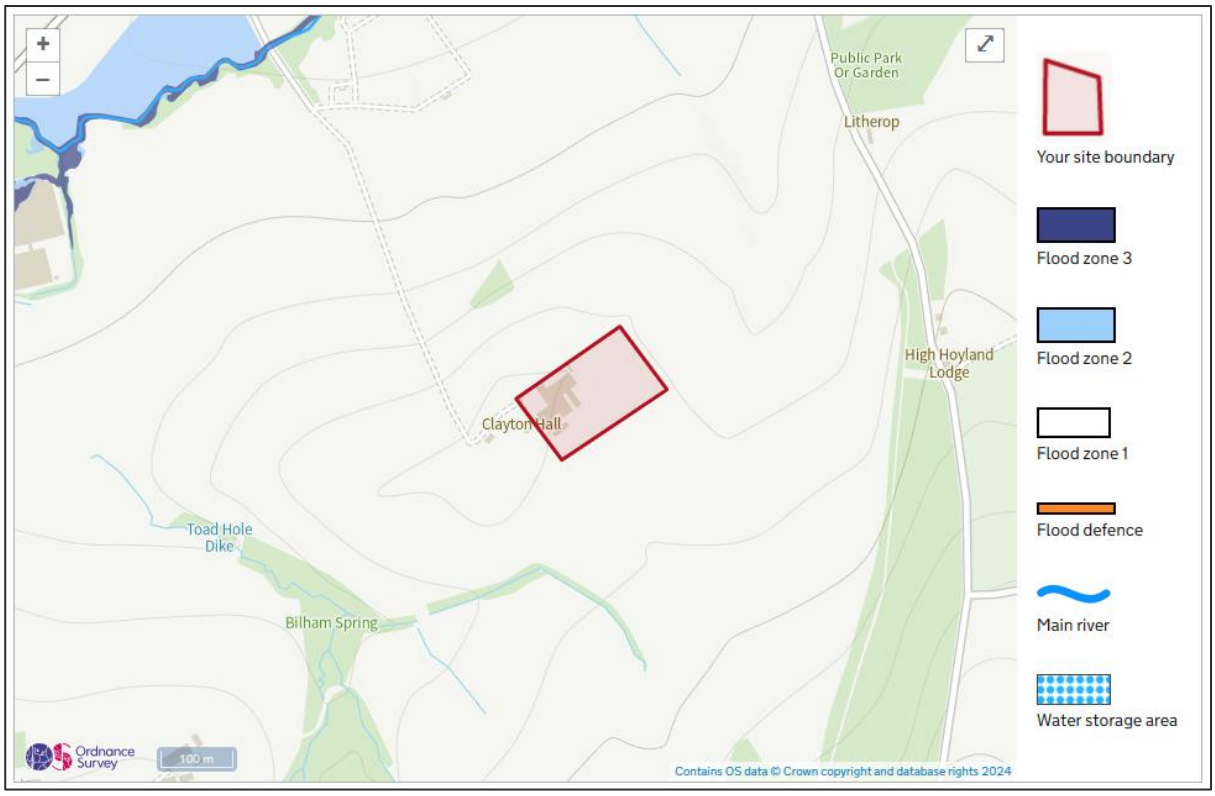
- very low risk of surface water flooding (Less than 0.1% chance each year of flooding)
- very low risk of flooding from rivers and the sea
- Flooding from Groundwater is unlikely in this area
- Flooding from Reservoirs is unlikely in this area

Land within flood zone 1 has a low probability of flooding from rivers and the sea.
Most developments that are less than 1 hectare (ha) in flood zone 1 do not need a flood risk assessment (FRA) as part of a planning application.

The map shows the flood risk Clayton Hall Farm Plant and the surrounding area.

[2] Your long term flood risk assessment - GOV.UK (check-long-term-flood-risk.service.gov.uk) accessed February 2024

Image 3 – Flood Risk Map



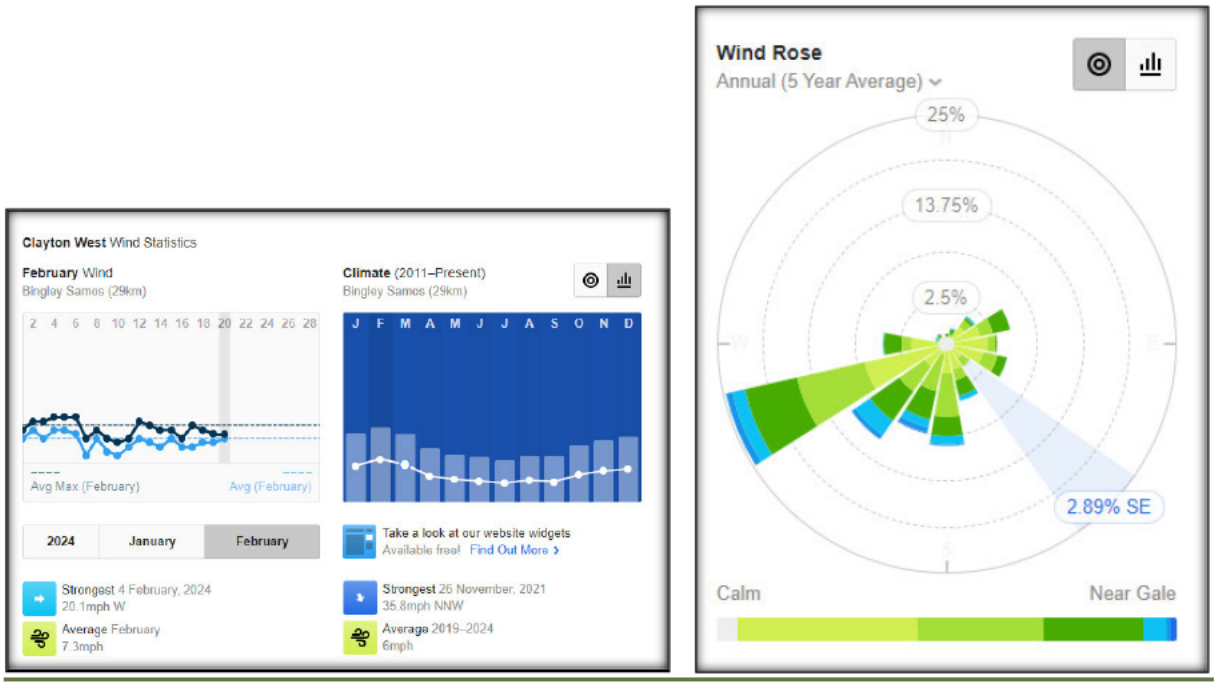
2.1.2 Prevailing Wind Direction.

Wind data demonstrates that the prevailing winds are largely from the South West. Predominately WSW/SSW/S and thus odours would be expected to be transported across rural land in the majority of cases.

The below diagram below shows the prevailing wind direction taken from Willy Weather and Windfinder[3].

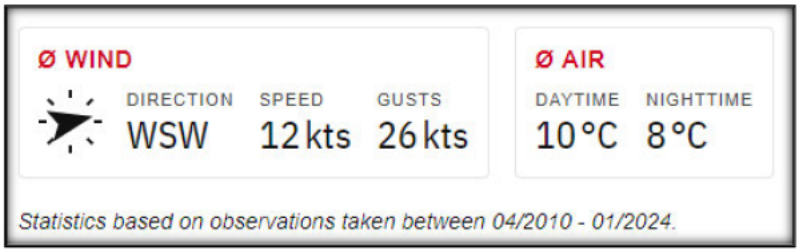
[3] Windfinder Apps for iOS and Android - Windfinder accessed February 2024

Figure 1 – Clayton West Wind Statistics



Clayton West wind statistics displayed in graphs and wind rose (Willy Weather Website - February 2024)

Figure 2 – Emley Moor Weather Station Wind Statistics



Annual wind & weather statistics for Emley Moor Weather Station, Huddersfield (Wind Finder website February 2024)

2.1.3 Transport Infrastructure

The Property is accessed via a farm track leading from the A636 Wakefield Road, which directly leads to the entrance of the site.

Table 3
Surrounding Roads/Lanes

Roads/Lanes	Distance (m)
Litherop Lane	415m
Litherop Road	420m
Jebb Lane	529m
Back Lane	529m
Church Lane	548m
Bilam Road	780m
A636 Wakefield Road	840m
Manor Road	995m

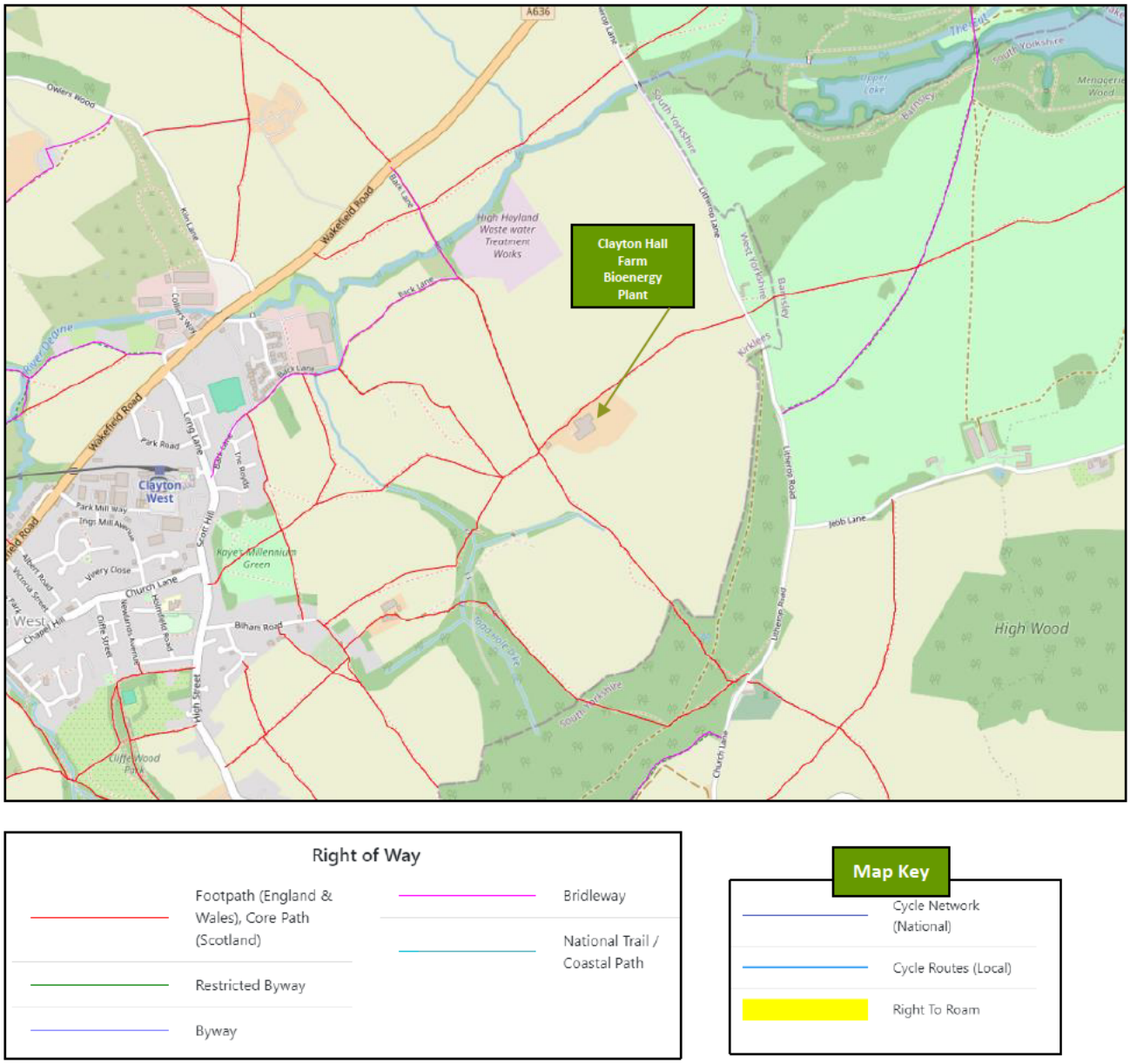
2.1.4 Public Footpaths, Recreational areas and Areas for Public Use (Open Space)

There are registered parks or gardens are located within 1km of the site.

Using the Foot Path Map[4] application Image 3 displays the 'Right of Way' public use features within 1km of the site.

[4] Map | FootPathMap.co.uk accessed February 2024

Image 4 – Right of Way within 1km of the site



2.1.5 Geology, Hydrogeology & Hydrology

Artificial Ground

The ground investigation established the site to be underlain by sandstone of the Pennine Middle Coal Measure, with an artificial deposit of infilled ground mantled by Made Ground.

Superficial Geology

Alluvium Flandrian clay, silt, sand and gravel

Bedrock Geology

Reference to publication of the British Geological Survey indicates that the site is underlain by Middle Coal Measures. The Pennine Middle Coal Measures Formation generally comprises layers of mudstone, siltstone, sandstone and coal seams.

2.1.6 Mineral Mining

The Envirocheck report shows that the site is not located within an area which is noted to be affected by coal mining activity. However, there has been several historical mineral mining works recorded, predominately sandstone mining within 1km of the site boundary.

Table 4
Geological – Mineral Mining Sites

NGR	Mineral Site	Address	Date	Distance (m)
427405 411860	Litherop Lane Quarry Opencast - Sandstone	Clayton West, Huddersfield, South Yorkshire	Ceased	438m
427422 412000	Litherop Opencast - Sandstone	High Hoyland, Barnsley, South Yorkshire	Ceased	572m
427813 411123	Jebb Lane Opencast - Sandstone	Haigh, Barnsley, South Yorkshire	Ceased	633m
427833 412055	Bretton Lakes Underground - Sandstone	High Hoyland, Barnsley, South Yorkshire	Ceased	860m
426197 411955	Gilcar Quarry Opencast - Sandstone	Emley, Huddersfield, South Yorkshire	Ceased	880m
426160 411930	Gilcar Quarry Opencast - Sandstone	Emley, Huddersfield, South Yorkshire	Ceased	898m
428018 410882	Deep Hargh Wood Opencast – Iron Ore: ironstone	Clayton West, Barnsley, South Yorkshire	Ceased	913m

2.1.7 Hydrogeology

Groundwater Vulnerability

Source Protection Zones (SPZs) are defined for groundwater sources (e.g. wells, boreholes and springs) used for public drinking water supply. These zones show the risk of contamination from activities that might cause pollution in the area, the closer the activity to the source the greater the risk. Table 4 displays the groundwater vulnerability in the surrounding area, which range medium to high on the Secondary Bedrock Aquifer only. There are no Source Protection Zones within 1km of the site boundary.

Table 5
Groundwater Vulnerability

NGR	Combined Classification	Combined Vulnerability	Distance (m)	Pollutant speed
427000 411381	Secondary Bedrock Aquifer	Medium vulnerability	0	Low
427067 411381	Secondary Bedrock Aquifer	High vulnerability	0	High
427067 411381	Bedrock Aquifer Designation	Aqua Designation – Secondary Aquifer A	0	N/A

Groundwater Vulnerability Map (England)

Classification Medium – High

Aquifer Designation Map (Bedrock) (England)

Typology Secondary Bedrock

Aquifer Designation Map (Superficial Drift) (England)

Typology Secondary A

Discharges to Groundwater

There has been twenty discharge consents identified with only eight active discharge consents with six of those associated with the Sewage Treatment Works, listed within 500m of the Site recorded within the Envirocheck report.

- 2 x Discharge Consents to Land/Soakaway
- 6 x Discharge Consents to Freshwater Stream/River

Surface & Groundwater Abstractions

There are three groundwater abstractions listed within 2km of the site recorded within the Envirocheck report.

Table 6
Surface & Groundwater Abstractions within 2km

Operator name	Licence number	Source	Location distance (m) from site	Date start
British Coal, North Yorkshire Area	2/27/08/103	Surface	1033m	Licence Revoked
Mr A D Brook Gilcar Farm, Emley	2/27/13/173 (General Farming & Domestic)	Borehole – Coal measures – Emley (Groundwater)	1043m	22/09/1994
Mr J S Auckland Car Spares & Accessories Car Wash, Denby Dale	2/27/08/112 (Retail)	Borehole (Groundwater)	1801m	20/06/1996
Mr J S Auckland Car Spares & Accessories Car Wash, Denby Dale	2/27/08/112 (Retail)	Borehole – Coal measures – Scissett (Groundwater)	1801m	20/06/1996

Groundwater Flooding

It is recorded in the Envirocheck report that the potential for Groundwater Flooding occurring at the Site is classed as Low.

2.1.8 Historical Land Use

The Clayton Hall Farm site at Clayton West has been in farming use since the end of the 1800's. It is clear from the Envirocheck report that the past land use in the area has remained rural/agricultural. The

Envirocheck Historical Ordnance Survey maps are included in Appendix 1 of this report. Table 7 shows the industrial land use within 1km of the Site location.

Table 7
Industrial Land Use within 1km of the Site location

Name	Location	Activity	Distance
Adare S E C Ltd	Park Mill, Wakefield Road, Huddersfield, HD8 (QQ	Printers	725m
Ecocute Ltd	Unit 3, Longsisde Barns, Jebb Lane, Haigh, Barnsley, S75 4BS	Electricity, Generating & Distribution Equipment	999m
H Wood & Sons	Bilham Grange Farm, Bilham Road, Clayton West, Huddersfield, HD8 9PA	Livestock Farming	667m
Factory	Manufacturing & Production – not specified	Factory	712m
Factory	Manufacturing & Production, HD8	Factory	725m
Works	Manufacturing & Production, HD8	Works	846m
Works	Manufacturing & Production, HD8	Works	847m
Slurry bed	Slurry Bed, HD8	Waste Storage, Processing and Disposal	0m
Sewage Works	Sewage Works, HD8	Waste Storage, Processing and Disposal	424m
Sewage Works	Sewage Works, HD8	Waste Storage, Processing and Disposal	429m
Sewage Works	Sewage Works, HD8	Waste Storage, Processing and Disposal	469m
Sludge Tanks	Sludge Tanks, HD8	Waste Storage, Processing and Disposal	471m
Graveyard	Cemetries and Crematoria	Cemetries and Crematoria	745m

Graveyard	Cemetries and Crematoria	Cemetries and Crematoria	750m
Picnic Area	Picnic Area, HD8	Recreational	480m
Picnic Area	Picnic Area, Litherop Lane, HD8	Recreational	482m

2.1.9 Ecology

A search was conducted on the magic map application and information sourced from the Envirocheck report shows sites of ecological importance fall outside 1km of the site. The nearest designated Special Area of Conservation (SAC) is Denby Grange Colliery Ponds which is located approximately 2.84km from the Site and the nearest designated Local Nature Reserve (LNR) within Bretton Country Park is approximately a distance of 1.67km from the Site.

Following the searches carried out there is no need to carry out a further habitats assessment in relation to these receptors.

2.1.10 Cultural Heritage

Searches on the MAGIC website[5] confirm that there are no sites of significant interest located within 500m of the application site.

Environmental Stewardship Agreements (England)

Higher level stewardship 276m

It is considered that the identified receptors will not be affected by the activities proposed at the site.

Table 8
Cultural Heritage

Historic Environment		
Scheduled Monument (England)		
Type	**Distance (approx. metres) from Site Boundary**	**Approval Date**
Iron mining shaft mounds and medieval earthworks – South of Bentley Grange Farm (SE26561308)	951m	30/06/1958
Registered Parks & Gardens (England)		
Bretton Hall (Grade II) (SE27491187)	276m	01/12/1984
Cannon Hall (Grade II) (SE27090880)	1600m	01/06/1984
Agri-Environmental Schemes		
Countryside Stewardship Agreement Management Areas		
Countryside Stewardship Tier	**Distance (approx. metres) from Site Boundary**	
Middle Tier	0m	
Higher Tier	392m	
Forestry & Woodland Schemes		
English Woodland Grant Schemes (England)		
Name	**Distance (approx. metres) from Site Boundary**	**Approval Date**
Job Earnshaw Woodlands (SE26821056)	0m	27/11/2013 & 09/02/2015
High Wood (SE27971073)	640m	15/12/2006
Globe Farm (SE26600982)	796m	21/09/2011
Job Earnshaw Woodlands (SE27531193)	451m	27/11/2013

Job Earnshaw Woodlands (SE28021081)	716m	06/03/2015
Bretton Woodlands (SE28021085)	720m	07/12/2006

2.1.11 Landfill

Table 9
Licensed Historic Landfill Sites & Tips

NGR	Site Name & Licence Number	Details	Waste Type	Date	Distance (m) from site
427413 411776	Litherop Tip (Denby Dale Rural District Council Tip)	Litherop Lane, Clayton West, Huddersfield	Deposited waste including household waste	31/12/1955 – until 31/12/1971	369m
427067 411381	Kirklees Metropolitan Borough Council	Local Authority Landfill Coverage	Not supplied	Not supplied	Not supplied
427473 411356	Barnsley Metropolitan Borough Council	Local Authority Landfill Coverage	Not supplied	Not supplied	265m
427588 412228	Wakefield Metropolitan Borough Council	Local Authority Landfill Coverage	Not supplied	Not supplied	849m
427413 411776	Barnsley Metropolitan Borough Council	Local Authority Landfill Coverage	Not supplied	Not supplied	370m
427398 411851	Potentially Infilled Land (Non-Water)	Unknown	Unknown filled Ground (Pit, quarry etc,)	1989	427m
426205 411950	Potentially Infilled Land (Non-Water)	Unknown	Unknown filled Ground (Pit, quarry etc,)	1989	871m
428029 410895	Potentially Infilled Land (Non-Water)	Unknown	Unknown filled Ground (Pit, quarry etc,)	1989	917m
427006 411269	Potentially Infilled Land (Water)	Unknown	Unknown Filled Ground (Pond, marsh, river, stream, dock etc)	1955	23m

426159 411592	Potentially Infilled Land (Water)	Unknown	Unknown Filled Ground (Pond, marsh, river, stream, dock etc)	1955	782m

There are records within the Envirocheck report of five historic landfills located within 1km of the site.

2.2 Receptors

2.2.1 Sensitive Land Use

Sensitive receptors considered include:

- Local schools, hospitals, nursing and care homes, residential areas, workplaces
- Local protected sites and species
- Local factories and other businesses
- Footpaths, public green space
- Homes, or groups of homes (such as villages or housing developments)
- Playing fields and playgrounds

The site is located within a rural open space area. Retail and commercial businesses, leisure facilities, care homes, educational establishments and homes are located outside a 1km distance, within the village of Clayton West.

Table 10 shows the sensitive receptors that could potentially be affected by activities on site that are located within 1km of the Site boundary.

Drawing 004 identifies the below receptors and site setting.

Table 10
Sensitive Receptors within 1km of Site location

Sensitive Receptors	Distance (m) from Site
High Hoyland Lodge	389m
Bretton Hall Grade II	276m
Bilham Spring	350m
Bretton Country Park Kennels and Cattery	439m

Water Sewage Treatment Works	462m
Picnic site (Litherop)	474m
Bilham Shrogg	480m
Litherop Spring	566m
Bilham Grange (H Wood & Sons) Farm	650m
Factory	693m
Adare SEC	712m
Bretton Woodlands	720m
Kaye's Millenium Garden	750m
Brian Fell and Son Sculpture & Metalwork	750m
Liz Grundy School – Sculpture & Stone Carving	770m
Church of All Hallows	801m
Brendon House	804m
Domestic Premises	806m
Manor House Farm	850m
Allotment Gardens	850m
Playing Field	873m
Arts Centre (Art Gallery)	927m
Iron mining shaft mounds and medieval earthworks – South of Bentley Grange Farm	951m
Woodman Inn	979m

Table 11 displays the sensitive land use within 1km of the Site boundary that could potentially be affected by activities on site.

Table 11
Sensitive Land Use within 1km of Site location

Receptor	Type	NGR	Distance (m) from Site
Bilham Shrogg	Plantation on Ancient Woodland	426796 411071	259m
Hoyland Bank Wood	Plantation on Ancient Woodland	427483 411342	274m
Hoyland Bank Wood	Ancient and Semi-Natural Woodland	427464 411139	304m
High Wood	Plantation on Ancient Woodland	427998 410853	908m
Areas of Adopted Green Belt	Kirklees Metropolitan Borough Council Planning Department	427067 411381	0m
Areas of Adopted Green Belt	Barnsley Metropolitan Borough Council	427474 411348	265m
Areas of Adopted Green Belt	Wakefield City Metropolitan District Council	427579 412235	851m
Nitrate Vulnerable Zones	River Dearne NVZ, Surface Water	427067 411381	0m

The site is located in a surface water Nitrate Vulnerable Zone, however no Nitrate is produced or used on site.

2.3 Site Infrastructure for pollution control

Waste Inputs

The following steps will be implemented upon the delivery and acceptance of waste on site.

All incoming commercial vehicles delivering waste are required to report to the site office where a member of the site staff shall require the following information prior to directing the vehicle to the reception area.

- The vehicle registration number
- The hauliers Registration of Carriers registration number
- A Transfer Note to conform to the Duty of Care legislation. This will show the waste producer, a description of the waste, the haulier of the waste and the waste's collection point
- Transaction details

Following the waste being deposited within the working area, the delivery driver required to report to the site office prior to leaving the site, where the transaction details are recorded and a ticket supplied to the haulier.

The site records are available for inspection by the Environment Agency during the permitted operating hours of the site. Commercial information shall be regarded as confidential.

Material Outputs

All vehicles collecting the product or rejected wastes are required to report to the site office. The following information will be requested:

- The vehicles registration number
- The hauliers Registration of Carriers registration number, in the case of rejected waste
- The tare weight of the vehicle

Following collection of the product or rejected wastes, the driver of the vehicle is required to report to the site office. The following information shall be required:

- The weight of the vehicle and the material
- Transaction details.
- Transfer note (if required).

Air Emissions

There are no changes to the point source emissions.

Table S3.1
Point Source Emissions to Air – Emission Limits and Requirements

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
Generator Exhaust	Oxides of Nitrogen	Generator Exhaust	500mg/Nm³	Hourly Mean	Annual monitoring	ISO 10849: 1996
	Carbon monoxide	Generator Exhaust	1400mg/Nm³	Hourly Mean		ISO 12039: 2001
	Sulphur dioxide	Generator Exhaust	350mg/Nm³	Hourly Mean		ISO 11632: 1998
	Total volatile organic compounds including methane	Generator Exhaust	1000mg/Nm³	Hourly Mean		BS EN 12619: 1999 BS EN 13526: 2002
	Non methane volatile organic compounds	Generator Exhaust	75mg/Nm³	Instantaneous Reading		BS EN 13649: 2002
	Temperature	Generator Exhaust	Gas engine exhaust gas temperature where the exhaust leaves the engine shall be no less than 200 degrees Celsius.	Instantaneous Reading		BS 6069: 1993
Gas Flare	Oxides of Nitrogen	Gas Flare	150mg/Nm³	Hourly Mean	Annual monitoring	ISO 10849: 1996
	Carbon monoxide	Gas Flare	50mg/Nm³	Hourly Mean		ISO 12039: 2001
	Total volatile organic compounds including methane	Gas Flare	10mg/Nm³	Hourly Mean		BS EN 12619: 1999 BS EN 13526: 2002

Note 1: Annual Monitoring is only required when flare operates in excess of 10% of the time, taken on an annual assessment period.

Note 2: Meteorological Data (wind speed, wind direction, temperature and relative humidity) should also be recorded during sampling, as well as taking note of on-site activities. Emission limits for the gas engines and gas flare are based on normal (N) operating conditions and load (temperature:0ºC (273K); pressure: 101.3 kPa; and oxygen: 5 percent (dry gas)). Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme (including the measurement of exhaust gas temperature) shall have either MCERTS certification or MCERTS accreditation (as appropriate), unless otherwise agreed in writing by the agency.

Site Infrastructure Plan

Food Waste Shed Layout Plan (Drawing_008) contains details of the following:

- Solid feeder
- Liquid feeder
- Compound food waste storage 1 & 2
- Depackager
- Food waste storage tanks for liquid waste
- Volume wash hose & vehicle wash equipment station
- Disinfectant footbath
- Automatic valves fitted & linked to a Scada system
- Emergency arrangements (spill kits etc)
- Entrances and exits that can be used by the emergency services
- Compound 1 & 2 location external to the shed – non-ABP materials

Drainage and Site Surfacing

The site has no external drainage other than the process pipework and the internal building drainage system. Refer to Drawing 005 Drainage Plan and Drawing 005a Process Pipework Plan.

Odour Management Plan

An updated odour management has been included as part of this permit variation. Odour management is regularly reviewed by the Environment Agency as part of existing permit arrangements.

Management Controls

A Changing Climate

Climate change means that extreme weather incidents are becoming more common and more severe.

Climate projections show that over the coming decades there is an increased risk of climate change impacts, including:

- extreme rainfall, leading to more frequent and severe floods
- heat waves
- drought
- rise in sea levels and tidal surges
- storms
- wildfires

A three-stage approach has been taken to assess these risks and the impacts that could have an impact on the businesses directly. Planning for this will help to:

- remain in compliance with the environmental permit, other obligations and regulations
- minimise the sites impact on the environment during an extreme weather event and the event's impact on operations, either through accidental release or abnormal operation
- improve resilience and business continuity by avoiding unplanned start-ups, shutdowns and other business interruptions

CHFB's Risk Assessment policies and procedures are driven by relevant UK Legislation, requiring all significant Environment Health & Safety (EHS) risks affecting the business to be identified, assessed and either eliminated, adequately controlled or mitigated against. Risk assessments, therefore, cover any significant and foreseeable EHS risks that maybe caused or exasperated by climate change on an ongoing basis.

Complaints Procedure

As part of the Environment Management System (EMS), the site has robust complaints procedures which are used to investigate all complaints received, including complaints in relation to environmental performance and the environmental permit. Complaints Management Procedure (SOP_3.25).

Managing Staff Competence/Training & Records

Manning levels at the Clayton Hall Farm Bioenergy Plant are adequate to safely run a 24 x 7 operation and the site is regularly reviewed by the Environment Agency as part of the existing permit arrangements.

Documented procedural arrangements including technical competence and responsibilities are managed under the Section 3.20 in the EMS (available upon request).

Accident Management Plan

The management system identifies plans for dealing with incidents or events that could result in pollution or permit non-compliance and identifies foreseeable potential events. An overview of the arrangements can be found in Section 3.21 of the EMS. Other references within the management system include SOP-3.21.1 Procedure for Hazard Identification Risk Assessment and the sites emergency arrangements. Accident prevention and management plans are regularly reviewed by the Environment Agency as part of the existing permit.

Contingency Plans

The management system takes in account foreseeable deviations and manages appropriate contingencies and includes breakdowns, enforced shutdowns and other changes to normal operations. An overview of the arrangements can be found in Section 3.22 of the EMS and further details can be found in the Contingency procedure (SOP_3.26). Contingency plans are monitored on a regular basis by the Environment Agency under the current permit.

Maintenance

All site infrastructure and equipment is subject to regular maintenance, inspection and calibration, as per the manufacturer's recommendations. This includes checking the integrity of equipment, such as the tanks and pipework, where possible.

Daily, weekly and monthly maintenance checks are carried out. Check lists are completed, and any issues that arise are recorded in the Site Diary. Monitoring carried out is checked against the manufacturer's recommendations. Any issues identified are actioned as soon as practicable

Preventative maintenance checks are also carried out and recorded with the purpose of identifying and subsequently correcting any potential failings either before they occur or prior to developing into major faults.

2.4 Site Activities

Material	Maximum quantity	Type and size of storage	Type and size of secondary containment
solid wastes awaiting digestion	1000 tonnes	Closed building with sealed concrete flooring	30 cm bunds installed in doorways
liquid wastes awaiting digestion	2 x 60 + 40 m3	Mobile tankers on sealed concrete floor	30 cm bunds installed in doorways. Provides 115 m3 containment requires 66 m3.
wastes undergoing digestion – digester 1	2430 m3	Cast concrete above ground tank	bund surrounding base draining rainwater into concrete 'dirty water' lagoon
wastes undergoing digestion – digester 2	3060 m3	Concrete panel above ground tank	bund surrounding base draining rainwater into concrete 'dirty water' lagoon
emergency spillage lagoon	2500 m3	Concrete panel lagoon	Concrete with earth surround
liquid digestate	3200 m3	Square concrete panel tank	Concrete with earth surround
liquid digestate	5000 m3	Round concrete panel tank	Concrete earth surround
dewatered digestate	500 tonnes	Indoors on concrete surface	Concreted surface
intermediate rainwater collection tank	24 m3	Square concrete panel tank	Drain to concrete 'dirty water' lagoon
Pasteuriser tank 1	10 m3	Steel tank	Drain to digester bund
Pasteuriser tank 2	10 m3	Steel tank	Drain to digester bund

2.5 Production Processes

Solid, semi solid and liquid organic matter is delivered to site and stored under cover in the incoming waste processing building. Liquids are stored in mobile tanks located within the building. If any, packaged waste food materials are accepted they are de-packaged prior to treatment. Solid and liquid material is fed into one of the two digesters by screw pumps and warmed by heat from the gas engines on the generators. Methane is given off and digested matter is drawn off and run through a Pasteuriser to kill off harmful pathogens. It then transfers into one of the two concrete panelled tanks where it's stored awaiting transfer to farm land for use.

A large earth banked lined lagoon has been recently replaced with a new concrete lagoon built to CIRIA 736 standard. This lagoon receives rainwater from the perimeter bunds around the two digesters. Initially the rainwater is collected in a smaller intermediate tank and drained into the lagoon. In the event of the rainwater becoming contaminated (by for example spilled digestate), the material can be drained into the round concrete digestate tank. In the event of a major failure of one of the digesters there is sufficient capacity to contain the contents in one or other of the tanks or the lagoon.

As required, digestate in one of the tanks is drawn off and spread onto farmland as a fertiliser and soil improver.

Digestate can also be de-watered and spread as a fertiliser onto farm land. This is stored on an impermeable concrete surface before being transferred for use onto land. The digestate complies with the QP standard that satisfies the End of Waste PAS110 criteria.

1. Receipt of wastes – arriving wastes and other materials must be delivered directly into the incoming waste processing building and not placed outside. The only exception is for the solid wastes to be delivered and temporarily placed on the concreted surface external to the reception storage shed with the intention to transfer indoors with immediate effect.

2. Handling of animal by products - The site is permitted to accept up to 10 tonnes per day of animal by-products, of the total incoming waste and invokes a separate set of regulations; Animal By-Products (Enforcement) (England) Regulations 2013. The regulations are designed to prevent biological contamination of foodstuffs and staff. A requirement of these regulations is that a Hazard and Critical Control Point (HCCP) plan is produced and adhered to.

Only Category 3 Animal By-Product (Low Risk) materials are permitted**,** which consists of the following:

- carcasses or body parts passed fit for humans to eat, at a slaughterhouse
- products or foods of animal origin originally meant for human consumption but withdrawn for commercial reasons, not because it's unfit to eat
- domestic catering waste
- shells from shellfish with soft tissue
- eggs, egg by-products, hatchery by-products and eggshells
- aquatic animals, aquatic and terrestrial invertebrates
- hides and skins from slaughterhouses
- animal hides, skins, hooves, feathers, wool, horns, and hair that had no signs of infectious disease at death
- processed animal proteins (PAP)

PAP are animal proteins processed from any category 3 ABP except:

- milk, colostrum or products derived from them
- eggs and egg products, including eggshells
- gelatine
- collagen
- hydrolysed proteins
- dicalcium phosphate and tricalcium phosphate of animal origin
- blood products (although any processed blood would still be subject to this guide)

This category of ABP wastes must only be collected, transported, stored, handled, processed and disposed of in accordance with European regulation (EC) 1069/2009. One of the permitted methods of treatment is turning into biogas.

The Hazard Analysis and Critical Control Point (HACCP) system is internationally accepted as the system of choice for food safety management. It is a preventative approach to food safety based on the following seven principles:

- identify any hazards that must be prevented eliminated or reduced
- identify the critical control points (CCPs) at the steps at which control is essential
- establish critical limits at CCPs
- establish procedures to monitor the CCPs
- establish corrective actions to be taken if a CCP is not under control
- establish procedures to verify whether the above procedures are working effectively
- establish documents and records to demonstrate the effective application of the above measures.

The HACCP applies primarily to ensure material being adequately contained, treated and applied to the land such that it does not pollute the environment but also that the material does not cause contamination of future food crops. Refer to the HACCP (CHFB_HACCP_2024).

3. Preparing material for the digester – wastes may need de-packaging. This is a mechanical process carried out indoors. Resulting packaging wastes will still have a high organic content and should only be stored in a sealed and covered skip before removal from site.

4. Digestion process – takes place in one of two sealed tanks, but as with all types of liquid storage there is a risk of leak or spillage. The digesters have small bunds around the base which are directed into an intermediate tank. The main principle is to divert clean rain water to the new concrete panel lagoon, but if a leak or spill occurred at the digesters, the matter would be contained. Routine maintenance items are listed within the Environment Management System, which include checks of drains and channels, pipework, clean ups of spills, and removing of rain water from the digester bunds, intermediate tank and from the earth bank concrete panel lagoons.

5. Digestate storage – digestate is drawn off into one of the two concrete tanks. It is critical that the tank and lagoon structures are inspected and maintained as stated in the Environment Management System.

6. Storage of dewatered digestate – this material presents a similar risk to that of received wastes and should be handled accordingly.

7. Application of digestate to farm land – as of April 2024 the digestate material is produced to an End of Waste, achieving compliance with the Quality Protocol Anaerobic Digestate to BSI PAS110 standard, that effectively becomes an agricultural fertiliser, which is not subject to the same waste controls from the EA. The digestate materials are spread to farmland, CHFB continue to hold a mobile plant permit (EB3639AN) as a contingency measure, that the digestate material fails the BSI PAS110 standard in which the material would be classed as a waste. In these circumstances the digestate materials would be spread to farmland in compliance with the Mobile Plant Permit (EB3639AN) and under deployments issued by the Environment Agency (EA). The waste material will only be applied to land that has been approved under the deployments, and at the quantities agreed by the EA. Ten metre wide no spread buffer zones apply to all fields which border watercourses, and 6 metre zones apply to public footpaths where they pass through fields.

2.5.1 Emissions to Air

The plant generates methane from anaerobic digestion of organic matter. The gas is stored in the roof of the digester and drawn off as a fuel to power a pair of gas engines which drive electric generators. Combustion of methane results in exhaust gases, mainly carbon dioxide and water vapour but also oxides of nitrogen, carbon monoxide, sulphur dioxide, and volatile organic compounds which include methane.

In the event of there being excess methane produced which cannot be burned in the generators, it is burned off in a flare, which also results in the same combustion products. Flaring occurs less than 10% over a 12-month period.

Release of gaseous products to air is controlled by conditions set in the environmental permit which requires that the exhaust products are monitored and reported on an annual basis.

Records are to be maintained of times when the flare is used and the reasons for this. The flare exhaust gases need to be monitored if it is in use for more than 10% of the time.

The requirements of the permit are achieved by regular maintenance of combustion equipment.

Abnormal/emergency situations

The digester is built with many safeguards and lock downs to protect against abnormal releases. In the event of gaseous emissions being released to atmosphere which are not controlled by the flare, Environment Agency and Fire Service must be notified.

2.5.2 Emissions to Water

There are no emissions to water.

2.5.3 Odour

Description

Handling of waste organic matter can produce an odour with potential to cause nuisance to residents of nearby properties. The installation is in an isolated position with very few domestic properties nearby. The main habited area is at Clayton West and prevailing winds ensure that any odours are blown in the opposite direction to this.

Incoming transport

If incoming wastes are potentially odorous, they should be covered. The wastes need to be inspected and tested upon arrival and if they are unsatisfactory, they must not be accepted for treatment on site.

Offloading and storage awaiting treatment

The incoming wastes can be slightly odorous, but this has shown to be unlikely to cause offence beyond the installation boundary. Should it become an issue the incoming waste processing building door should be kept closed except at delivery time.

Digestion

The digestion process causes minimal odour as it is carried out in a sealed tank. The gaseous products, methane and carbon dioxide are odourless. It is possible if the digestion process goes wrong that more pungent gases such as hydrogen sulphide could be generated. This is carefully controlled by waste inputs and running of the digester.

Storage of liquid digestate

The storage of digested food waste in open lagoons is potentially the largest source of odour. The current permit proposes that this is covered over. Experience so far has shown this to be unnecessary. A crust forms across the lagoons that provides an alternative cover to minimise odour release.

Storage of dewatered digestate

The dewatering activity takes place within the building. To avoid escape of odours the doors to the building must be kept closed. New shutter doors for the entrance/exit of vehicles have been installed and measures have been taken to minimise escape of fugitive odour emissions from the pedestrian doorway.

2.5.4. Noise Risk

There is no associated noise risk in relation to the changes to the permit variation.

All treatment and process equipment is located within process buildings or housed in bespoke containment. All process equipment has been designed in accordance with European noise standards; the equipment is subject to regular preventative maintenance in accordance with the manufacturer's requirements.

CHFB considers it highly unlikely that the activities on site will give rise to noise or vibration nuisance at the site boundary. The site does not have a history of complaints from nearby residents or businesses in

relation to noise. The activities carried out during normal operations should have no environmental impact on noise sensitive receptors. Therefore, it is not necessary to implement noise control measures.

3.0 Environmental Risk Assessment

3.1 Overview and Approach

This section outlines the procedure that has been followed in the undertaking of the ERA for the site. The results are presented, in accordance with the EA Guidance, in the tables presented in Section 3.2.

3.1.1 Identification of Hazards

The first step of an ERA is to consider and identifv the risks posed to the environment by the activities proposed for a site.

The EA Guidance states that an operator must:

"…….*identify whether any of the following risks could occur and what the environmental impact could be:*

- *any discharge, for example sewage or trade effluent to surface or groundwater*
- *accidents*
- *odour (not for standalone water discharge and groundwater activities)*
- *noise and vibration (not for standalone water discharge and groundwater activities)*
- *uncontrolled or unintended (fugitive') emissions, for which risks include dust, litter, pests and pollutants that shouldn't be in the discharge*
- *visible emissions, e.g., smoke, or visible plumes*."

3.1.2 Identification of Receptors

Section 2 of this document describes the site setting and the land uses in the vicinity of the proposed site.

This information has been used in order to focus on the main receptors that could be potentially at risk from the activities of the site.

Using the information gathered from the stated sources, the receptors considered for assessment within the ERA are defined in Tables 10 and 11.

In accordance with the EA Guidance, Drawing 004 presents a map showing the location of the site and the receptors considered within the ERA.

3.1.3 Identification of Potential Pathways

For each of the identified hazards for operation of the site, the ERA has considered that pathways through which each hazard may impact on a sensitive receptor. Where such pathways exist, the risks of potentially significant impacts have been assessed in accordance with Sections 3.1.4 and 3.1.5 below.

Where no pathway exists between an identified hazard and an identified receptor, the associated risks are not considered further within the ERA.

3.1.4 Assessment of Risks

The EA Guidance states that the nature of the ERA will be influenced by the type of activity (or activities) that are proposed for a site. For installations/waste operations, the ERA is required to consider, "*…one or more of the following, depending on the substances you discharge and where they're discharged to:*

- *assess the risks of your air emissions*
- *calculate the global warming impact of your air emissions*
- *assess risks to groundwater*
- *assess risk to groundwater from landfill leachate*
- *assess risks to surface water from hazardous pollutants*
- *assess risks to surface water from sanitary and other pollutants*"

For installations and waste operations, an operator is also required to decide how to treat, recycle or dispose of waste. The ERA has therefore included consideration of the environmental impact of the ultimate fate of the materials that will be processed by the proposed activities of the site.

3.1.5 Controlling Risks

The EA Guidance states:

"*You'll need to show how you're managing any risks appropriately by controlling and monitoring your emissions and through your management system.*"

Where an ERA identifies risks that are potentially significant, the ERA is required to demonstrate how the risk of pollution or harm can be mitigated by measures to manage these risks. The approach undertaken to the implementation of management/mitigation measures, for this ERA, is (in order of preference):

- Avoidance/prevention
- Minimisation/management
- Mitigation; and
- Offset/compensation.

The following tables present the assessment in terms of hazards posed, receptors and pathways, along with management and residual risks for the following hazards:

- Odour
- Noise and Vibration
- Fugitive Emissions (including dust, mud, litter and pests); and
- Accidents.

Table 9 Odour Risk Assessment and Management Plan

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	Receptor	Pathway	Risk management	Probability of exposure	Consequence	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	**What is the risk that still remains? The balance of probability and consequence**
Odours from onsite processes and waste management.	*Site personnel and local human population*	Air	Operations on site will be controlled as directed by written Operating and Process Procedures and Odour Management Plan OMP. Strict operational and waste acceptance procedures will be adhered to. Potentially incoming odorous liquid waste is transferred within the building from tanker to storage tank. Storage of digested food waste in open lagoons is potentially a source of odour. The crust that forms across the lagoons provides an alternative cover to minimise odour release	Negligible Low Low	Odour nuisance and loss of amenity.	Not significant

			Abatement systems are in place to manage odours potentially arising from site production activities. Robust maintenance procedures to support all odour management and abatement activities on site. The site will be monitored for odours, if required, by site personnel throughout the working day. In the event that odours are detected, investigations will be undertaken to determine the cause and appropriate remedial action taken as underpinned by the OMP and Complaint procedure**s**. The Site Manager will be responsible for implementing risk management measures.			

Table 10 Noise Risk Assessment and Management Plan

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	Receptor	Pathway	Risk management	Probability of exposure	Consequence	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	**What is the risk that still remains? The balance of probability and consequence**
Noise from vehicular movements (site access road and yard) Noise from operation of site plant.	*Site personnel and local human population*	Air.	The site is located within an agricultural area. The machinery/plant will only be operated within the permitted site opening hours which are 24hrs per day. All equipment will be maintained and operated in accordance with manufacturer's guidance and will be maintained in good working order. The site will be operated so as to minimise noise emissions from the site. Measures that will be taken at the site include: • locating plant away from noise-sensitive receptors where possible • the avoidance of dropping materials from height • switching plant off when not in use	Mobile. Intermittent throughout the day. Medium.	Noise nuisance and loss of amenity.	Not significant

			• the imposition of a speed limit for vehicles on the site. This will reduce noise associated with high engine speeds; training of all personnel in the need to minimise site noise. All personnel are responsible for monitoring and reporting excessive noise when carrying out their everyday roles • regular maintenance of site plant and machinery to minimise noise resulting from inefficient operation of pumps, generators and engines • in the event that reversing alarms are found to give rise to complaints, alternative alarms or technology will be investigated • regular maintenance of site surfaces to prevent the development of potholes. This will significantly reduce noise generated by vehicles, particularly empty vehicles exiting the site • consideration will be given to the fitting of noise suppression kits on items of plant and equipment, if required; and • all plant will be maintained in accordance with manufacturer's recommendations to minimise noise emissions.			

			Any noise complaint received will be logged in the site diary. The Site Manager will investigate the complaint and will take action to identify the source of the noise and implement remedial measures where appropriate depending on source identified. The measures employed at the site to minimise the emission of noise will be regularly reviewed by the Site Manager and additional measures will be employed where required. The site has robust complaints procedures which are used to investigate all complaints received, including complaints in relation to environmental performance and the environmental permit. Ref: (SOP_3.25) Complaints Procedure. The management of noise emissions is detailed further within the Noise Management and Minimisation procedure (SOP_3.12) relating to activities or control measures.			

Table 11 Fugitive Emissions Risk Assessment and Management Plan

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	Receptor	Pathway	Risk management	Probability of exposure	Consequence	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	**What is the risk that still remains? The balance of probability and consequence**
To Air:						
Dust from: Vehicle movements to site Waste management and storage from operational processes Emissions and deposition Arising from surfaces	*Site personnel and local human population*	Air	Due to the nature of site activities, is not anticipated that dust will pose a risk. Robust maintenance procedures to support all activities on site. **Site Controls** • A speed limit of 10mph is implemented for vehicles using the site to reduce the risk of dust suspension. • Access to CCTV should the speed limit be breached can be used to take immediate action and report to management.	Medium	Dust nuisance Harm to human health	Low

			• Site fencing and hedgerows act as containment measures around the site boundary. • Incoming and outgoing vehicles carrying loads are covered or secured. **Housekeeping** • Site access roads and operational areas will be maintained and repaired to minimise emissions of dust. These are checked on a daily basis for damage with any remedial action logged within the recording systems. • Any temporary repairs are made good within 24 hours and arrangements will be made to have permanent repairs completed within one week. (Any substantial repair timescales may exceed this timescale dependant on weather conditions and work required), this would be tracked and recorded electronically and in the site diary. • Records of all repairs made are recorded in the site			

			diary and contractor invoices/records are kept in the site office for inspection if required. • The site benefits from concrete surfacing throughout. • Site cleaning is carried out to clean working areas down at the start of the day and at the end of the working day if required. • During the day if dust is identified by the Site Manager, action will be taken to clean site access and operational areas. • Plant cleaning and maintenance (if required) is carried out every week as a routine measure. Records for each machine/plant are kept to evidence this. • Prior to leaving site vehicles on can be washed down using the site power washer if the site supervisor or driver identify dust or debris on the vehicle body or wheels. Water is directed and controlled via the site drainage system into the lagoon system.			

			Procedures and Recording Forms • Records for the management of the site and housekeeping, maintenance and cleaning are detailed within the EMS. • The procedure for managing complaints is included in the EMS. • Individual Plant and Equipment Maintenance Forms records all operational equipment cleaning and inspections. **Water Supplies** • The site has as access to the local water supply for general everyday use. **Management of procedures** • The Site Manager (and other nominated trained members of staff) will be responsible for implementing risk management controls and site recording. • The facility will not give rise to reasonable cause for annoyance. In the unlikely event of any complaints,			

			these will be dealt with in accordance with the sites complaint procedures.			
To Water						
Runoff from waste storage areas & site surfaces	Surface water: Groundwater within bedrock deposits.	Overland percolation through the ground	The site operates with all surfacing made up of concrete pad with sealed drainage. Drainage systems are comprehensive with tank and process shut off valves. The drainage system will be maintained and regularly cleaned to prevent blockages. Drainage arrangements are shown in Drawings within the Environment Management System.	Low	Contamination of surface water and groundwater.	Not significant
Pests						
Birds, vermin and insects.	*Site personnel and local human population*	Via air (flies and birds) or over ground (vermin and birds).	The facility will be inspected by both site management and operatives for infestations of pests, vermin and insects on a routine basis recorded in site inspections and audits. In the event a pest infestation is identified, a specialist pest control contractor will provide site pest management programmes with at least monthly visits. Additional visits	Negligible	Nuisance, loss of amenity and harm to human health.	Not significant

			will be made as required. Inspection and Audit arrangements are shown in within the Environment Management System.			
Mud/Litter						
Litter from acceptance and storage of waste	*Local human population and wildlife.*	Airborne litter	Due to the nature of site activities, it is not anticipated that litter will pose a risk. However, the boundary of the site and surrounding environment will be routinely inspected; with any visible litter any litter removed with immediate effect. Inspections will be recorded within the daily inspection forms and observations noted in the site diary. Inspection and Audit arrangements are shown in within the Environment Management System. The site will benefit from fencing and hedgerows which will limit the potential for litter to escape off-site. It will be the responsibility of the site staff to monitor the site for any signs of escaping materials such as packaging either from within the site or from vehicles delivering or removing materials to and from the site.	Low	Nuisance and loss of amenity	Not significant
Mud on roads	*Local human population*	Transferral of mud on vehicle wheels	The site is accessed via a farm track leading from the A636 Wakefield Road, which directly leads to the entrance of the site. The site is partially surfaced with concrete,	Low	Mud on road, road traffic accidents.	Not significant

			with an ongoing programme to concrete the remaining unmade ground/hardstanding area. It is not expected that mud will feature as a problem on the site. The following measures will be taken to prevent the deposition or tracking of mud or debris from the site onto public areas or highways: • site surfaces will be maintained free of significant quantities of mud and debris. • all operational areas will be subject to monitoring by staff throughout the working day; and • all vehicles leaving operational areas will, before leaving the site, be checked to ensure that they are clear of loose materials and that any products being exported to and from the site are secure. In the event that mud, debris or waste arising from the site is deposited onto public areas outside the site, the following remedial measures will be implemented: • the affected public areas outside the site will be cleaned; and			

			• traffic will be isolated from sources of mud and debris within the site to prevent further tracking of mud and debris, and measures will be taken to clear any such sources as soon as practicable.			

Table 12 Accidents Risk Assessment and Management Plan

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	Receptor	Pathway	Risk management	Probability of exposure	Consequence	**What is the overall risk**
What has the potential to cause harm?	What is at risk what do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? – Who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	**What is the risk that still remains? The balance of probability and consequence**
Unauthorised waste	*Site personnel and local human population* *Local environment*	Via air (odours and dust) Overland (to sewer, surface water and groundwater)	The site has strict waste acceptance procedures. Upon delivery waste will be subject to strict waste acceptance procedures to identify, reject and/or segregate potentially non-conforming waste. Only waste authorised by the permit will be accepted at the site. All wastes will be subject to inspection and checking against the declaration on the waste transfer documentation. In the event that unauthorised waste is delivered to the site, the waste will be reloaded onto			Not significant

			the delivery vehicle for removal from site or will be segregated and stored in a designated quarantine area prior to export from site. Any non-permitted wastes (including malodorous wastes), which are found following deposit or during subsequent storage and treatment operations, will be covered, segregated and removed within 48hrs. The Waste Acceptance procedure (SOP_3.2.3) and Waste Rejection procedure (SOP_3.3.1) are included in the EMS. The site also has an Odour Management Plan (CHFB_OMP) in place as part of the management system. The Site Manager will be responsible for implementing risk management measures.			

Fire	*Site personnel and local human population* *Local environment*	Air, water runoff	The site has an Emergency Procedures (SOP_3.1) which covers the risk and control of Fire included in the site EMS. Ref: (SOP_3.1.1) A brief summary of the measures which will be employed is as follows: • Additional measures are in place to allow the early detection and management of a fire • flammable wastes and incompatible materials are stored in accordance with site procedures and storage areas • the plant inspection schedule will include checks of electrical equipment within the site to ensure that any faults are identified and repaired • fire extinguishers will be provided at designated locations • smoking will not be permitted in operational areas of the site • working practices will ensure the assessment of	Low	Nuisance (smoke and fumes) and harm to human health. Water contamination (runoff)	Not significant

			fire hazards and training of employees in fire prevention, e.g. the use of fire extinguishers and emergency procedures; and • any fire at the site will be treated as an emergency. • In the event of a major fire, the following action will be taken: • the Site Manager and the Fire & Rescue Service will be notified immediately and the Environment Agency as soon as practicable • the burning area will be isolated and attempts will be made to extinguish the fire utilising the onsite fire extinguishers, if safe to do so; and the site and buildings will be evacuated.			
Spillage and Leakage	Local land quality, surface water and groundwater.	Runoff and percolation through ground.	To prevent loss of containment and minimise the risk and impact of releases the following measures will be implemented:	Low	Contamination of groundwater and surface water.	Not significant

	Site personnel, emergency services personnel and local human population	Direct exposure and transport via air	**Containment system:** any facilities for the storage of oils, fuels or chemicals will be sited above ground on impervious bases and surrounded by impervious bund walls. The volume of the bunded compound will be at least the equivalent to the capacity of the tank plus 10%. All filling points, vents and gauges will be located within the bund. Site surfaces are impermeable with sealed drainage and drainage isolation systems. Containment systems and procedures for the management of liquids on site are managed under site specific SOPs as well as the HACCP covering ABPR - biosecurity measures, non-hazardous and hazardous waste materials. **Storage vessels:** storage tanks will be constructed to the appropriate British Standard **Inspection:** tanks will be inspected visually on a daily basis by site staff to ensure the continued integrity of the tanks, and identify the requirement for any remedial action		Harm to human health.	

			Spill kits: materials suitable for absorbing and containing minor spillages will be maintained on site; and **Monitoring techniques:** the site staff will undertake daily monitoring for evidence of spillage and leakage. In the event of any potentially polluting leak or spillage occurring on site, the following action will be taken: Minor spillages will be cleaned up immediately, using sand or proprietary absorbent. The resultant materials will be placed into containers and will then be removed from site and disposed of at a suitably permitted facility. The incident will be logged in the site diary. Any dry products/or wastes spilled on site will be collected and transported to the appropriate area of the site.			

			In the event of a major spillage, which is causing or is likely to cause polluting emissions to the environment, immediate action will be taken to contain the spillage and prevent liquid from entering surface water or drains. The spillage will be cleared immediately and placed in containers for offsite disposal, and the Environment Agency will be informed. The spillage procedure, included in of the EMS, provides further information with respect to spillages on site (SOP_3.22) Spillage response Procedure refer.			
Security and Vandalism	Personnel on site, emergency service workers.		The following security measures are in place: **Site perimeter:** the site benefits from a secure perimeter fencing and hedgerows. **Security gates:** the site entrance gate will be locked at all times when the facility is unattended. The permitted facility is located within the farmstead with the occupied farmhouse within close proximity. The site will be monitored 24 hours via CCTV.	Low	Nuisance and harm to human health. Contamination of land and surface water.	Not significant

			Inspection: gates and fencing extending around the site will be inspected regularly by the operations staff to identify deterioration and damage, and the need for any repairs **Maintenance and repair:** fencing and gates will be maintained and repaired to ensure their continued integrity. In the event that damage is sustained repairs will be made by the end of the working day. If this is not possible, suitable measures will be taken to prevent any unauthorised access to the site and permanent repairs will be affected as soon as practicable Authorised access system: all visitors to the site will be required to register in the visitor's book and sign out again on exit to minimise the risk of unauthorised visitors being present on site; and **Monitoring techniques:** operational procedures, including regular inspections, will ensure continual monitoring of security provision at the site.			

			In the event of a breach of security at the site, the cause will be investigated and appropriate mitigation measures implemented. Records to be maintained include inspections and maintenance of security fencing and gates, breaches of security, investigations and actions taken.			
Flooding	*Site personnel and local human population* *Local environment*	Overland	There are no surface water features within the site boundary. According to the UK government Flood Map for Planning, the site does not lie within a flood zone. Evacuation procedures will be implemented in the event of flooding. The EMS has an Emergency Response Procedure (SOP_3.1) and Flooding Procedure (SOP_3.1.2).	Low	Inundation of site with flood water	Not significant

Envirocheck® Report:

Datasheet

Order Details:

Order Number:
333683478_1_1

Customer Reference:
CHF0124

National Grid Reference:
427070, 411380

Slice:
A

Site Area (Ha):
4.88

Search Buffer (m):
1000

Site Details:

Clayton Hall Farm Bioenergy, Clayton Hall Farm
Back Lane
Clayton West
HUDDERSFIELD
HD8 9QE

Client Details:

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Olive Compliance Ltd
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Contents

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.
For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.
In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

Report Version v53.0

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 3			20	27
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 15				1
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 15		Yes		
Pollution Incidents to Controlled Waters	pg 15			2	6
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality	pg 17				4
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 17				3
Water Abstractions	pg 18				(*4)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 19	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 19	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 19		1	11	63

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites	pg 29			1	
Historical Landfill Sites	pg 29			1	
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)	pg 29	1			
Local Authority Landfill Coverage		1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites	pg 29			1	
Potentially Infilled Land (Non-Water)	pg 29			1	2
Potentially Infilled Land (Water)	pg 30		1		1
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 31	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 31	Yes		Yes	Yes
BGS Recorded Mineral Sites	pg 31			1	6
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas	pg 33	Yes	n/a	n/a	n/a
Mining Instability	pg 33	Yes	n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 33	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 33	Yes	Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 33	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 34	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 34	Yes		n/a	n/a
Radon Potential - Radon Affected Areas	pg 34	Yes	n/a	n/a	n/a
Radon Potential - Radon Protection Measures	pg 34	Yes	n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 35				2
Fuel Station Entries					
Points of Interest - Commercial Services					
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 35				5
Points of Interest - Public Infrastructure	pg 35	1		4	2
Points of Interest - Recreational and Environmental	pg 36			2	
Gas Pipelines					
Underground Electrical Cables					

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland	pg 37			3	1
Areas of Adopted Green Belt	pg 37	1		1	1
Areas of Unadopted Green Belt	pg 37	1			
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 37	1			
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (W)	0	1	427067 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	0	1	427200 411400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (N)	0	1	427067 411400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (E)	0	1	427150 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	28	1	427200 411500
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (S)	41	1	427050 411250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (NW)	43	1	426900 411500
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (E)	47	1	427250 411350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	48	1	427250 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	49	1	427250 411400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (E)	50	1	427250 411450
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	52	1	426900 411250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	78	1	427200 411550
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (N)	79	1	427000 411550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NW (NW)	80	1	426950 411550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (W)	81	1	426850 411450
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (E)	97	1	427300 411300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (E)	97	1	427300 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	99	1	427300 411400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	100	1	427300 411450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (N)	129	1	427050 411600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (W)	131	1	426800 411450

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (W)	133	1	426800 411300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	142	1	427100 411150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (E)	147	1	427350 411350
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (E)	148	1	427350 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (N)	179	1	427067 411650
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (W)	181	1	426750 411400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	193	1	427150 411100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	204	1	427300 411650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (N)	228	1	427100 411700
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	228	1	427200 411700
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (N)	229	1	427067 411700
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12NE (W)	231	1	426700 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (SW)	243	1	426900 411050
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	273	1	427350 411700
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	275	1	426800 411050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	278	1	427100 411750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	278	1	427150 411750
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (S)	290	1	426950 411000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A18SW (NW)	292	1	426850 411750
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NE (S)	294	1	427200 411000
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SE (SW)	301	1	426700 411100
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SE (SW)	316	1	426650 411150

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	328	1	427100 411800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NE (W)	331	1	426600 411400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (S)	341	1	427000 410950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (NE)	342	1	427300 411800
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14NW (E)	359	1	427550 411550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A18SW (NW)	376	1	426750 411800
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12NE (W)	381	1	426550 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NE (W)	431	1	426500 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A17SE (NW)	434	1	426600 411750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A17SE (NW)	473	1	426550 411750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	478	1	427100 411950
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12NE (W)	481	1	426450 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A7NE (SW)	482	1	426650 410900
1	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: Sewage Disposal Works - Water Company Location: Clayton West Wwtw Old Hall Lane, Clayton West, Barnsley, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 10 Effective Date: 31st March 2010 Issued Date: 25th February 2005 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A18SW (NW)	355	2	426800 411800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: Sewage Disposal Works - Water Company Location: Clayton West Wwtw Old Hall Lane, Clayton West, Barnsley, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 12 Effective Date: 4th March 2009 Issued Date: 25th February 2005 Revocation Date: 31st March 2009 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A18SW (NW)	355	2	426800 411800
2	**Discharge Consents** Operator: Mr Nicholas W L Rose Property Type: DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Location: Litherup Farm & Barn, Clayton West, Huddersfield, West Yorkshire, Hd8 9lt Authority: Environment Agency, North East Region Catchment Area: Not Supplied Reference: Eprgp3423kz Permit Version: 1 Effective Date: 14th January 2011 Issued Date: 14th January 2011 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Into Land Via Old Soakaway **Status: New issued under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	374	2	427426 411770
3	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West (Old) Wpc Works Final, Effluent (Ceased) Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: E129 Permit Version: 1 Effective Date: 1st January 1982 Issued Date: 1st January 1982 Revocation Date: 19th July 1991 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	467	2	426600 411800
3	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West (Old) Wpc Works Final, Effluent (Ceased) Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: E129 Permit Version: 1 Effective Date: 1st January 1982 Issued Date: 1st January 1982 Revocation Date: 19th July 1991 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	467	2	426600 411800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 14 Effective Date: 3rd March 2010 Issued Date: 3rd March 2010 Revocation Date: 2nd September 2021 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 13 Effective Date: 1st April 2009 Issued Date: 14th October 2008 Revocation Date: 2nd March 2010 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 9 Effective Date: 6th October 2004 Issued Date: 6th October 2004 Revocation Date: 31st December 2005 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 7 Effective Date: 18th March 2003 Issued Date: 18th March 2003 Revocation Date: 5th October 2004 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 8 Effective Date: 1st January 2006 Issued Date: 18th March 2003 Revocation Date: 31st March 2009 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 4 Effective Date: 17th September 1998 Issued Date: 17th September 1998 Revocation Date: 31st December 1998 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 5 Effective Date: 1st January 1999 Issued Date: 17th September 1998 Revocation Date: 29th February 2000 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 6 Effective Date: 1st March 2000 Issued Date: 17th September 1998 Revocation Date: 31st December 2000 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 11 Effective Date: 1st January 2001 Issued Date: 17th September 1998 Revocation Date: 17th March 2003 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 3 Effective Date: 29th October 1996 Issued Date: 29th October 1996 Revocation Date: 16th September 1998 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 2 Effective Date: 23rd July 1984 Issued Date: 23rd July 1984 Revocation Date: 28th October 1996 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 2 Effective Date: 23rd July 1984 Issued Date: 23rd July 1984 Revocation Date: 28th October 1996 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: Undefined Or Other Location: Clayton West New Wpc Works Storm Ta, Nks Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 2539 Permit Version: 1 Effective Date: 1st January 1982 Issued Date: 1st January 1982 Revocation Date: 19th July 1991 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Not Supplied **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: Undefined Or Other Location: Clayton West New Wpc Works Storm Ta, Nks Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 2539 Permit Version: 1 Effective Date: 1st January 1982 Issued Date: 1st January 1982 Revocation Date: 19th July 1991 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Not Supplied Receiving Water: Not Supplied **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: Undefined Or Other Location: Clayton West New Wpc Works Storm Ta, Nks Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 1 Effective Date: 1st January 1982 Issued Date: 1st January 1982 Revocation Date: 22nd July 1984 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 15 Effective Date: 3rd September 2021 Issued Date: 3rd September 2021 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	531	2	426700 411948

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: Sewage Disposal Works - Water Company Location: Clayton West Wwtw Old Hall Lane, Clayton West, Barnsley, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 10 Effective Date: 31st March 2010 Issued Date: 25th February 2005 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	609	2	426780 412060
5	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: Sewage Disposal Works - Water Company Location: Clayton West Wwtw Old Hall Lane, Clayton West, Barnsley, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 12 Effective Date: 4th March 2009 Issued Date: 25th February 2005 Revocation Date: 31st March 2009 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	609	2	426780 412060
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 14 Effective Date: 3rd March 2010 Issued Date: 3rd March 2010 Revocation Date: 2nd September 2021 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 13 Effective Date: 1st April 2009 Issued Date: 14th October 2008 Revocation Date: 2nd March 2010 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 9 Effective Date: 6th October 2004 Issued Date: 6th October 2004 Revocation Date: 31st December 2005 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 7 Effective Date: 18th March 2003 Issued Date: 18th March 2003 Revocation Date: 5th October 2004 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 8 Effective Date: 1st January 2006 Issued Date: 18th March 2003 Revocation Date: 31st March 2009 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 6 Effective Date: 1st March 2000 Issued Date: 17th September 1998 Revocation Date: 31st December 2000 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 11 Effective Date: 1st January 2001 Issued Date: 17th September 1998 Revocation Date: 17th March 2003 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 4 Effective Date: 17th September 1998 Issued Date: 17th September 1998 Revocation Date: 31st December 1998 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 5 Effective Date: 1st January 1999 Issued Date: 17th September 1998 Revocation Date: 29th February 2000 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 15 Effective Date: 3rd September 2021 Issued Date: 3rd September 2021 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A18NW (N)	623	2	426782 412075

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 3 Effective Date: 29th October 1996 Issued Date: 29th October 1996 Revocation Date: 16th September 1998 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A18NW (N)	644	2	426800 412100
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 2 Effective Date: 23rd July 1984 Issued Date: 23rd July 1984 Revocation Date: 28th October 1996 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A18NW (N)	644	2	426800 412100
6	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Back Lane Cso Back Lane, Clayton West, Huddersfield, West Yorkshire, Hd8 9pp Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: Wra9265 Permit Version: 2 Effective Date: 31st March 2018 Issued Date: 26th February 2018 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Clvrt Trib Of Toad Hole Dike **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A12NW (W)	766	2	426166 411492
7	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Back Lane Cso Back Lane, Clayton West, Huddersfield, West Yorkshire, Hd8 9pp Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: Wra9265 Permit Version: 1 Effective Date: 4th September 2007 Issued Date: 4th September 2007 Revocation Date: 30th March 2018 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Tributary Of Toad Hole Dike **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A12NW (W)	851	2	426080 411410

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: Sewage Disposal Works Location: Clayton West Stw, Back Lane, DENBY DALE, West Yorkshire Authority: Environment Agency, North East Region Catchment Area: Aire And Calder Navigation Reference: S/UD/71 Permit Version: Not Supplied Effective Date: Not Supplied Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Storm /emergency overflow Discharge Environment: Freshwater Stream/River Receiving Water: Culverted Tributary Of Toad Hole Dike **Status: Not Supplied** Positional Accuracy: Located by supplier to within 100m	A12NW (W)	851	2	426080 411410
8	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Park Mill Cso Opp Design Hse 6 Wakefield Rd, A636 Off Clayton West, Huddersfield, West Yorkshire, Hd8 9qb Authority: Environment Agency, North East Region Catchment Area: Calder Reference: 3212 Permit Version: 2 Effective Date: 31st March 2004 Issued Date: 26th February 2004 Revocation Date: 30th March 2018 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A11NE (W)	950	2	426000 411660
8	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Park Mill Cso Opp Design Hse 6 Wakefield Rd, A636 Off Clayton West, Huddersfield, West Yorkshire, Hd8 9qb Authority: Environment Agency, North East Region Catchment Area: Calder Reference: 3212 Permit Version: 1 Effective Date: 2nd March 1977 Issued Date: 2nd March 1977 Revocation Date: 30th March 2004 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Transferred from Rivers (Prevention of Pollution) Act 1951-1961** Positional Accuracy: Located by supplier to within 10m	A11NE (W)	950	2	426000 411660
8	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Park Mill Cso Opp Design Hse 6 Wakefield Rd, A636 Off Clayton West, Huddersfield, West Yorkshire, Hd8 9qb Authority: Environment Agency, North East Region Catchment Area: Calder Reference: 3212(Ss) Permit Version: 2 Effective Date: 9th April 2018 Issued Date: 9th April 2018 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A11NE (W)	953	2	425999 411667

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
8	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Park Mill Cso Opp Design Hse 6 Wakefield Rd, A636 Off Clayton West, Huddersfield, West Yorkshire, Hd8 9qb Authority: Environment Agency, North East Region Catchment Area: Calder Reference: 3212 Permit Version: 3 Effective Date: 31st March 2018 Issued Date: 19th March 2018 Revocation Date: 8th April 2018 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A11NE (W)	953	2	425999 411667
8	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Park Mill Cso Opp Design Hse 6 Wakefield Rd, A636 Off Clayton West, Huddersfield, West Yorkshire, Hd8 9qb Authority: Environment Agency, North East Region Catchment Area: Calder Reference: 3212(Ss) Permit Version: 1 Effective Date: 31st March 2018 Issued Date: 19th March 2018 Revocation Date: 8th April 2018 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A11NE (W)	953	2	425999 411667
9	**Discharge Consents** Operator: COBEX LTD Property Type: MINING OF COAL + LIGNITE Location: Dearne Lea Occs (Proposed) Litherop Lane, Clayton West, Nr Wakefield, West Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: WRA7522 Permit Version: 1 Effective Date: 30th July 1999 Issued Date: 30th July 1999 Revocation Date: 24th December 2001 Discharge Type: Trade Effluent Discharge Environment: Freshwater Stream/River Receiving Water: RIVER DEARNE **Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A24SW (N)	980	2	427450 412420
10	**Discharge Consents** Operator: Yorkshire Sculpture Park Property Type: CULTURAL/ZOO/COMMUNITY CENTRE/MUSEUM/LIBRARY/ARCHIVE Location: Longside Barns, Jebb Lane, Barnsley, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: Wra7623 Permit Version: 3 Effective Date: 26th July 2012 Issued Date: 26th July 2012 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Trib Of Dearne **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A15NW (E)	1000	2	428200 411460

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
10	**Discharge Consents** Operator: Yorkshire Sculpture Park Property Type: CULTURAL/ZOO/COMMUNITY CENTRE/MUSEUM/LIBRARY/ARCHIVE Location: Longside Barns, Jebb Lane, Barnsley, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: Wra7623 Permit Version: 2 Effective Date: 19th January 2001 Issued Date: 19th January 2001 Revocation Date: 25th July 2012 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Trib Of Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A15NW (E)	1000	2	428200 411460
10	**Discharge Consents** Operator: Yorkshire Sculpture Park Property Type: CULTURAL/ZOO/COMMUNITY CENTRE/MUSEUM/LIBRARY/ARCHIVE Location: Longside Barns, Jebb Lane, Barnsley, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: Wra7623 Permit Version: 1 Effective Date: 1st August 2000 Issued Date: 1st August 2000 Revocation Date: 18th January 2001 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Trib Of Dearne **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A15NW (E)	1000	2	428200 411460
11	**Local Authority Pollution Prevention and Controls** Name: Adare Halcyon Location: Park Mill, Manor Park, Clayton West, Hd8 9qq Authority: Kirklees Metropolitan Borough Council, Environmental Health Department Permit Reference: Ppc W 163 Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG6/16 Printworks **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A12NW (W)	732	3	426220 411644
	Nearest Surface Water Feature	A13SW (S)	158	-	426976 411132
12	**Pollution Incidents to Controlled Waters** Property Type: Farm Location: Bretton/Source Dearne Afu Authority: Environment Agency, North East Region Pollutant: Agricultural: General Note: Not Supplied Incident Date: 17th April 1991 Incident Reference: 121392 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A14SW (E)	297	2	427500 411300
13	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Sewage Treatment Works Location: Sewage Treatment Works, CLAYTON WEST Authority: Environment Agency, North East Region Pollutant: Sewage - Treated Effluent Note: No Fish Killed Incident Date: 4th July 1997 Incident Reference: SH970376 Catchment Area: Dearne Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18SW (NW)	450	2	426800 411900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
14	**Pollution Incidents to Controlled Waters** Property Type: Industrial Premises Location: Bretton/Source Dearne Afu Authority: Environment Agency, North East Region Pollutant: Milk/Creamery Wastes Note: Not Supplied Incident Date: 29th April 1990 Incident Reference: 115570 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A12NW (W)	644	2	426300 411600
15	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Sewage Treatment Works Location: Bretton/Source Dearne Afu Authority: Environment Agency, North East Region Pollutant: Sewage - Treated Effluent Note: Not Supplied Incident Date: 13th October 1989 Incident Reference: 104108 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A18NW (N)	742	2	426800 412200
16	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Sewage Treatment Works Location: River Dearne At, Litherop Lane Authority: Environment Agency, North East Region Pollutant: Sewage - Treated Effluent Note: Fish Killed: No Information Incident Date: 19th September 1997 Incident Reference: SH970508 Catchment Area: Dearne Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A23SE (N)	928	2	427200 412400
17	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Sewage Treatment Works Location: Bretton/Source Dearne Afu Authority: Environment Agency, North East Region Pollutant: Sewage - Storm Overflow Note: Not Supplied Incident Date: 6th November 1990 Incident Reference: 116808 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A11NE (W)	958	2	426000 411695
17	**Pollution Incidents to Controlled Waters** Property Type: Industrial Premises Location: Bretton/Source Dearne Afu Authority: Environment Agency, North East Region Pollutant: Milk/Creamery Wastes Note: Not Supplied Incident Date: 2nd July 1989 Incident Reference: 100894 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A11NE (W)	959	2	426000 411700
18	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Sewage Treatment Works Location: Calder 02C Authority: Environment Agency, North East Region Pollutant: Other Sewage Note: Fish Killed: No Information; Calder 02C Incident Date: 1st August 1995 Incident Reference: SL950785 Catchment Area: Calder Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	967	2	427700 412300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	River Quality Name: River_Dearne GQA Grade: River Quality C Reach: Park_Gate_Dike_Clayton_West_St Estimated Distance (km): 1.5 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A17SE (NW)	502	2	426655 411889
	River Quality Name: River_Dearne GQA Grade: River Quality D Reach: Clayton_West_Stw_Bentley_Broo Estimated Distance (km): 1.1 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A18NW (N)	621	2	426850 412086
	River Quality Name: River_Dearne GQA Grade: River Quality C Reach: Bentley_Brook_Bretton_Lake_Outle Estimated Distance (km): 1.6 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A19NW (NE)	899	2	427556 412298
	River Quality Name: Bentley_Brook GQA Grade: River Quality B Reach: Furnace_Grange_River_Dearn Estimated Distance (km): 3.1 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A19NW (NE)	899	2	427556 412298
19	**Substantiated Pollution Incident Register** Authority: Environment Agency - North East Region, Yorkshire Area Incident Date: 17th July 2016 Incident Reference: 1453346 Water Impact: Category 2 - Significant Incident Air Impact: Category 4 - No Impact Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: Sewage Materials: Final Effluent	A18SW (NW)	603	2	426787 412055
19	**Substantiated Pollution Incident Register** Authority: Environment Agency - North East Region, Yorkshire Area Incident Date: 14th April 2004 Incident Reference: 229489 Water Impact: Category 2 - Significant Incident Air Impact: Category 4 - No Impact Land Impact: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 10m Pollutant: Sewage Materials: Sludge	A18NW (N)	612	2	426810 412070
20	**Substantiated Pollution Incident Register** Authority: Environment Agency - North East Region, Yorkshire Area Incident Date: 4th January 2006 Incident Reference: 368861 Water Impact: Category 2 - Significant Incident Air Impact: Category 4 - No Impact Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: Sewage Materials: Grey Water	A12NW (W)	770	2	426161 411489

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: British Coal; North Yorkshire Area Licence Number: 2/27/08/103 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, North East Region Abstraction: Unclassified Combinations Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 818 Yearly Rate (m3): 196420 Details: Licence Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A11NE (W)	1033	2	425920 411680
	Water Abstractions Operator: Mr A D Brook Licence Number: 2/27/13/173 Permit Version: 100 Location: Borehole - Coal Measures - Emley Authority: Environment Agency, North East Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 20 Yearly Rate (m3): 7300 Details: Gilcar Farm,Emley,Huddersfield, Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 22nd September 1994 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A17NW (NW)	1043	2	426300 412300
	Water Abstractions Operator: Mr J S Auckland Licence Number: 2/27/08/112 Permit Version: 100 Location: Borehole Authority: Environment Agency, North East Region Abstraction: Other Industrial/Commercial/Public Services: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 18 Yearly Rate (m3): 6570 Details: Car Spares & Accessaries, Car Wash Of A636, Scissett, Denby Dale Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 20th June 1996 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(W)	1801	2	425200 410800
	Water Abstractions Operator: Mr J S Auckland Licence Number: 2/27/08/112 Permit Version: 100 Location: Borehole - Coal Measures - Scissett Authority: Environment Agency, North East Region Abstraction: Retail: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Car Spares & Accessaries, Car Wash Of A636, Scissett, Denby Dale Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 20th June 1996 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(W)	1801	2	425200 410800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Bedrock Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Productive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: <40% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A13NW (W)	0	4	427000 411381
	Groundwater Vulnerability Map Combined Classification: Secondary Bedrock Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: High Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: >70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A13NW (W)	0	4	427067 411381
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13NW (W)	0	4	427067 411381
	Superficial Aquifer Designations No Data Available				
	Extreme Flooding from Rivers or Sea without Defences None				
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
21	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 389.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A13SW (S)	158	5	426977 411132
22	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 20.6 Watercourse Level: Underground Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A13SW (SW)	251	5	426819 411067

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
23	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 10.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A13SW (SW)	268	5	426801 411058
24	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 8.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A13SW (SW)	274	5	426797 411053
25	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 94.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A13SW (SW)	275	5	426791 411055
26	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A13SW (SW)	275	5	426798 411051
27	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 154.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A13SW (SW)	277	5	426803 411046
28	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 372.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12SE (SW)	319	5	426703 411069
29	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 71.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12SE (SW)	320	5	426704 411068
30	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 430.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18SE (N)	359	5	427173 411831
31	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 207.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A7NE (SW)	376	5	426676 411016

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
32	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 411.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A7NE (SW)	376	5	426676 411016
33	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 741.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dearne Catchment Name: Don and Rother Primacy: 1	A17SE (NW)	512	5	426648 411897
34	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 133.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12SE (W)	514	5	426426 411204
35	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 333.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A7NE (SW)	530	5	426640 410849
36	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 130.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A7NE (SW)	530	5	426640 410849
37	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 239.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12SW (W)	594	5	426339 411289
38	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 178.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12NW (W)	617	5	426319 411542
39	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 180.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A8SW (S)	619	5	426870 410675
40	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 108.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A8SW (S)	619	5	426870 410675

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
41	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 316.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A7NE (SW)	627	5	426666 410723
42	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 20.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A7NE (SW)	627	5	426652 410730
43	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 8.1 Watercourse Level: Underground Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12NW (W)	651	5	426304 411644
44	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 67.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12NW (W)	654	5	426303 411652
45	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 279.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	665	5	426785 412136
46	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 120.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A17SE (NW)	669	5	426537 412011
47	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 21.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dearne Catchment Name: Don and Rother Primacy: 1	A18NW (N)	674	5	426812 412134
48	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 20.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	674	5	426812 412134
49	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 165.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dearne Catchment Name: Don and Rother Primacy: 1	A18NW (N)	677	5	426855 412143

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
50	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 30.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12NW (W)	678	5	426254 411507
51	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.7 Watercourse Level: Underground Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12NW (W)	678	5	426254 411507
52	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12NW (W)	678	5	426254 411506
53	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12NW (NW)	680	5	426298 411718
54	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	682	5	426792 412138
55	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 9.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	682	5	426828 412144
56	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 408.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dearne Catchment Name: Don and Rother Primacy: 1	A17SW (NW)	683	5	426297 411724
57	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	692	5	426827 412154
58	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 134.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	694	5	426827 412156

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
59	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12NW (W)	709	5	426224 411511
60	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 65.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12NW (W)	716	5	426216 411511
61	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 562.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dearne Catchment Name: Don and Rother Primacy: 1	A18NW (N)	727	5	426982 412197
62	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 188.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A17NE (NW)	787	5	426446 412089
63	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 13.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A8SW (S)	791	5	426870 410502
64	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 17.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A8SW (S)	804	5	426866 410489
65	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 128.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NE (NE)	811	5	427747 412071
66	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	820	5	426795 412279
67	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 15.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	824	5	426791 412282

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
68	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NE (N)	828	5	427343 412288
69	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 115.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NE (N)	836	5	427343 412296
70	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NE (N)	836	5	427343 412296
71	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	837	5	426780 412293
72	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 139.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NE (N)	837	5	427345 412297
73	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 74.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	841	5	426780 412297
74	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 55.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	848	5	427589 412227
75	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 138.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Bretton Lakes Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	852	5	427597 412226
76	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 182.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	864	5	427557 412259

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
77	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NE (N)	867	5	427246 412338
78	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 9.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NE (N)	872	5	427249 412343
79	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 103.3 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A17NE (N)	891	5	426726 412337
80	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 25.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	896	5	427731 412194
81	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 36.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	907	5	427718 412216
82	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (N)	931	5	427461 412366
83	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 19.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (N)	938	5	427462 412373
84	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 78.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Bretton Lakes Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	940	5	427725 412252
85	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 180.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A17NE (NW)	953	5	426629 412373

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
86	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 60.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	963	5	427617 412341
87	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 568.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dearne Catchment Name: Don and Rother Primacy: 1	A11NE (W)	969	5	425984 411676
88	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 158.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A11NE (W)	969	5	425984 411676
89	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 123.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A17NW (NW)	969	5	426328 412228
90	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 16.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A17NW (NW)	969	5	426328 412228
91	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 147.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	969	5	427646 412333
92	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1554.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dearne Catchment Name: Don and Rother Primacy: 1	A24SW (N)	972	5	427479 412403
93	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 341.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Bentley Brook Catchment Name: Don and Rother Primacy: 1	A24SW (N)	972	5	427479 412403
94	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 84.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A17NW (NW)	981	5	426311 412230

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
95	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 446.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A15NW (E)	998	5	428198 411466

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
96	**BGS Recorded Landfill Sites** Site Name: Litherop Tip Location: Litherop Lane, Clayton West, HUDDERSFIELD, West Yorkshire Authority: British Geological Survey, National Geoscience Information Service Ground Water: Information not available Surface Water: Information not available Geology: N/A Positional Accuracy: Positioned by the supplier Boundary Accuracy: Moderate	A19SW (NE)	370	-	427413 411776
97	**Historical Landfill Sites** Licence Holder: Denby Dale Rural District Council Location: Litherop Lane, Clayton West, Huddersfield, West Yorkshire Name: Litherop Tip Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD04801 First Input Date: 31st December 1955 Last Input Date: 31st December 1971 Specified Waste Type: Deposited Waste included Household Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: 1743 Other Ref: 4400/(169), 4400/(150)	A19SW (NE)	369	2	427413 411774
98	**Licensed Waste Management Facilities (Locations)** Licence Number: 101347 Location: Clayton Hall Farm, Clayton West, Huddersfield, West Yorkshire, HD8 9QE Operator Name: Clayton Hall Farm Bioenergy Llp Operator Location: Not Supplied Authority: Environment Agency - North East Region, Yorkshire Area Site Category: Treatment - Biological **Licence Status: Issued** Issued: 6th August 2010 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A13SW (W)	0	2	427030 411380
	Local Authority Landfill Coverage Name: Kirklees Metropolitan Borough Council - Has not been able to supply Landfill data		0	6	427067 411381
	Local Authority Landfill Coverage Name: Barnsley Metropolitan Borough Council - Has supplied landfill data		265	7	427473 411356
	Local Authority Landfill Coverage Name: Wakefield Metropolitan Borough Council - Has not been able to supply Landfill data		849	8	427588 412228
99	**Local Authority Recorded Landfill Sites** Location: Not Supplied Reference: 169 Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards **Last Reported Status: Unknown** Types of Waste: Not Supplied Date of Closure: Not Supplied Positional Accuracy: Positioned by the supplier Boundary Quality: Moderate	A19SW (NE)	370	7	427413 411776
100	**Potentially Infilled Land (Non-Water)** Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A18SE (NE)	427	-	427398 411851
101	**Potentially Infilled Land (Non-Water)** Bearing Ref: NW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A17SW (NW)	871	-	426205 411950
102	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A9NE (SE)	917	-	428029 410895

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
103	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1955	A13SW (SW)	23	-	427006 411269
104	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1955	A12NW (W)	782	-	426159 411592

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Pennine Lower Coal Measures Formation And South Wales Lower Coal Measures Formation (Undifferentiated)	A13NW (W)	0	1	427067 411381
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13NW (W)	0	1	427067 411381
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 120 - 180 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A18SW (NW)	364	1	426747 411784
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A14NE (E)	780	1	427981 411402
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A9NE (SE)	815	1	427929 410924
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A15NW (E)	896	1	428097 411402
105	**BGS Recorded Mineral Sites** Site Name: Litherop Lane Quarry Location: Clayton West, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 13374 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	438	1	427405 411860

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
106	**BGS Recorded Mineral Sites** Site Name: Litherop Location: High Hoyland, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 94607 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Emley Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	572	1	427422 412000
107	**BGS Recorded Mineral Sites** Site Name: Jebb Lane Location: Haigh, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 25943 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14SE (E)	633	1	427813 411123
108	**BGS Recorded Mineral Sites** Site Name: Bretton Lakes Location: High Hoyland, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 25930 Type: Underground **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	860	1	427833 412055
109	**BGS Recorded Mineral Sites** Site Name: Gillcar Quarry Location: Emley, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 94608 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Emley Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	880	1	426197 411955
109	**BGS Recorded Mineral Sites** Site Name: Gillcar Quarry Location: Emley, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 94609 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Emley Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	898	1	426160 411930
110	**BGS Recorded Mineral Sites** Site Name: Deep Hargh Wood Location: Clayton West, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 103070 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Iron Ore - Ironstone Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	913	1	428018 410882

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				
	Coal Mining Affected Areas Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.	A13NW (W)	0	9	427067 411381
	Mining Instability Mining Evidence: Inconclusive Coal Mining Source: Ove Arup & Partners Boundary Quality: As Supplied	A13NW (W)	0	-	427067 411381
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	427067 411381
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	427074 411394
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	427067 411381
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	40	1	426900 411268
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	58	1	427024 411231
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	233	1	426887 411062
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	427067 411381
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	427067 411381
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	28	1	426904 411354
	Potential for Landslide Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	48	1	426867 411426
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	123	1	426894 411174
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	150	1	427324 411557
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	194	1	427269 411111
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A14SW (E)	197	1	427405 411295
	Potential for Landslide Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A14SW (E)	232	1	427435 411343
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A14NW (NE)	241	1	427430 411545

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	427067 411381
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	427074 411394
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	40	1	426900 411268
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	58	1	427024 411231
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	233	1	426887 411062
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	427067 411381
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	427074 411394
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	40	1	426900 411268
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	75	1	426929 411215
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	181	1	427364 411551
	Radon Potential - Radon Affected Areas Affected Area: The property is an Intermediate probability radon area (3 to 5% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	427067 411381
	Radon Potential - Radon Affected Areas Affected Area: The property is in an Intermediate probability radon area (1 to 3% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	426975 411381
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	427100 411400
	Radon Potential - Radon Protection Measures Protection Measure: Basic radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	427067 411381
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	426975 411381
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	427100 411400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
111	**Contemporary Trade Directory Entries** Name: Adare S E C Ltd Location: Park Mill, Wakefield Road, Clayton West, Huddersfield, HD8 9QQ Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	725	-	426221 411618
112	**Contemporary Trade Directory Entries** Name: Ecocute Ltd Location: Unit 3, Longsisde Barns, Jebb Lane, Haigh, Barnsley, S75 4BS Classification: Electricity Generating & Distributing Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A15SW (E)	999	-	428202 411311
113	**Points of Interest - Manufacturing and Production** Name: H Wood & Sons Location: Bilham Grange Farm, Bilham Road, Clayton West, Huddersfield, HD8 9PA Category: Farming Class Code: Livestock Farming Positional Accuracy: Positioned to address or location	A7NE (SW)	667	10	426452 410830
114	**Points of Interest - Manufacturing and Production** Name: Factory Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	712	10	426230 411595
114	**Points of Interest - Manufacturing and Production** Name: Factory Location: HD8 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A12NW (W)	725	10	426220 411612
115	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	846	10	426095 411596
116	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	847	10	426084 411483
117	**Points of Interest - Public Infrastructure** Name: Slurry Bed Location: HD8 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A13NE (NE)	0	10	427077 411402
118	**Points of Interest - Public Infrastructure** Name: Sewage Works Location: HD8 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A18SW (NW)	424	10	426757 411857
118	**Points of Interest - Public Infrastructure** Name: Sewage Works Location: HD8 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	A18SW (NW)	429	10	426804 411880
118	**Points of Interest - Public Infrastructure** Name: Sewage Works Location: HD8 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	A18SW (NW)	469	10	426820 411926
118	**Points of Interest - Public Infrastructure** Name: Sludge Tanks Location: HD8 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A18SW (NW)	471	10	426730 411896

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
119	**Points of Interest - Public Infrastructure** Name: Graveyard Location: S75 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A9SW (SE)	745	10	427435 410586
119	**Points of Interest - Public Infrastructure** Name: Graveyard Location: Not Supplied Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A9SW (SE)	750	10	427454 410587
120	**Points of Interest - Recreational and Environmental** Name: Picnic Area Location: HD8 Category: Recreational Class Code: Picnic Areas Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	480	10	427434 411891
120	**Points of Interest - Recreational and Environmental** Name: Picnic Area Location: Litherop Lane, HD8 Category: Recreational Class Code: Picnic Areas Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	482	10	427431 411895

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
121	**Ancient Woodland** Name: Bilham Shrogg Reference: 1103292 Area(m²): 113151.21 Type: Plantation on Ancient Woodland	A13SW (SW)	259	11	426796 411071
122	**Ancient Woodland** Name: Hoyland Bank Wood Reference: 1103296 Area(m²): 22322.91 Type: Plantation on Ancient Woodland	A14SW (E)	274	11	427483 411342
123	**Ancient Woodland** Name: Hoyland Bank Wood Reference: 1103296 Area(m²): 147811.87 Type: Ancient and Semi-Natural Woodland	A14SW (SE)	304	11	427464 411139
124	**Ancient Woodland** Name: High Wood Reference: 1103298 Area(m²): 697857.87 Type: Plantation on Ancient Woodland	A9NE (SE)	908	11	427998 410853
125	**Areas of Adopted Green Belt** Authority: Kirklees Metropolitan Borough Council Plan Name: Kirklees Unitary Development Plan **Status: Adopted** Plan Date: 1st March 1999	A13NW (W)	0	12	427067 411381
126	**Areas of Adopted Green Belt** Authority: Barnsley Metropolitan Borough Council, Planning Department Plan Name: Proposal Map **Status: Adopted** Plan Date: 3rd January 2019	A14SW (E)	265	13	427474 411348
127	**Areas of Adopted Green Belt** Authority: Wakefield City Metropolitan District Council Plan Name: Proposal Map **Status: Adopted** Plan Date: 12th September 2012	A19NW (NE)	851	14	427579 412235
128	**Areas of Unadopted Green Belt** Authority: Kirklees Metropolitan Borough Council Plan Name: Kirklees Local Plan **Status: Submission Draft** Plan Date: 25th April 2017	A13NW (W)	0	12	427067 411381
129	**Nitrate Vulnerable Zones** Name: River Dearne Nvz Description: Surface Water Source: Environment Agency, Head Office	A13NW (W)	0	4	427067 411381

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards	January 2020	Annual Rolling Update
Environment Agency - Head Office	November 2023	Annually
Kirklees Metropolitan Borough Council - Planning Services	October 2017	Annual Rolling Update
Wakefield City Metropolitan District Council - Environmental Health	October 2017	Annual Rolling Update
Discharge Consents		
Environment Agency - North East Region	October 2023	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - North East Region	March 2013	
Integrated Pollution Controls		
Environment Agency - North East Region	January 2009	
Integrated Pollution Prevention And Control		
Environment Agency - North East Region	January 2023	Quarterly
Local Authority Integrated Pollution Prevention And Control		
Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards	April 2014	Variable
Kirklees Metropolitan Borough Council - Environmental Health Department	April 2014	Variable
Wakefield City Metropolitan District Council - Environmental Health	December 2020	Variable
Local Authority Pollution Prevention and Controls		
Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards	April 2014	Annual Rolling Update
Kirklees Metropolitan Borough Council - Environmental Health Department	April 2014	Annual Rolling Update
Wakefield City Metropolitan District Council - Environmental Health	December 2020	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements		
Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards	April 2014	Variable
Kirklees Metropolitan Borough Council - Environmental Health Department	April 2014	Variable
Wakefield City Metropolitan District Council - Environmental Health	June 2014	Variable
Nearest Surface Water Feature		
Ordnance Survey	December 2023	
Pollution Incidents to Controlled Waters		
Environment Agency - North East Region	December 1998	
Prosecutions Relating to Authorised Processes		
Environment Agency - North East Region	July 2015	
Prosecutions Relating to Controlled Waters		
Environment Agency - North East Region	March 2013	
Registered Radioactive Substances		
Environment Agency - North East Region	June 2016	As notified
Environment Agency - Head Office	May 2023	Quarterly
River Quality		
Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points		
Environment Agency - Head Office	April 2012	
River Quality Chemistry Sampling Points		
Environment Agency - Head Office	April 2012	
Substantiated Pollution Incident Register		
Environment Agency - North East Region - Ridings Area	October 2023	Quarterly
Environment Agency - North East Region - Yorkshire Area	October 2023	Quarterly
Water Abstractions		
Environment Agency - North East Region	October 2023	Quarterly
Water Industry Act Referrals		
Environment Agency - North East Region	October 2017	
Groundwater Vulnerability Map		
Environment Agency - Head Office	June 2018	As notified

Data Currency

Agency & Hydrological	Version	Update Cycle
Bedrock Aquifer Designations Environment Agency - Head Office	January 2018	As notified
Superficial Aquifer Designations Environment Agency - Head Office	January 2018	As notified
Source Protection Zones Environment Agency - Head Office	September 2022	Bi-Annually
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	December 2023	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	December 2023	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	February 2023	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	January 2024	Quarterly
Flood Defences Environment Agency - Head Office	August 2022	Quarterly
OS Water Network Lines Ordnance Survey	January 2024	Quarterly
Surface Water 1 in 30 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 100 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 1000 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water Suitability Environment Agency - Head Office	February 2016	Annually
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	As notified

Waste	Version	Update Cycle
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	November 2002	As notified
Historical Landfill Sites		
Environment Agency - Head Office	July 2023	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - North East Region	January 2009	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - North East Region - Ridings Area	January 2024	Quarterly
Environment Agency - North East Region - Yorkshire Area	January 2024	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - North East Region - Ridings Area	January 2023	Quarterly
Environment Agency - North East Region - Yorkshire Area	January 2023	Quarterly
Local Authority Landfill Coverage		
Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards	February 2003	Not Applicable
Kirklees Metropolitan Borough Council - Planning Services	February 2003	Not Applicable
Wakefield City Metropolitan District Council - Environmental Health	February 2003	Not Applicable
Local Authority Recorded Landfill Sites		
Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards	October 2018	
Kirklees Metropolitan Borough Council - Planning Services	October 2018	
Wakefield City Metropolitan District Council - Environmental Health	October 2018	
Potentially Infilled Land (Non-Water)		
Landmark Information Group Limited	December 1999	
Potentially Infilled Land (Water)		
Landmark Information Group Limited	December 1999	
Registered Landfill Sites		
Environment Agency - North East Region - Ridings Area	March 2006	Not Applicable
Environment Agency - North East Region - Yorkshire Area	March 2006	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - North East Region - Ridings Area	April 2018	
Environment Agency - North East Region - Yorkshire Area	April 2018	
Registered Waste Treatment or Disposal Sites		
Environment Agency - North East Region - Ridings Area	June 2015	
Environment Agency - North East Region - Yorkshire Area	June 2015	
Hazardous Substances	**Version**	**Update Cycle**
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	March 2023	Bi-Annually
Explosive Sites		
Health and Safety Executive	March 2017	
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	August 2001	
Planning Hazardous Substance Enforcements		
Kirklees Metropolitan Borough Council - Planning Services	August 2015	Variable
Barnsley Metropolitan Borough Council - Planning Department	January 2016	Variable
Wakefield City Metropolitan District Council	July 2023	Variable
Planning Hazardous Substance Consents		
Kirklees Metropolitan Borough Council - Planning Services	August 2015	Variable
Wakefield City Metropolitan District Council	February 2016	Variable
Barnsley Metropolitan Borough Council - Planning Department	January 2016	Variable

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	As notified
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	December 2015	As notified
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	June 2023	Bi-Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB) Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011 November 2020	As notified
Coal Mining Affected Areas The Coal Authority - Property Searches	February 2023	Annual Rolling Update
Mining Instability Ove Arup & Partners	June 1998	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	April 2020	As notified
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	October 2023	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	October 2023	Annually

Data Currency

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	October 2023	Quarterly
Fuel Station Entries Catalist Ltd - Experian	November 2023	Quarterly
Gas Pipelines National Grid	October 2021	Bi-Annually
Points of Interest - Commercial Services PointX	December 2023	Quarterly
Points of Interest - Education and Health PointX	December 2023	Quarterly
Points of Interest - Manufacturing and Production PointX	December 2023	Quarterly
Points of Interest - Public Infrastructure PointX	December 2023	Quarterly
Points of Interest - Recreational and Environmental PointX	December 2023	Quarterly
Underground Electrical Cables National Grid	February 2023	Bi-Annually

Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural England	October 2023	Bi-Annually
Areas of Adopted Green Belt		
Barnsley Metropolitan Borough Council - Planning Department	August 2023	Quarterly
Kirklees Metropolitan Borough Council	August 2023	Quarterly
Wakefield City Metropolitan District Council	August 2023	Quarterly
Areas of Unadopted Green Belt		
Barnsley Metropolitan Borough Council - Planning Department	August 2023	Quarterly
Kirklees Metropolitan Borough Council	August 2023	Quarterly
Wakefield City Metropolitan District Council	August 2023	Quarterly
Areas of Outstanding Natural Beauty		
Natural England	November 2023	Bi-Annually
Environmentally Sensitive Areas		
Natural England	August 2023	
Forest Parks		
Forestry Commission	May 2023	Not Applicable
Local Nature Reserves		
Natural England	August 2023	Bi-Annually
Marine Nature Reserves		
Natural England	October 2023	Bi-Annually
National Nature Reserves		
Natural England	August 2023	Bi-Annually
National Parks		
Natural England	February 2018	Bi-Annually
Nitrate Sensitive Areas		
Natural England	April 2023	Not Applicable
Nitrate Vulnerable Zones		
Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	April 2016	
Environment Agency - Head Office	March 2023	Bi-Annually
Ramsar Sites		
Natural England	October 2023	Bi-Annually
Sites of Special Scientific Interest		
Natural England	November 2023	Bi-Annually
Special Areas of Conservation		
Natural England	October 2023	Bi-Annually
Special Protection Areas		
Natural England	October 2023	Bi-Annually

Data Suppliers

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	
Centre for Ecology and Hydrology	
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	

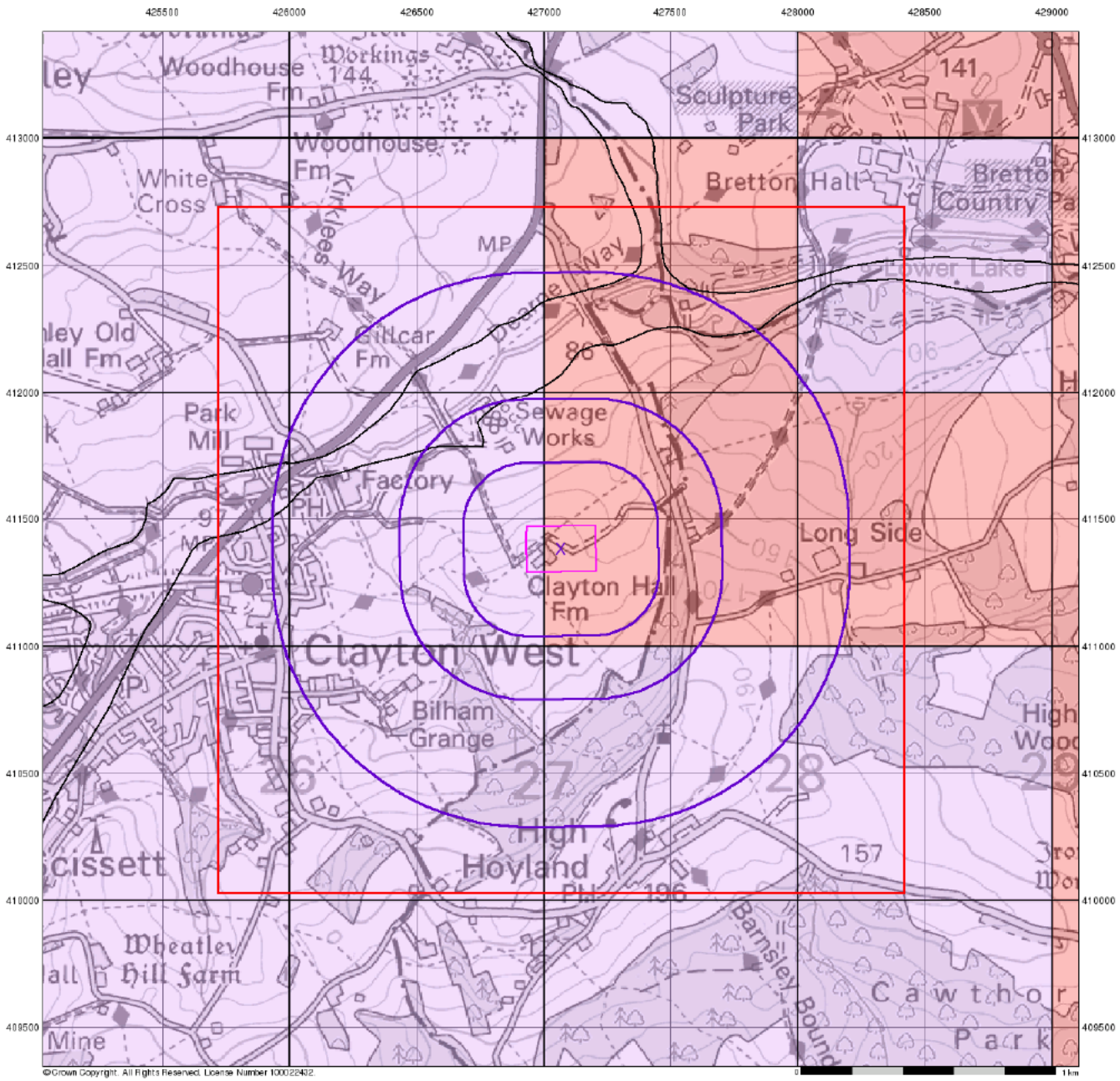
Useful Contacts

Contact	Name and Address	Contact Details
1	**British Geological Survey - Enquiry Service** British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	**Environment Agency - National Customer Contact Centre (NCCC)** PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	**Kirklees Metropolitan Borough Council - Environmental Health Department** West Riding House, 9 Manchester Road, Huddersfield, West Yorkshire, HD1 3HH	Telephone: 01484 221000 Email: customer.relations@kirklees.gov.uk Website: www.kirklees.gov.uk
4	**Environment Agency - Head Office** Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
5	**Ordnance Survey** Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
6	**Kirklees Metropolitan Borough Council - Planning Services** PO BOX B93, Civic Centre III, Off Market Street, Huddersfield, West Yorkshire, HD1 2JR	Telephone: 01484 221000 Fax: 01484 221613 Website: www.kirklees.gov.uk
7	**Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards** Central Offices, Kendray Street, Barnsley, South Yorkshire, S70 2TN	Telephone: 01226 770770 Fax: 01226 772599 Website: www.barnsley.gov.uk
8	**Wakefield City Metropolitan District Council - Environmental Health** Newton Bar, Wakefield, West Yorkshire, WF1 2TX	Telephone: 01924 306090 Website: www.wakefield.gov.uk
9	**The Coal Authority - Property Searches** 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: groundstability@coal.gov.uk Website: www2.groundstability.com
10	**PointX** 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
11	**Natural England** County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
12	**Kirklees Metropolitan Borough Council** Town Hall, Civic Centre, Huddersfield, West Yorkshire, HD1 2TA	Telephone: 01484 221000 Fax: 01484 442768 Website: www.kirklees.gov.uk
13	**Barnsley Metropolitan Borough Council - Planning Department** Central Offices, Kendray Street, Barnsley, South Yorkshire, S70 2TN	Telephone: 01226 770770 Fax: 01226 772599 Website: www.barnsley.gov.uk
14	**Wakefield City Metropolitan District Council** Newton Bar, Wakefield, West Yorkshire, WF1 2TX	Telephone: 01924 306090 Fax: 01924 378532 Website: www.wakefield.gov.uk

Useful Contacts

Contact	Name and Address	Contact Details
-	**Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards** Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.



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Groundwater Vulnerability

General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

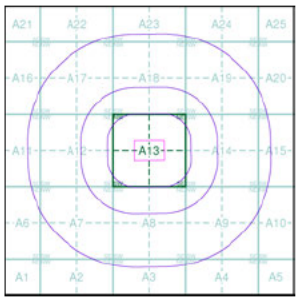
Agency and Hydrological

Bedrock Aquifers	Superficial Aquifers
High Vulnerability, Principal Aquifer	High Vulnerability, Principal Aquifer
High Vulnerability, Secondary Aquifer	High Vulnerability, Secondary Aquifer
Medium Vulnerability, Principal Aquifer	Medium Vulnerability, Principal Aquifer
Medium Vulnerability, Secondary Aquifer	Medium Vulnerability, Secondary Aquifer
Low Vulnerability, Principal Aquifer	Low Vulnerability, Principal Aquifer
Low Vulnerability, Secondary Aquifer	Low Vulnerability, Secondary Aquifer

Unproductive Aquifer

Soluble Rock

Site Sensitivity Context Map - Slice A



Order Details

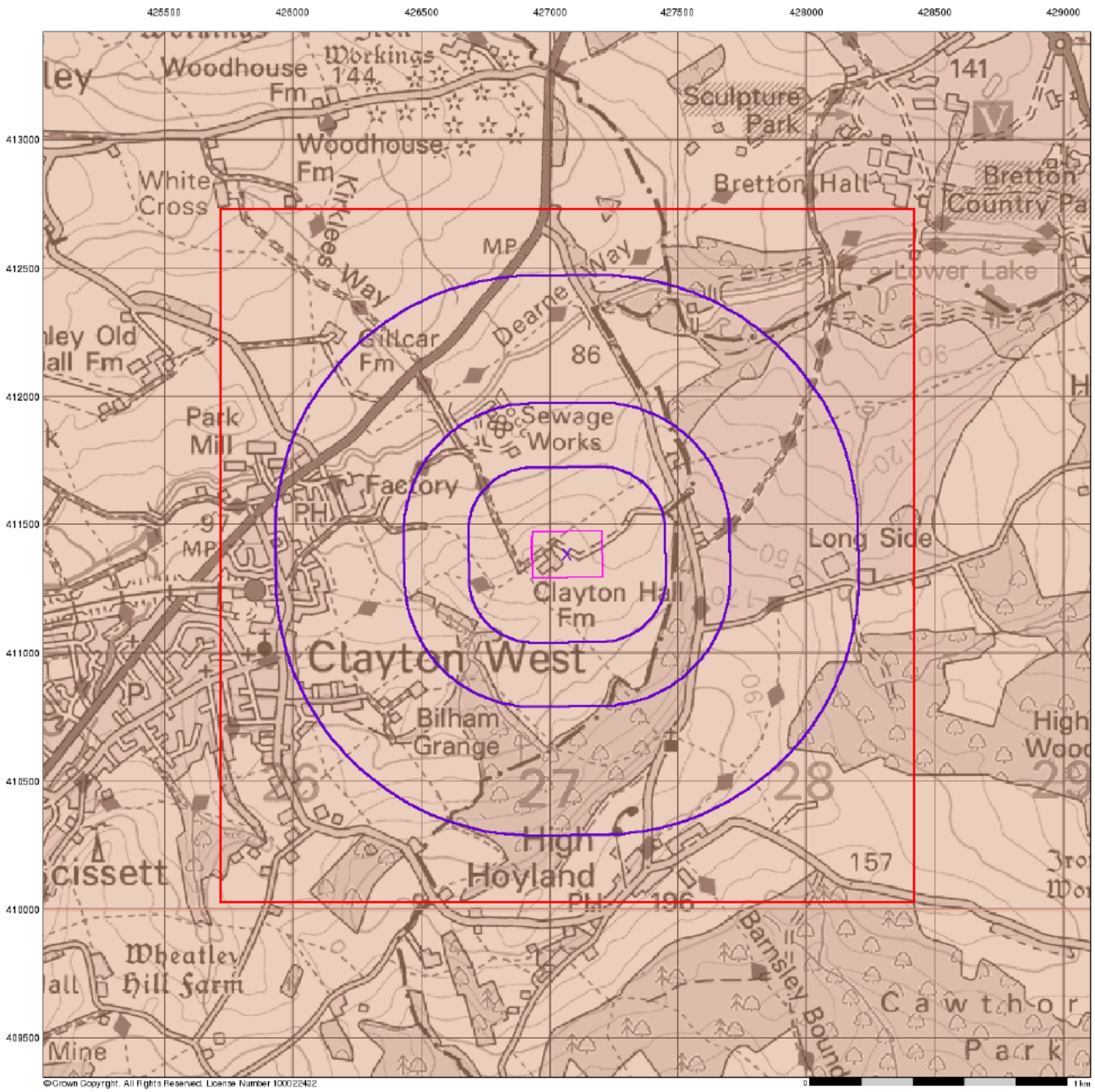
Order Number:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Search Buffer (m):	1000

Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE

Landmark INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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LANDMARK INFORMATION GROUP

Bedrock Aquifer Designation

General

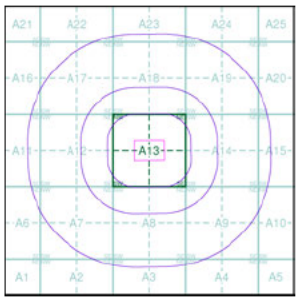
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



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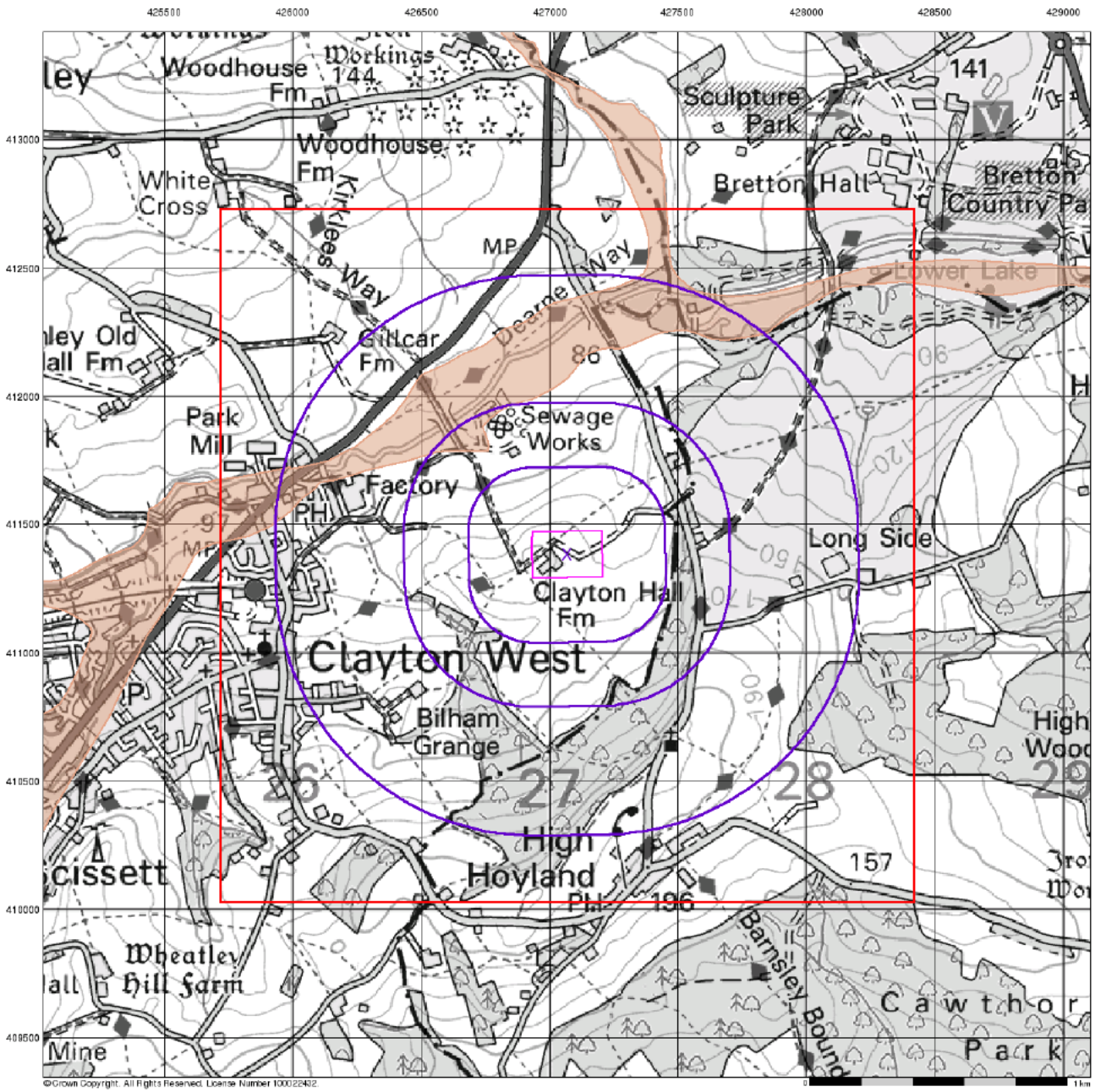
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Search Buffer (m):	1000

Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE



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LANDMARK INFORMATION GROUP

Superficial Aquifer Designation

General

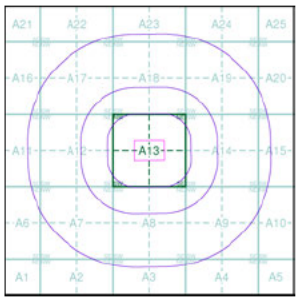
Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



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Site Details

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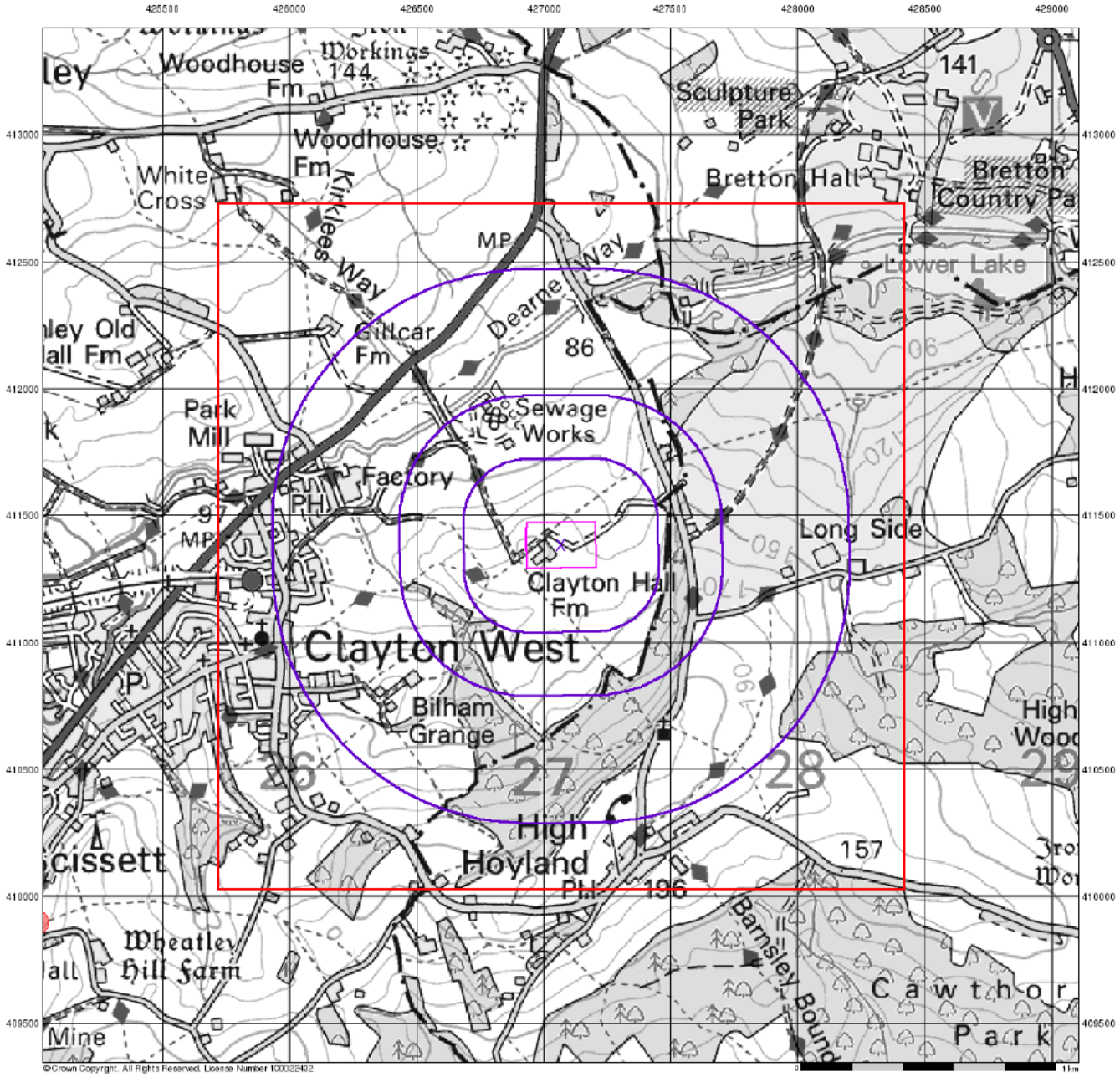

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LANDMARK INFORMATION GROUP

Source Protection Zones

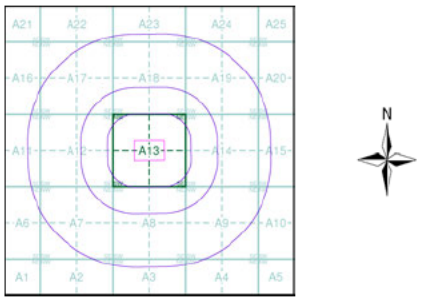
General

Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)

Site Sensitivity Context Map - Slice A



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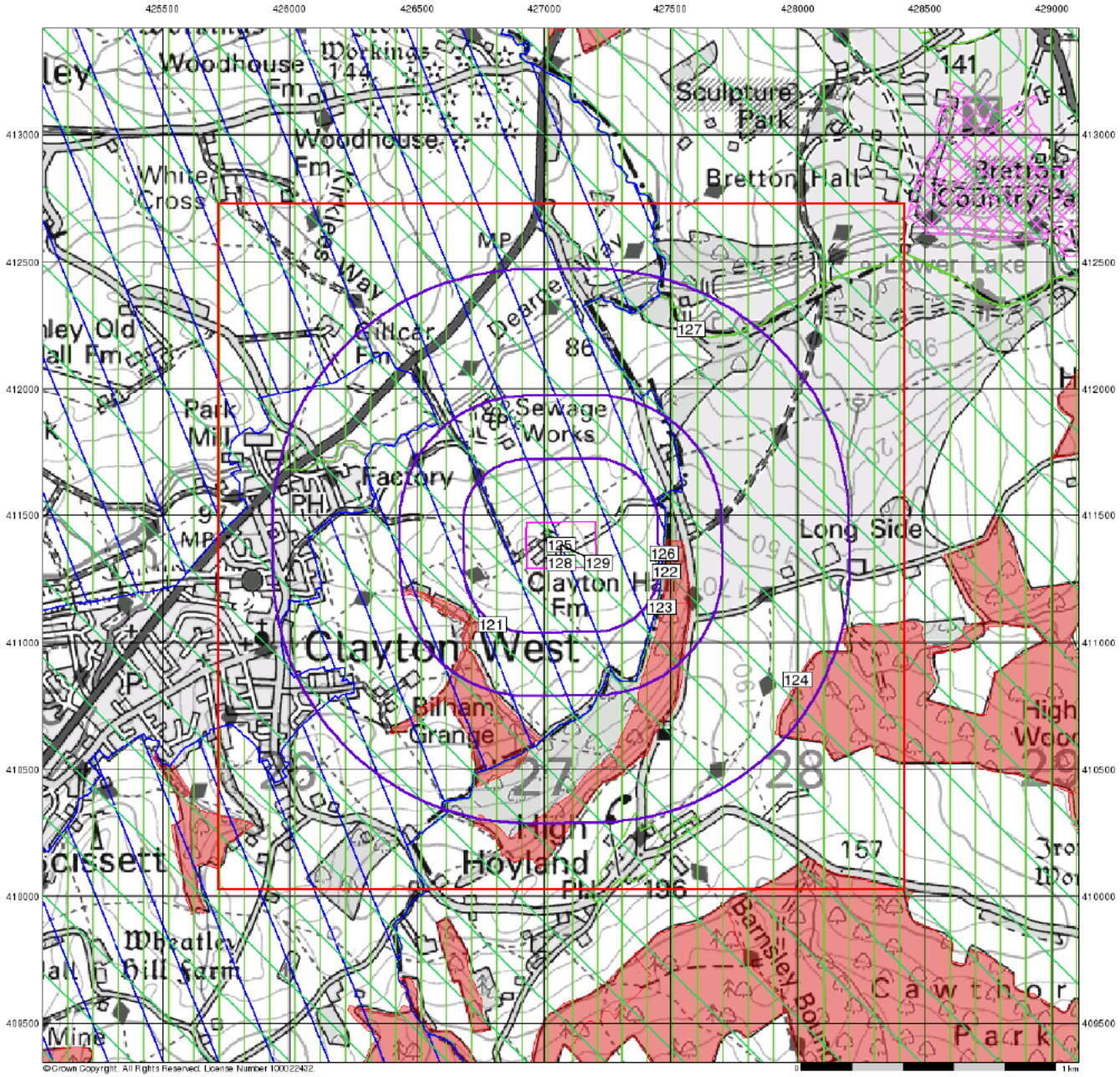

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LANDMARK INFORMATION GROUP®

Sensitive Land Uses

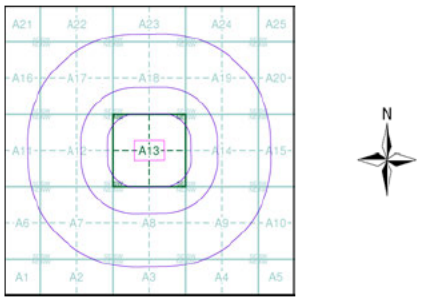
General

Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

Site Sensitivity Context Map - Slice A



Order Details

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Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
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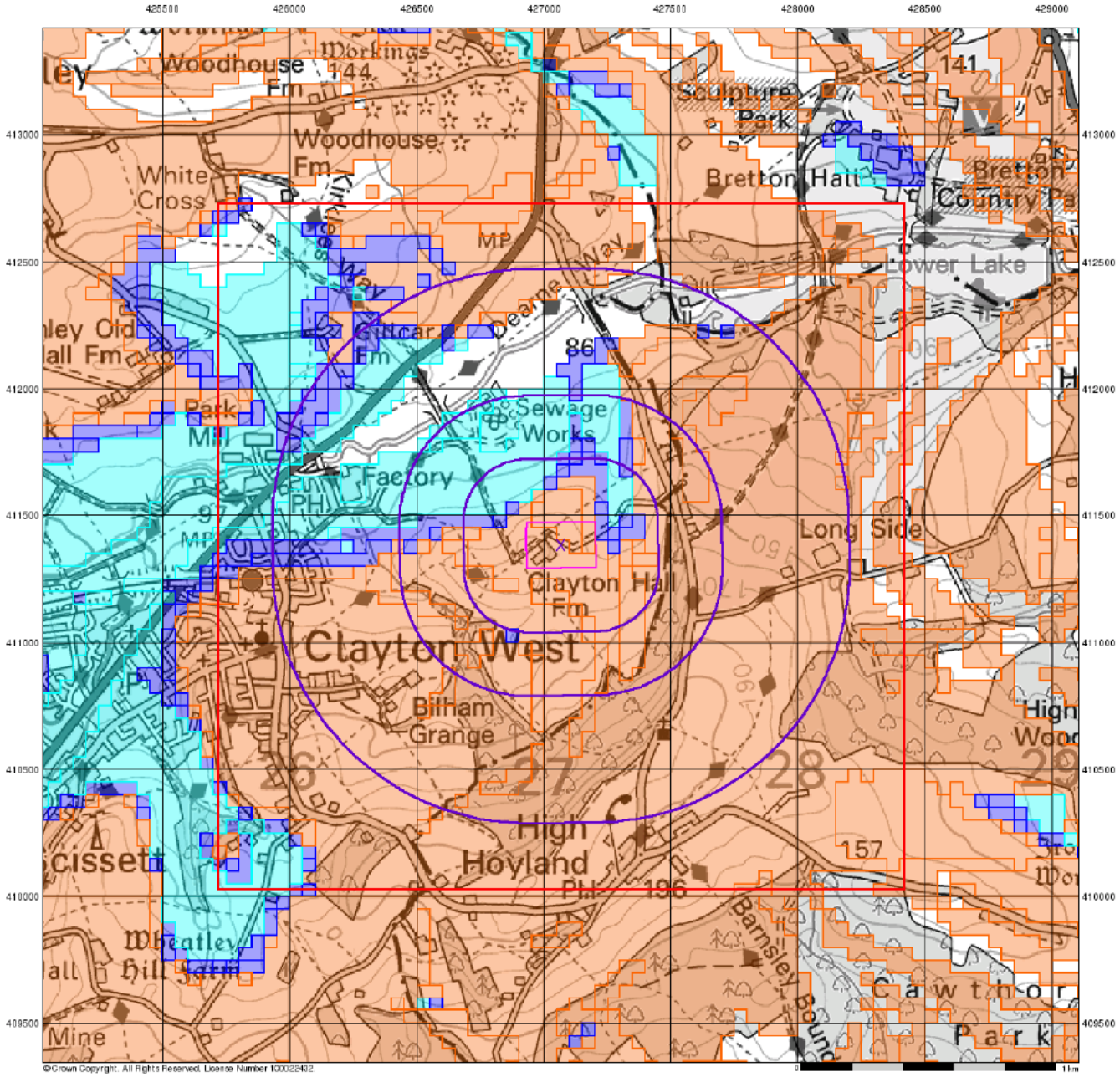

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LANDMARK INFORMATION GROUP®

BGS Flood GFS Data

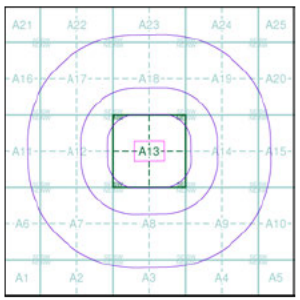
General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice A



Order Details

Order Number:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Search Buffer (m):	1000

Site Details

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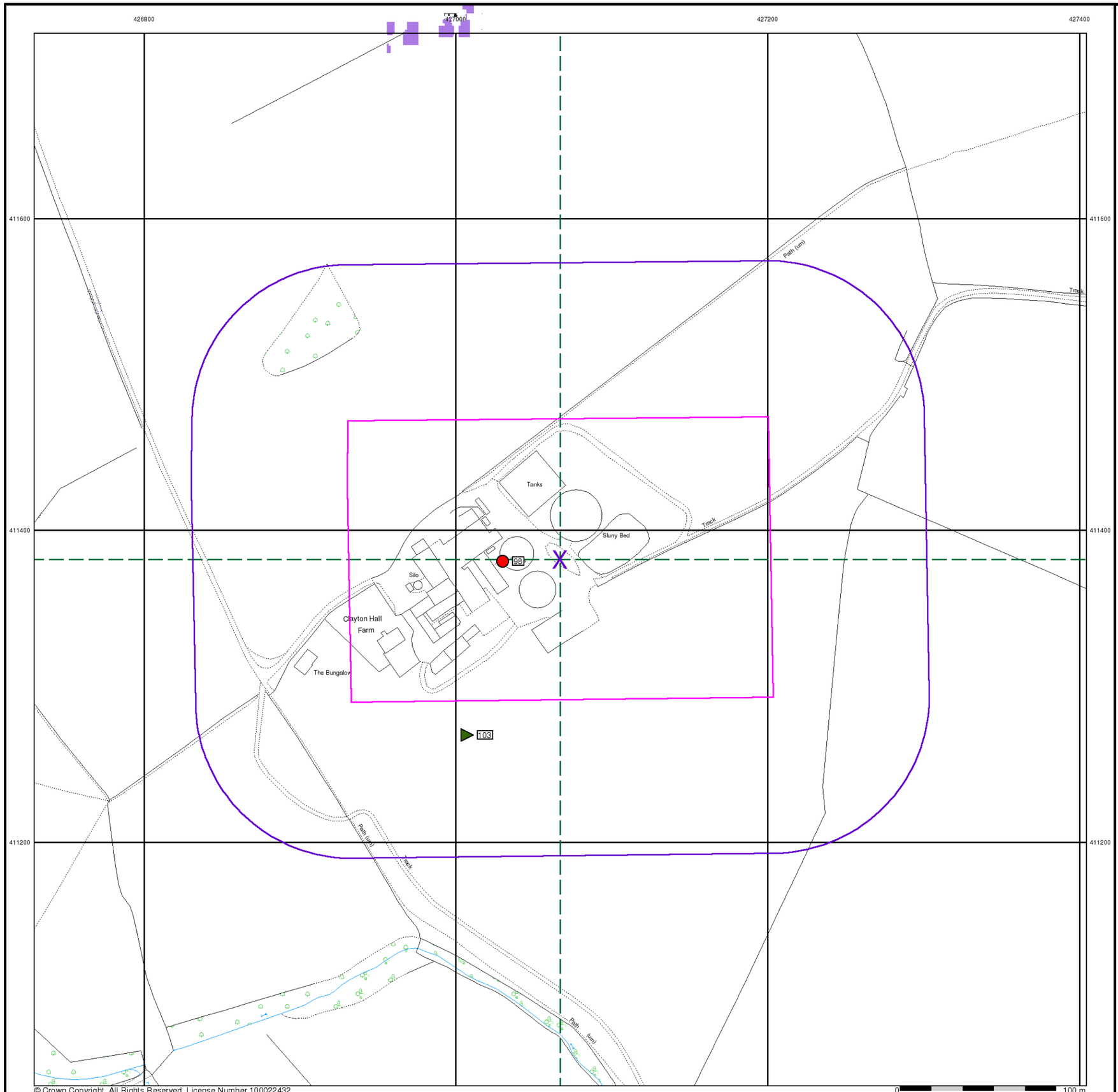

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LANDMARK INFORMATION GROUP®

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location
- Pylon
- Overhead Transmission Line

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

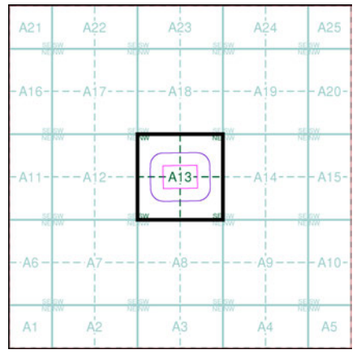
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Segment A13



Order Details

Order Number:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Plot Buffer (m):	100

Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE

Landmark INFORMATION GROUP

Tel: 0844 844 9952
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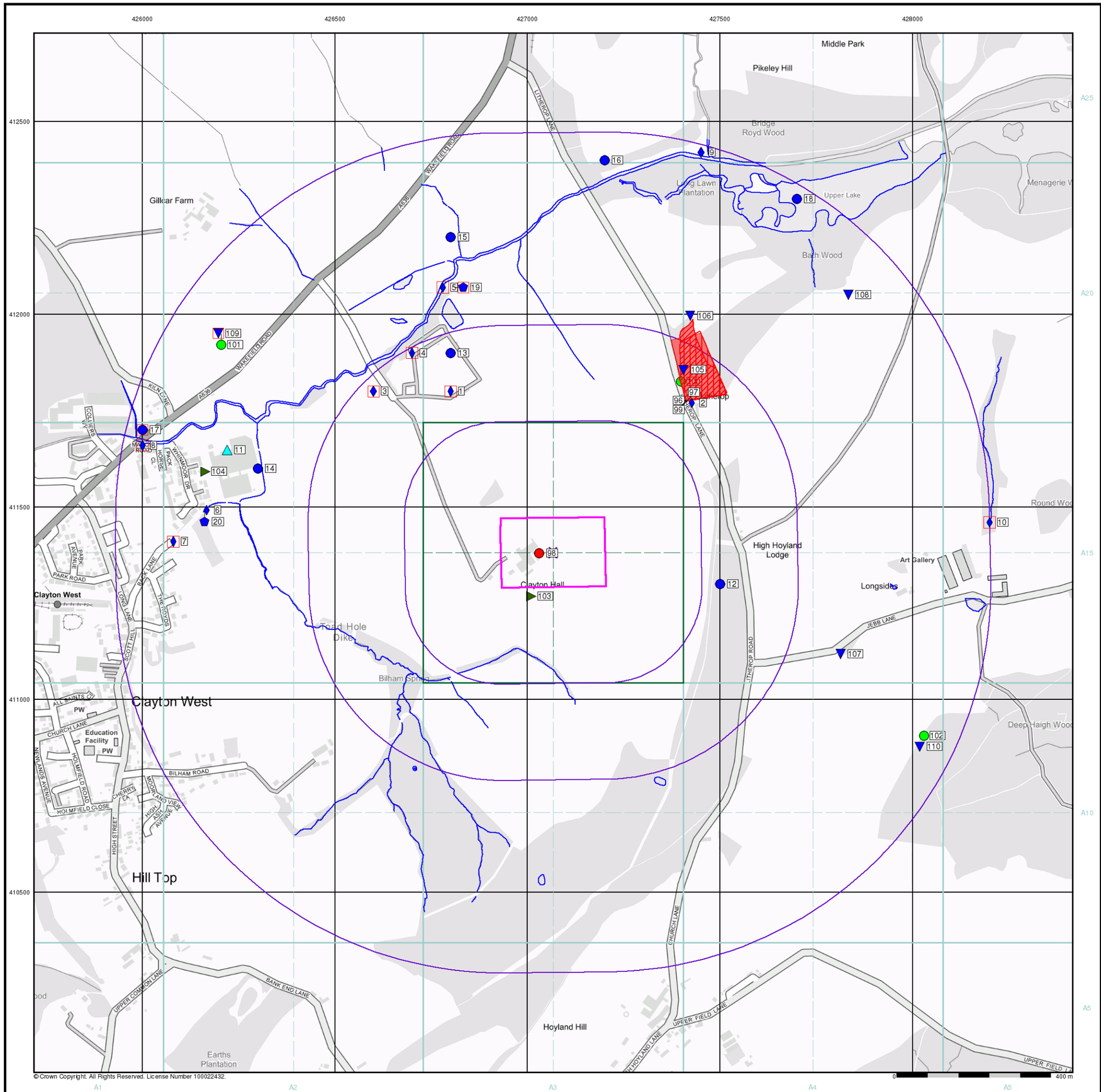
Web: www.envirocheck.co.uk



0 400 m

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LANDMARK INFORMATION GROUP®

General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Map ID

Several of Type at Location

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

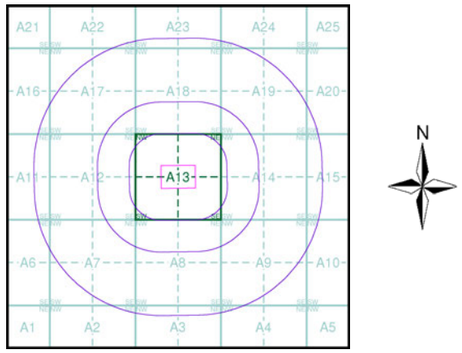
Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

Geological

- BGS Recorded Mineral Site

Site Sensitivity Map - Slice A



Order Details

Order Number:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Search Buffer (m):	1000

Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE

Landmark INFORMATION GROUP

Tel: 0844 844 9952
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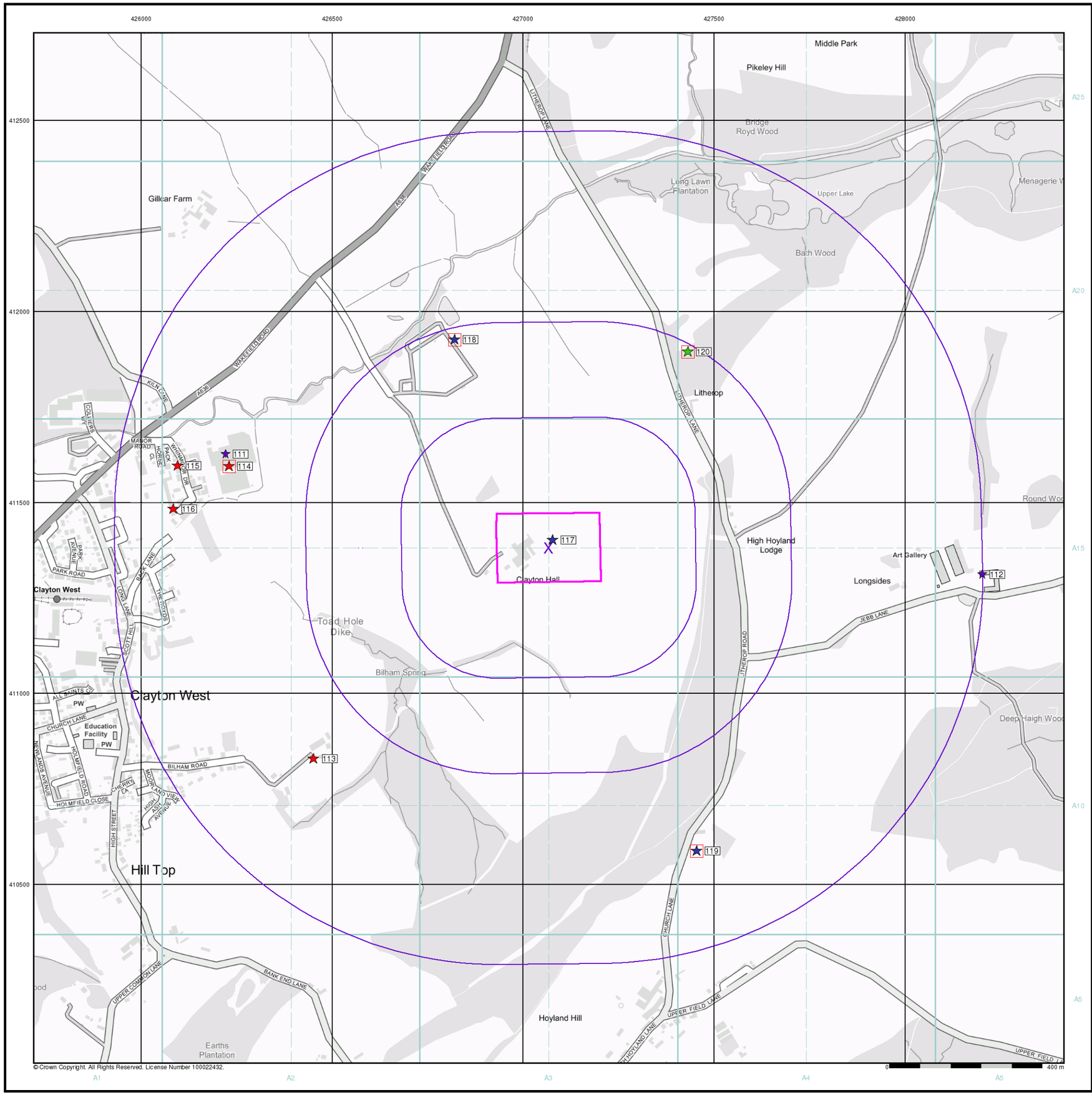

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Industrial Land Use Map

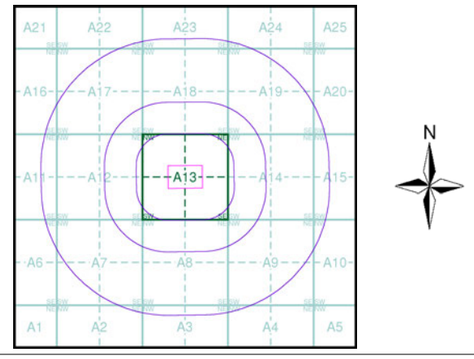
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

Industrial Land Use Map - Slice A



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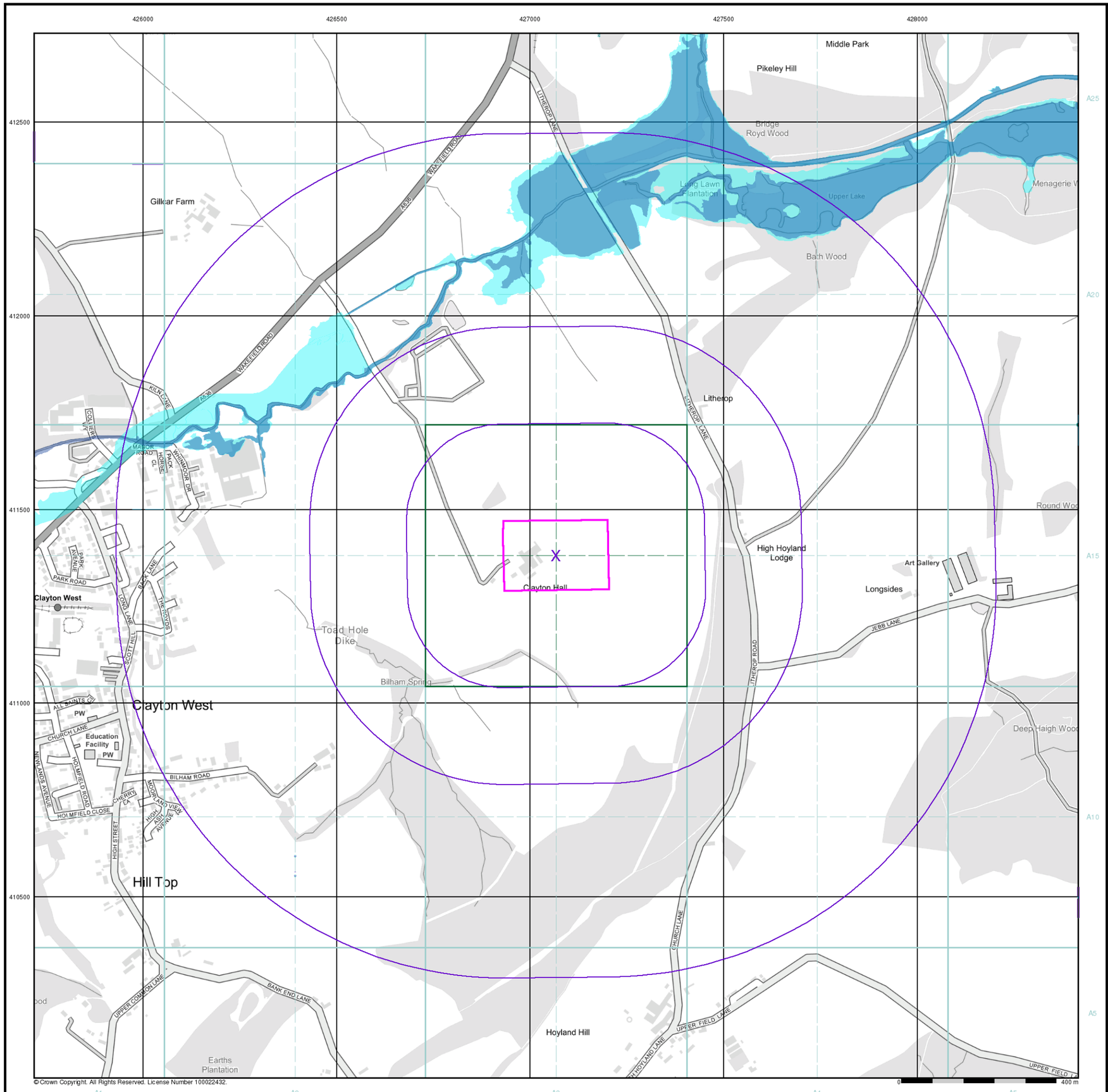

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LANDMARK INFORMATION GROUP®

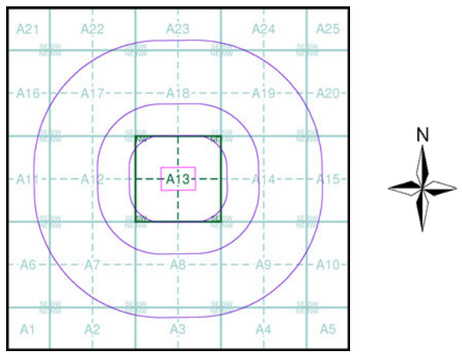
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Agency and Hydrological (Flood)

- Extreme Flooding from Rivers or Sea without Defences (Zone 2)
- Flooding from Rivers or Sea without Defences (Zone 3)
- Area Benefiting from Flood Defence
- Flood Water Storage Areas
- Flood Defence

Flood Map - Slice A



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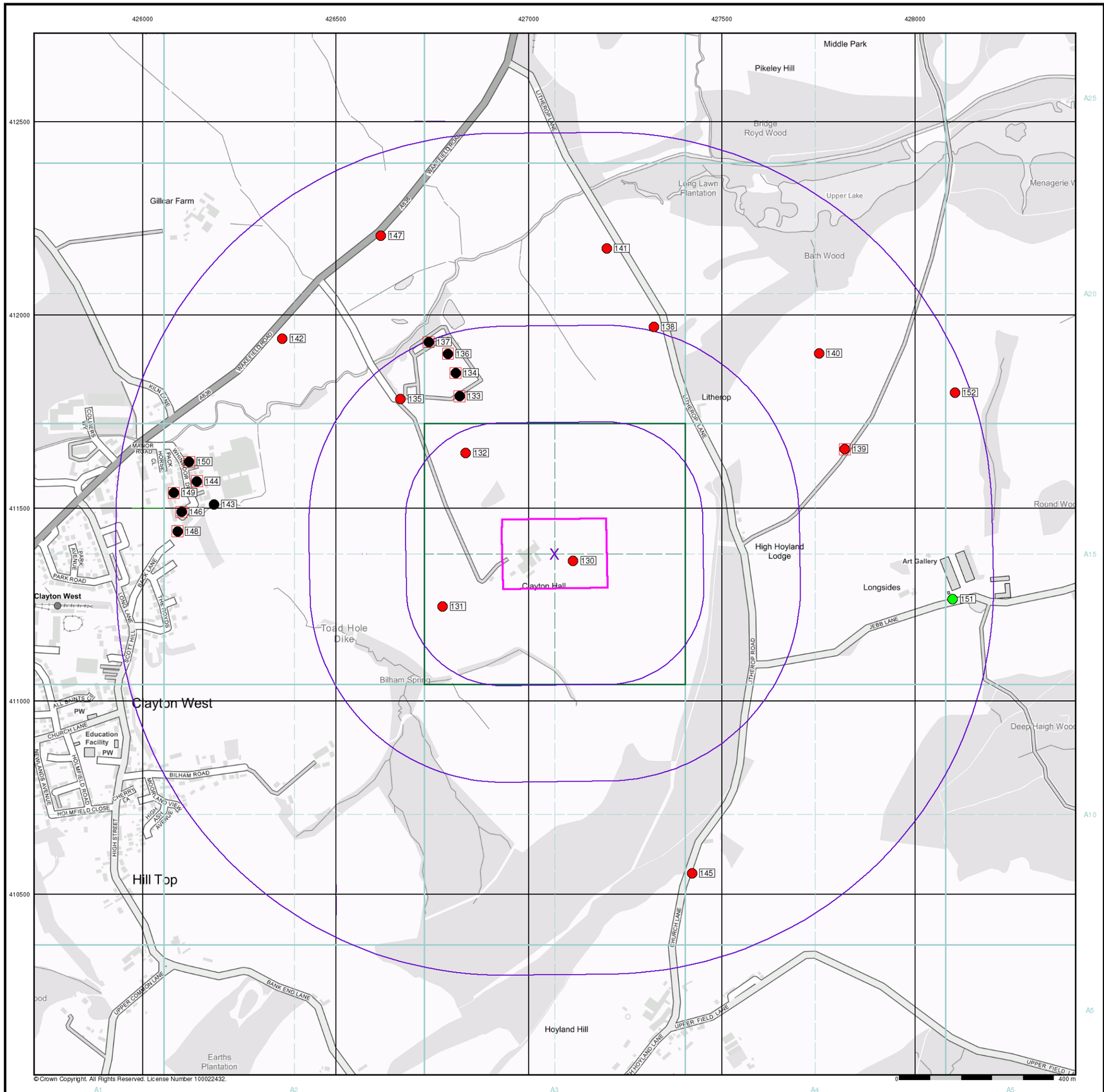

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LANDMARK INFORMATION GROUP®

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

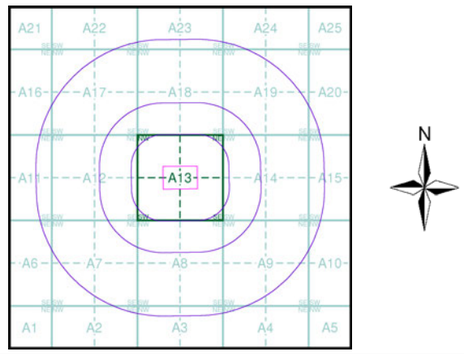
Agency and Hydrological (Boreholes)

- BGS Borehole Depth 0 - 10m
- BGS Borehole Depth 10 - 30m
- BGS Borehole Depth 30m +
- Confidential
- Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice A



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Slice:	A
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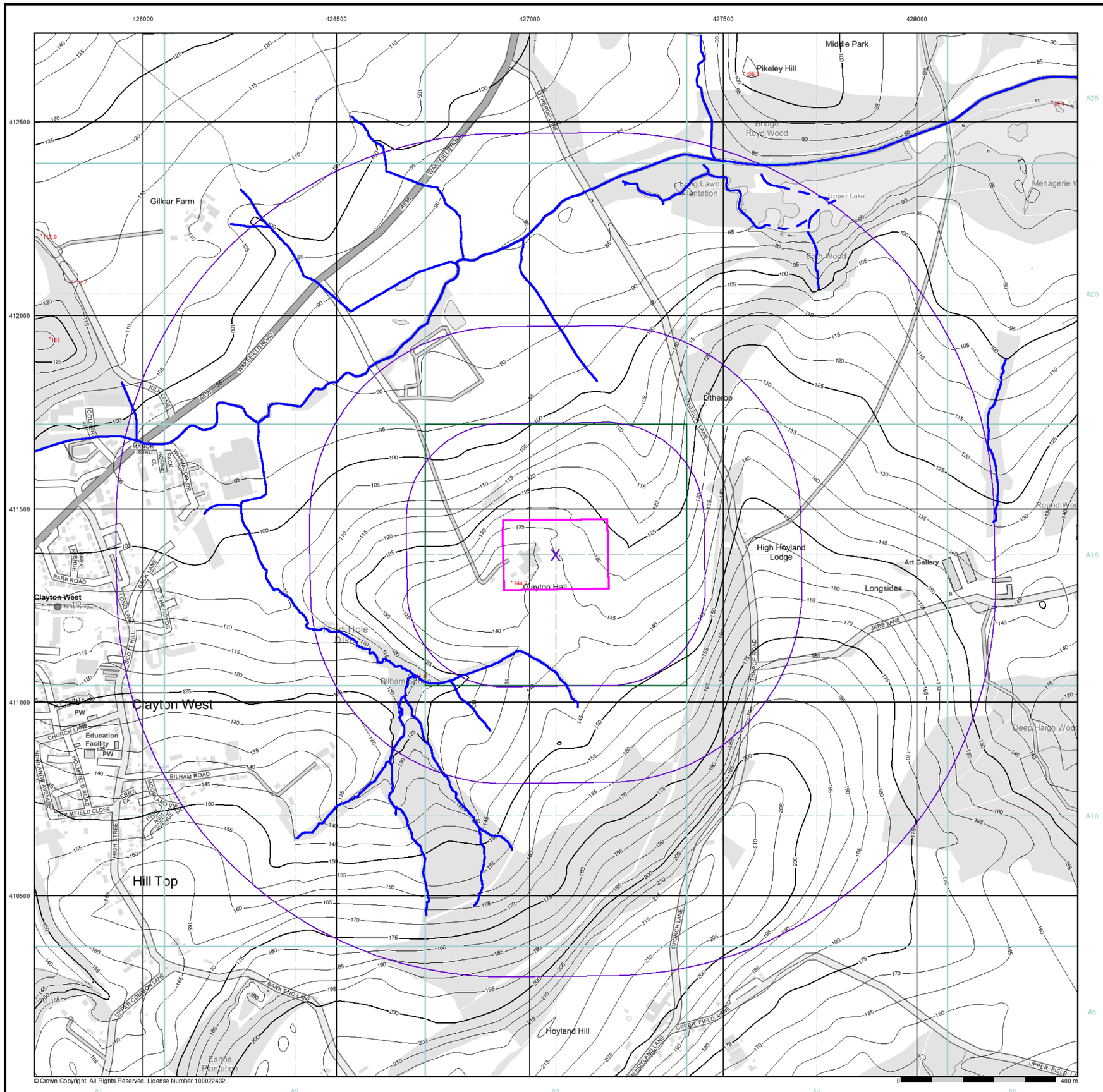

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LANDMARK INFORMATION GROUP®

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

OS Water Network Data

- Canal
- Reservoir
- Foreshore
- Marsh
- Tidal River
- Inland River
- Drain
- Other
- Lake
- Transfer
- Lock Or Flight Of Locks
- Sea

Contours (height in meters)

Standard Contour 105

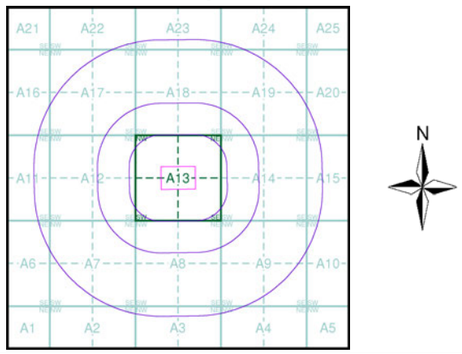
Master Contour 100

Spot Height 167.3

MLW Mean Low Water

MHW Mean High Water

OS Water Network Map - Slice A



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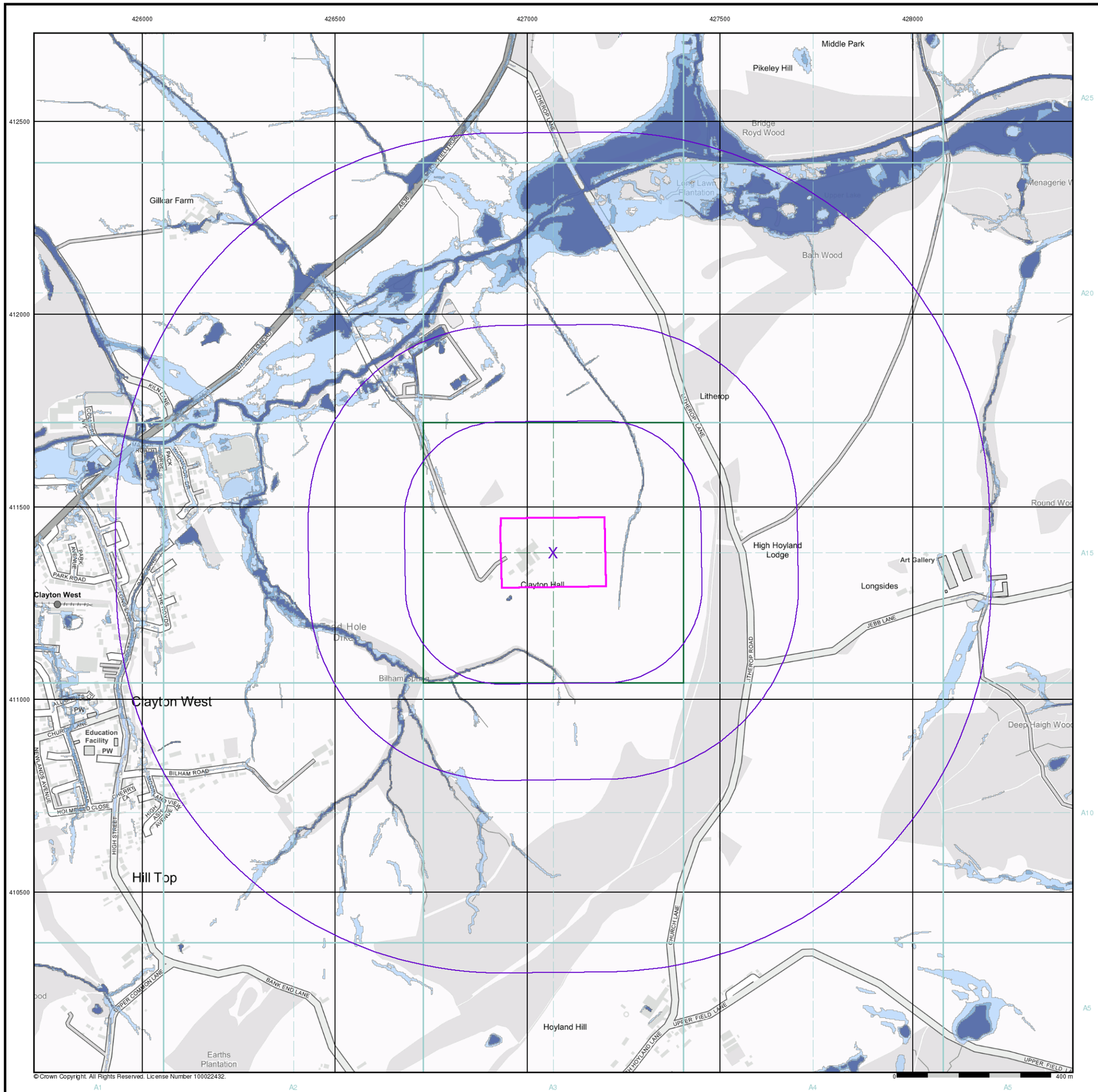

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LANDMARK INFORMATION GROUP®

General

- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point

Risk of Flooding from Surface Water

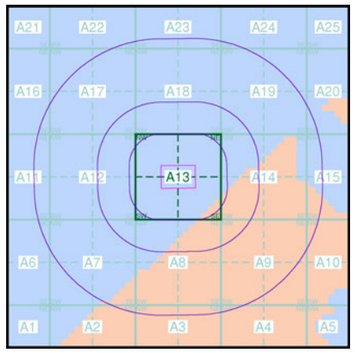
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

EA/NRW Suitability Map - Slice A



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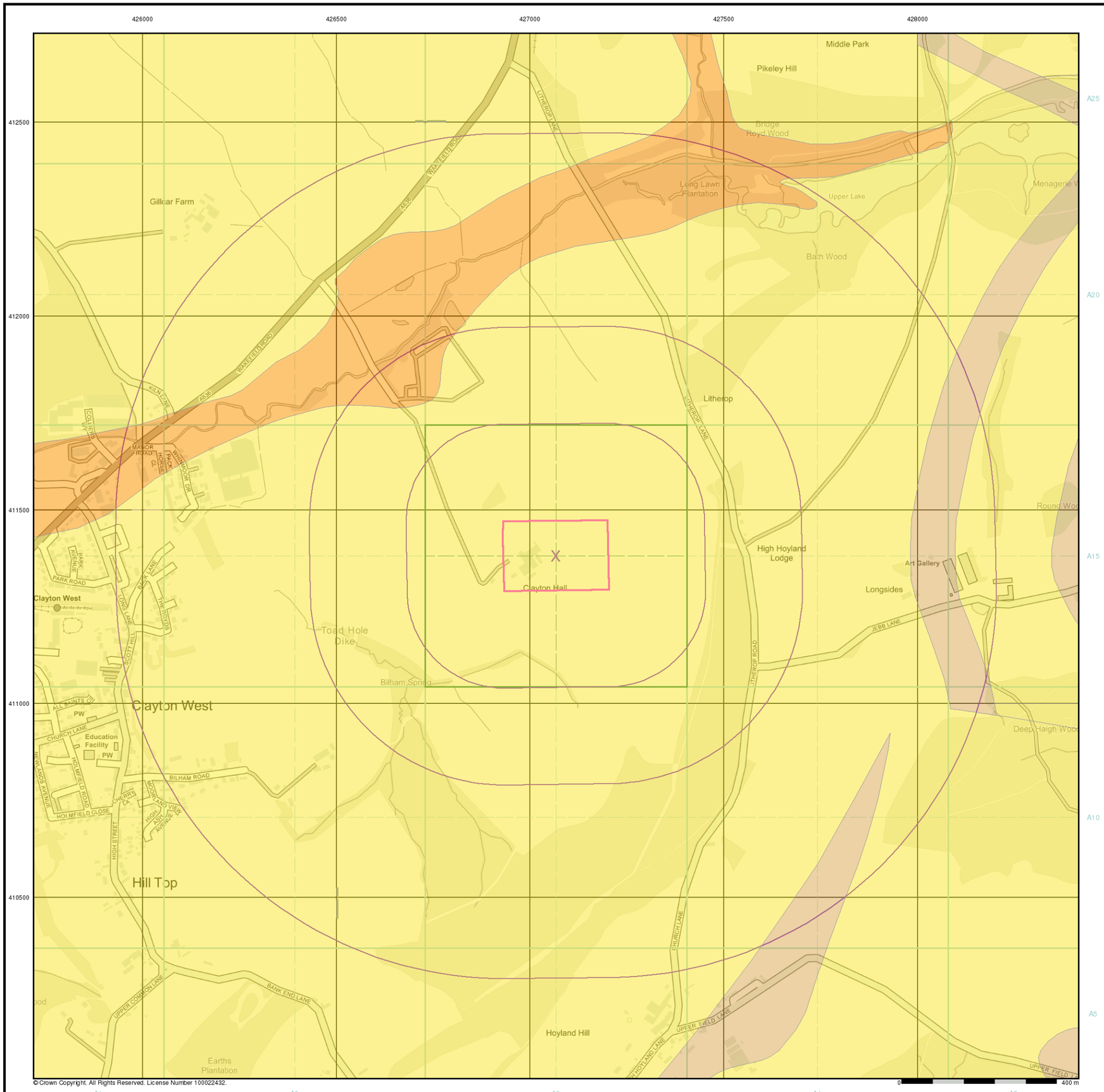


Envirocheck®

LANDMARK INFORMATION GROUP®

General

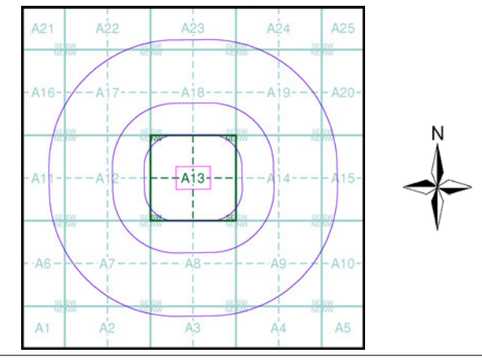
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg

- < 15
- 15 - 25
- 25 - 35
- 35 - 45
- 45 - 60
- 60 - 120
- > 120

Estimated Soil Chemistry Arsenic - Slice A



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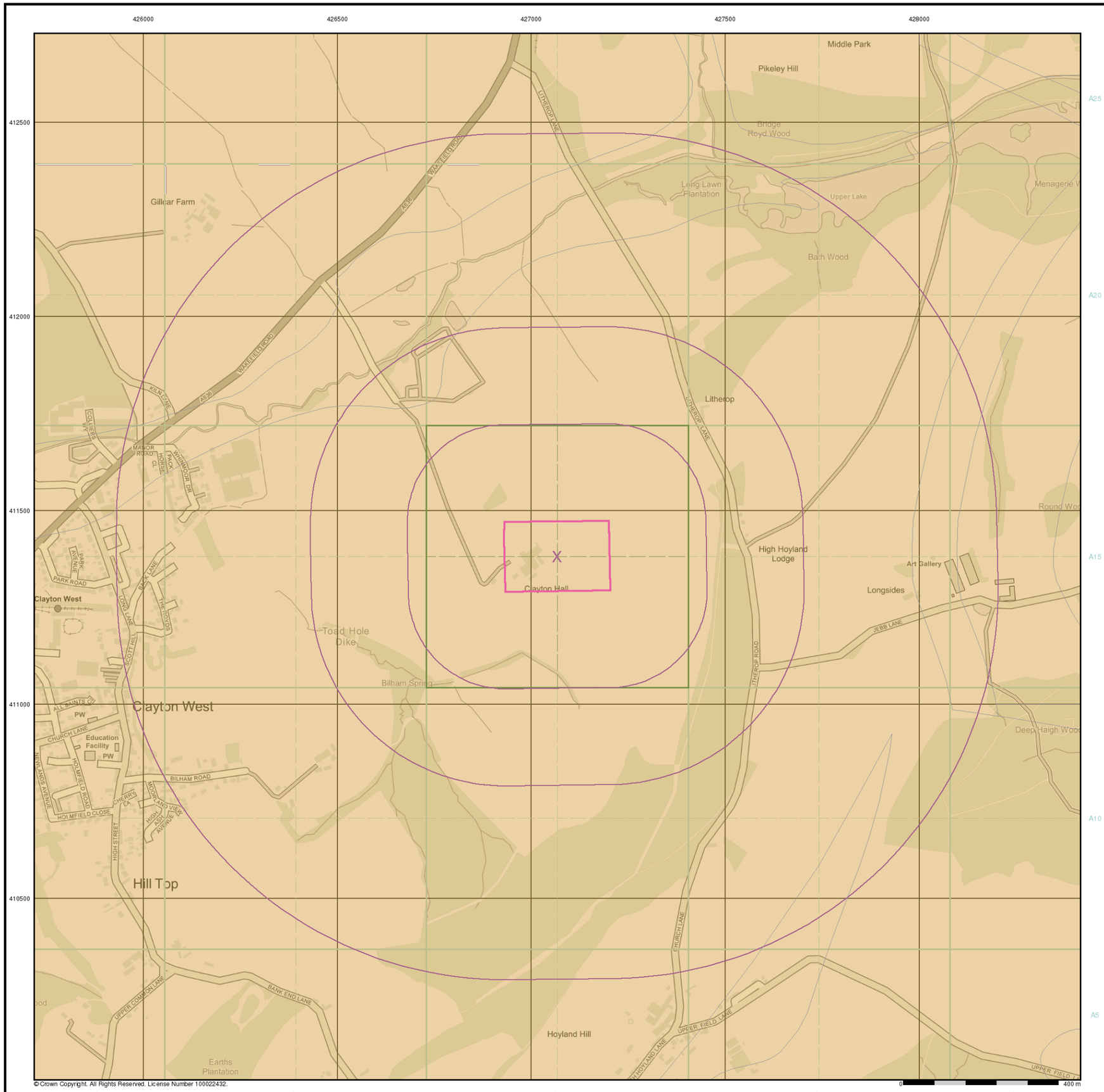

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LANDMARK INFORMATION GROUP®

General

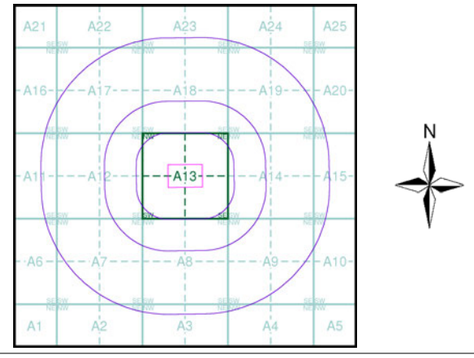
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg

- < 1.8
- 1.8 - 2.2
- 2.2 - 3.0
- > 3.0

Estimated Soil Chemistry Cadmium - Slice A



Order Details

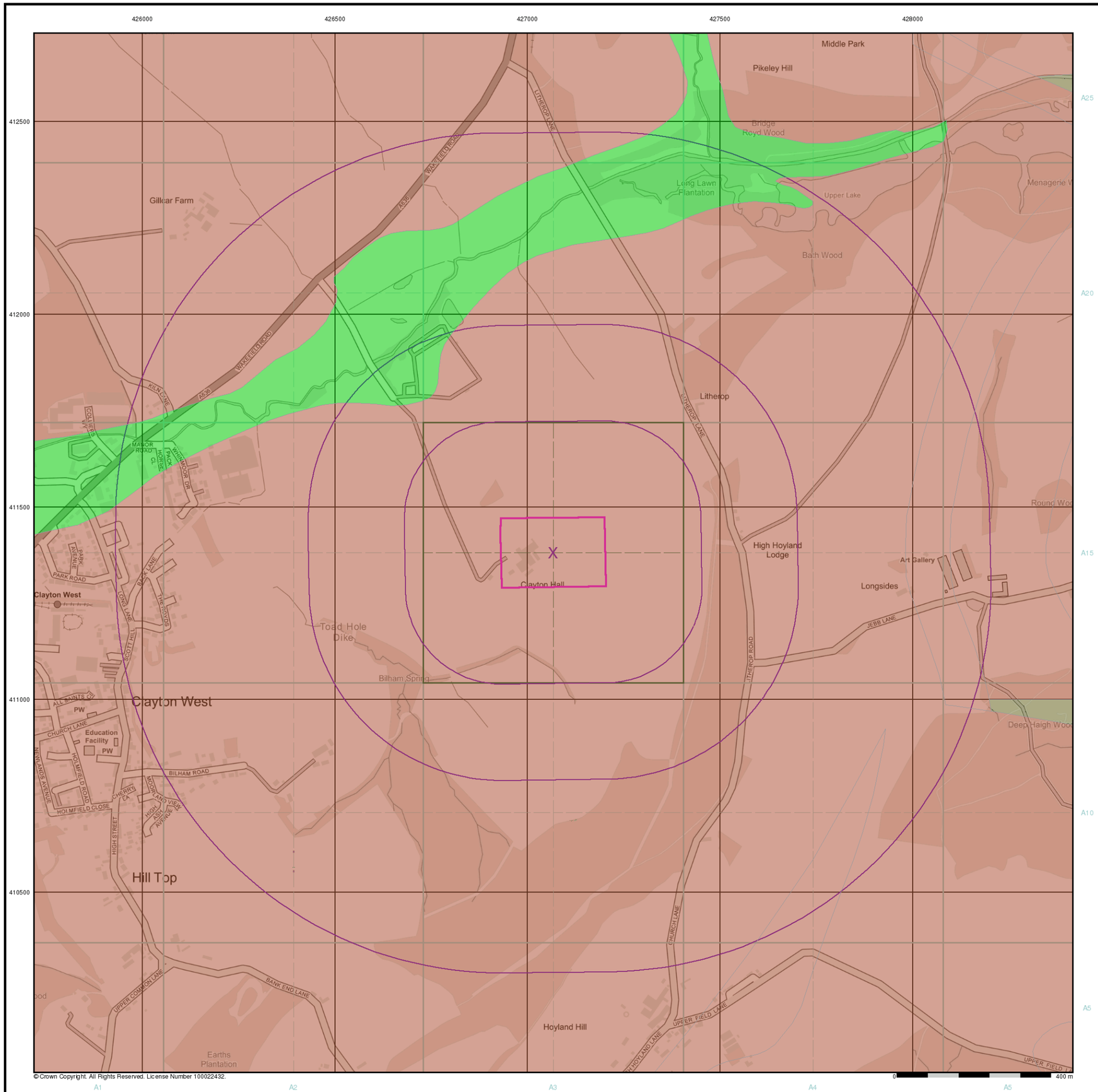
Order Details:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Search Buffer (m):	1000

Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE

Landmark INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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General

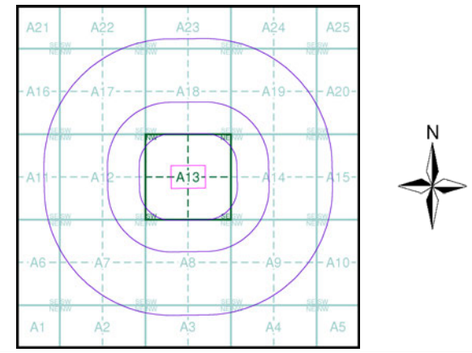
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg

- < 20
- 20 - 40
- 40 - 60
- 60 - 90
- 90 - 120
- 120 - 180
- > 180

Estimated Soil Chemistry Chromium - Slice A



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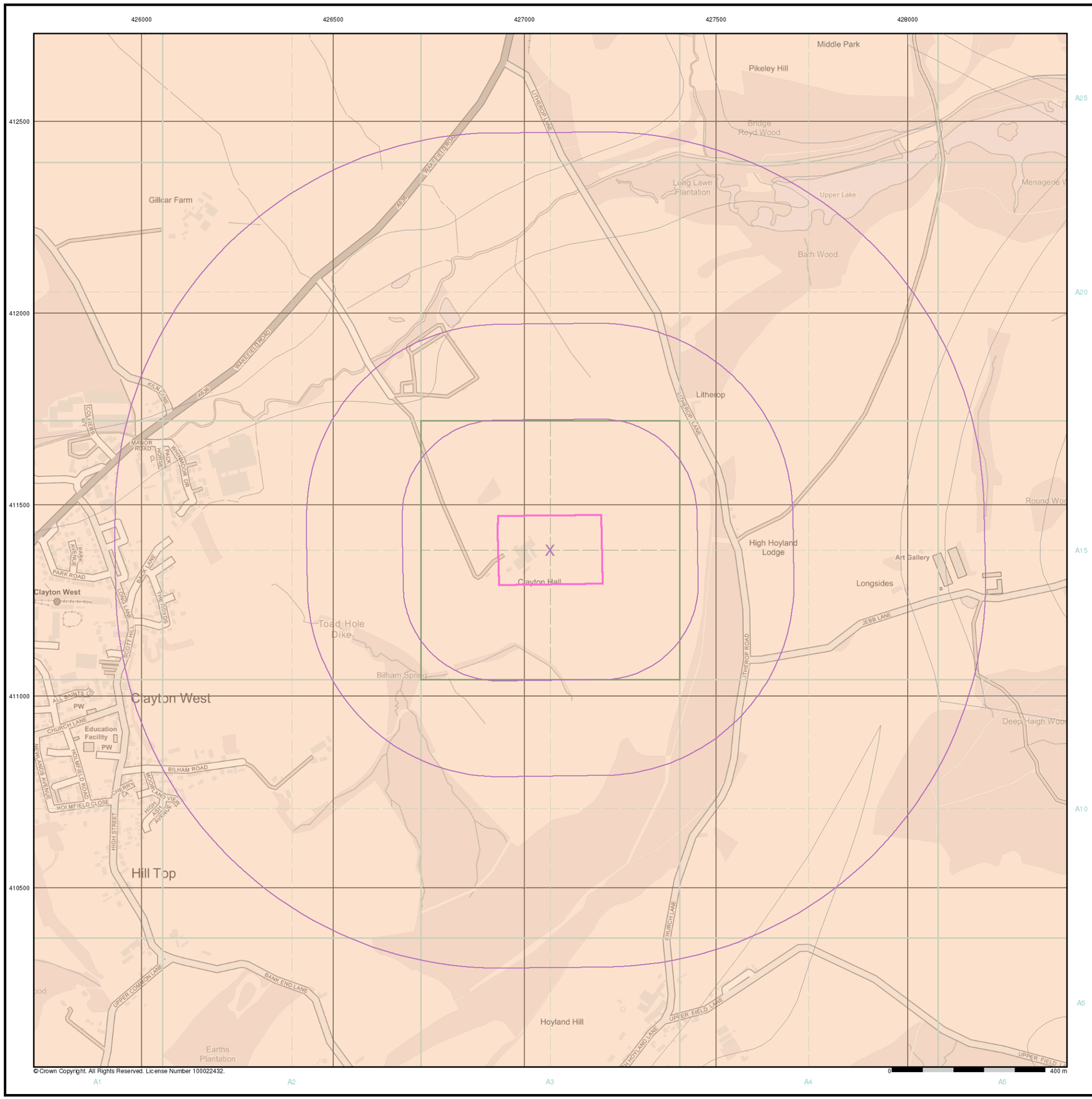

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General

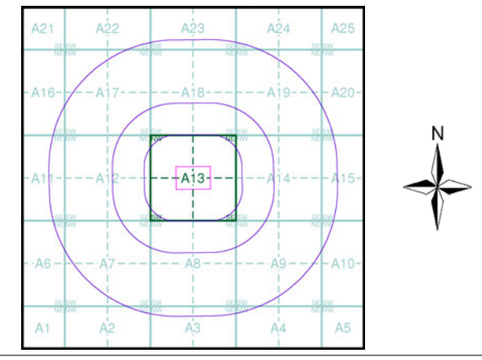
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Lead

Lead Concentrations mg/kg

- <100 mg/kg
- 100 - 200
- 200 - 300
- 300 - 600
- 600 - 1200
- >1200

Estimated Soil Chemistry Lead - Slice A



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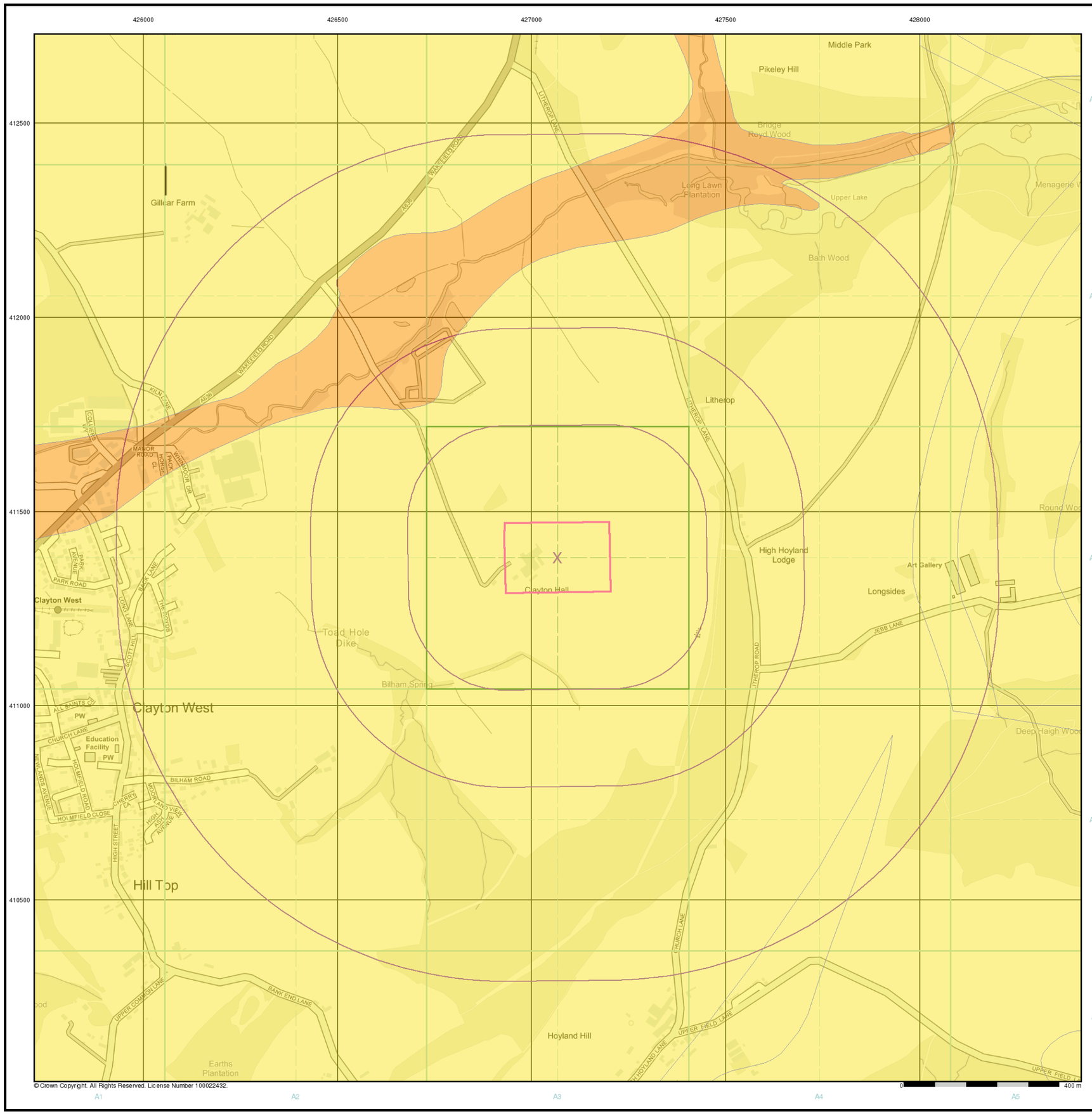

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General

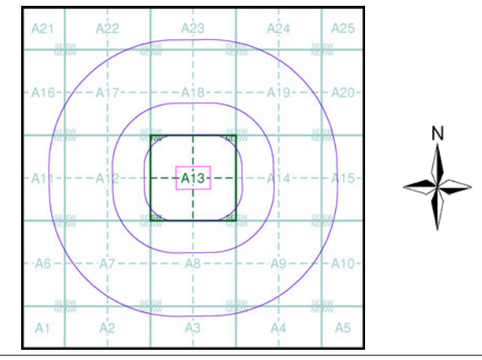
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg

- < 15
- 15 - 30
- 30 - 45
- 45 - 60
- 60 - 80
- 80 - 100
- > 100

Estimated Soil Chemistry Nickel - Slice A



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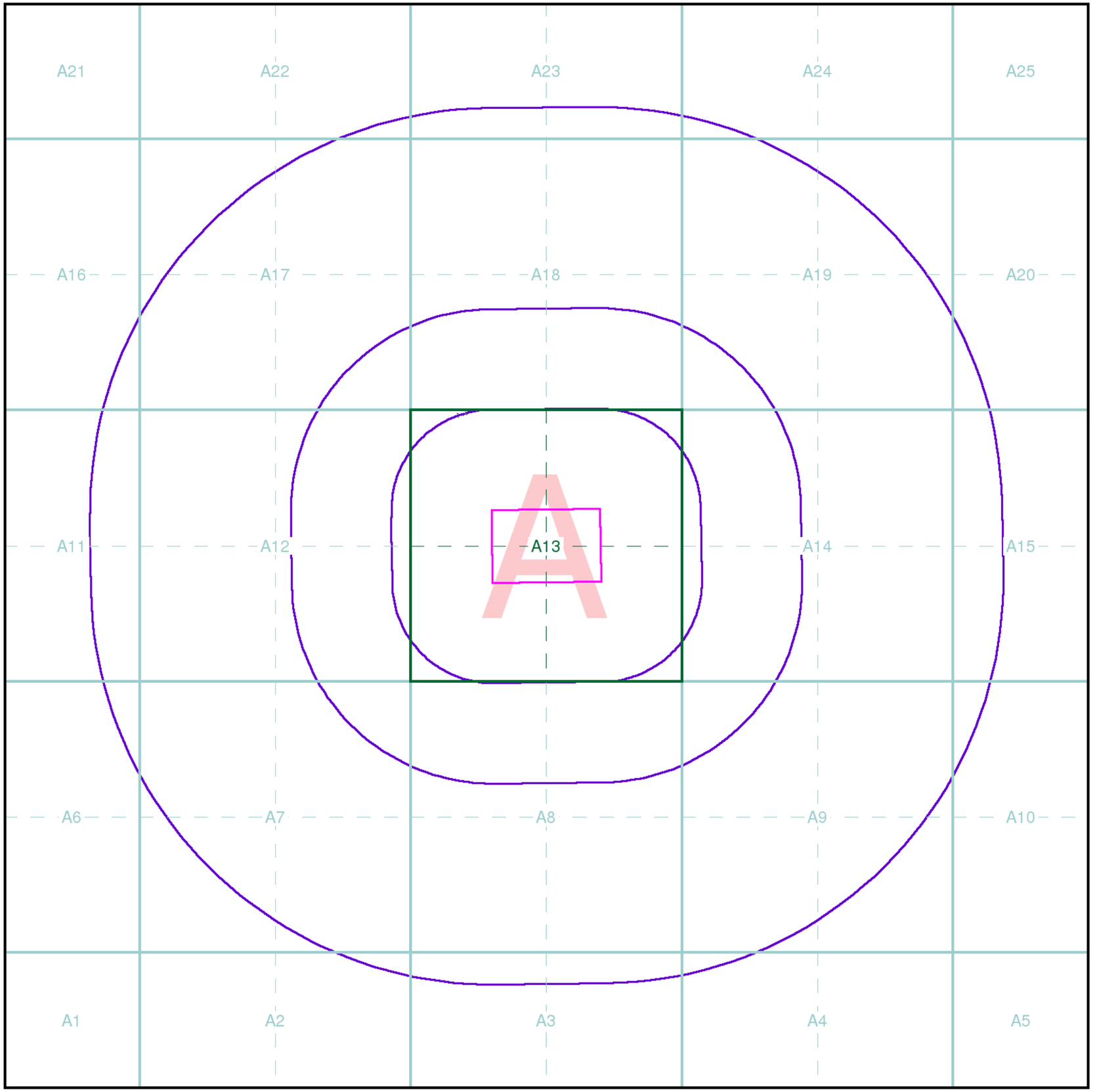

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Index Map

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

Slice
Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice "grid". This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

Segment
A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

Quadrant
A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

A selection of organisations who provide data within this report:

Map data | British Geological Survey, Natural Environment Research Council | Environment Agency | Natural England

Envirocheck reports are compiled from 136 different sources of data.

Prepared For

Julie Dingwall
Olive Compliance Ltd
FOR:Clayton Hall BioEnergy LLP

Client Details

Mrs K Dowling, Olive Compliance Ltd, 19 Main Street, ponteland, Newcastle, Newcastle, Northumberland, NE20 9NH

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Historical Mapping Legends

Ordnance Survey County Series 1:10,560

Gravel Pit
Sand Pit
Other Pits
Quarry
Shingle
Orchard
Osiers
Reeds
Marsh
Mixed Wood
Deciduous
Brushwood
Fir
Furze
Rough Pasture
Arrow denotes flow of water
Trigonometrical Station
Site of Antiquities
Bench Mark
Pump, Guide Post, Signal Post
Well, Spring, Boundary Post
285 Surface Level
Sketched Contour
Instrumental Contour
Main Roads
Fenced
Un-Fenced
Minor Roads
Fenced
Un-Fenced
Sunken Road
Raised Road
Road over Railway
Railway over River
Railway over Road
Level Crossing
Road over River or Canal
Road over Stream
Road over Stream
County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
Co. Boro. Bdy. County Borough Boundary (England)
Co. Burgh Bdy. County Burgh Boundary (Scotland)
R.D. Bdy. Rural District Boundary
Civil Parish Boundary

Ordnance Survey Plan 1:10,000

Chalk Pit, Clay Pit or Quarry
Gravel Pit
Sand Pit
Disused Pit or Quarry
Refuse or Slag Heap
Lake, Loch or Pond
Dunes
Boulders
Coniferous Trees
Non-Coniferous Trees
Orchard
Scrub
Coppice
Bracken
Heath
Rough Grassland
Marsh
Reeds
Saltings
Building
Direction of Flow of Water
Shingle
Sand
Glasshouse
Pylon
Pylon
Electricity Transmission Line
Sloping Masonry
Cutting
Embankment
Standard Gauge Multiple Track
Road Under
Road Over
Level Crossing
Foot Bridge
Standard Gauge Single Track
Siding, Tramway or Mineral Line
Narrow Gauge
Geographical County
Administrative County, County Borough or County of City
Municipal Borough, Urban or Rural District, Burgh or District Council
Borough, Burgh or County Constituency
Shown only when not coincident with other boundaries
Civil Parish
Shown alternately when coincidence of boundaries occurs

BP, BS	Boundary Post or Stone	Pol Sta	Police Station
Ch	Church	PO	Post Office
CH	Club House	PC	Public Convenience
F E Sta	Fire Engine Station	PH	Public House
FB	Foot Bridge	SB	Signal Box
Fn	Fountain	Spr	Spring
GP	Guide Post	TCB	Telephone Call Box
MP	Mile Post	TCP	Telephone Call Post
MS	Mile Stone	W	Well

1:10,000 Raster Mapping

Gravel Pit
Refuse tip or slag heap
Rock
Rock (scattered)
Boulders
Boulders (scattered)
Shingle
Mud
Mud
Sand
Sand
Sand Pit
Slopes
Top of cliff
General detail
Underground detail
Overhead detail
Narrow gauge railway
Multi-track railway
Single track railway
County boundary (England only)
Civil, parish or community boundary
District, Unitary, Metropolitan, London Borough boundary
Constituency boundary
Area of wooded vegetation
Non-coniferous trees
Non-coniferous trees (scattered)
Coniferous trees
Coniferous trees (scattered)
Positioned tree
Orchard
Coppice or Osiers
Rough Grassland
Heath
Scrub
Marsh, Salt Marsh or Reeds
Water feature
Flow arrows
MHW(S) Mean high water (springs)
MLW(S) Mean low water (springs)
Telephone line (where shown)
Electricity transmission line (with poles)
BM 123.45 m Bench mark (where shown)
Triangulation station
Point feature (e.g. Guide Post or Mile Stone)
Pylon, flare stack or lighting tower
Site of (antiquity)
Glasshouse
General Building
Important Building

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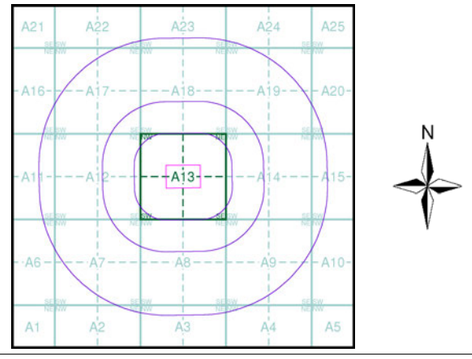
Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Yorkshire	1:10,560	1854	2
Yorkshire	1:10,560	1894	3
Yorkshire	1:10,560	1907	4
Yorkshire	1:10,560	1930	5
Yorkshire	1:10,560	1932	6
Yorkshire	1:10,560	1938 - 1948	7
Yorkshire	1:10,560	1948	8
Ordnance Survey Plan	1:10,000	1955	9
Ordnance Survey Plan	1:10,000	1966	10
Ordnance Survey Plan	1:10,000	1983	11
Ordnance Survey Plan	1:10,000	1989	12
10K Raster Mapping	1:10,000	2000	13
10K Raster Mapping	1:10,000	2006	14
VectorMap Local	1:10,000	2023	15

Historical Map - Slice A



Order Details

Order Number: 333683478_1_1
Customer Ref: CHF0124
National Grid Reference: 427070, 411380
Slice: A
Site Area (Ha): 4.88
Search Buffer (m): 1000

Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE

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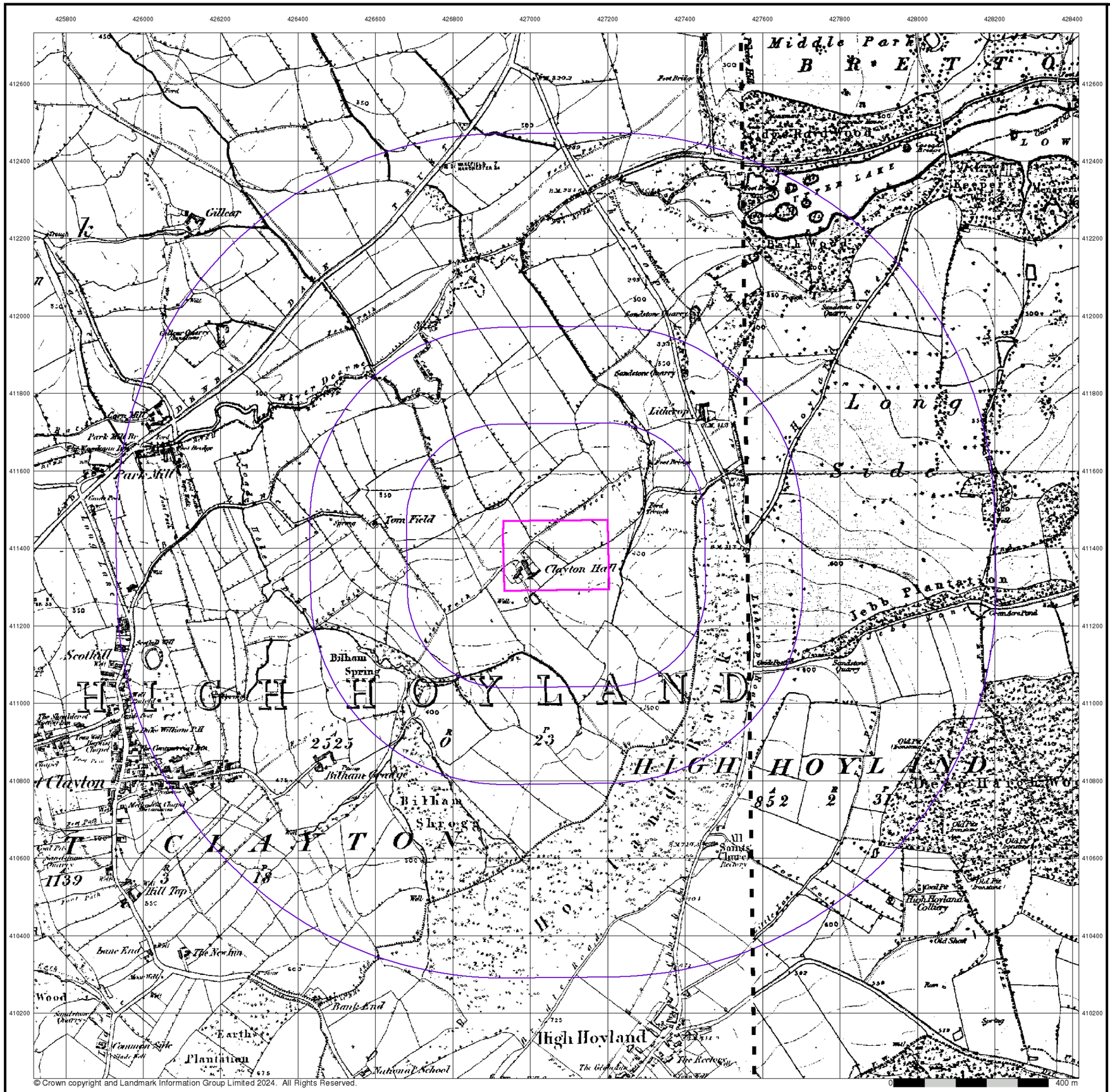

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Yorkshire

Published 1854

Source map scale - 1:10,560

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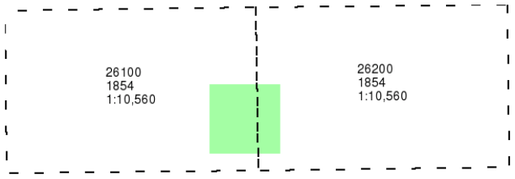
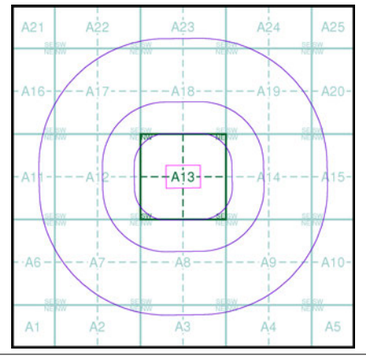
Map Name(s) and Date(s)



Historical Map - Slice A



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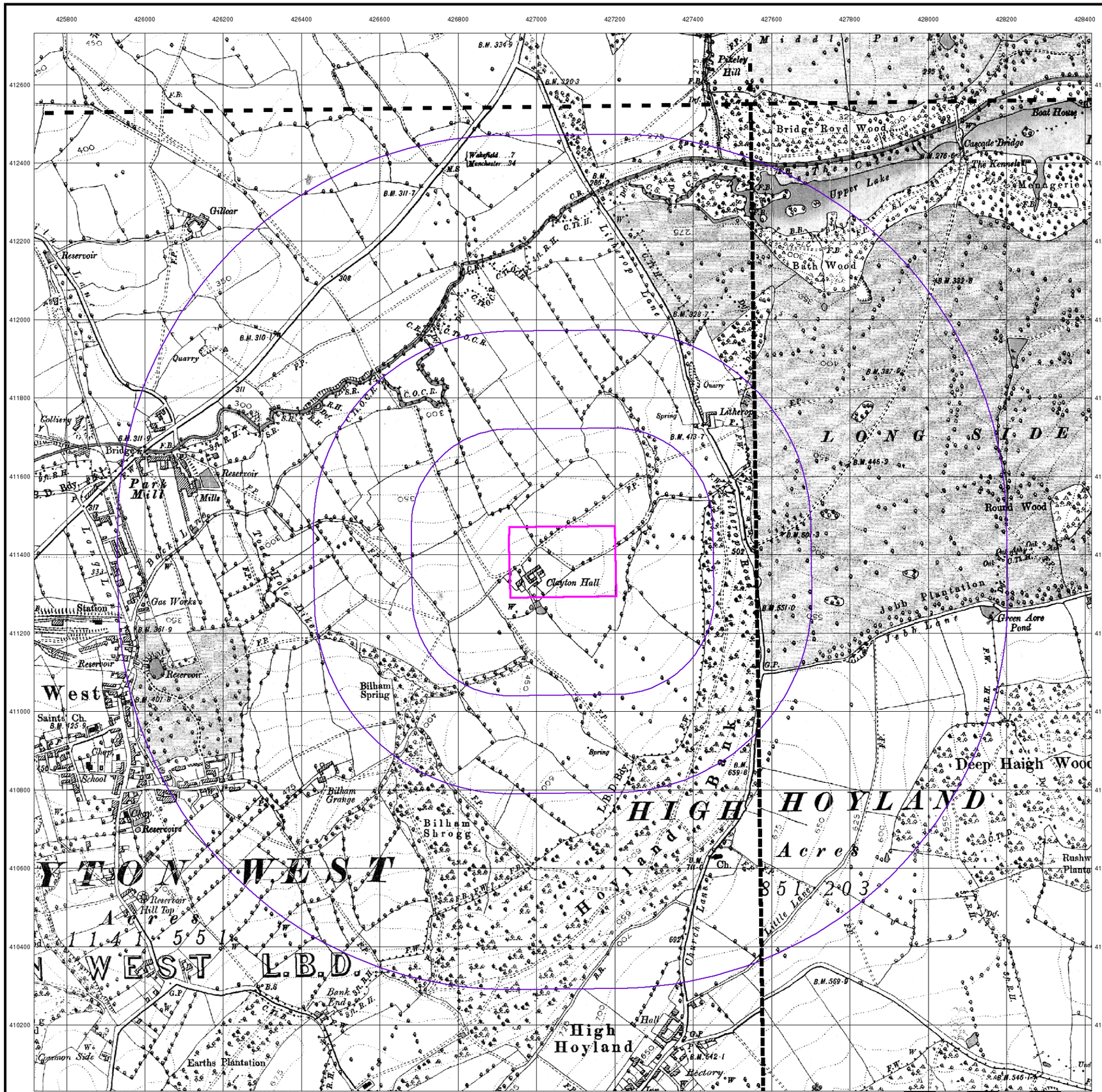

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Yorkshire

Published 1894

Source map scale - 1:10,560

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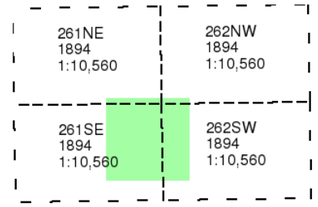
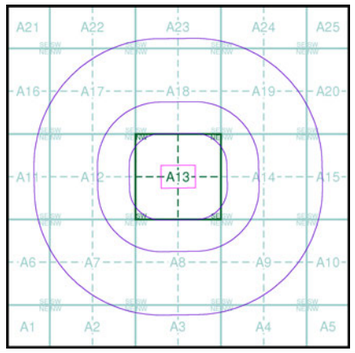


Historical Map - Slice A



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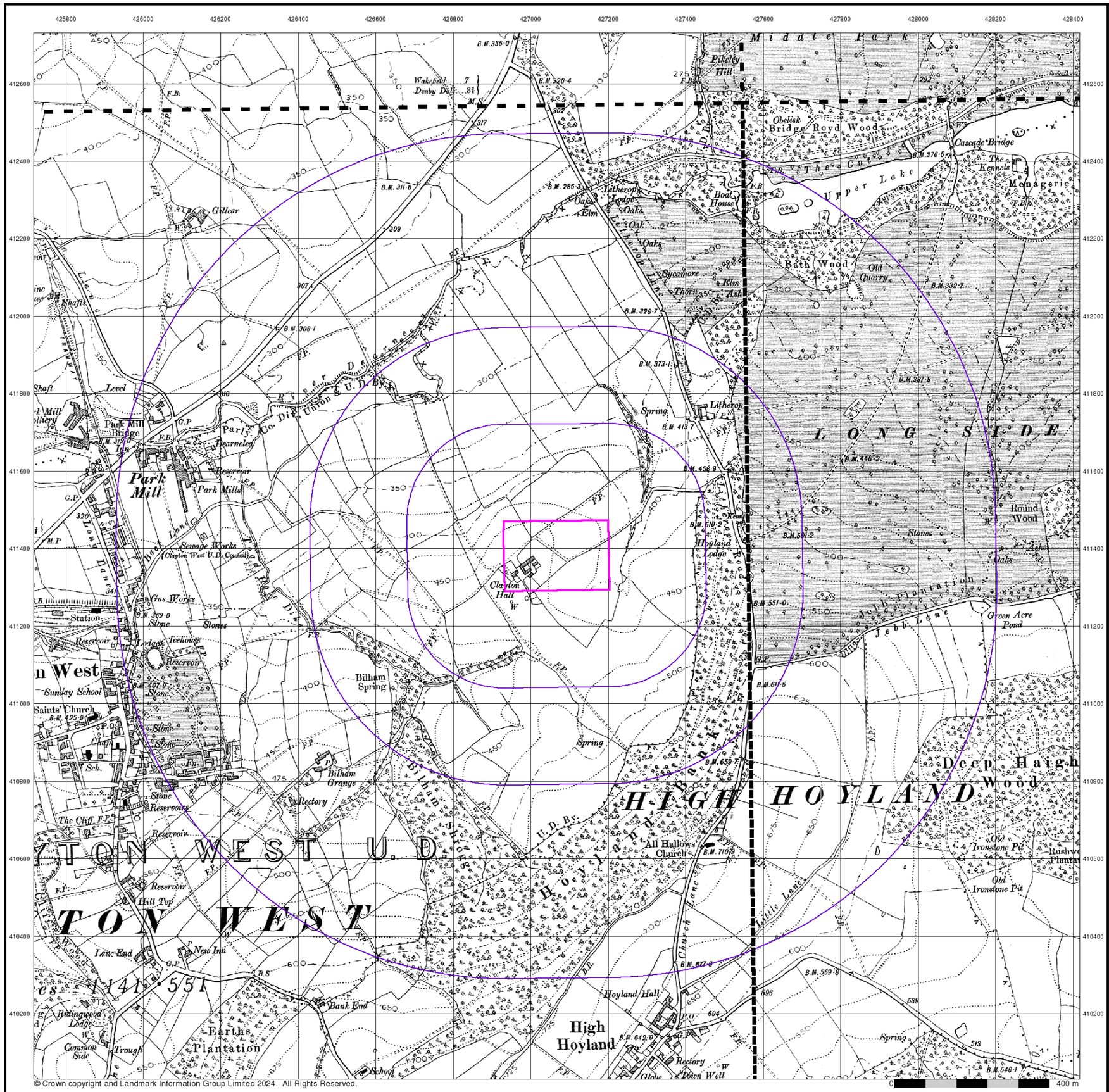

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Yorkshire

Published 1907

Source map scale - 1:10,560

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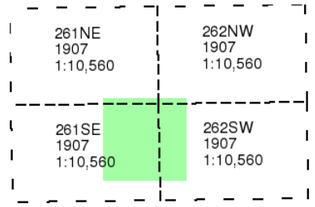
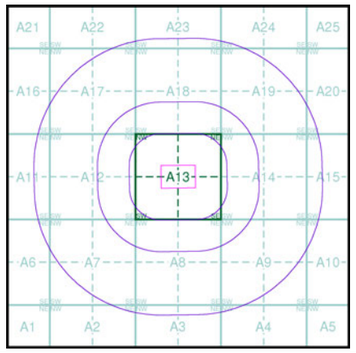


Historical Map - Slice A



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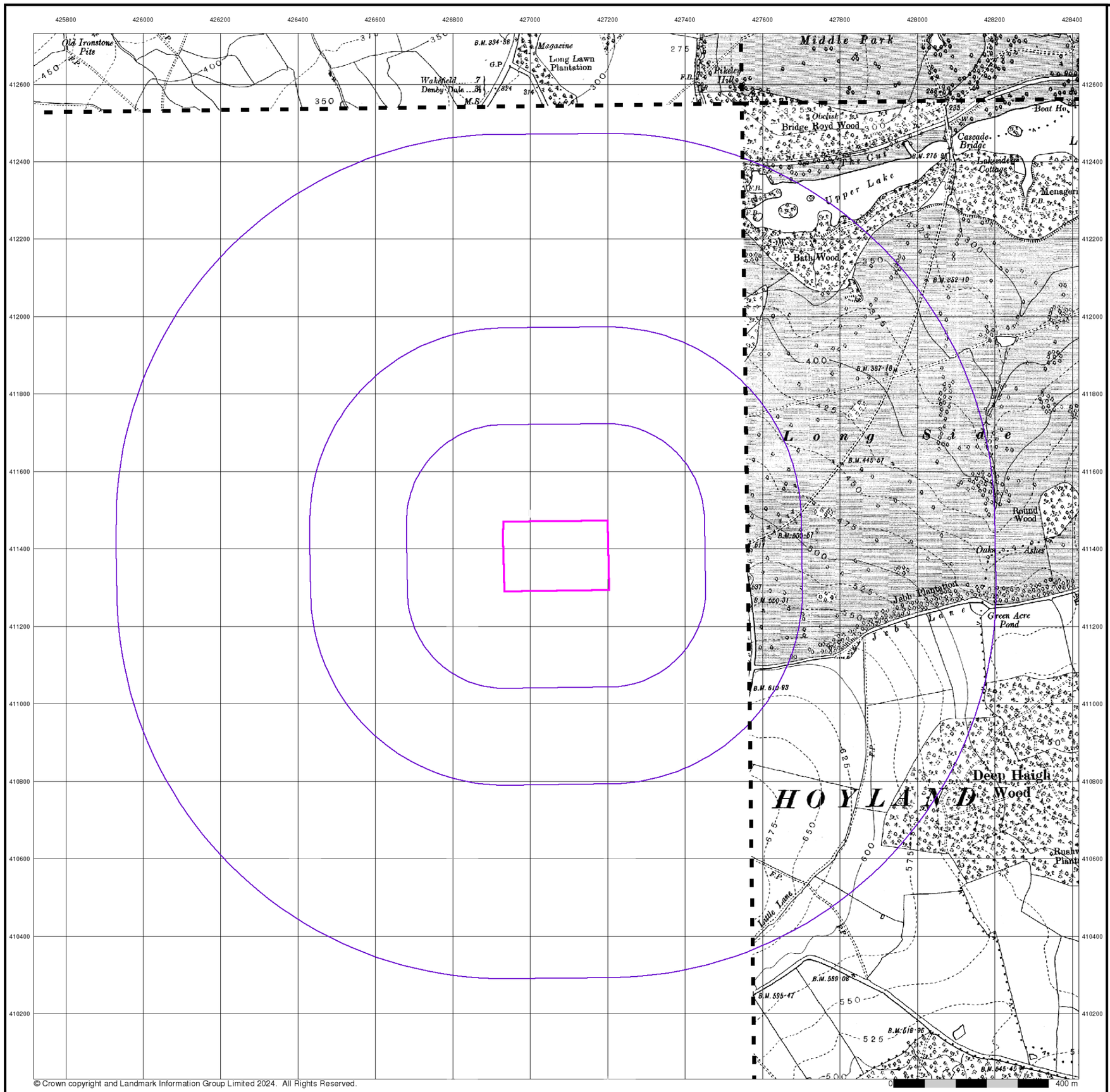

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Yorkshire

Published 1930

Source map scale - 1:10,560

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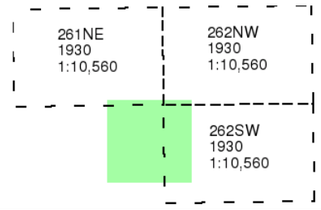
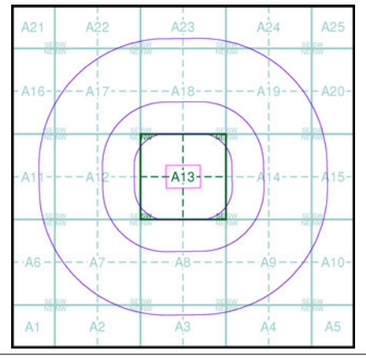


Historical Map - Slice A



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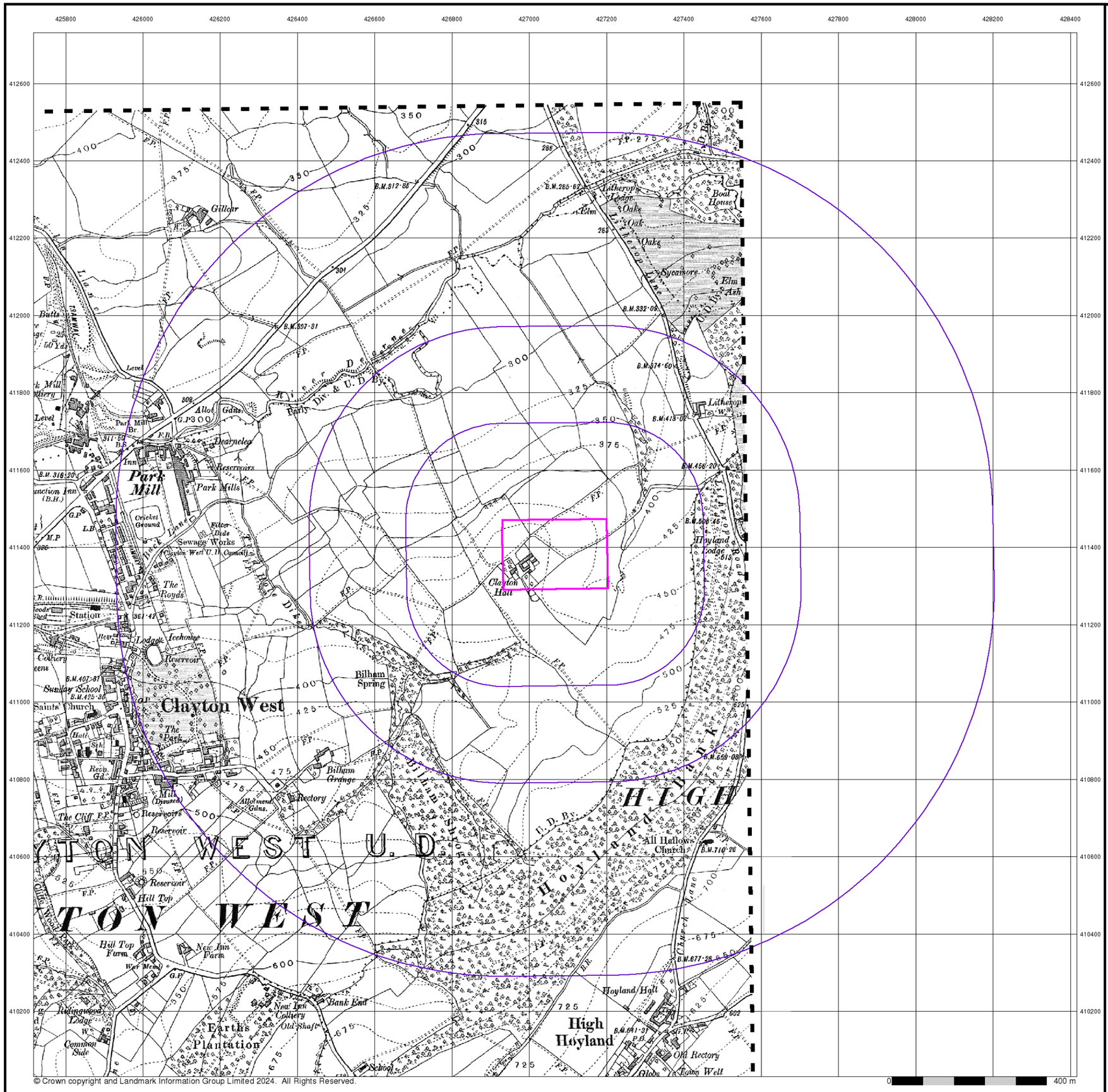

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Yorkshire

Published 1932

Source map scale - 1:10,560

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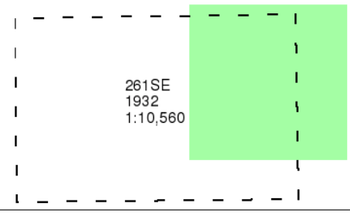
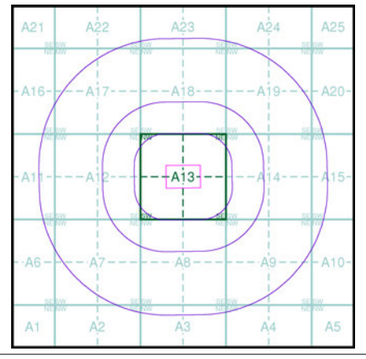


Historical Map - Slice A



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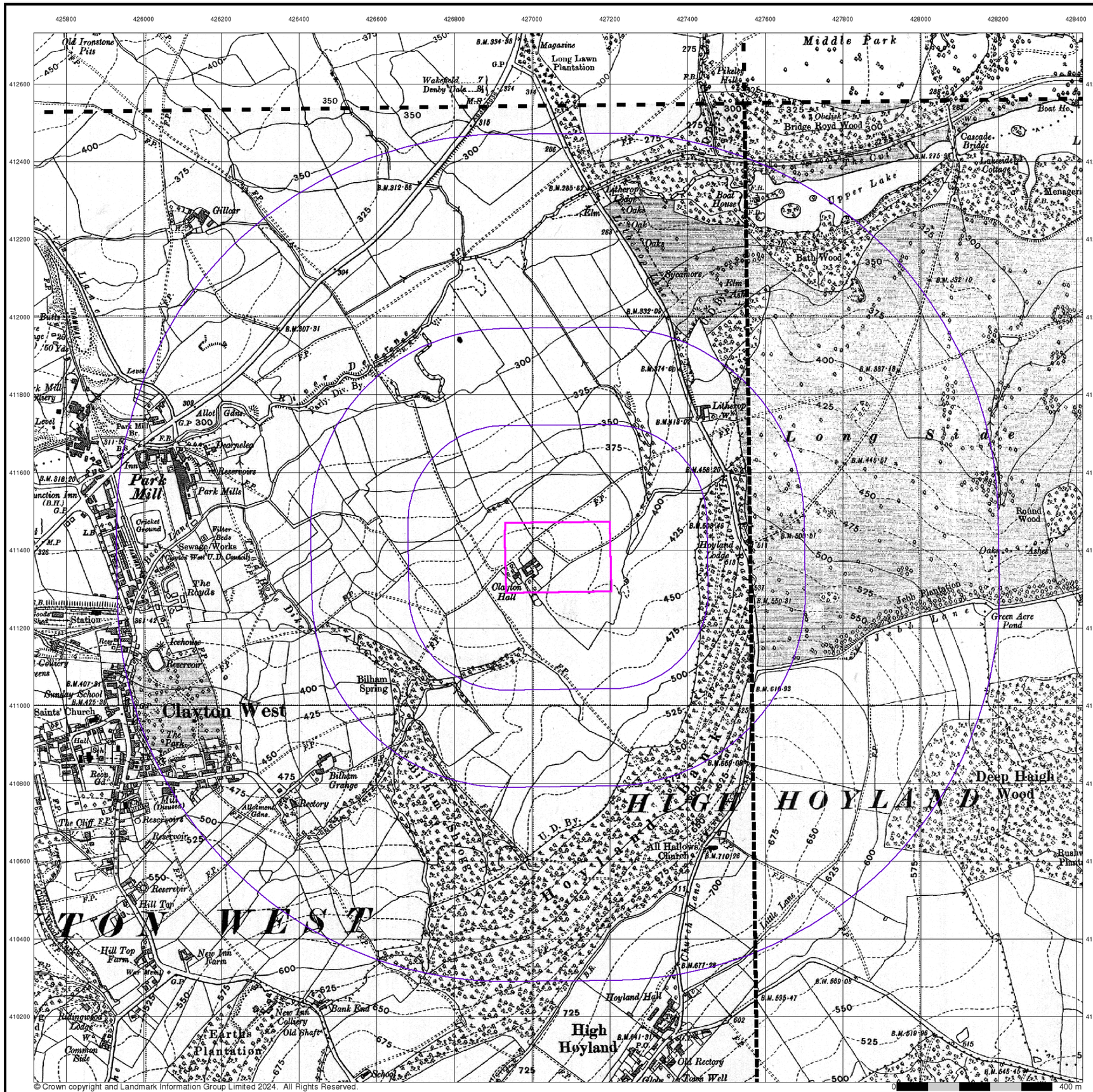

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LANDMARK INFORMATION GROUP®

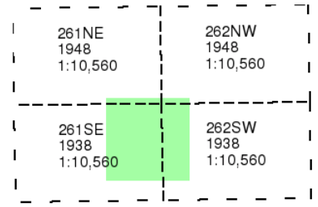
Yorkshire

Published 1938 - 1948

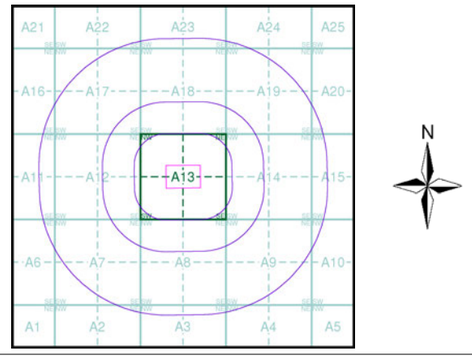
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940`s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)



Historical Map - Slice A



Order Details

Order Number:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Search Buffer (m):	1000

Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE

Landmark INFORMATION GROUP

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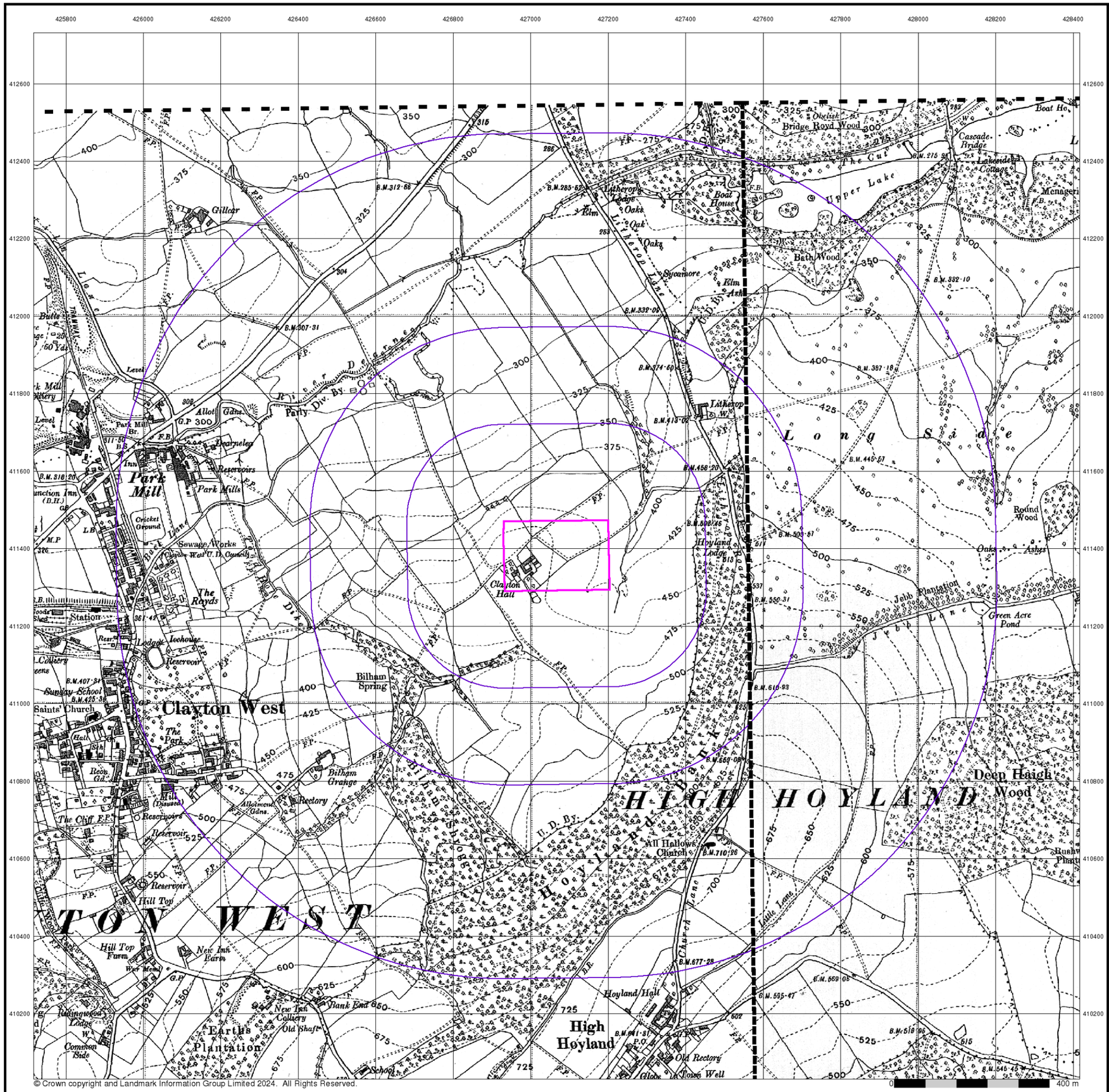

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LANDMARK INFORMATION GROUP®

Yorkshire

Published 1948

Source map scale - 1:10,560

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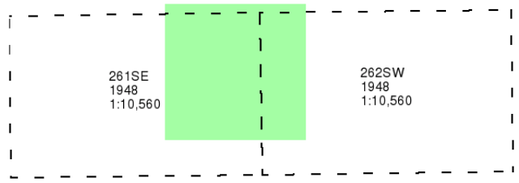

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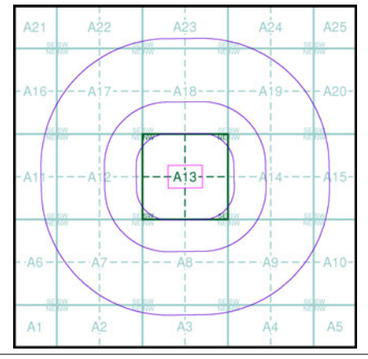

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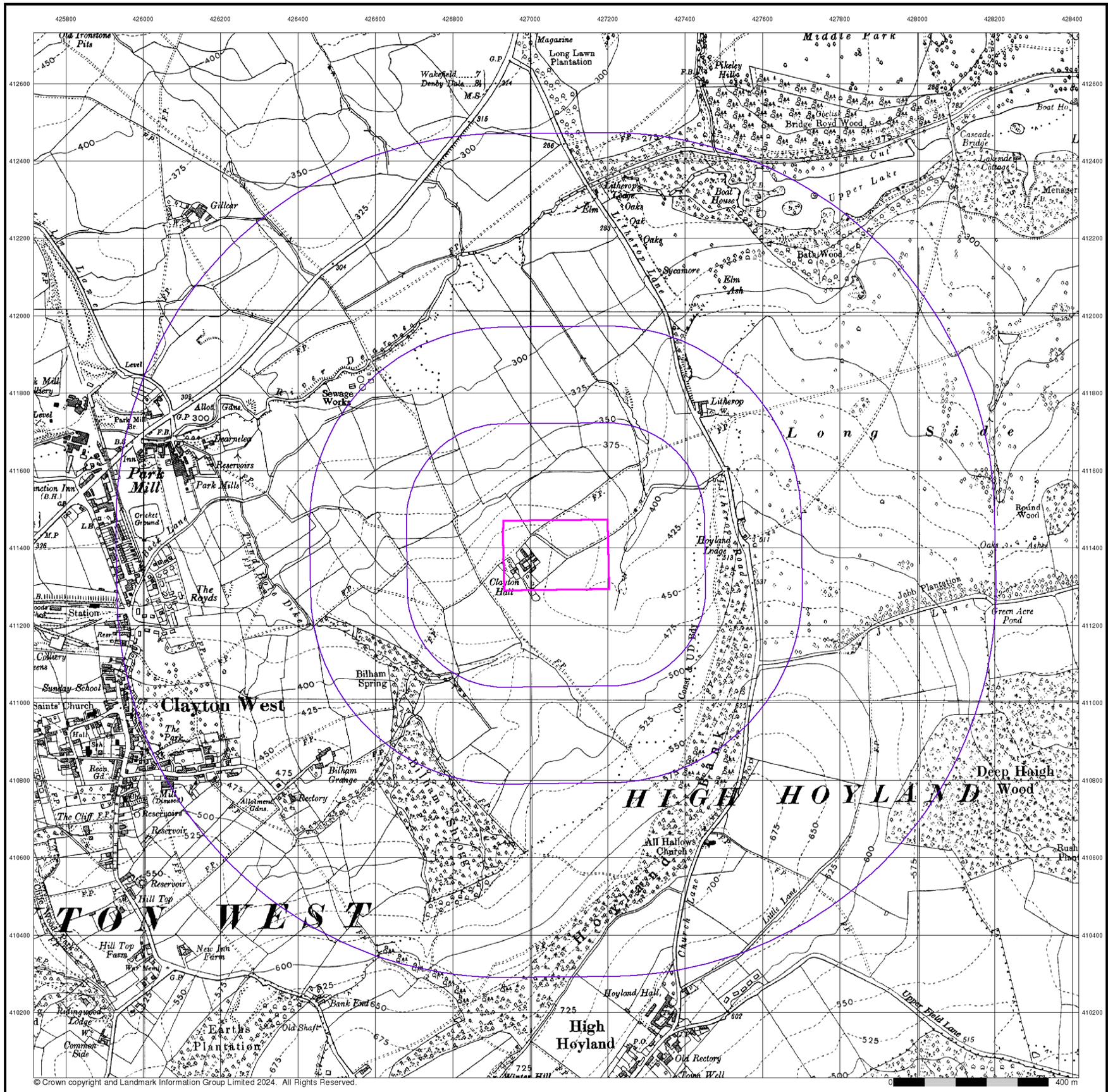
Clayton West
HIGH HOYLAND
Park Mill
Litherop Lane
Long Side
Middle Park
Upper Lake
Bath Wood
Deep Haigh Wood
Bridge Royd Wood
Round Wood
Earths Plantation
High Hoyland
Bilham Spring
Bilham Grange
Clayton Hall
Hoyland Lodge
Hoyland Hall
All Hallows Church
Sewage Works
Reservoirs
Sunday School
Saints' Church
Station
Inn
Rectory
Old Rectory
Town Well
Hill Top Farm
New Inn Farm
Redingwood Lodge
Common Side
Bank End
Old Shaft
Church Lane
Little Lane
Upper Field Lane
Jubb Lane
Green Acre Pond
Cascade Bridge
Lakeside Cottage
Boat House
Litherop Lodge
Sycamore
Elm
Oak
Ash
Gillcar
Magazine
Long Lawn Plantation
Pikeley Hills
Old Ironstone Pits
Wakefield 7
Denby Dale 8
M.S. 314
Co. Const. & U.D. Bdy
Level
Allot. Gdns.
Recn. Gd.
Cricket Ground
Pearneley
Park Mills
Hall
Sh.
Mill (Disused)
Allotment Gdns.
The Cliff F.P.
Hill Top
The Roods
Dike
Beck Lane
Footpath
F.P.
B.S.
F.B.
G.P
L.B.
M.P
Reservoir
Reservoirs
Rectory
Station
Inn
Chapel
Sch.
Works
Dyeing
Mill
Lodge
Cottage
Farm
Hall
Top
Side
Lane
Road
Wood
Green
Pond
Bridge
Cascade
Lakeside
Litherop
Sycamore
Elm
Oak
Ash
Gillcar
Magazine
Plantation
Pikeley
Hills
Middle
Park
Upper
Lake
Bath
Deep
Haigh
Round
Bridge
Royd
Earths
Bilham
Spring
Grange
Clayton
Hall
Hoyland
Lodge
Hoyland
Hall
All
Hallows
Church
Sewage
Works
Reservoirs
Sunday
School
Saints'
Church
Station
Inn
Rectory
Old
Rectory
Town
Well
Hill
Top
Farm
New
Inn
Farm
Redingwood
Lodge
Common
Side
Bank
End
Old
Shaft
Church
Lane
Little
Lane
Upper
Field
Lane
Jubb
Lane
Green
Acre
Pond
Cascade
Bridge
Lakeside
Cottage
Boat
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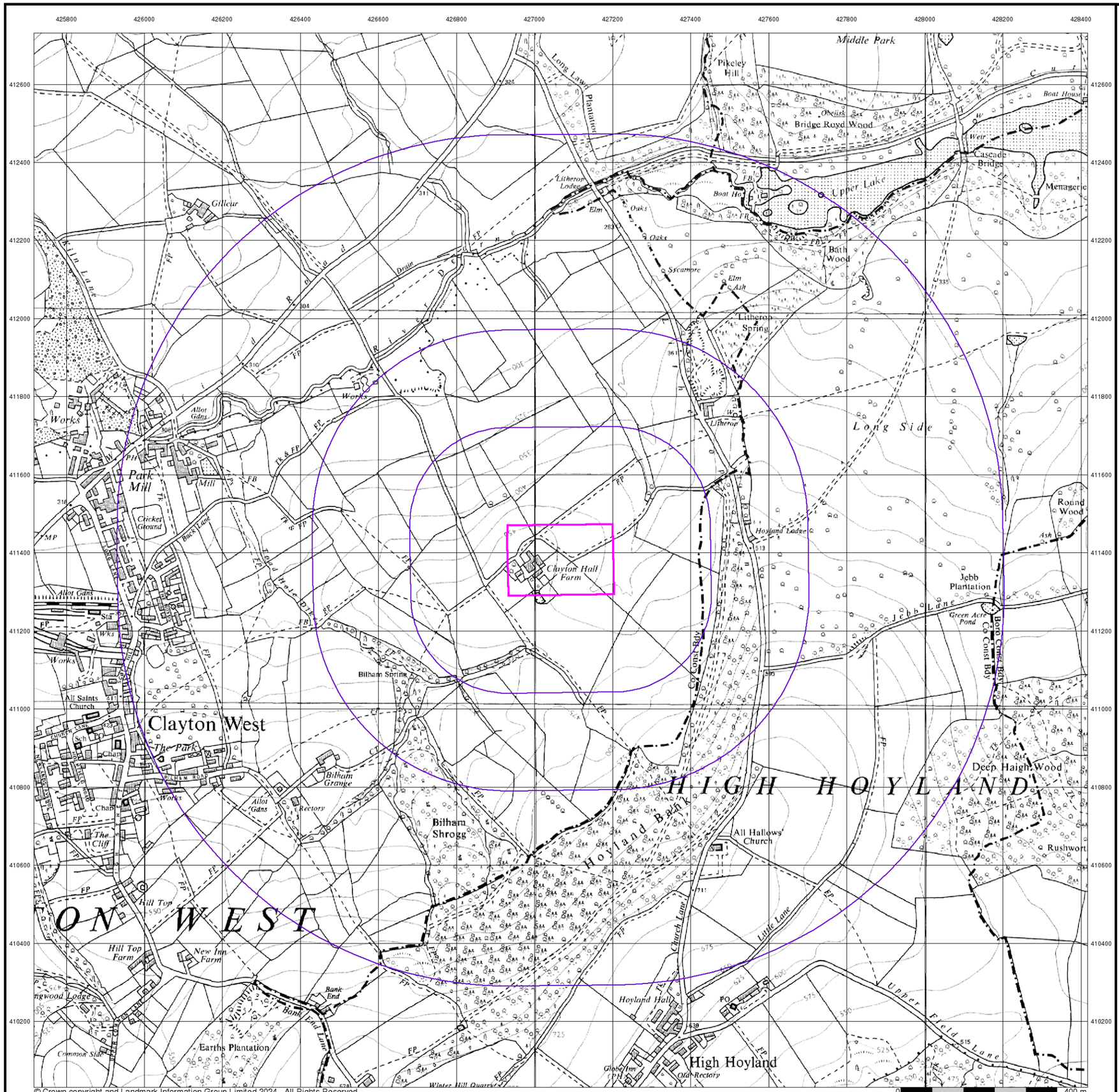
Wood
Deep
Haigh
Wood
Bridge
Royd
Wood
Round
Wood
Earths
Plantation
High
Hoyland
Bilham
Spring
Bilham



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Ordnance Survey Plan

Published 1966

Source map scale - 1:10,000

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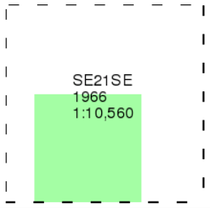
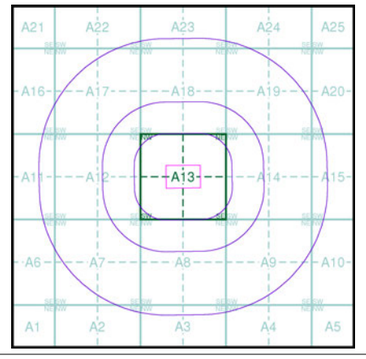


Historical Map - Slice A



Order Details

Order Number:	333683478_1_1
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Site Area (Ha):	4.88
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Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE

Landmark INFORMATION GROUP

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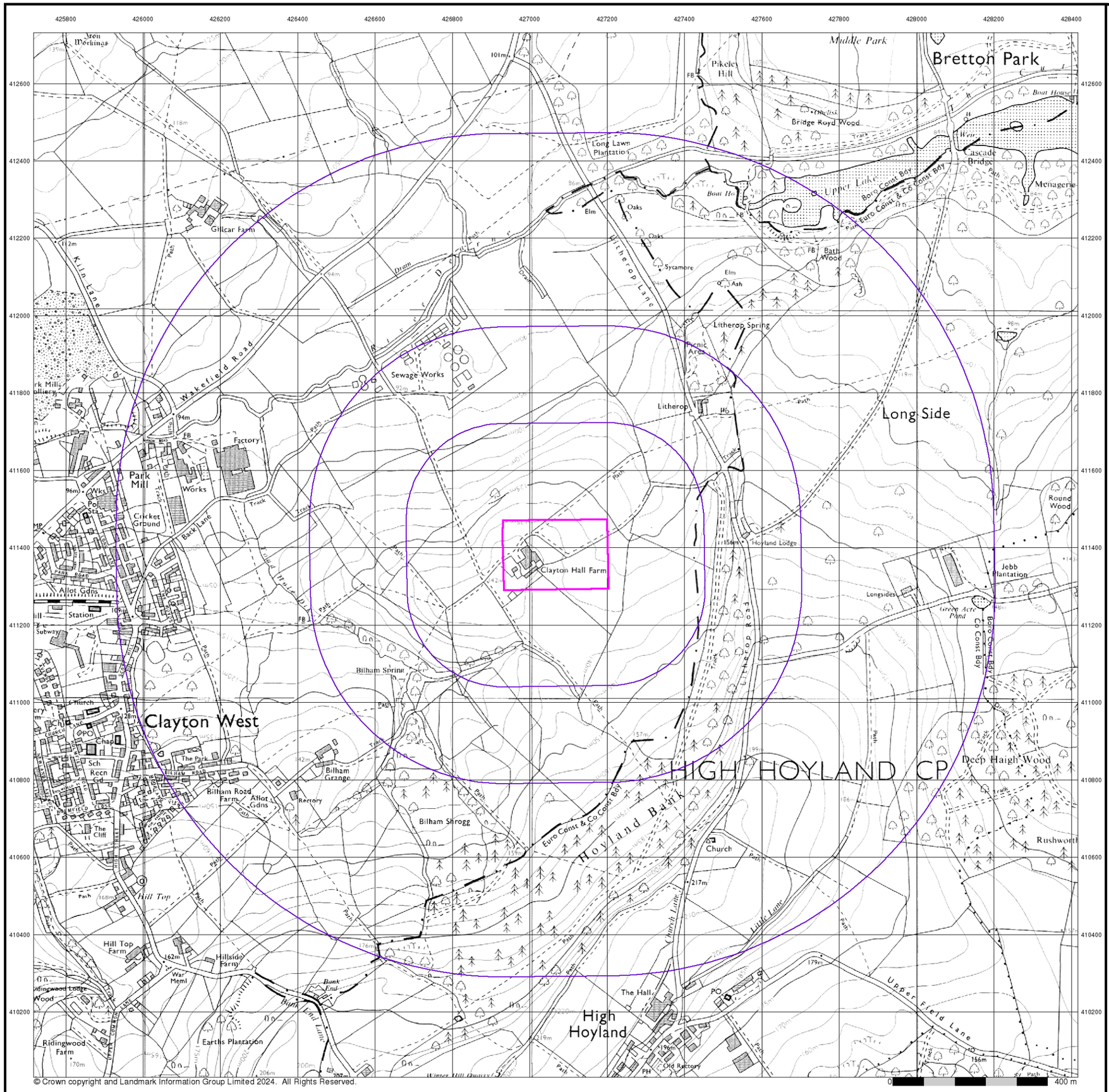

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Ordnance Survey Plan

Published 1983

Source map scale - 1:10,000

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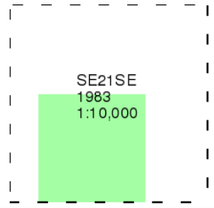

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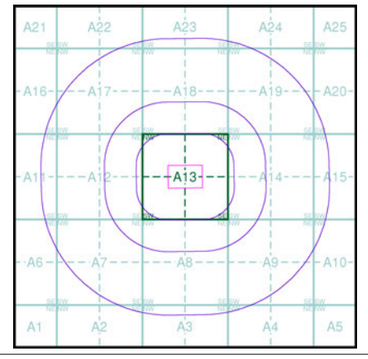

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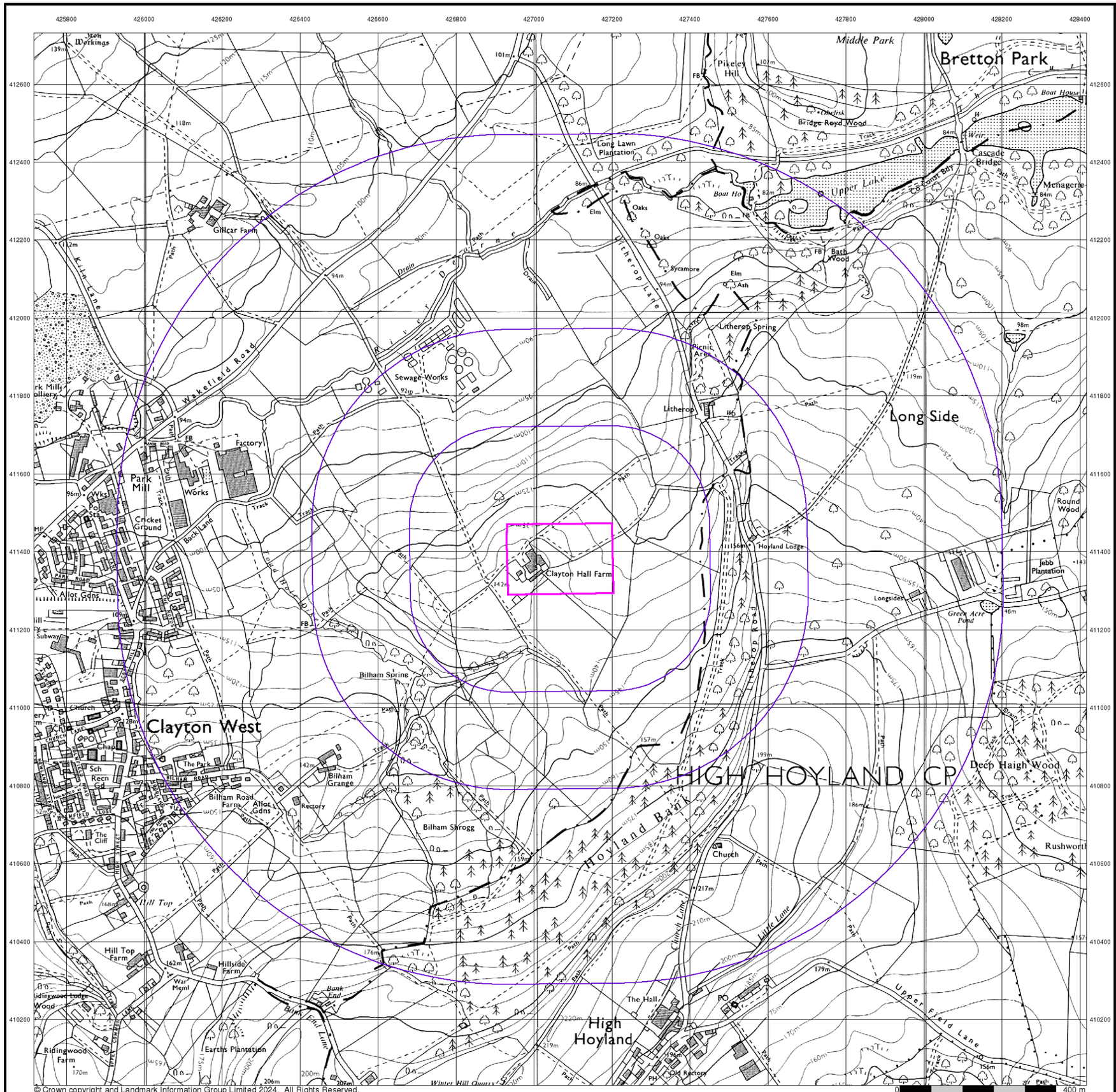

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Ordnance Survey Plan

Published 1989

Source map scale - 1:10,000

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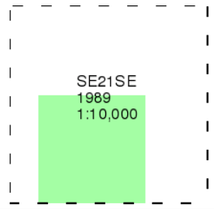
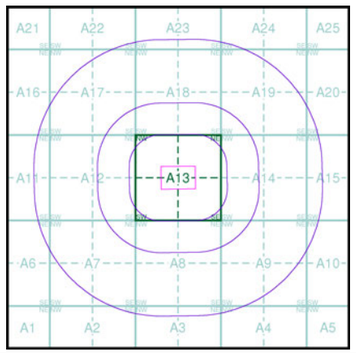


Historical Map - Slice A



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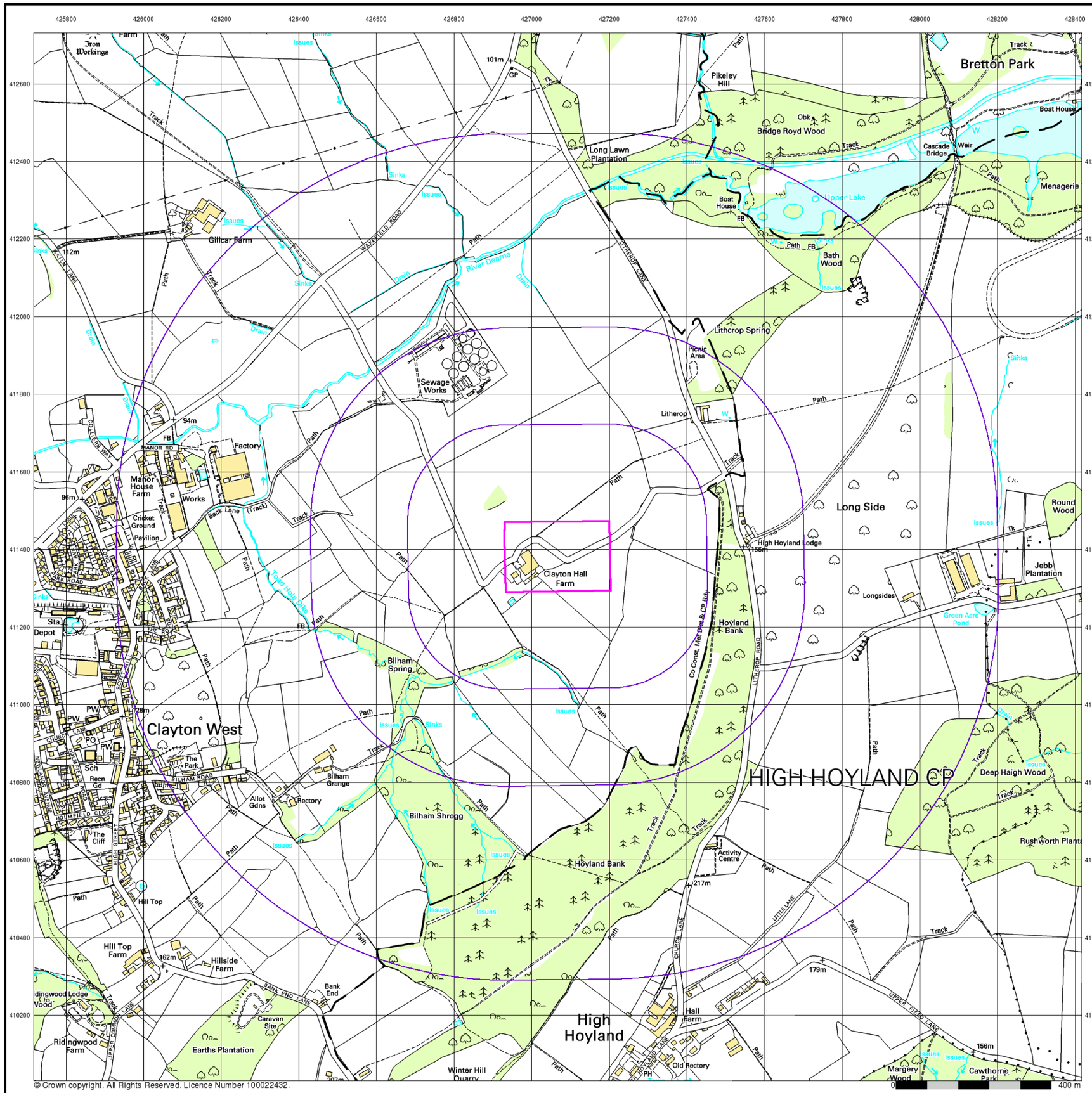

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LANDMARK INFORMATION GROUP®

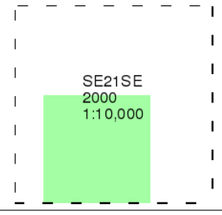
10k Raster Mapping

Published 2000

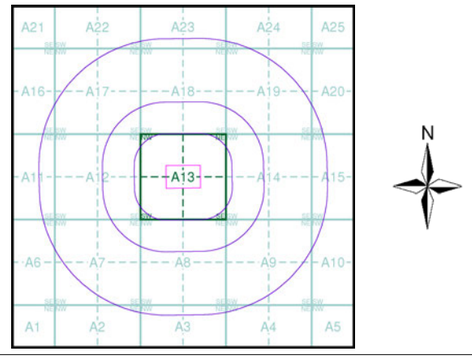
Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey`s 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

Map Name(s) and Date(s)



Historical Map - Slice A



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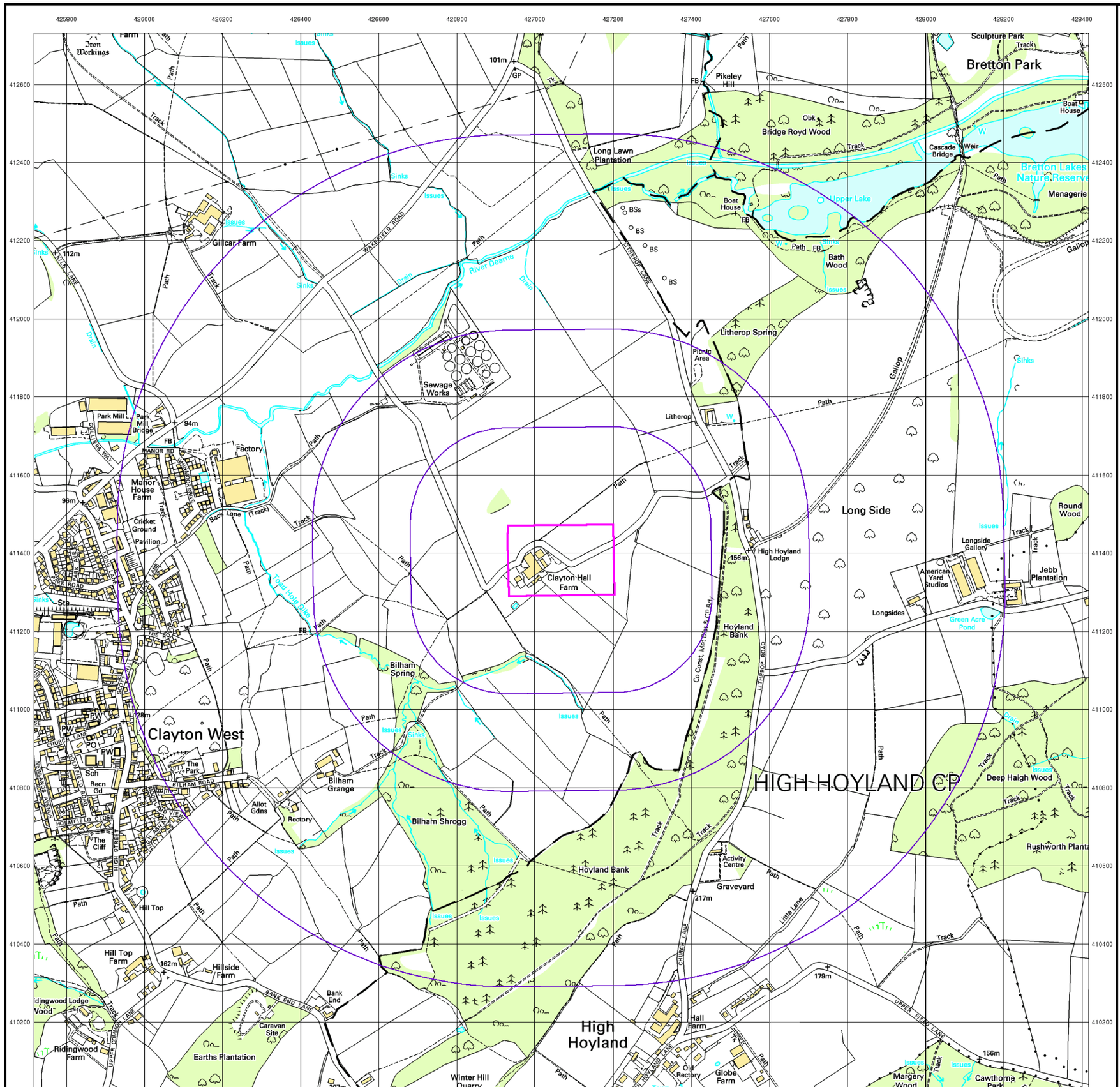

Envirocheck®

LANDMARK INFORMATION GROUP®

10k Raster Mapping

Published 2006

Source map scale - 1:10,000

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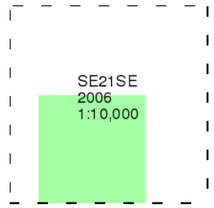
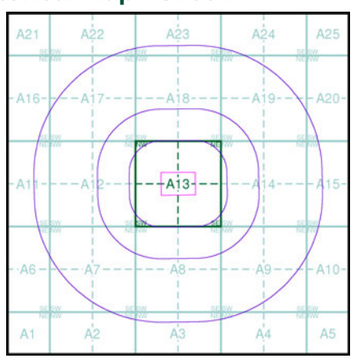


Historical Map - Slice A



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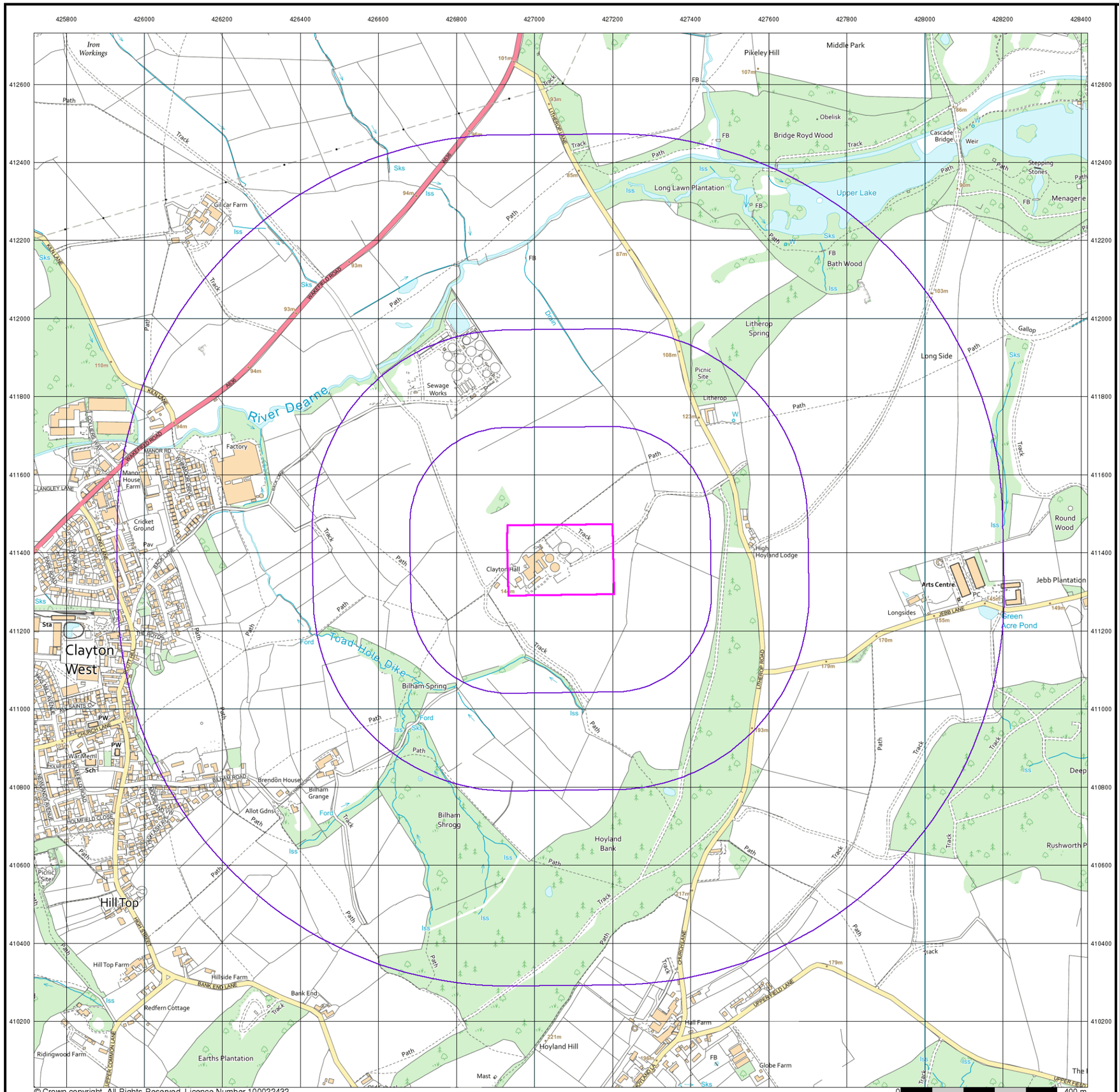
Iron Workings
Pikeley Hill
Middle Park
Obelisk
Bridge Royd Wood
Cascade Bridge
Weir
Stepping Stones
Menagerie
Upper Lake
Long Lawn Plantation
Bath Wood
Litherop Spring
Long Side
Gallop
Round Wood
Gil car Farm
Sewage Works
River Dearne
Factory
Manor House Farm
Cricket Ground
Picnic Site
Litherop
Clayton Hall
High Hoyland Lodge
Arts Centre
Jebb Plantation
Longsides
Green Acre Pond
Clayton West
Road Hole Dike
Bilham Spring
Brendon House
Bilham Grange
Allot Gdns
Bilham Shrogg
Hoyland Bank
Rushworth P
Deep
Hill Top
Hill Top Farm
Hillside Farm
Bank End
Redfern Cottage
Ridingwood Farm
Earths Plantation
Hoyland Hill
Hall Farm
Globe Farm
Mast
Litherop Lane
Track
Path
Drain
Ford
Sks
Iss
FB
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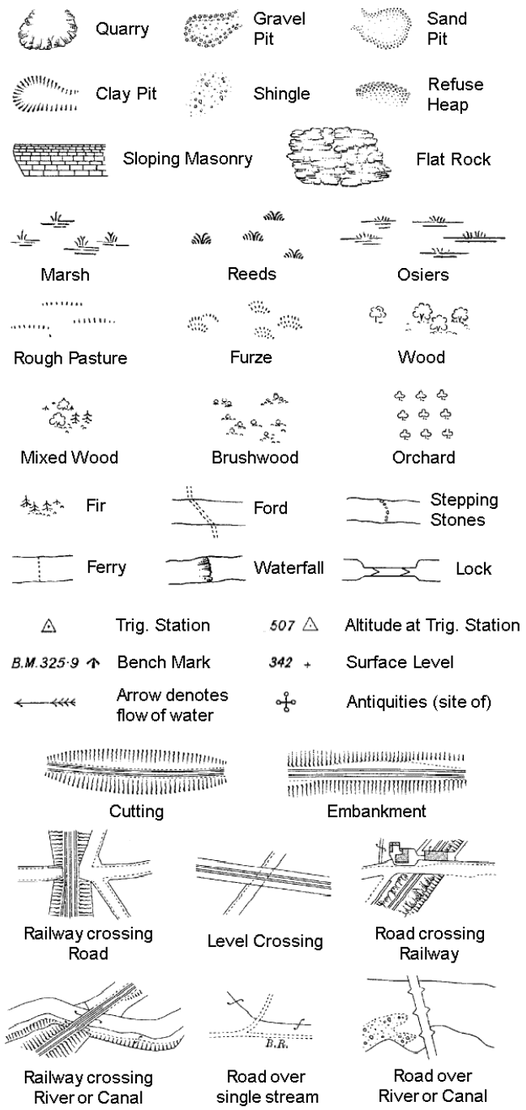
Historical Mapping Legends

Ordnance Survey County Series and Ordnance Survey Plan 1:2,500



County Boundary (Geographical)

County & Civil Parish Boundary

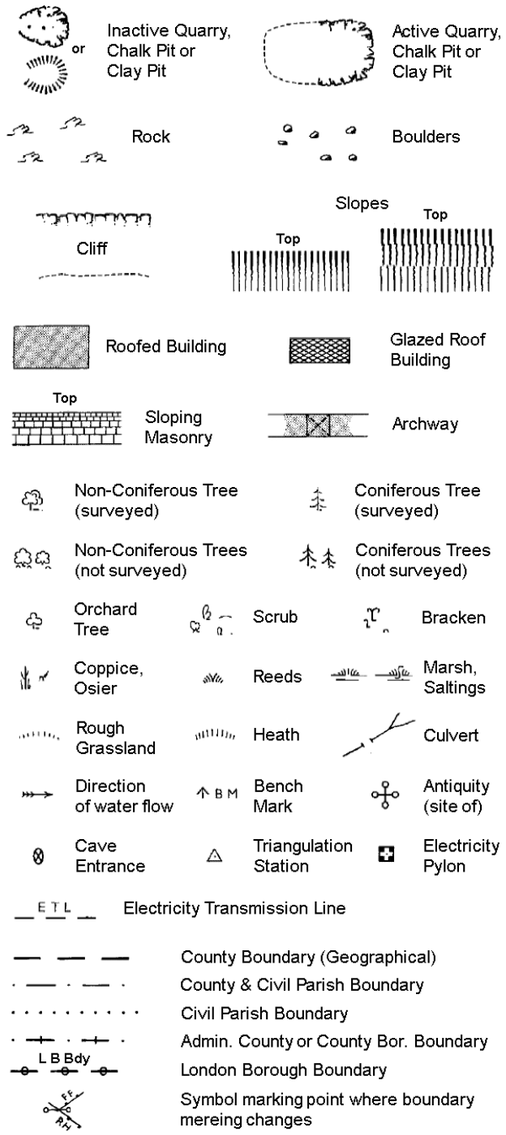
Administrative County & Civil Parish Boundary

Co. Boro. Bdy. County Borough Boundary (England)

Co. Burgh Bdy. County Burgh Boundary (Scotland)

B P B S	Boundary Post or Stone	P.C.B	Police Call Box
B.R.	Bridle Road	P	Pump
E.P	Electricity Pylon	S.P	Signal Post
F.B.	Foot Bridge	St.	Sluice
F.P.	Foot Path	Sp.	Spring
G.P	Guide Post or Board	T.C.B	Telephone Call Box
M.S	Mile Stone	Tr.	Trough
M.P M.R	Mooring Post or Ring	W	Well

Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250



County Boundary (Geographical)

County & Civil Parish Boundary

Civil Parish Boundary

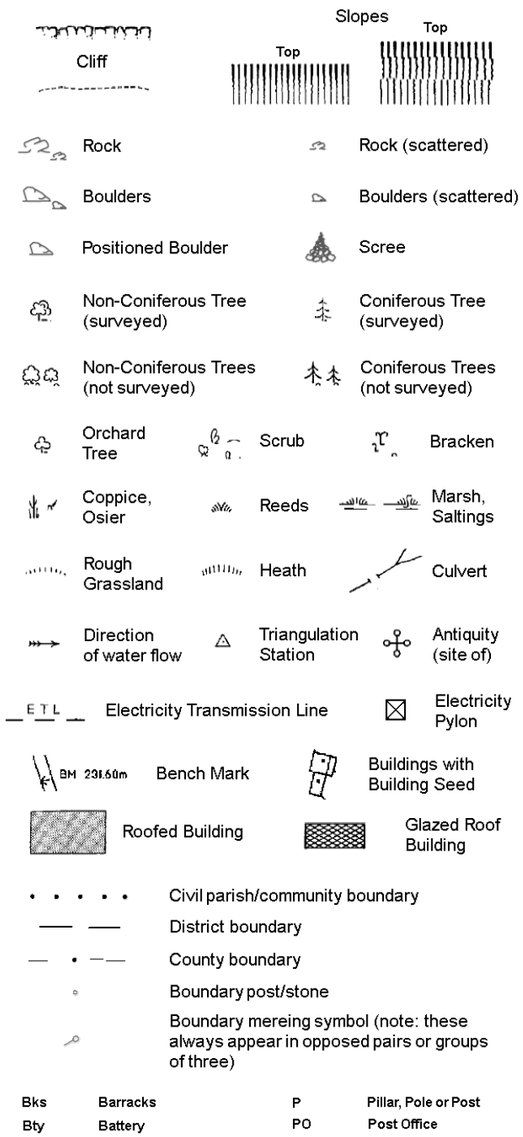
Admin. County or County Bor. Boundary

L B Bdy London Borough Boundary

Symbol marking point where boundary mereing changes

BH	Beer House	P	Pillar, Pole or Post
BP, BS	Boundary Post or Stone	PO	Post Office
Cn, C	Capstan, Crane	PC	Public Convenience
Chy	Chimney	PH	Public House
D Fn	Drinking Fountain	Pp	Pump
El P	Electricity Pillar or Post	SB, S Br	Signal Box or Bridge
FAP	Fire Alarm Pillar	SP, SL	Signal Post or Light
FB	Foot Bridge	Spr	Spring
GP	Guide Post	Tk	Tank or Track
H	Hydrant or Hydraulic	TCB	Telephone Call Box
LC	Level Crossing	TCP	Telephone Call Post
MH	Manhole	Tr	Trough
MP	Mile Post or Mooring Post	Wr Pt, Wr T	Water Point, Water Tap
MS	Mile Stone	W	Well
NTL	Normal Tidal Limit	Wd Pp	Wind Pump

Large-Scale National Grid Data 1:2,500 and 1:1,250



Civil parish/community boundary

District boundary

County boundary

Boundary post/stone

Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)

Bks	Barracks	P	Pillar, Pole or Post
Bty	Battery	PO	Post Office
Cemy	Cemetery	PC	Public Convenience
Chy	Chimney	Pp	Pump
Cis	Cistern	Ppg Sta	Pumping Station
Dismtd Rly	Dismantled Railway	PW	Place of Worship
El Gen Sta	Electricity Generating Station	Sewage Ppg Sta	Sewage Pumping Station
El P	Electricity Pole, Pillar	SB, S Br	Signal Box or Bridge
El Sub Sta	Electricity Sub Station	SP, SL	Signal Post or Light
FB	Filter Bed	Spr	Spring
Fn / D Fn	Fountain / Drinking Ftn.	Tk	Tank or Track
Gas Gov	Gas Valve Compound	Tr	Trough
GVC	Gas Governer	Wd Pp	Wind Pump
GP	Guide Post	Wr Pt, Wr T	Water Point, Water Tap
MH	Manhole	Wks	Works (building or area)
MP, MS	Mile Post or Mile Stone	W	Well

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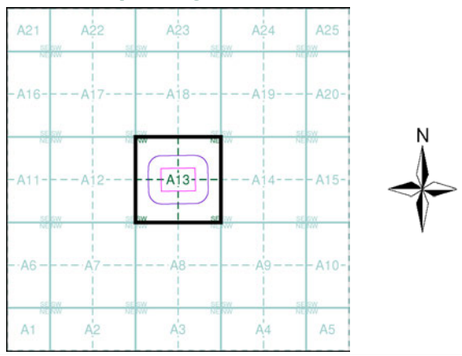
Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Yorkshire	1:2,500	1893	2
Yorkshire	1:2,500	1906	3
Yorkshire	1:2,500	1916	4
Ordnance Survey Plan	1:2,500	1960	5
Additional SIMs	1:2,500	1960	6
Supply of Unpublished Survey Information	1:2,500	1975	7
Additional SIMs	1:2,500	1981 - 1988	8
Additional SIMs	1:2,500	1990	9
Additional SIMs	1:2,500	1991	10
Large-Scale National Grid Data	1:2,500	1993	11
Historical Aerial Photography	1:2,500	1999	12

Historical Map - Segment A13



Order Details

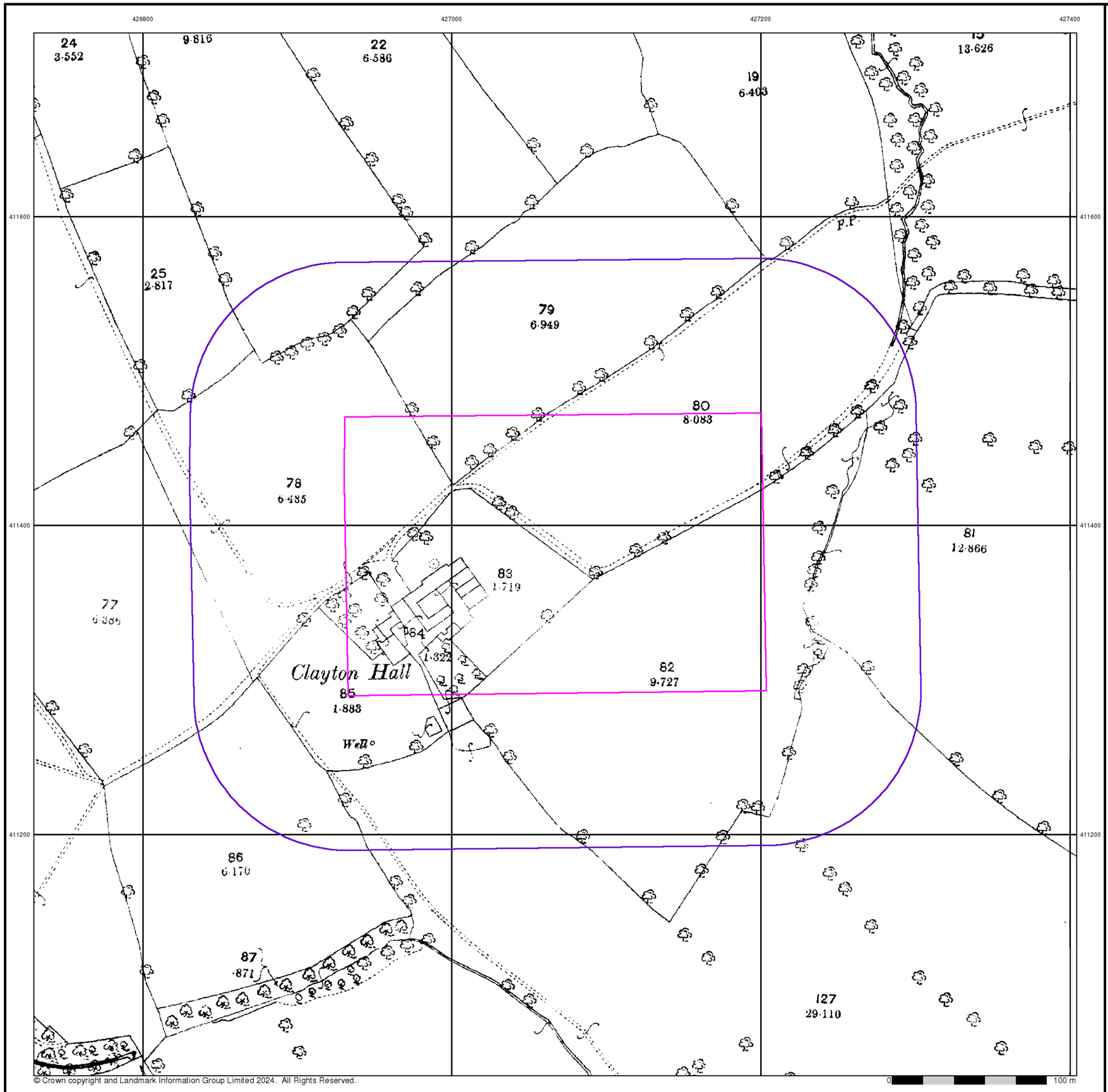
Order Number:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Search Buffer (m):	100

Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE

Landmark® INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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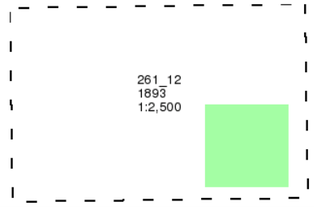
Yorkshire

Published 1893

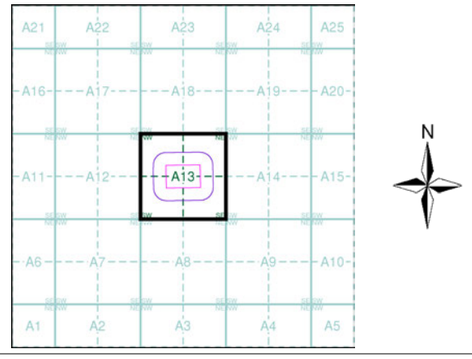
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

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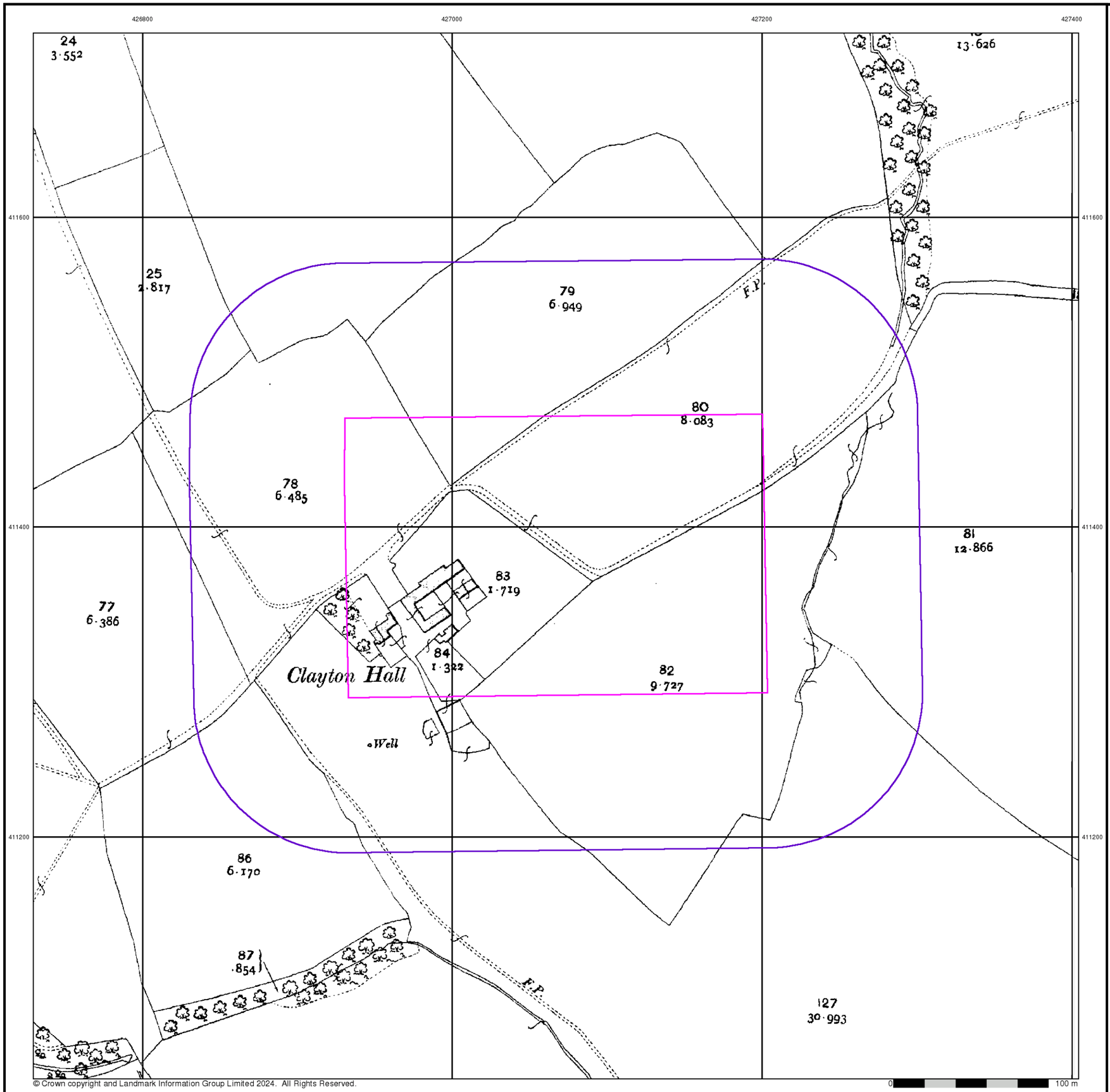

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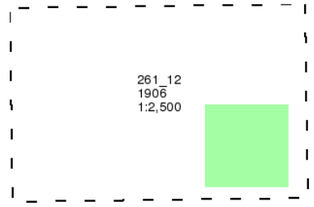
Yorkshire

Published 1906

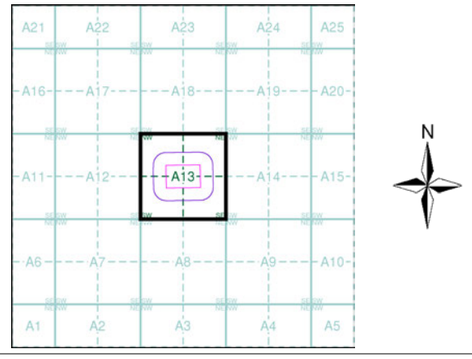
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Search Buffer (m):	100

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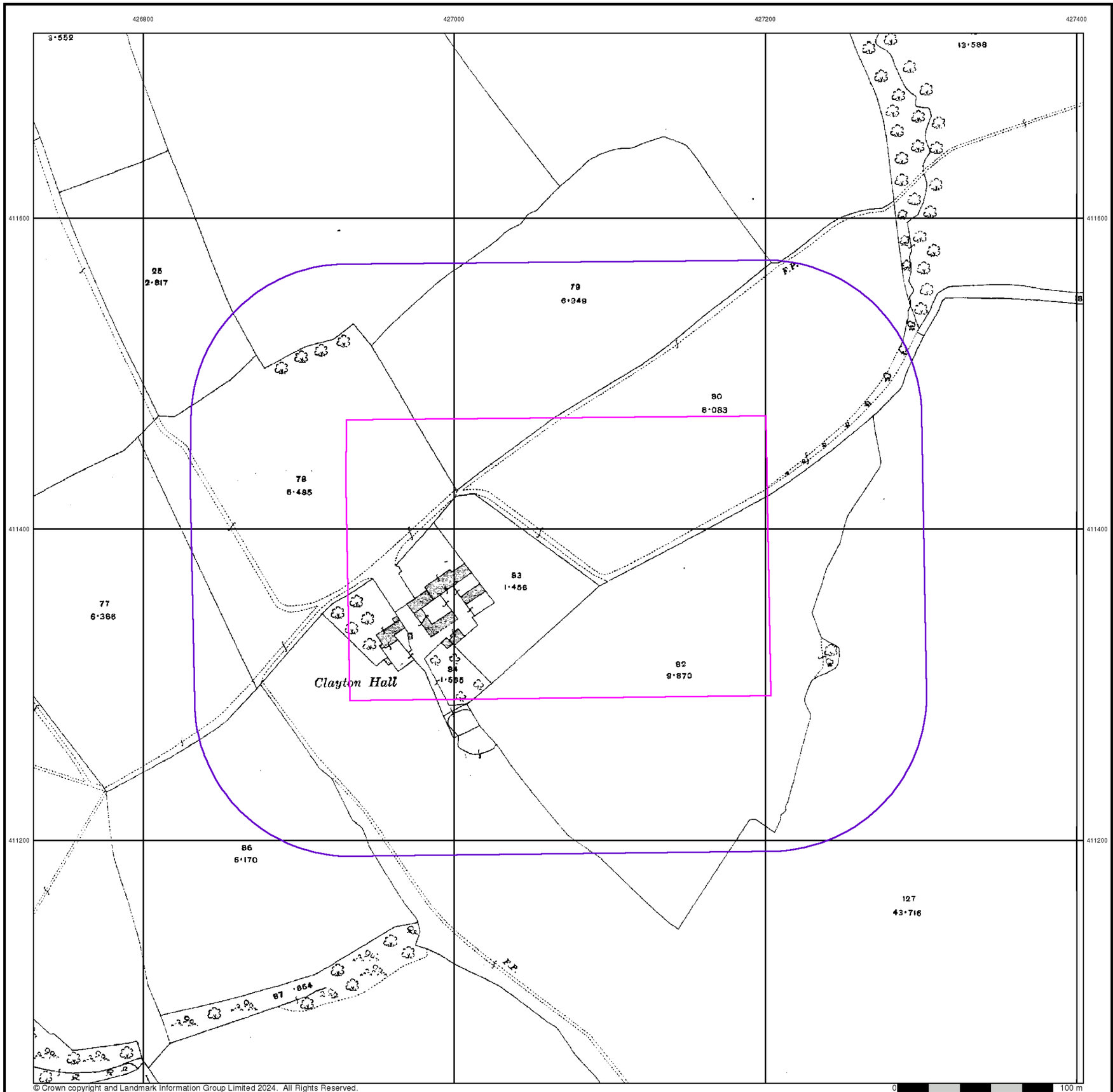

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LANDMARK INFORMATION GROUP®

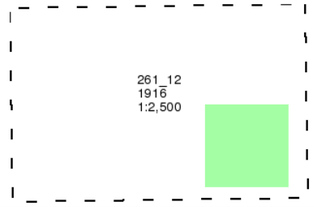
Yorkshire

Published 1916

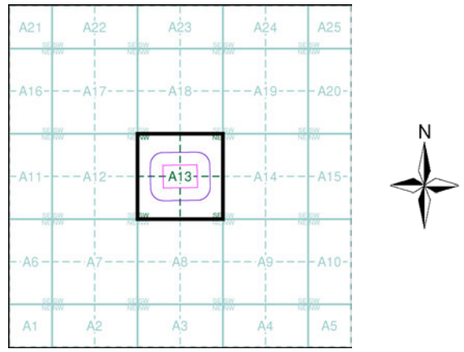
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

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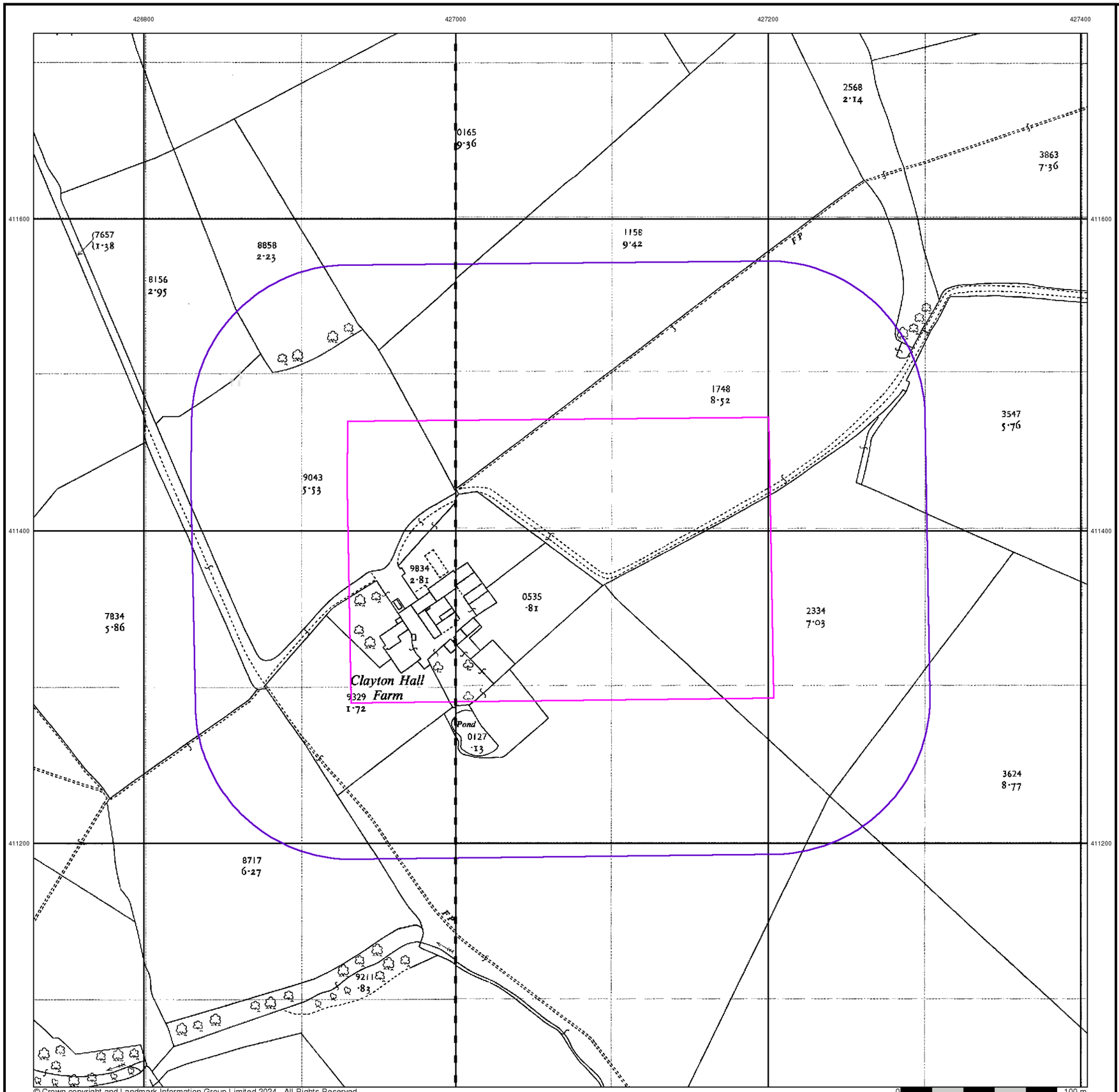


0 100 m

Envirocheck®

LANDMARK INFORMATION GROUP®

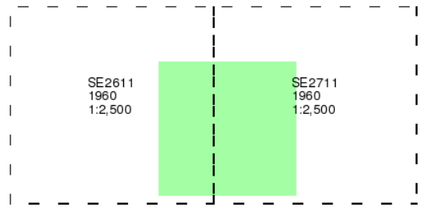
Ordnance Survey Plan

Published 1960

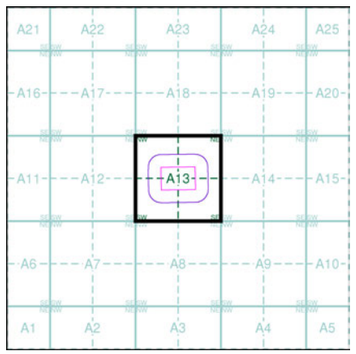
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840`s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
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Site Details

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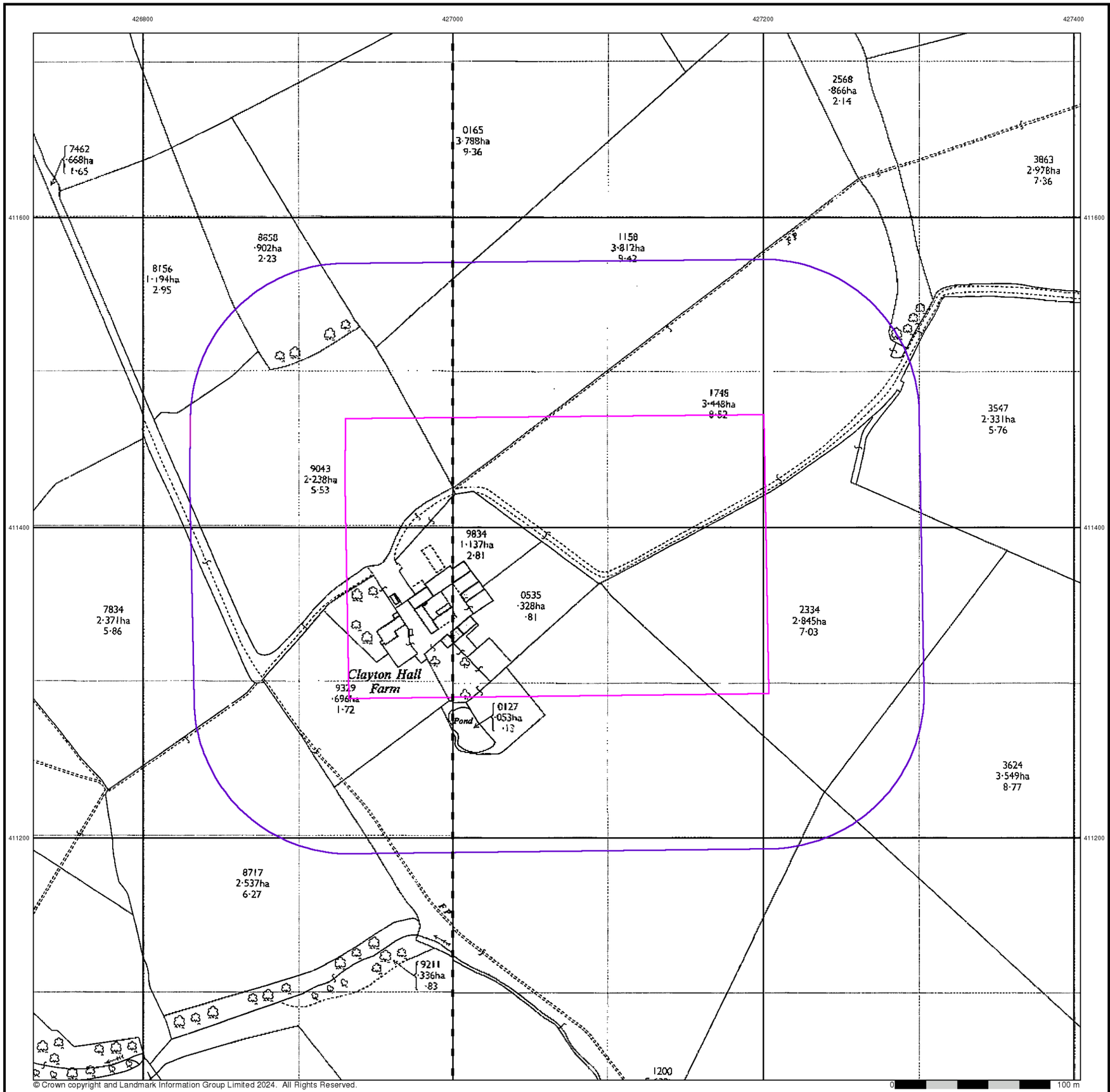


Envirocheck®

LANDMARK INFORMATION GROUP®

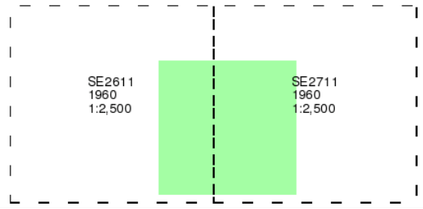
Additional SIMs

Published 1960

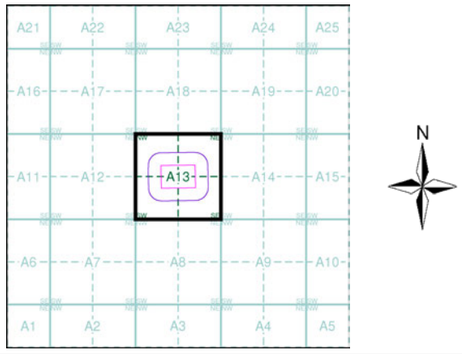
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

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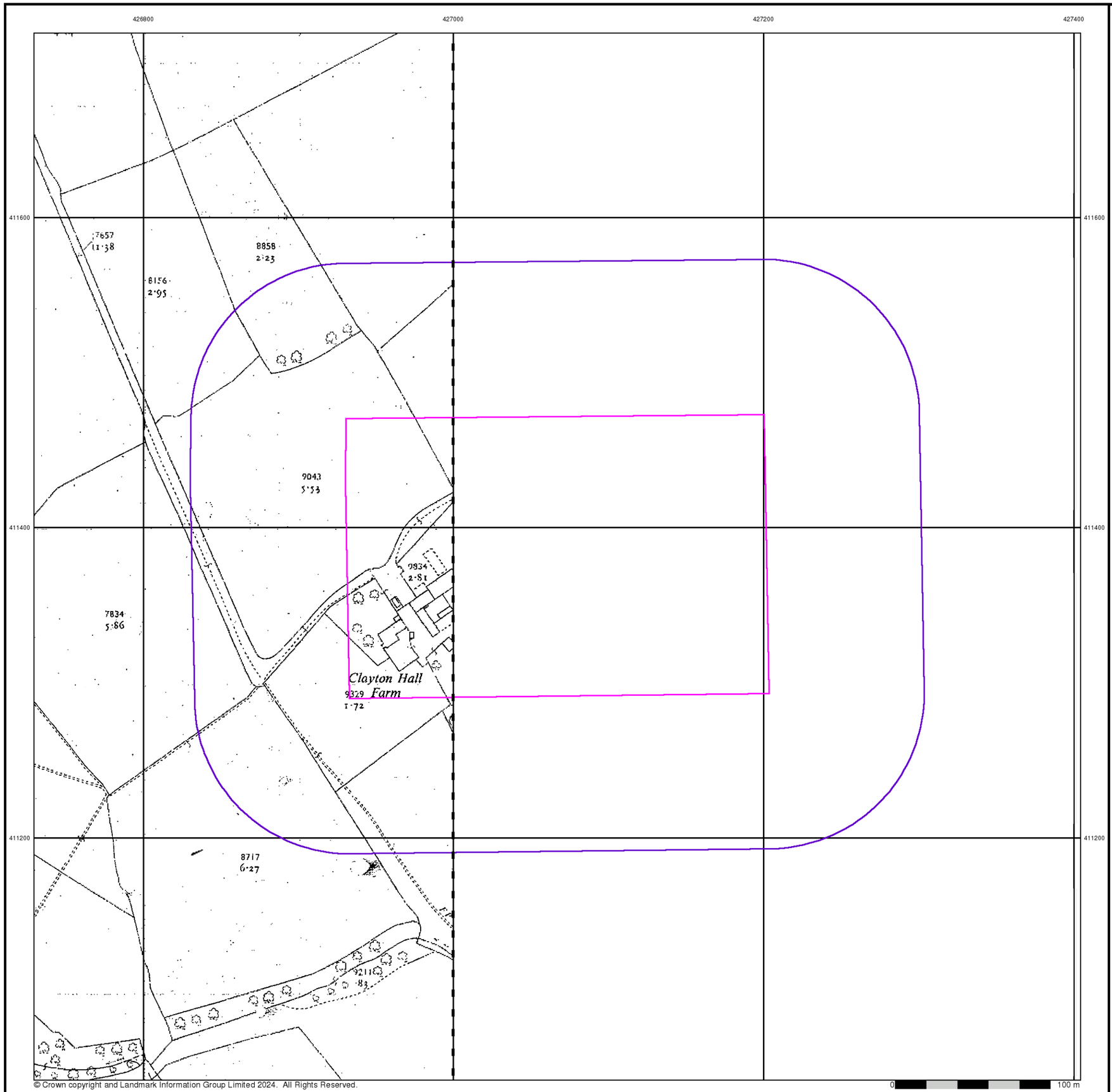


Envirocheck®

LANDMARK INFORMATION GROUP®

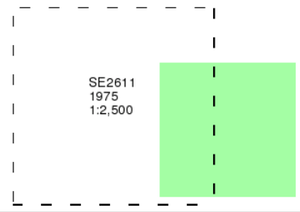
Supply of Unpublished Survey Information

Published 1975

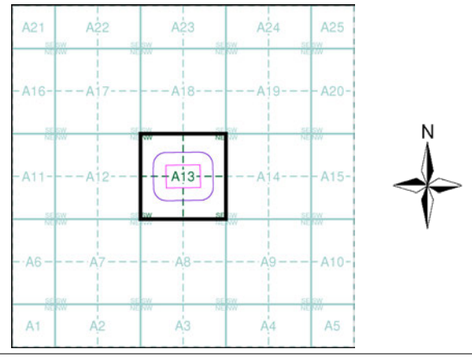
Source map scale - 1:2,500

SUSI maps (Supply of Unpublished Survey Information) were produced between 1972 and 1977, mainly for internal use at Ordnance Survey. These were more of a `work-in-progress' plan as they showed updates of individual areas on a map. These maps were unpublished, and they do not represent a single moment in time. They were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
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Site Details

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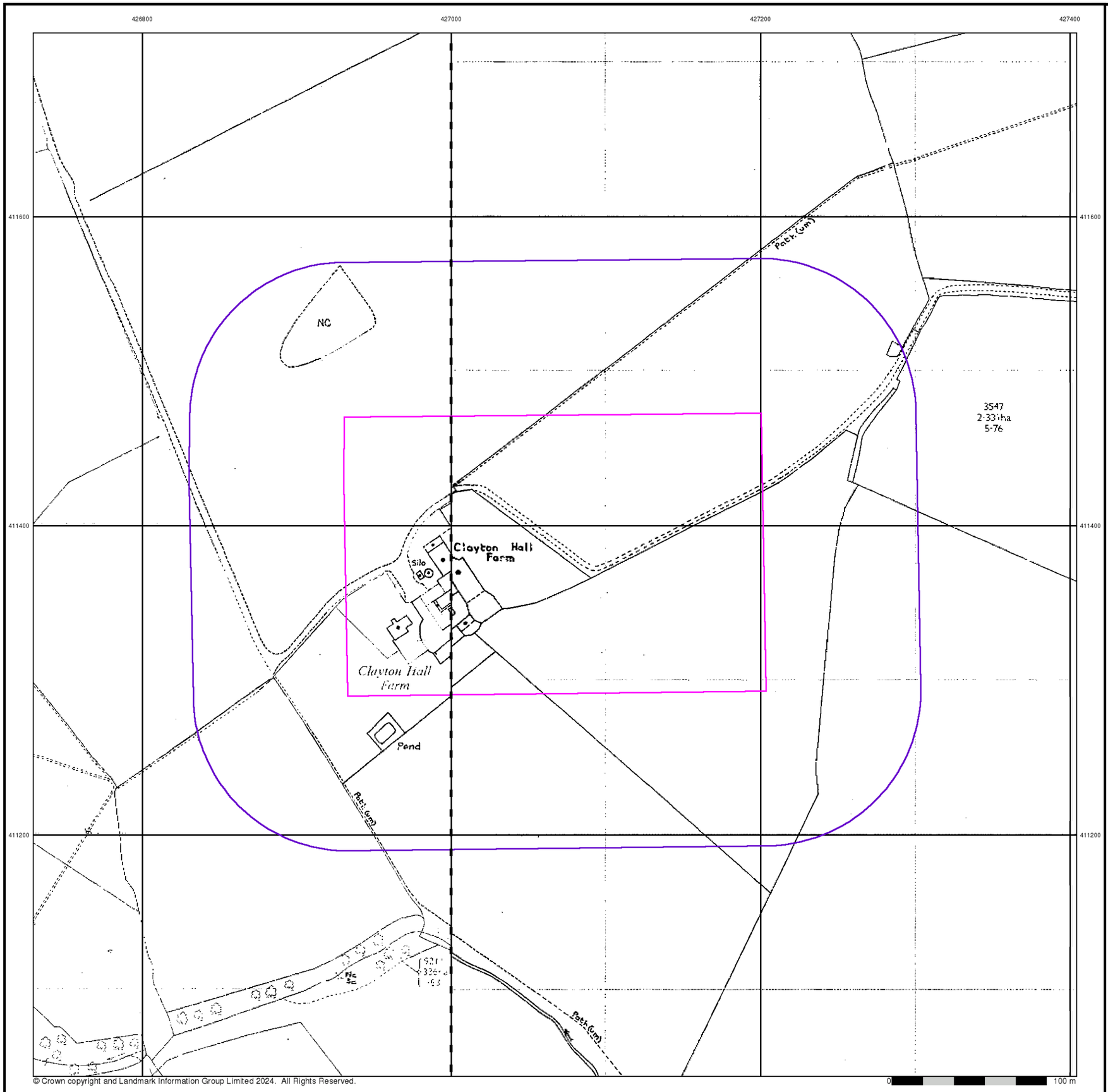

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LANDMARK INFORMATION GROUP®

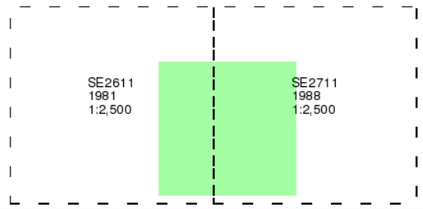
Additional SIMs

Published 1981 - 1988

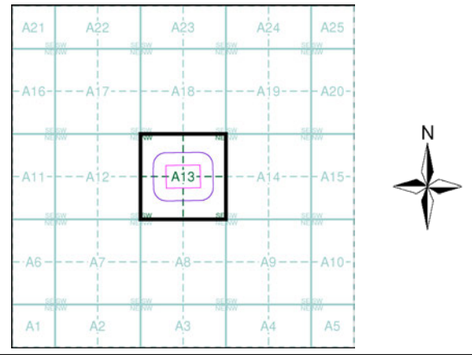
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

Order Number:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Search Buffer (m):	100

Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE

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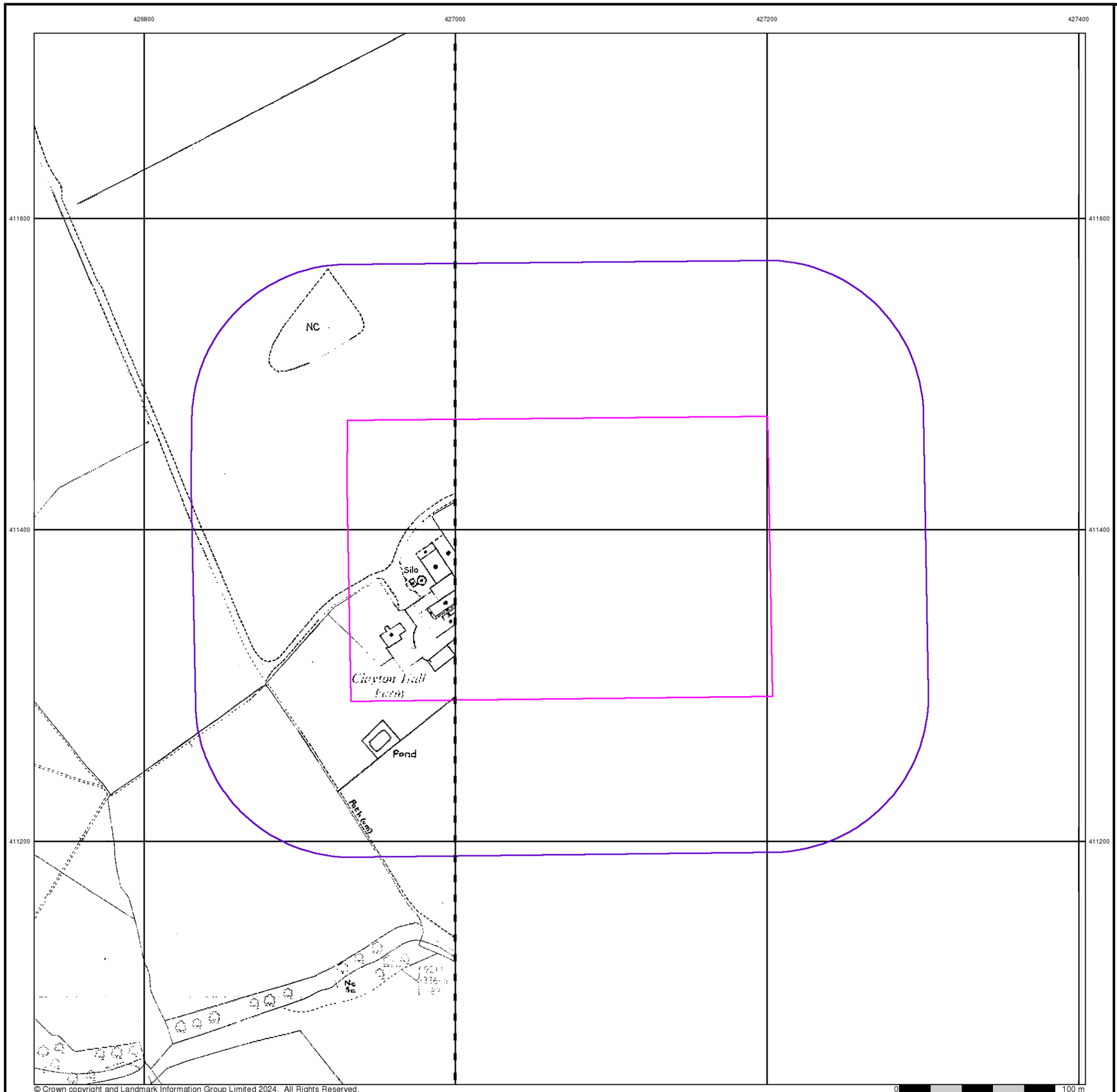

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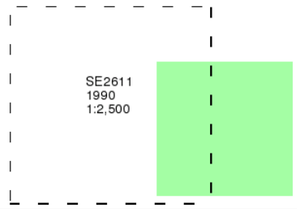
Additional SIMs

Published 1990

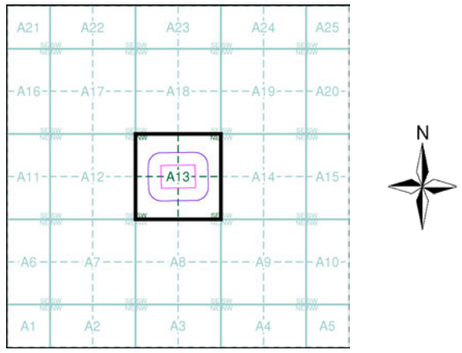
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

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Site Details

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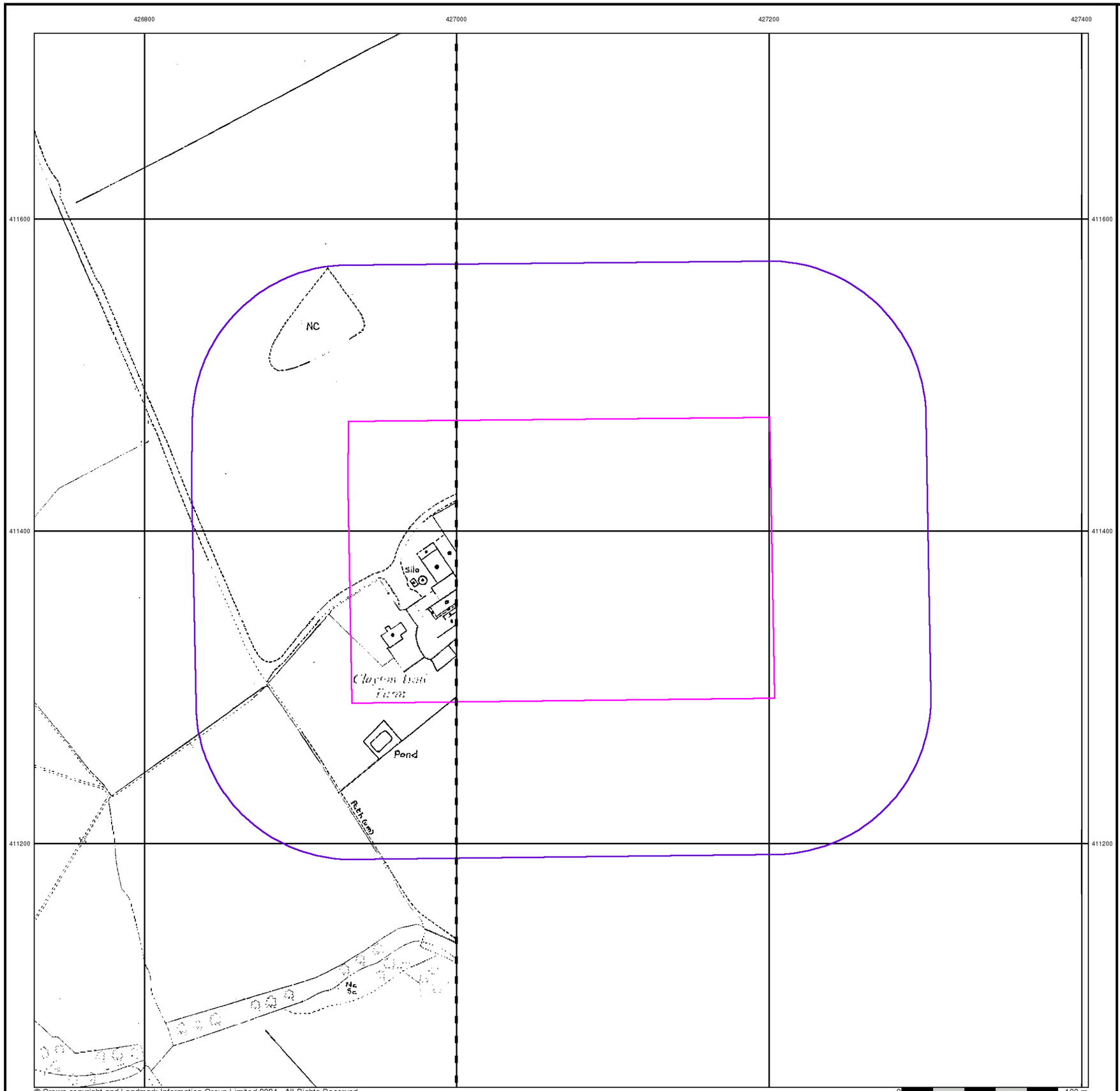

0 100 m

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LANDMARK INFORMATION GROUP®

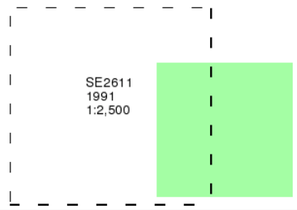
Additional SIMs

Published 1991

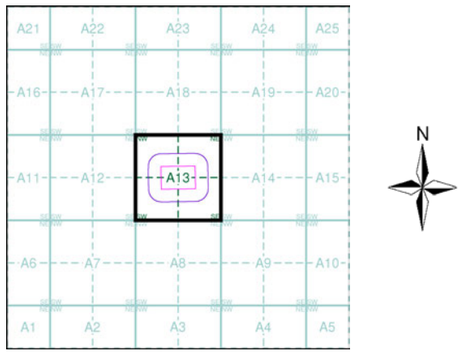
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's `Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



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Site Details

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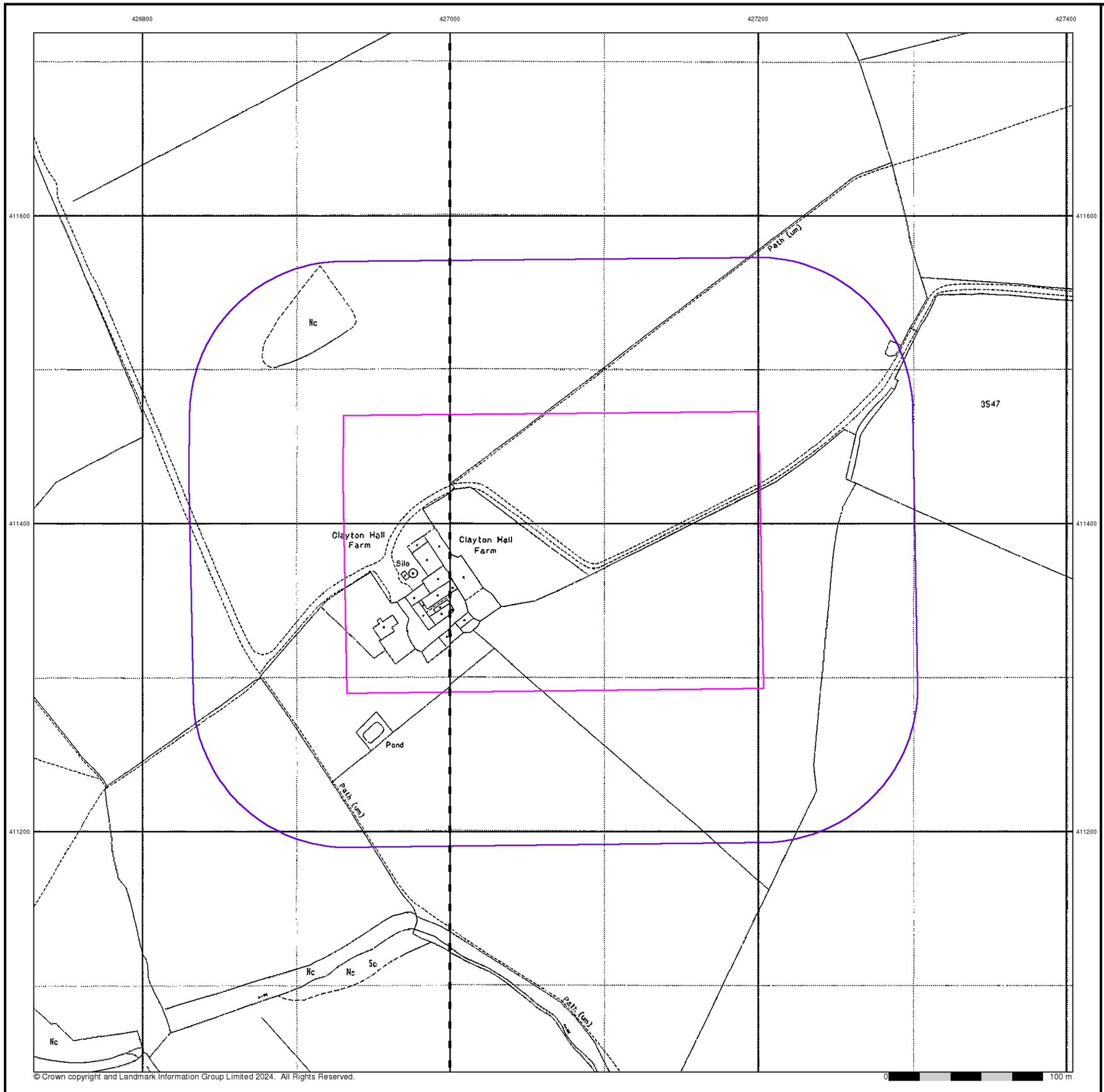


Envirocheck®

LANDMARK INFORMATION GROUP®

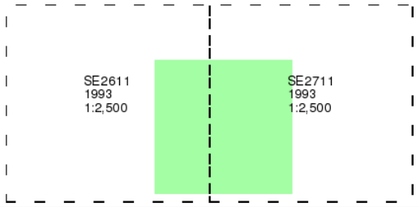
Large-Scale National Grid Data

Published 1993

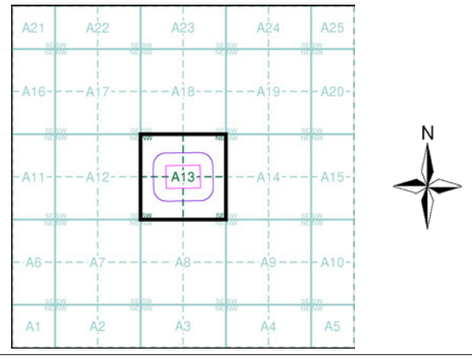
Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

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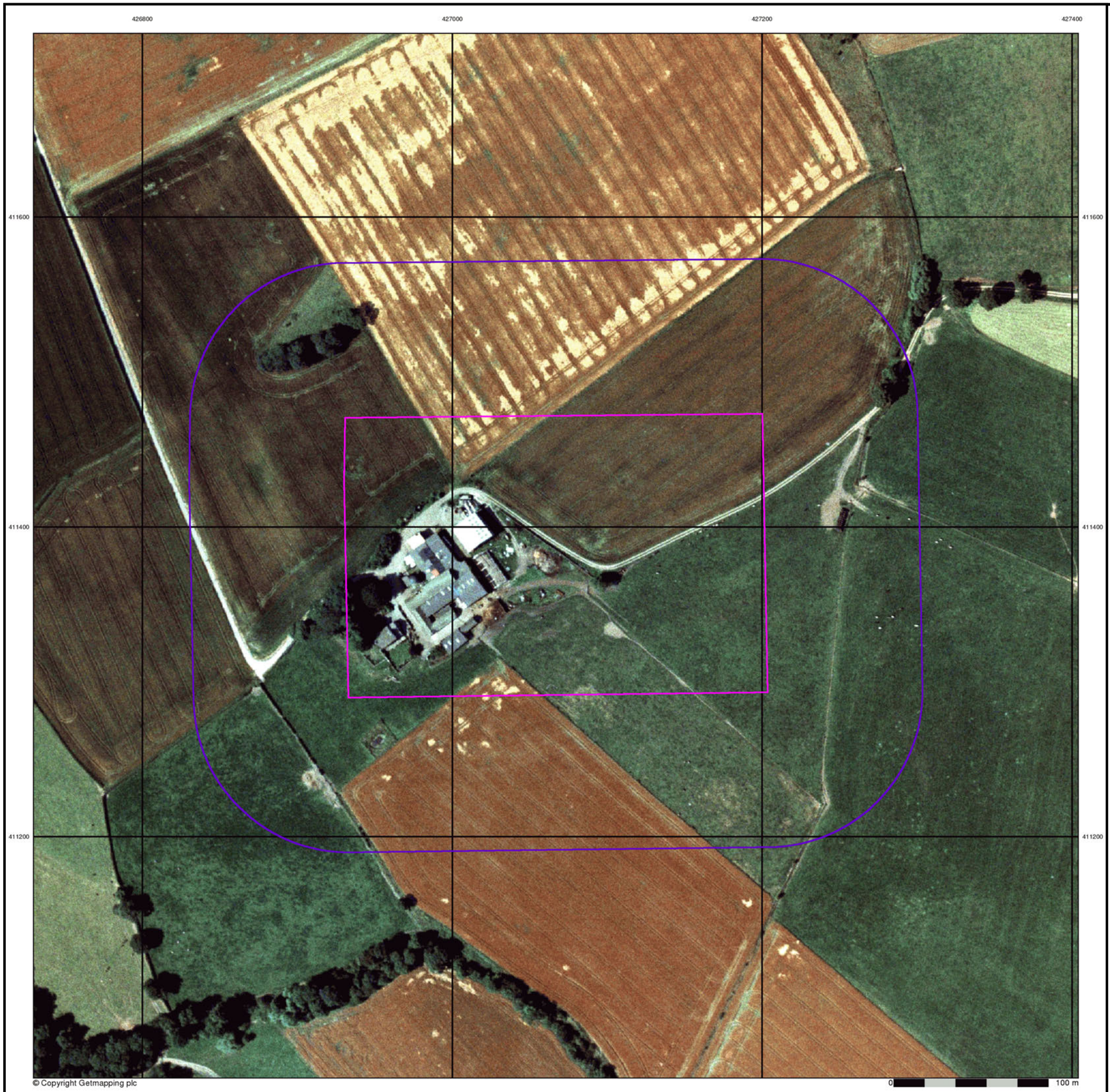


Envirocheck®

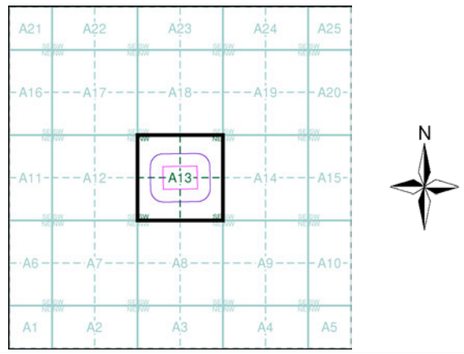
LANDMARK INFORMATION GROUP®

Historical Aerial Photography

Published 1999

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

Historical Aerial Photography - Segment A13



Order Details

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Slice:	A
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Search Buffer (m):	100

Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE

Flood map for planning

Your reference	Location (easting/northing)	Created
EPRFP3596EY	**427035/411397**	**26 Feb 2024 12:32**

Your selected location is in flood zone 1, an area with a low probability of flooding.

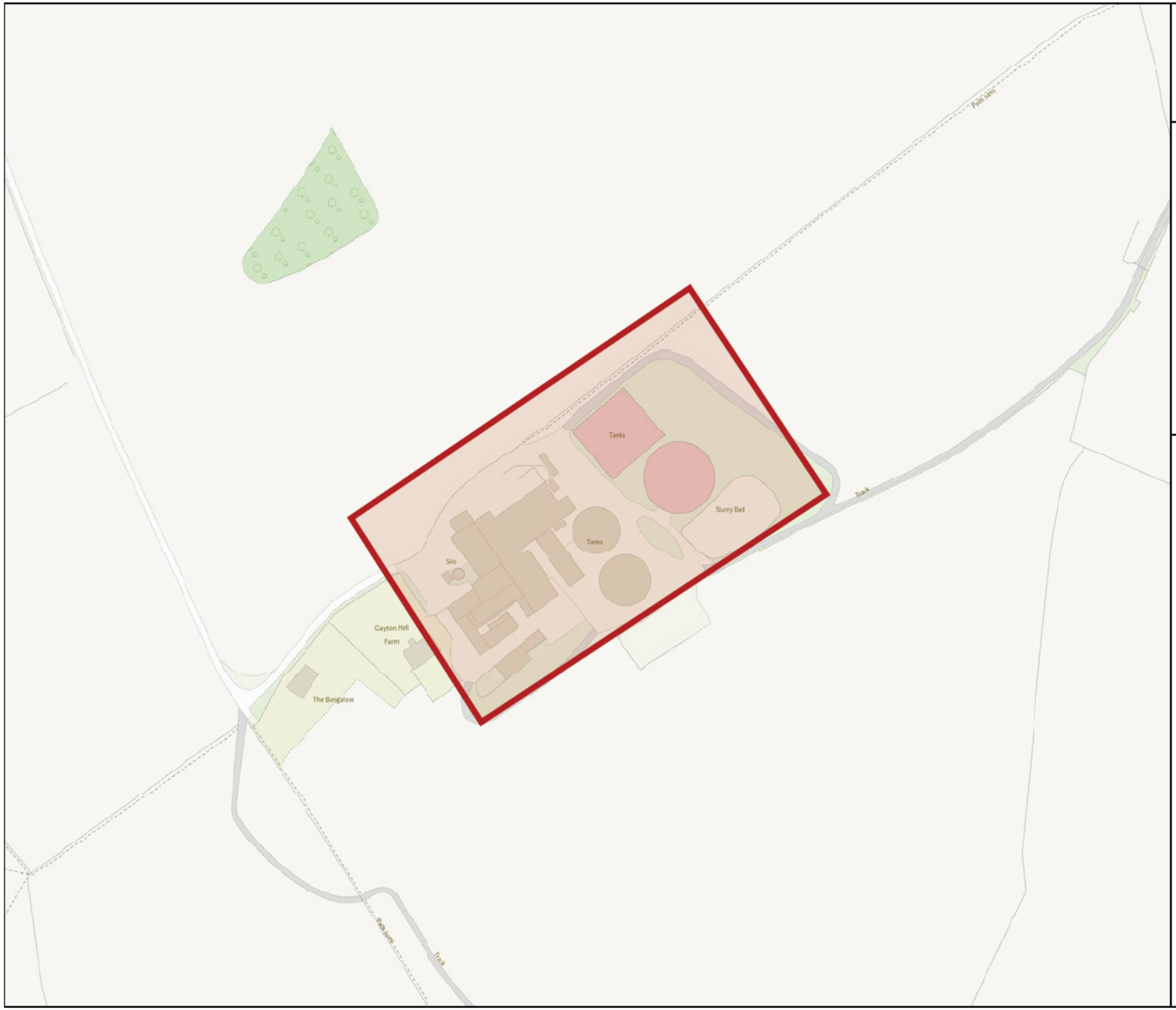
You will need to do a flood risk assessment if your site is **any of the following:**

- bigger that 1 hectare (ha)
- In an area with critical drainage problems as notified by the Environment Agency
- identified as being at increased flood risk in future by the local authority's strategic flood risk assessment
- at risk from other sources of flooding (such as surface water or reservoirs) and its development would increase the vulnerability of its use (such as constructing an office on an undeveloped site or converting a shop to a dwelling)

Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.



Environment Agency

Flood map for planning

Your reference
EPRFP3596EY

Location (easting/northing)
427035/411397

Scale
1:2500

Created
26 Feb 2024 12:32

- Selected area
- Flood zone 3
- Flood zone 2
- Flood zone 1
- Flood defence
- Main river
- Water storage area

0 20 40 60m

VERSION 2.1

ANAEROBIC DIGESTION
ABPR
BIOSECURITY (A&PHA)
HACCP

For the

CLAYTON HALL FARM

ANAEROBIC DIGESTION
and
BIOENERGY
Facility

ENVIRONMENT AGENCY PERMIT - EPR/FP3596EY
ANIMAL AND PLANT HEALTH AGENCY PERMIT

Prepared for:

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Clayton Hall Farm
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Clayton West
Huddersfield
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HD8 9QE

Relates to Permit/Site:
Permit Ref:
EPR/FP3596EY

Site:
Clayton Hall Farm Bioenergy Plant
Clayton Hall Farm
Clayton West
Huddersfield
West Yorkshire
HD8 9QE

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Version 1.0 6th August 2010
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List of Contents

List of Revisions, and documentation events

Ref	Date	Index		
1	Original HACCP		*HACCP in manuscript*	.
2	15/6/23		*HACCP transcribed to electronic (WORD) Format*	
3			*HACCP Updated with revised drawings; Schematic Flow Diagram and the update to the liquids reception systems and controls added into the HACCP Analyses.*	
4	19/6/23	Section 12	*Revised the name of the Vets A&PHA office details*	

1.0 Introduction to the Clayton Hall Farm Bioenergy Plant

1.1 Introduction to the Clayton Hall Farm Bioenergy LLP Management Team

1.1.1 Company Primary contact, Company name and address

Mrs Dawn Gemmell

Clayton Hall Farm Bioenergy LLP
Clayton Hall Farm
Clayton West
Huddersfield
West Yorkshire HD8 9QE

1.1.2. Responsible Person and Site Manager (etc.) contact number details

Mrs Dawn Gemmell	Senior Partner	07797 105591
Mr George Gemmell	Operations Manager	07714 307995

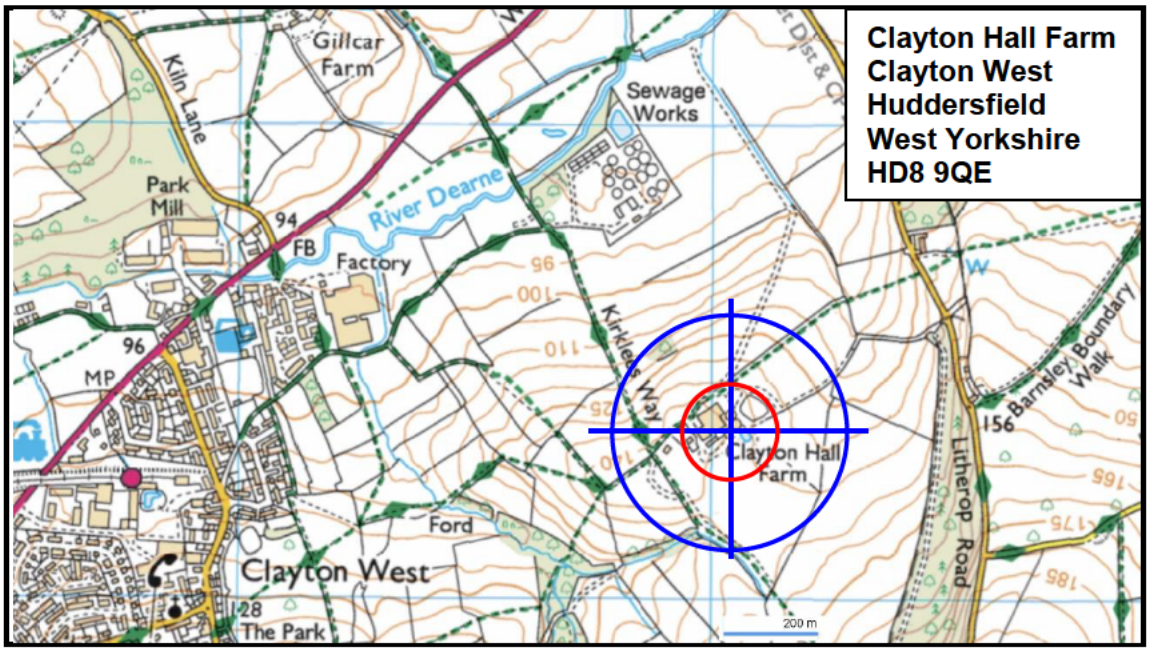
1.1.3. Site Manager Support Team contact number details

Mr D Baldwin	Consultant (Recogen Ltd)	mob 07785 352993

1.2 Introduction to the Bioenergy Plant Location

The site is located at an existing farmstead and is remote from third party dwellings being accessed by a 800m farm track from the A636 highway. The farmstead is set on high ground overlooking the village of Clayton West and the River Dearne.

Figure 1. Extract from Map (1km grid) Showing location of Anaerobic Digester Facility.



1.3 Introduction to the Clayton Hall Farm Anaerobic Digestion (AD) Site.

The Clayton Hall Farm facility comprises organic waste treatment facilities to service the agri-food industry and the local farming community. Planning for the facility started in 2007 and since then it has evolved into a larger and more significant waste treatment and bio-energy facility. It is registered with the APHA under the ABP Regulations and includes a pasteurisation step within the process after digestion and prior to materials release. In addition to the Treatment facility there are enclosed buildings for the purpose of receiving, de-

packaging and storage of food materials and a series of liquid containment vessels for the reception and storage of food or organic based liquids such as creamery and brewery waste. The AD process is relatively simple and standard for this type of mixed waste feedstock and comprises buffer tanks, a feedstock holding tank, two large digester vessels and the pasteuriser, complete with all the relevant plumbing, pipework, maceration, mixing and pumping equipment required for such a scheme.

The output from the AD tank process is pasteurised and released to a holding tank where checks are made; and then the digestate is discharged unseparated to a storage lagoon nearby.

The overall site is built within a secure area at the farmstead and the only entries to the farmstead are gated with steel gating that are locked and secured. The facility utilises the nearby staff welfare facilities and has good control over vehicle access and vehicle parking.

1.4 Description of the Anaerobic Digestion (AD) Facility

There are now THREE main routes for materials arriving at the reception (Fig 2) and for materials being received into the AD Facility:

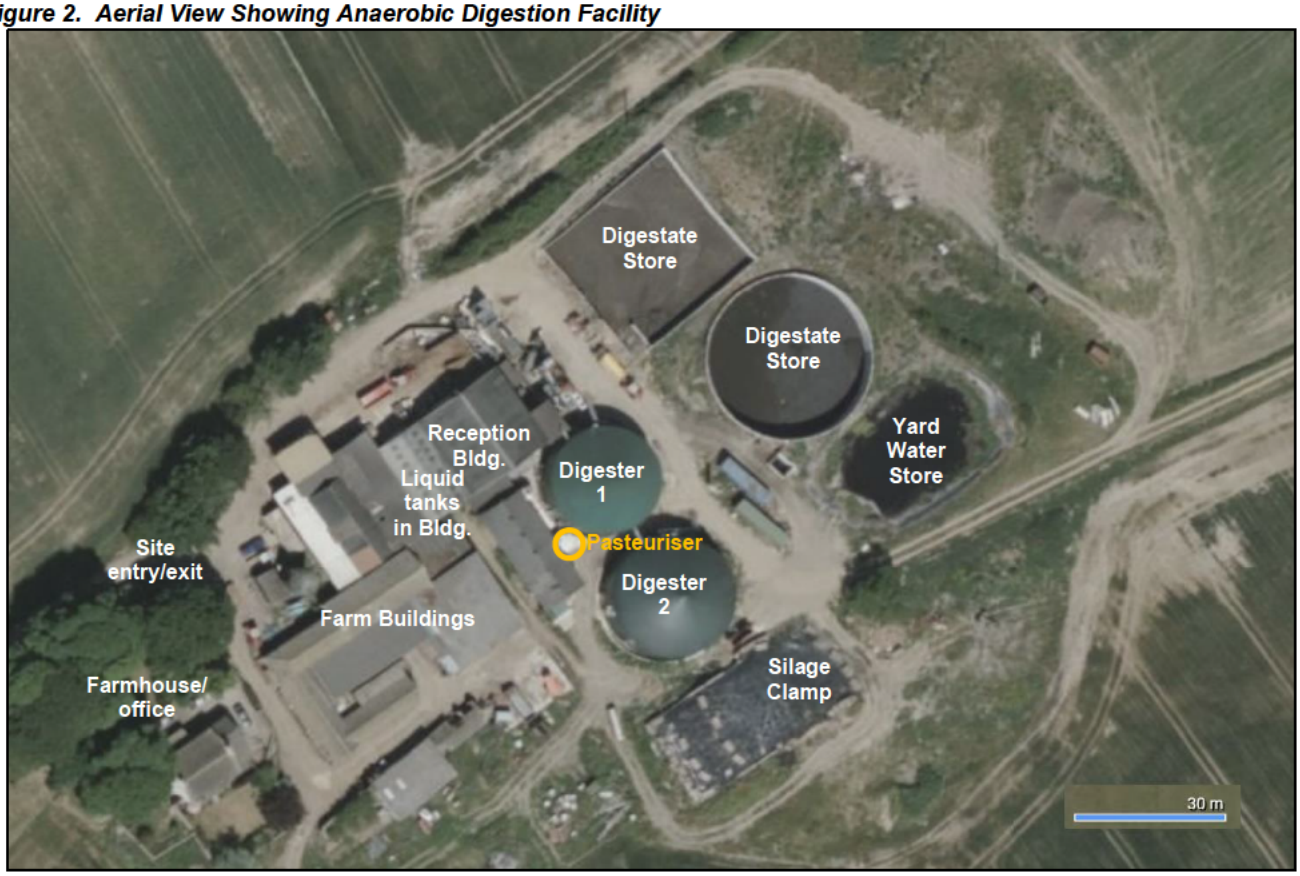
1. Original Reception direct to the AD Facility

The facility has been designed to enable haulage tanker lorries to unload liquefied food waste material directly by pipeline into the reception of the AD Facility. All of the processing of the material is then undertaken within the enclosed, sealed systems of the anaerobic digestion process. The process is operated in accordance with EU ABP Regulations and controls to ensure the full treatment of the material inclusive of pasteurisation of particles of less than 12mm at temperatures exceeding 70°C for a duration of greater than 1 hour. Systems are in place to ensure the process is undertaken anaerobically to maximise the quality of the digestate produced and the biogas recovered within the system.

After processing and following pasteurisation, the material is transferred to a intermediate digestate holding tank where it quality assured before discharge to the digestate storage tank/lagoon as whole digestate.

The key features of the site are shown in Figure 2.

Figure 2. Aerial View Showing Anaerobic Digestion Facility



1.5 Introduction to the Anaerobic Digestion Process

The scheme provides for the material to be received as solid food (ABP) waste, or liquid ABP waste and then treated within an enclosed (anaerobic) environment until such time as it is fully pasteurised and approved by the Animal and Plant Health Authority. The material then leaves the digester and pasteuriser system and is then conditioned to the desired quality assurance standards within the digestate storage tank before leaving the facility in a sealed pipeline.

1.6 Typical Feedstocks

The 40 - 44,000 tonnes per year of Feedstocks comprise both solid and liquid materials and may include: Livestock Slurry, Waste from the Dairy, Food and Brewing Industries; i.e. Former Foods, Catering Waste and or its effluent, Liquefied or Liquid Category 3 ABPR Material (including blood), Derogated Category 2 ABPR Materials that do not require pre-processing and other materials that do not require A&PHA approvals.

Generally, the liquid wastes shall be source segregated and in liquid/flowable form, and shall be received by tanker directly into Reception Point A. where it will be pumped directly into separate holding tanks Generally, solid food waste and which may be packaged, shall be received by enclosed vehicle into Reception Point B, to be offloaded and prepared for AD Treatment.

Other permitted materials are used as feedstocks such as silage and vegetable matter. These do not ordinarily require A&PHA approvals.

Anaerobic Digestion Reception – Feedstock Compliance

The company operate both a 'Pre-Acceptance Criteria Check' and an 'Acceptance Criteria Check' for all feedstocks and waste types due to be received at the facility.

'Pre-Acceptance Criteria Checks'
These checks place the focus on the producer/supplier of the feedstock i.e. the waste. It entails a series of checks as to the nature and type of materials being proposed, the context and compliance arrangements in place at the source; The compliance with The Facility Environmental Permit (EWC List), the compliance with the ABP Regulations and the compliance with the Quality Assurance scheme PAS110 and the Quality Protocol Annex B List.
It includes due consideration of the haulier and the type and specification of the vehicle to be used in transport, to ensure no cross contamination of physical or biological hazards.

'Acceptance Criteria Checks'
Each load shall be checked for compliance with the ABP Regulations and also shall be subject to the prerequisite checks under the Environmental Permit and Quality Assurance Standards (PAS110:2014 and the Digestate Quality Protocol). This check shall include inspection of solid materials within the vehicle (if possible) or else inspection once tipped to the reception area within the building. If it is liquid, then it may entail occasional sub-sampling from the vehicle before transfer to the holding tanks.

1.7 Anaerobic Digestion Scheme Arrangements

There are THREE Primary routes for the reception and inclusion of material into the feedstock mix prior to anaerobic digestion.

A. Agricultural materials that are not Animal By-Products (and not wastes), that are in the form of fresh or conserved forage, silage or vegetable matter and are sourced from the farm enterprise. Solid material is stored in nearby Silage Clamps or silos and shall be fed and metred into the system loading equipment in accordance with a pre-specified recipe to provide both carbohydrate and protein typically as dry-matter, into the mix. The input equipment comprises a solids feedstock incorporator where the material is drawn into the flow of liquid drawn from one of the liquid storage tanks or digester vessel.

B. Liquid (Food Industry/Industrial) materials which includes both Animal By-Products and non-ABP Material (and which are typically wastes), are received in tankers and after acceptance checks, these are

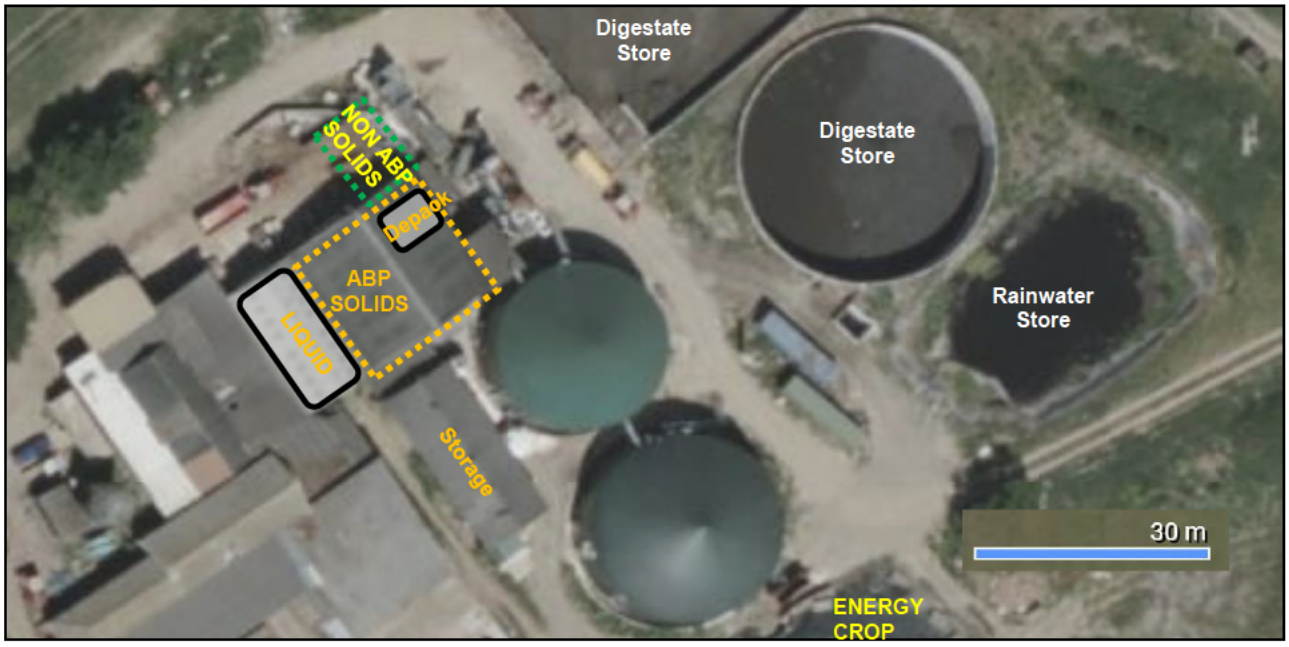
coupled to a pre-specified storage tank in accordance with the type of material. The delivery is designed to accept Liquid ABP Materials directly from a Tanker Vehicle with the entry into a pipeline coupling that is protected within an enclosure/building. The reception pipeline incorporates lockable valves for security when closed off. The enclosure provides containment of any spills from the vehicle while connections are made, or de-coupled. The enclosure provides full containment and is lockable to prevent access by unauthorised personnel.

C. Solid Form (Food Industry/Industrial) materials which includes both Animal By-Products and non-ABP Material (and which are typically wastes),

The solid food waste material is received into the Reception Building at Point C and may require a degree of preparatory treatment to make it suitable as feedstock for the AD Facility. Reception Point C is therefore fully enclosed. The area for Reception Point C is within an existing building and is separated by walling from other activities within the overall facility. There is a feedstock incorporator and pipeline system that transfers the prepared feedstock to the AD Buffer/ Mixing Tank. The procedure and description is summarised as follows:

- Delivery vehicles arrive at site where the acceptance criteria checks are undertaken.
- Using the same route the vehicle travels to the Reception Building C, and prepares for reverse entry.
- The door opening procedure is implemented.
- Once the vehicle front end clears the doorway, the door is closed.
- Personnel/driver undertakes foot bath disinfection routine.
- The vehicle offloads contents (walking floor or tipper, pallets forklift etc)
- Operative undertakes required inspections and checks.
- The vehicle is steam cleaned in accordance with ABP Rules.
- Personnel/driver undertakes foot bath disinfection routine.
- The door opening system is implemented for the vehicle exit.
- The vehicle returns to the entry/exit following the route around the facility.

Figure 3. Aerial View Showing Specific Feedstock Reception/Storage Areas



1.7 Site Security and Biosecurity

Security
The site is surrounded by security fencing and can only be approached via a locked gate at the entrance. The operating company management live in a house adjacent to the site and have 24 hour CCTV security.

Bio-security farmed animals
The site is surrounded by arable (or energy cropped) land and there are no farm animals kept on the farmstead. It has been determined that there is minimal risk of a biosecurity related incident between the Anaerobic Digestion activities and any neighbouring farm.

2.0 This HACCP

2.1 Statutory Compliance

The Animal By-Product Regulations referred to within this HACCP comprise:

- **Animal By-Products (Enforcement) (England) Regulations 2015 etc.**

2.2 Principles of the HACCP System

The HACCP system consists of the following seven principles:

PRINCIPLE 1 - Conduct a hazard analysis.
PRINCIPLE 2 - Determine the Critical Control Points (CCPs).
PRINCIPLE 3 - Establish critical limit(s).
PRINCIPLE 4 - Establish a system to monitor control of the CCP.
PRINCIPLE 5 - Establish the corrective action to be taken when monitoring indicates that a particular CCP is not under control.
PRINCIPLE 6 - Establish procedures for verification to confirm that the HACCP system is working effectively.
PRINCIPLE 7 - Establish documentation concerning all procedures and records appropriate to these principles and their application

Prior to establishing the HACCP: 1. establish a **Process Diagram** 2. determine the **Process Steps.**

Figures 2 and 3, provide an illustration of the site layout. Table 1 now provides a DETAILED list of the process steps including general processes that are fundamental to maintaining bio-security at the site. Figure 4 shows a schematic flow diagram that includes these steps.
NOTE: Management systems which may or may not be steps, that assist in maintaining biosecurity, but which are not 'Critical' (because a later step provides the critical control); are called '**PRE-REQUISITES'.**

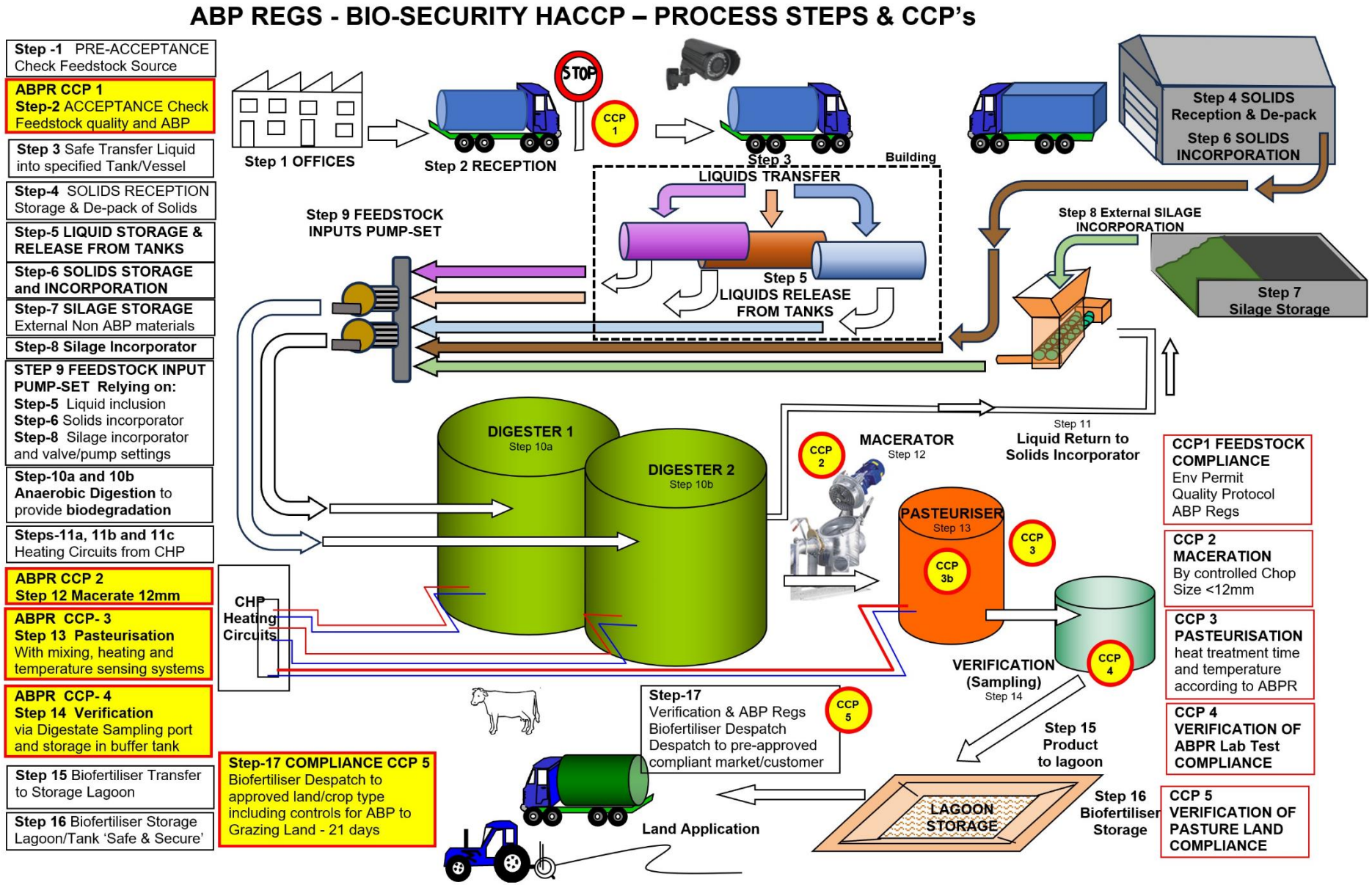
The 'Control Points' and CRITICAL Control Points have been identified in Table 1 and Figure 6.

3.0 Clayton Hall Farm - Anaerobic Digestion Facility Process Steps

Table 1 –The AD Process Steps

STEP 1	Waste Compliance List, Waste Producer/ supplier Control, Waste Compliance Check	Pre-requisite	
STEP 2	Waste Acceptance offloading	ABP Restricted	Critical – CCP1
STEP 3	Safe Transfer of Liquid into specified Tank/Vessel	Pre-requisite	
GENERAL	Delivery & Driver Dirty Boot footwear Cleansing Cleansing of Vehicle, Vehicle wheels and Wash-down Area Maintenance of Cleansing Equipment and Foot Dips	Pre-requisite	
STEP 4	SOLIDS RECEPTION Storage and De-packaging of solids	Pre-requisite	
STEP 5	LIQUID Storage and release from Tanks	Pre-requisite	
STEP 6	SOLIDS STORAGE and Incorporation into liquid line	Pre-requisite	
STEP 7	SILAGE Storage (External Bunker non ABP Material)	Pre-requisite	
STEP 8	SILAGE Incorporation of feedstock solids into liquid line	Pre-requisite	
STEP 9	FEEDSTOCK INPUT Pumping/Incorporation	Pre-requisite	
STEP 10	Anaerobic Digestion Processing	Pre-requisite	
STEP 11	Pasteurisation Process By-Pass Control	Pre-requisite	
STEP 12	Pre-Pasteurisation Maceration - Particle size control	ABP Conditional	Critical – CCP2
STEP 13	Pasteurisation Process – Time, Temperature & mixing	ABP Conditional	Critical – CCP3
STEP 14	Digestate Sampling for Verification of Successful Treatment	ABP Conditional	Critical – CCP4
STEP 15	Digestate Batch Quarentine – pending test results	Pre-requisite	
STEP 16	Digestate Safe/Secure Storage in Lagoon/Tank	Pre-requisite	
STEP 17	Digestate Use COMPLAINCE 'grazing land' RULE in ABPR	ABP Conditional	Critical – CCP5
STEP 18	Digestate LIQUID Export equipment and techniques	Pre-requisite	
STEP 19	Contaminants Residues and/or Digestate Residues Export	Pre-requisite	
GENERAL	Preventing farm animal access to site - fencing	Pre-requisite	
GENERAL	Management of disease carriers – notably rats and vermin	Pre-requisite	
GENERAL	Staff (operatives) training - awareness of procedures	Pre-requisite	

Figure 4. Schematic to show process flow.



4.0 PRINCIPLE 1 - The Hazard Analysis.

The Table 1 provides a Register of Biosecurity **HAZARDS** and Determines whether these may be controlled by **CRITICAL CONTROLS** or **PRE-REQUISITES**

The Hazards that are deemed to critical and requiring Critical Controls are highlighted.

Table 2 HAZARDS REGISTER and ANALYSIS to Determine Critical Hazards

	Hazard	Defined by	Measure	Analysis of Control
	Source of Animal By-Products	ABP Regs. compliance	Limited control	Pre-requisite
	Pathogen/ ABP type Contamination pre-acceptance	ABP Regs. compliance	Diffuse	Pre-requisite
	APPROVED Animal By-Product Type Acceptance at site	ABP Regs. compliance	Only Specific categories acceptable	**Critical (see CCP 1)**
	Fugitive emission of untreated ABP material via various transport systems	Descriptive in ABP Regs.	Adherence to general principles - Vehicles, drains, personnel, equipment, emissions, Animals / pests	Pre-requisites
	Pathogen Cross contamination – general cleanliness	Descriptive in ABP Regs.	Adherence to general principles – Materials Flow, Vehicles, drainage, personnel, equipment	Pre-requisites
	Pathogen Cross contamination – by material **BY-PASS**	Principle within ABP Regs.	Specific at 'Macerator and Pasteurisation Process	Pre-requisites
	Pathogens – (based on E.Coli and salmonellae as indicator species)	ABP Regs. compliance Process **PARTICLE SIZE**	Specific within ABPR	**Critical (see CCP 2)**
	Pathogens – (based on E.Coli and salmonellae as indicator species)	ABP Regs. **PASTEURISATION** compliance Duration time at appropriate temperature	Specific within ABPR	**Critical (see CCP 3)**
	Pathogens – (based on E.Coli and salmonellae as indicator species)	Pasteurisation Process Bacteriological Validation And VERIFICATION (**SAMPLE LAB. TESTS**)	Specific within ABPR Sample numbers/types of test/standards	**Critical (see CCP 4)**
	Pathogens	Sampling and Sample Management to ensure validity	Implicit within regulation	Pre-requisite
	Re-infection with Pathogens/ABP materials	Test result validation/, re-contamination quarantine/aftercare	Implicit within regulation	Pre-requisite
	Re-infection with Pathogens/ABP materials	Treated material **RE-CONTAMINATION** by untreated ABP material by-pass	Safe and Secure Storage	Pre-requisite
	Pathogen risk to livestock	Principle of ABP Regs. diffuse emission, restricted livestock access at site	Implicit within regulation. Preventing animals access onto site	Pre-requisite
	Pathogen risk to livestock	Defined in ABPR – **NON-GRAZING** rule Verify land use and confirmation that non grazing.	Specific for use of treated material	**Critical (see CCP 5)**

5.0 CCP 1 – ANIMAL BY-PRODUCT ACCEPTANCE

1. Hazards	Non-Compliant Animal By Products entering the system that is not design to treat them appropriately thereby presenting the high risk of spread of pathogens and disease organisms.
2. Critical Control Points (CCP's)	**Reception Intake Facility.** Operative checks vehicle, documentation and visual inspection of material for evidence or presence of non-compliant materials in accordance with FEEDSTOCK ACCEPTANCE CRITERIA
3. Critical Limits (CL's)	The critical limit is either Acceptable or Unacceptable. In the case of any doubt, then the material shall not be accepted, i.e. shall be REJECTED.
4. QMS record of evaluation of CCP & its CLs	The Operative approves the acceptance of the load, enters information on the Load Reception and Acceptance Register
5. Corrective action if deviation from CLs at the CCP	Non-compliant waste is rejected and reloaded. Action is corrected by Site manager providing verbal caution and advice, backed up with written notification; recorded as Load rejection Non-compliant that is REJECTED, shall be diverted to an appropriate animal by-product disposal point e.g. Renderer.
6. Verification that CCP & CL (of the hazard) provide due control of risk	Evidence of maintained validation by Annual Reviews of ABP Sources, Supply chain and Acceptance Procedures including visual inspections. Internal Audit. External Audit by PAS110 Certification Body External Audit by Environment Agency and A&PHA
7. QMS record of corrective action	Compliance failure or Incident Investigation and Corrective Action Record

6.0 CCP 2 – ANIMAL BY-PRODUCT PARTICLE SIZE CONTROL
'MACERATOR DESIGN AND MANAGEMENT'

1. Hazards	The Animal By-Product Regulations require that the particle size of material is reduced to less than 12mm in any plane, prior to the pasteurisation process so that the transfer of heat into the centre of solid particles is sufficiently fast to enable the thermal treatment of those solids to be effective and to adequately destroy the pathogen organisms based on time and temperature criteria.
2. Critical Control Points (CCP's)	**The 'Rotacut' Macerator is the Critical Control Point,** and within the macerator is a perforated plate (known as a cutting screen) with a honeycomb of holes that are sized to a required specification. The cutting screens are 10mm across the hole. The hole size therefore means that regardless of how long a particle is (e.g. feather), it must be less than 10mm in order to pass through the screen. **The Rotacut screen therefore ensures that particles will be less than 10mm in 2 dimensions (both width and breadth).** For added QA and reliability within the treatment process, the rotary chopper provides the means to also reduce the 3rd dimension (particle length).
3. Critical Limits (CL's)	The ABPR 2015 critical limit is a maximum12mm particle size **in one plane**.(see definition in A&PHA Guidance); Accordingly, the **CRITICAL LIMIT of hole size for this facility is taken as 12.mm.**
4. QMS record of evaluation of CCP & its CLs	Operative checks the screen at regular intervals (screen check once per week) to check equipment condition (distortion, breakage or tear) and any wear on hole sizes. A record is made on the AD Equipment Check List
5. Corrective action if deviation from CLs at the CCP	Processing is stopped. Material is sent back to the buffer tank for reprocessing later. New plate and cutting blades are fitted. The system restarted and checked again later that day. In the instance of rapid wear, the Engineer will be called, technical rectifications made, daily tests undertaken and the process

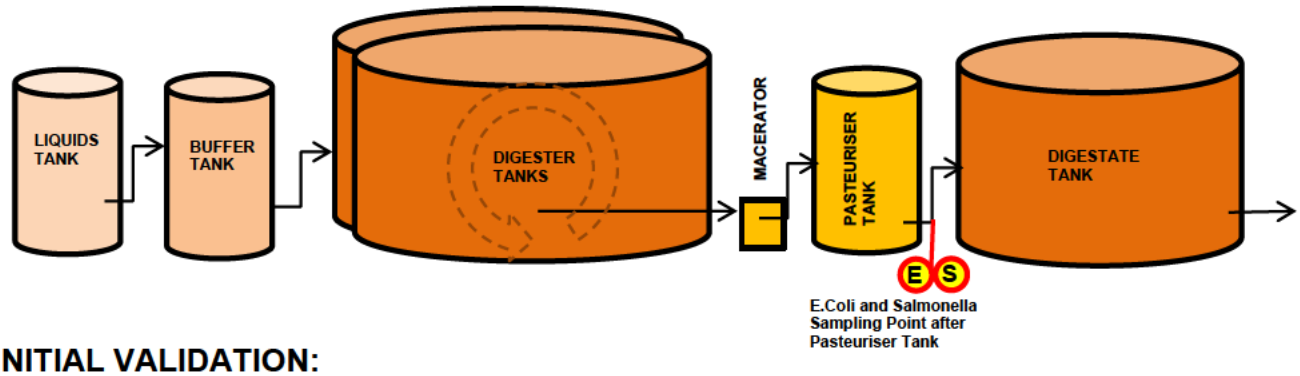
	restarted with any further checks being undertaken to ensure reliable performance.
6. Verification that CCP & CL (of the hazard) provide due control of risk	**WEEKLY** evidence of maintained validation by removal of the macerator screen, and checking the hole size using slip gauge (hardened steel TOOL bit of **11.0mm**). Internal Audit. External Audit by PAS110 Certification Body External Audit by Environment Agency and A&PHA. If the **11.00mm Slip Gauge TOOL** passes through any hole in the macerator screen, then it means that the hole is larger than the TOOL and therefore is greater than the threshold size of **11.00mm** at which the Macerator Screen must be replaced.
7. QMS record of corrective action	Compliance failure or Incident Investigation and Corrective Action Record

7.0 CCP 3 – ANIMAL BY-PRODUCT PASTEURISATION

'Including:
4a. By-Pass Control
4b. Temperature Criteria
4c. Time Material Held at Temperature
4d. Mixing to provide Assurance of 100% material Treated

1. Hazards	The Animal By-Product Regulations require that all of the material is pasteurised utilising a batch system where all of the material is held without inlet or output in a vessel so that all of the batch achieves the temperature exceeding 70 deg C for at least 1 hour. This is so that the pasteurisation process provides the transfer of heat into the centre of solid particles and the thermal treatment of those solids will be adequately effective to destroy the pathogen organisms.
2. Critical Control Points (CCP's)	The Pasteuriser Vessel and its associated heating system, pipework, valves and controls provide the CCP.
3. Critical Limits (CL's)	The statutory limit of 70 deg C, **for this site is achieved by utilising a CRITICAL LIMIT of 71.0 deg C**, therefore the Critical Limits are: 4a: All of the material to be pasteurised (no by-pass) 4b All of the material to achieve 71.0 deg C for >1 hour, including evidence of the accuracy of the temperature measurements. 4c All of the material to be held for at least 1 hour at a temperature greater than 71.0 deg C. 4d Assurance that all of the material achieves these criteria, i.e. mixing to ensure there are no 'dead' spots, stratification or surface heat losses that risk any material not achieving the required CL's.
4. QMS record of evaluation of CCP & its CLs	Operative checks the system on a daily basis (gauge and pipe temp check) to ensure that the equipment is functioning properly and that the pasteurisation process is providing treatment to the required Critical Levels. A record is made on the Datalogger. Measurements and acquired Data are displayed on the SCADA User interface and Recorded within a computer program/datalogger.
5. Corrective action if deviation from CLs at the CCP	Processing is stopped. Material is not allowed to be discharged downstream. A&PHA shall be consulted regarding suitable rectification if required. In the instance of system failure, the Rectification Procedure above shall be activated.
6. Verification that CCP & CL (of the hazard) provide due control of risk	Evidence of maintained validation by calibration checks on the equipment (temperature probes), Laboratory sample results, (monthly) Internal Audit. External Audit by PAS110 Certification Body External Audit by Environment Agency and A&PHA
7. QMS record of corrective action	Compliance failure or Incident Investigation and Corrective Action Record.

Figure 5. Schematic to show location of sampling points.



INITIAL VALIDATION:
Sample the E.Coli and Salmonella once per week for 12 weeks.
Vets sample the 1st, 4th, 8th and 12th Week (batch) (Means they will have to be primed for when pastueriser run will be done)

ONGOING VERIFICATION:
Sample the E.Coli and Salmonella once each 4th week, being 25% of the frequency on which it was validated
Vets sample 4 times per year in the quarters.

SAMPLING:
ONE pot for E.Coli and for Salmonella, sampled immediately after pasteurisation - Sampling Point (E/S from flow going to the digestate tank); typically done by adding short bursts of liquid to a composite sample and then taking the lab's sample from that.

In each case the sampling 'tap' or valve, must be purged to clear any debris, must be cleansed to ensure no external contamination.

Sampling pots to be clean etc.
Use DATE as reference for the Sample (Batch Referencing)

Ensure Labs fore-warned to receive and deal with samples.
Ensure refrigerated transport of samples, by fast courier, etc.
Normal Biosecurity, cleanliness and Health and Safety to be in place for sampling.
Sample early in week to avoid week-end delay issues.

8.0 CCP 4 – ANIMAL BY-PRODUCT RESULTS OF TESTS 'INTERPRETATION/ACCEPTANCE OF TEST RESULTS

1. Hazards	The Animal By-Product Regulations require that the treated material be subjected at intervals to sampling and laboratory testing. This is to demonstrate at least for the indicator organisms that the material is acceptable for use on land.
2. Critical Control Points (CCP's)	The sampling point is shown in Figure 5. This after transformation at the biogas plant **and after the Pasteuriser** but before the material is released from the anaerobic digester facility. **For E.Coli and Salmonellae, the Sampling Point (E/S)** is immediately after the Pasteuriser.
3. Critical Limits (CL's)	The critical limits are for 5 sub-samples from a given batch: **For E.Coli** for at least 4 of the 5 samples shall not exceed 1000 cfu/g and the 5th sample will be acceptable if

	it does not exceed 5000 cfu/g. **For Salmonella** for all of the 5 samples the salmonella shall be absent in 25g
4. QMS record of evaluation of CCP & its CLs	The operative shall undertake the sampling in accordance with the schedule, and in accordance with sampling procedures and the pre-requisite use of approved laboratories, approved means of courier to the lab and approved sampling equipment and sample pots. When Sampling is undertaken, then NO DIGESTATE may be released or despatched from the digestate storage until the Laboratory results confirm that both results are PASSES. A record of sampling to be made on QMS recording sheets and or Diary Records
5. Corrective action if deviation from CLs at the CCP	**PROCESSING MUST BE STOPPED.** **MATERIAL SHALL NOT BE RELEASED** **A&PHA MUST BE CONSULTED TO DETERMINE PROCEDURES TO IMPLEMENT IN THE INSTANCE OF A SALMONELLAE FAILURE**
6. Verification that CCP & CL (of the hazard) provide due control of risk	Evidence of maintained verification by reference to the verification test results and the regular sampling and testing of material. Internal Audit. External Audit by PAS110 Certification Body External Audit by Environment Agency and A&PHA
7. QMS record of corrective action	Compliance failure or Incident Investigation and Corrective Action Record **Written correspondence with A&PHA as required.**

9.0 CCP 5 – TREATED ANIMAL BY-PRODUCT USE ON LAND

‘Restricting Animal Access to Treated Material (Pasture Land)’

1. Hazards	The Animal By-Product Regulations require that validated treated material be restricted from the use on ‘grazing land’ in order to minimise the risk of pathogen or disease spread to animals.
2. Critical Control Points (CCP’s)	The control point is prior to the point of despatch, so that land users are consulted, informed and enter into an agreement for the use of the material on their land.
3. Critical Limits (CL’s)	The Critical Limit is that the agreement must be in place. The Critical Limits that the land user agrees to comply with are that animals shall not have access to land where the material has been applied (or foodstuffs/fodder grown on land where material has been applied) unless, in the case of all animals except pigs, that 21 days have elapsed since the time of application; and in the case of pigs, 60 days have elapsed since the time of application to that land.
4. QMS record of evaluation of CCP & its CLs	The operative in charge of materials despatch shall ensure that the agreements described are in place and retain a copy of the agreement in the QMS system. The records may also form a part of the PAS110 ‘Biofertiliser’ control system and shall be filed accordingly. A record of despatch to be made on the Despatch Records.
5. Corrective action if deviation from CLs at the CCP	If any material is despatched without the prior agreement, then the land user shall be contacted immediately and land applications stopped until the agreement is put in place, and the application shall be supervised to ensure there are no animals having access to that land for the time given as the critical Limits. The incident shall be recorded.

6. Verification that CCP & CL (of the hazard) provide due control of risk	The verification of the procedures being used shall be via the regular management reviews, the Internal Audit. External Audit by PAS110 Certification Body, and External Audit by Environment Agency and **A&PHA**
7. QMS record of corrective action	Compliance failure or Incident Investigation and Corrective Action Record.

Clayton Hall Farm Biogas Facility

10.0 LIST OF PREREQUISITES – BIOSECURITY PROCEDURES

BIOSEC 1	**ABP (waste) Compliance list**	The List refers to the range of materials that are acceptable to comply with all of the facility's statutory requirements.
BIOSEC 2	**ABP Producer Controls – 'Approved suppliers List'**	For purpose of minimisation of the risk of cross contamination by non-compliant Animal By Products, the source of the feedstock/waste shall be checked and if acceptable, then approved. The same applies to hauliers to ensure no risk of cross contamination by non-compliant material during handling/within loads.
BIOSEC 3	**Waste Compliance Check**	Administrative check for each load of material delivered, to ensure that the source has been approved, the material is documented as being compliant, the haulier is approved and that there is no evidence to suggest that the load is non-compliant
BIOSEC 4	**Delivery Vehicle Movement Control**	Any delivery vehicle that contains Category 3 material shall be limited in accessibility to the site, so as not to present a risk to material in other parts of the site that have been treated; e.g. tracking untreated materials on wheels or by leakage.
BIOSEC 5	**Reception Building**	For the purposes of minimising the risk of birds, pests and scavengers entering the reception facilities; or for providing a route for airborne emissions, dust, aerosols, etc. from the reception area when Cat 3 risk material is present, then the reception building must under normal conditions be kept closed, except when required to be opened for the connection of tanker vehicles or for cleaning.
BIOSEC 6	**CCP 1**	Assurance of Compliant material refer to CCP 1 earlier
BIOSEC 7	**Cleansing Delivery Vehicle Wheels, bodies and driver footwear**	For the minimisation of risk that untreated material may be carried out of the reception via solid material on the vehicle wheels; or by drainage or spillage of residues from the vehicle body. Also to minimise the risks that solids material are carried away from the site via the drivers footwear. The Procedures describe the pressure washing of vehicles externally including the wheels and any residues at the offloading parts of the vehicle, and the washing/dipping (in disinfectant) of the operative's or driver's footwear.
BIOSEC 8	**Equipment Cleansing**	For the minimisation of risk that untreated material may be carried out of the reception via solid material on the materials handling equipment; or hand tools. The Procedures describe the pressure washing of vehicles to remove residues.
BIOSEC 9	**Feedstock Movement Control**	To ensure that the delivered material is managed and stored safely and securely; and is only retained in reception for due time so that any specific ABP material does not become stale in storage.
BIOSEC 10	**Reception Area Cleansing**	For the minimisation of risk that untreated material may be carried out of the reception on wheels or footwear etc. and to minimise the build up of old material that may host the development of pathogens or disease organisms.
BIOSEC 11	**Effluent Control**	To ensure that washing water, solids debris and other effluent is directed to the drainage system and removed to the buffer tank where it will join the liquid feedstocks and be treated within the AD system in accordance with the requirements.
BIOSEC 12	**Dirty Boot waste and dip control**	To maintain the condition of the foot-dips/mats so that they remain effective. To manage the disposal of spent dips so that they do not impose a risk to the system and to ensure that the spent material is first buffered and then treated to the process requirements.
BIOSEC 13	**Rejects Transfer control**	To provide safe and secure storage of reject material within containers that minimise the risk of growth of pathogens and prevent the re-contamination of fresh feedstock within the reception facilities. In any event to prevent the escape of reject material into the environment; and to ensure that due control is maintained when the material is despatched for disposal off site.
BIOSEC 14	**No By-Pass**	Assurance that there is no by-pass of the macerator or pasteuriser
BIOSEC 15	**CCP 2**	Macerated Particle Size Compliance **See CCP details**

BIOSEC 16	**Transformation by Anaerobic Digestion**	The ABP Regs. Require that the material is transformed by anaerobic digestion. This is afforded (at this facility) by a complex process entailing retention of the prepared material within the anaerobic environment of a closed vessel for a retention time of circa 40 days, temperature of circa 40-42 deg C while being mixed, monitored and controlled.
BIOSEC 17	**CCP 3**	Pasteurisation See CCP details
BIOSEC 18	**Sampling**	According to procedure, numbers of samples, cleanliness of sampling and pots
BIOSEC 19	**Approved Laboratory**	According to A&PHA List of approved labs – Alliance and Technical, Ipswich
BIOSEC 20	**CCP 4**	Satisfactory results for validation batches See CCP4
BIOSEC 21	**Test failure procedure A&PHA Contact Details**	**Refer to CCP 5 A&PHA MUST BE CONSULTED TO DETERMINE PROCEDURES TO IMPLEMENT IN THIS INSTANCE** Duty Veterinary Officer - **A&PHA** Details as shown below **(Section 12 Preston)**
BIOSEC 22	**Liquid material despatch**	As a prerequisite Supply Agreement, and procedures for despatch
BIOSEC 23	**Cleansing Control**	As a general prerequisite
BIOSEC 24	**CCP 5**	Use of Treated material on grazing land see CCP 5
BIOSEC 25	**Animal access control**	As a general prerequisite, locked gates/controls to prevent livestock entry to the site.
BIOSEC 26	**Pest Control**	As a general prerequisite, use of pest baiting and control (Contractor)
BIOSEC 27	**Training**	As a general prerequisite, staff Training and information for visitors is regularly undertaken and updated.

12.0 Preston Office of the Animal and Plant Health Agency

Address: Barton Hall,
Burrow House, Garstang Rd,
Broughton,
Newsham,
Preston
PR3 5HE

Phone: 01772 861144

Section 5

Technically competent manager details

Save this form on your computer. Open it, type in the details, then save and upload it.
If you prefer, you can print it out, fill it in, and then scan and upload it.

Give details for every manager who will be responsible for the permitted operations.

Technically competent manager 1

First name	David
Last name	Riley
Date of birth DD/MM/YYYY	[redacted]
Phone - landline or mobile	07889592512
Email	dave@djrec.co.uk

Give details for **all** permitted operations that this person provides technical competence for, in addition to the current application. Include permits held by other operators.

Permit number eg EPR/AB1234CD	Site address Address is not needed for mobile plant permits	Postcode
	To be checked and updated near permit issue due to consultancy and ad hoc cover	

If a second manager is also responsible, give their details on the next page.

Certificate No. OCC4200

Operator Competence Certificate

Qualification Title:

Level 4 in Waste Management Operations - Managing Treatment Hazardous Waste (4TMH)

This Certificate is awarded to

David Riley

Awarded: 01/10/2013

Authorised

WAMITAB Chief Executive Officer

CIWM Chief Executive Officer

The Chartered Institution of Wastes Management

This certificate is jointly awarded by WAMITAB and the Chartered Institution of Wastes Management (CIWM) and provides evidence to meet the Operator Competence requirements of the Environmental Permitting (EP) Regulations, which came into force on 6 April 2008.

00040342

Qualification Title:

Level 4 in Waste Management Operations - Managing Treatment Hazardous Waste (4TMH)

Qualification Accreditation Number:

10026587

Units gained by David Riley

U1027789	Create effective working relationships (MCI Unit C4)
R1013863	Provide information to support decision making on a waste management site.
K1013867	Control the reception of hazardous waste
M1013871	Control the movement, sorting and storage of hazardous wastes
U1051769	Monitor procedures to control risks to health and safety (Employment NTO Unit B)
F1013860	Control maintenance and other engineering operations
J1013861	Control improvements to waste management operations
U1026119	Support the efficient use of resources (MCI Unit B1)
U1027792	Contribute to the selection of personnel for activities (MCI Unit C7)
D1013915	Control site operations for the treatment of hazardous waste
K1013920	Control the disposal of outputs and residues from hazardous waste treatment and recovery operations
H1014015	Ensure protection of the environment on hazardous waste treatment or transfer sites

Serial No: 18621/11/2

00040345

National Vocational Qualification

Qualification Title:

Level 4 in Waste Management Operations - Managing Treatment Hazardous Waste (4TMH)

Qualification Accreditation Number:

10026587

This Certificate is awarded to

David Riley

Awarded: 01/10/2013

Serial No:18621/4TMH/2

Authorised

Chris James
Chief Executive Officer, WAMITAB

Ray Burberry
Qualifications Manager, WAMITAB

Regulated by Ofqual

For more information see http://register.ofqual.gov.uk

Llywodraeth Cymru
Welsh Government

The qualifications regulators logos on this certificate indicate that the qualification is accredited only for England, Wales and Northern Ireland.

00040348

WAMITAB

Waste Management Industry
Training and Advisory Board

Unit Certificate
which forms part of a
National Vocational Qualification

Units gained:

K1013867 Control the reception of hazardous waste
U1027792 Contribute to the selection of personnel for activities (MCI Unit C7).
K1013920 Control the disposal of outputs and residues from hazardous waste treatment and recovery operations

This Certificate is awarded to

David Riley

Awarded: 06/11/2012

Serial No: 18621/1H/1

Authorised

Chris James
Chief Executive Officer, WAMITAB

Ray Burberry
Qualifications Manager, WAMITAB

Ofqual

Llywodraeth Cynulliad Cymru
Welsh Assembly Government

Rewarding Learning

The qualifications regulators logos on this certificate indicate that the qualification is accredited only for England, Wales and Northern Ireland.

00021778

CIWM

Continuing Competence Certificate

This certificate confirms that

David Riley

Has met the relevant requirements of the Continuing Competence scheme for the following award(s) which will remain current for two years from 04/02/2022

TMH Treatment - Hazardous Waste

Expiry Date: 04/02/2024

Verification date: 22/01/2022

Authorised:

Professional Services Director

Learner ID: 18621

Certificate No.: 5192195

Date of Issue: 04/02/2022

CIWM Chief Executive Officer

The Chartered Institution of Wastes Management

Scan code on reverse to authenticate that this is a genuine paper

Credit certificate
This certificate determines credit awarded to:

David Riley

Units gained:

		Credit Value	Credit Level
A/508/0756	Maintain health and safety in the waste resource management industry	4	L4
F/508/0757	Manage the environmental impact of work activities	3	L4
F/508/0760	Manage the movement, sorting and storage of waste	5	L4
J/508/0887	Manage the reception of non-hazardous waste	6	L3
A/508/1003	Manage site operations for the anaerobic digestion of non-hazardous waste	6	L4
T/508/0979	Manage transfer and disposal from anaerobic digestion operations	5	L4

Verification date: 07/03/2019

Authorised:

Learner ID: 18621

Certificate No.: 5140054

Date of Issue: 07/03/2019

Chris James
WAMITAB Chief Executive Officer

Regulated by Ofqual

Corff dyfarnu cydnabyddedig
Cymwysterau Cymru Qualifications Wales
Recognised awarding body

The qualifications regulators logos on this certificate indicate that the qualification is accredited only for England, Wales and Northern Ireland. Qualifications Wales regulates this qualification where it is awarded to learners assessed wholly or mainly in Wales.

00131703

Operator Competence Certificate

Title:

Anaerobic Digestion

This Certificate is awarded to

David Riley

Verification date: 07/03/2019

Authorised:

Learner ID: 18621

Certificate No.: 5140054

Date of Issue: 07/03/2019

WAMITAB Chief Executive Officer

CIWM Executive Director

The Chartered Institution of Wastes Management

This certificate is jointly awarded by WAMITAB and the Chartered Institution of Wastes Management (CIWM) and provides evidence to meet the Operator Competence requirements of the Environmental Permitting (EP) Regulations, which came into force on 6 April 2008.

00131704

CIWM

Continuing Competence Certificate

This certificate confirms that

David Riley

Has met the relevant requirements of the Continuing Competence scheme for the following award(s) which will remain current for two years from 24/03/2023

AD Anaerobic Digestion

Expiry Date: 24/03/2025

Verification date: 18/03/2023

Authorised:

Professional Services Director

Learner ID: 18621

Certificate No.: 5221631

Date of Issue: 24/03/2023

CIWM Chief Executive Officer

The Chartered Institution of Wastes Management

Scan code on reverse to authenticate that this is a genuine paper

Section 6

Company Information

Company Name: Clayton Hall Farm Bioenergy

Companies House Link: CLAYTON HALL FARM BIOENERGY LLP overview - Find and update company information - GOV.UK (company-information.service.gov.uk)

Date: 01/10/2024

	Name	Date of Birth
1	GEMMELL, Dawn Angela	[redacted]
2	GEMMELL, George Alexander Depledge	[redacted]
3		
4		
5		
6		
7		
8		

Section 7

CLAYTON HALL FARM BIOENERGY LLP

BAT ASSESSMENT

CLAYTON HALL FARM BIOENERGY PLANT

Clayton West

Huddersfield

West Yorkshire

HD8 9QE

EPR/FP3596EY

Olive Compliance Ltd
Planet House, Northumbrian Way, Newcastle-upon-Tyne, NE12 6EH
Company No: 1286122

Table of Contents

1 Introduction

This report comprises a review of but not limited to the operations, activities, infrastructure, and management systems, in comparison to the requirements of indicative BAT as stated in the Best Available Techniques Reference Document for Waste Treatment[1], and the Biological Waste Treatment Appropriate Measures for Permitted Facilities [2] guidance document to ensure that all relevant areas are included.

All feedstock is a waste delivered by third party contractors or producers of the waste. The site is predominantly a farm growing crops for produce with a small percentage being fed into the Anaerobic Digester (AD) plant on site. The Anaerobic Digestion plant provides gas into 2 x CHP engines for electricity for use on site and export to the national grid.

The aim of this report is to provide confidence to the Environment Agency that the Operator has both considered the requirements of BAT and will operate the site in compliance with the requirements of indicative BAT and the Environment Agency's Appropriate Measures which is an overlap of best available techniques (BAT) for waste installations and necessary measures for waste operations.

The report is structured in a table format in the same order as set out in the guidance notes to ensure a logical review of the requirements of indicative BAT.

This is followed by a review of the Operator's proposals and a comparison against indicative BAT.

The final section comprises conclusions, recommendations and proposed timescales

[1] Best Available Techniques (BAT) Reference Document for Waste Treatment, European IPPC Bureau, 2018

[2] Biological Waste Treatment: appropriate measures for permitted facilities, Environment Agency 2022, updated 2024

1. General BAT Conclusions		
1.1 Environment Management System		
BAT 1	**In order to improve the overall environmental performance, BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features**	
I	Commitment of the management, including senior management;	Senior management of Clayton Hall Farm Bioenergy LLP (CHFB) have committed to the establishment and further development of an Environment Management System **(EMS).** EMS Manual **(CHFB_EMSM**) Senior Management of CHFB strives to: • Operating in compliance with all permit requirements and relevant legislation • Considering the environmental impacts of all operations • Striving to minimise waste and energy where possible
II	Definition, by the management, of an environmental policy that includes the continuous improvement of the environmental performance of the installation;	The Environmental Policy includes a commitment to measure, record and monitor environmental performance in order to continually improve the Environmental Management System. Environmental Policy Statement **(CHFB_EPS).**
Appropriate Measures: Management Systems	The company should adopt an environmental policy that is designed by senior managers. This policy must include the continuous improvement of the facility's environmental performance to: • Identify pollution risks • Minimise pollution risks through appropriate measures	All of these points are included within the Environmental Policy Statement **(CHFB_EPS).** The Environmental Policy is available electronically and a hard copy is available at the company's registered office upon request. CHFB will proactively communicate with their external partners and customers about their EMS and goals in terms of environmental performance.

	• Makes best and most efficient use of resources	Environmental objectives and targets are set by senior management.
III	Planning and establishing the necessary procedures, objectives and targets, in conjunction with financial planning and investment by the management;	The EMS has been developed and approved by senior management who are also responsible for financial planning and investment decisions. The EMS documents are detailed within the Master List of Documents **(CHFB_MLD)** and includes Standard Operating Procedures and Environmental Objectives. Environmental objectives and targets are set in the accordance with the Target & Objective Setting Procedure **(SOP_3.28.2).** Environmental Policy is set in accordance with the Policy Setting Procedure **(SOP_3.28.1).**
IV	Implementation of procedures paying particular attention to: (a) structure and responsibility (b) recruitment, training, awareness and competence (c) communication (d) employee involvement (e) documentation (f) effective process control (g) maintenance programmes (h) emergency preparedness and response (i) safeguarding compliance with environmental legislation	Environment Management System documents and procedures covering all of these elements are in place and are summarised within the EMS Manual **(CHFB_EMSM**) and the Master List of Documents **(CHFB_MLD).** These procedures will be reviewed to ensure that they reflect activities at the operational site. There is an ongoing focus for continual improvement of the existing documentation to ensure that these elements are incorporated. The EMS Manual **(CHFB_EMSM**) describes how all of these elements are incorporated into the EMS. • Staff structure, relevant roles and responsibilities are detailed within the EMS Manual **(CHFB_EMSM**) • Staff training, awareness and competence • The Environmental Policy Statement **(CHFB_EPS)** is communicated to all staff and interested parties via induction, emails, meetings and presentations.

		• Communication of performance measures and targets to staff • Document control is in place and all documents benefit from version control which is managed through the Document Control **(CHFB_DC1.11)** and recorded in the Master List of Documents **(CHFB_MLD).** • The process is monitored and controlled for effectiveness in accordance with PAS110 SOPs. • All plant and equipment are subject to a planned preventative maintenance programme in accordance with the Maintenance Procedure Plan **(SOP_3.24)** for the site and as detailed under BAT 14 • There is a site-specific Emergency Action Plan **(CHFB_EAP)**. • Daily, weekly and monthly checks **(CHFB_PPMForm12)** to inspect the site and process making sure compliance with environment legislation is maintained
V	Checking performance and taking corrective action, paying particular attention to: (a) monitoring and measurement (b) corrective and preventive action (c) maintenance of records	The Environment Management System incorporates: (a) Checking performance through a planned audit and inspection schedule. Monitoring and Control Management Procedure **(SOP_3.10)** (b) By investigating and learning from incidents, near misses and mistakes including those of other organisations all non-conformances are reported and reviewed, resulting with corrective and preventive actions. Corrective and Preventative Action Procedure **(SOP_3.21.5)** (c) All plant and equipment are subject to a planned preventative maintenance programme in accordance with the maintenance planner for the site and as detailed under BAT 14. Daily/weekly/monthly inspections are carried out **(CHFB_PPM Form 12)**

	(d) independent (where practicable) internal or external auditing in order to determine whether or not the EMS conforms to planned arrangements and has been properly implemented and maintained	(d) Internal auditing where records of audits and non-conformances are held electronically on a shared drive which is backed up onto the cloud. Auditing Procedure **(SOP_3.28.4).**
Appropriate Measures: Management Systems	Measures that apply to all processes and operations: 1. the site must always be operated or monitored (or both) by an adequate number of staff who have appropriate qualifications or training (or both) and competence. 2. Operating a 24-hour process	1. Procedures for monitoring emissions or impacts are documented. Monitoring and Control Management Procedure **(SOP_3.10).** Site inspections are carried out daily and findings are recorded in the Daily Checklist **(CHFB_Form 1).** Written documentation with findings are saved and reviewed by senior management All staff will receive training on the EMS and Regulatory Compliance in accordance with the Environmental Management System: Regulatory Compliance Procedure **(CHFB_3.28.3)** EMS Compliance procedure **(CHFB_3.28)** All training will be formally recorded in the Training Competency Matrix **(CHFB_TCMX)** going forward. 2. The pasteuriser and digesters are linked to the SCADA system. Sensors monitor levels, temperatures etc. monitoring data and trigger alarms are sent to the SCADA system.

	• remote or telemetric systems in place to make sure an alarm would be raised in the event of an incident during unmanned hours • appropriate personnel on call to deal with such incidents 3. You must adequately explain these procedures in your management system and make sure they are implemented. 4. The design, installation and maintenance of infrastructure, plant and equipment must be carried out by competent people, including using CQA where appropriate.	3. Contractors will not be employed or allowed to start work unless they have provided the necessary evidence of competence and have signed to agree site rules and conditions of work. This is in accordance with the Management of Contractors Policy **(CHFB_MCP)**. The work of contractors will be monitored by the Plant Manager or Nominated Competent Person and if any of the policy conditions are not met then the contractor may be told to stop work. 4. A planned preventative maintenance programme is in place. Maintenance is carried out in accordance with the Maintenance Checklist **(CHFB_Form 11)**. The Plant Manager retains overall responsibility for the maintenance of all plant and equipment whether it is carried out in-house or by third party contractors. It is the responsibility of the Plant Manager to ensure that any new items of plant or equipment are incorporated into the preventative maintenance regime and that staff training is carried out as required. The procedures for maintenance tasks are detailed in the Master List of Documents **(CHFB_MLD)**. There is a comprehensive inspection and maintenance programme in place to minimise disruption to the process and unscheduled shut downs.

	5. You must have appropriately qualified managers for your waste activity who are members of a government-approved technical competence scheme.	5. Technically Competent Management will be provided by David Riley who holds the WAMITAB Level 4 High Risk Managing Treatment Hazardous Waste Operator Competence qualification. The Technically Competent Manager will undertake Continuing Competence assessments at the required two-yearly intervals to ensure that qualifications are maintained and in accordance with the regulatory requirements.
VI	Review, by senior management, of the EMS and its continuing suitability, adequacy and effectiveness;	CHFB will carry out Management Review Meetings at least annually in accordance with the Management Review Procedure **(SOP_3.28.5)** to check that the Management System is still suitable, adequate and effective.
VII	Following the development of cleaner technologies;	Clayton Hall Farm Bioenergy LLP are active members of the Renewable Energy Association (REA) (trade body) the industry body Anaerobic Digestion and Bioresources Association (ADBA) and have a network of contacts within the sector to keep updated with industry developments. The Environmental Policy Statement **(CHFB_EPS)** includes an objective to continually review operational practices and technologies employed.
Appropriate Measures: Management Systems	Review the development of cleaner technologies and their applicability to site. The Environment Agency would expect consideration of cleaner technologies • as a result of substantial pollution incidents • when reviewing management systems • when planning investment decisions, for example new plant	Clayton Hall Farm Bioenergy's AD technology recovers the volatile matter from waste biomass as much as possible to produce biogas, thus reducing carbon emission. At each stage of the AD system starting from the substrate supply chain, biogas production, upgradation, utilisation, and digestate application has a significant effect on the overall carbon emission potential based on the plant's design, operation, and maintenance. CHFB will ensure that ongoing maintenance and improvements to the facility will comply with CIRIA 736 requirements that include that the open digestate tanks and lagoons will have coverings to

		ensure that odour is reduced. Gas emissions will be captured and treated prior to release to atmosphere. CHFB will demonstrate through their Environmental Management System (CHFB_EMS) the effectiveness of covers, containment methods and abatement systems (including alternative measures in place) on site which will also include a leak detection and repair plan. CHFB will strive to introduce an appropriate monitoring and recording programme of methane leaks from both the AD plant and onsite containment systems. The Leak Detection and Repair (LDAR) programme will be reviewed to measure diffuse emissions of ammonia, VOCs including methane and odour from all sources identified in the LDAR. CHFB has installed continuous monitoring, with the use of SCADA, along with robust monitoring and maintenance checks to ensure that the plant infrastructure is repaired when necessary and operates effectively.
VIII	Consideration for the environmental impacts from the eventual decommissioning of the plant at the stage of designing a new plant, and throughout its operating life	The EMS includes a Closure Plan Procedure **(SOP_3.30)** which meets the requirements of BAT. See below
Appropriate Measures: Management Systems	When designing new plant, you must assess the environmental impacts from the plant's operating life and eventual decommissioning. You must make sure that new plant is authorised by your environmental permit.	CHFB have carried out assessments during the initial design of the plant which is documented and kept on file. CHFB plant is authorised with their environmental permit. The plant has been designed to minimise environmental impact throughout its life, including decommissioning. The majority of site equipment is above ground and can be dismantled for removal.

		• All pipes, ducts and cables are fixed on cable trays and stanchions positioned above the concrete containment, so as to not penetrate the containment floor or walls. • This has been designed in accordance with CIRIA C736 to ensure any potential leakages are visible to onsite, operational staff whilst carrying out daily inspections of the containment bund structure. • The use of impermeable surfaces throughout the site ensures that there will be minimal, if any, contamination of soil beneath the site. • Removal of concrete from hardstanding areas is a common task, and a variety of machines are available to complete this work. • Digesters and pipework can be drained down and washed through prior to disassembly • The dirty water lagoon will be cleared out using vacuum tankers if required when empty. • Site structures including the control room, feeders, CHPs, GEU and GUU are containerised and can either be disassembled or removed as a single unit. Feedstock reception building and pasteurisation building are steel framed with cladding, these are easy to disassemble and remove from site. • All new insulation material meets modern health and safety standards.

		• Materials used are able to be recycled as far as possible.
Appropriate Measures: Management Systems	A Site Condition Report is in place and maintained. Carry out a Site Condition Assessment during the life of the site and carryout this assessment on surrender	The Site Condition Report describes the condition of the land referencing historical uses before operations started. Incidents and Accidents are recorded on the Corrective and Preventative Action Request **(SOP_3.21.5).** These records will be retained for the operational life of the site. Assessments of the Site Condition Report **(CHFB_SCR)** are carried out with the report updated as appropriate during the operational life of the site and prior to surrender in accordance with current or future guidance.
IX	Application of sectoral benchmarking on a regular basis;	The Environmental Policy **(CHFB_EPS)** includes an objective to *'protect the local environment where CHFB operates by adhering to all compliance obligations set by interested parties.'* CHFB strives to protect the local environment by continuing to remain compliant with their permit conditions and adhere to all associated regulations. CHFB will compare their environmental performance against members of the REA, ADBA and operators within the sector. Through industry connections and networking CHFB will make every effort to improve their performance through environmental objective setting.
X	Waste stream management (see BAT 2);	Refer to BAT 2.
Appropriate Measures: Management	Consider the risks a changing climate presents to your operations and have an appropriate contingency plan in place to assess and manage future risks.	There is a Change Control Procedure in place **(SOP_3.21.4)** and in addition the Climate Change Plan **(CHFB_CCP)** considers, assesses and manages future risks of climate change.

Systems		
XI	An inventory of wastewater and waste gas streams (see BAT 3)	Refer to BAT 3.
XII	Residues Management Plan - A residues management plan is part of the EMS and is a set of measures aiming to: • minimise the generation of residues arising from the treatment of waste • optimise the reuse, regeneration, recycling and/or recovery of energy of the residues • ensure the proper disposal of residues.	It is unlikely for any residues will result from the treatment of waste. Under normal operating conditions there are no residues that arise from the processing of the waste streams. Digestate (both liquid and solid) will be produced to meet PAS110 & ADQP standards and accreditation will be sought from the Biofertiliser Certification Scheme. The existing EMS forms the basis for the development of a Digestate Quality Management System to ensure that the PAS110 standard can be met for both digestate liquor and separated fibre. A comprehensive digestate management procedure will be written for the site.
XIII	**Accident Management Plan** - An Accident Management Plan is part of the EMS and is a set of measures aiming to: • identifies hazards posed by plant and the associated risks • defines measures to address these risks • considers the inventory of pollutants present or likely to be present which could have environmental consequences if they escape	Investigating incidents, (and near misses) including identifying suitable corrective action and following up is included in the Accident Management Procedure **(SOP_3.21**) as part of the Environment Management System. The Risk Assessment within the Accident Management Plan **(CHFB_AMPlan)** identifies the likelihood and consequence of accidents and appropriate actions and considers the risk and impact of flooding and fires. The Environmental Management System includes a number of Emergency Response Procedures including but not limited to: • Spillage Response Procedure **(SOP_3.22)**

		• SCADA Alarm Response Procedure **(SOP_3.21.6)** • Emergency Shutdown Procedure **(SOP_3.26.2)** • Fire and Explosion Response Procedure **(SOP_3.23.1)** • Emissions to Air Response Procedure **(SOP_3.13)** • Foam in Fermenter Procedure **(SOP_3.18)** • Fire Prevention, Fire Detection and Fire Fighting Procedure **(SOP_3.23)** • Accident Management Plan **(CHFB_AMPlan)** • Accident & Incident Reporting and Investigation Management procedure **(SOP_3.21.7)**
Appropriate Measures: Management Systems	**<u>Accident Management Plan</u>** Identify the hazards, risks and mitigation measures that will protect the environment in the event of an accident or event. Areas to consider: • waste types and reactions of mixed waste	Incidents are logged in the Incident Register whilst near misses are logged in the Near Miss Register. Changes to procedures are logged within the version history box on documents. New versions are recorded on the EMS Master List of Documents **(CHFB_MLD)**. In accordance with the Document Control Procedure **(SOP_3.29)** any old documents will be stored in a register and kept on file for 6 years. Significant findings from maintenance inspections are logged on SCADA. Waste Acceptance procedure **(SOP_3.2)** and Waste Storage procedure **(SOP_3.2.3).** An inventory of substances is kept up to date and held on site as part of the Accident Management Plan **(CHFB_AMP).**

	• transferring substances, such as filling (including overfilling) or emptying of vessels and containers over pressure of vessels and pipework, blocked drains • preventing incompatible substances coming into contact with each other • failure of plant and equipment, for example storage tanks and pipework, or blocked drains	The risk of spillage from transferring liquid or solid feedstocks during deliveries and loading of the feed hopper. Spillages, if any will only occur within the reception building and dirty water drainage area, where the transfer takes place. Any spillages will be cleaned up as soon as practicably possible in accordance with the Spillage Response Procedure **(SOP_3.22)**. Removal of digestate from site will be carried out in accordance with a Work Instruction for Tankers **(CHFB_WIT)** removing digestate from site which include measures around coupling of pipe connections and overseeing of the load discharge. Any spillages arising during off-take of digestate will be contained within a sump at the off-take point and managed promptly in accordance with the Spillage Response Procedure **(SOP_3.22)**. The plant has been designed to ensure that there is sufficient storage for required feedstocks, and that these feedstocks can be stored safely Plant and equipment including pumps and filter pots are subject to routine daily/weekly/monthly inspections PPM Schedule **(CHFB_Form 12)** and maintenance is carried out in accordance with the Maintenance Checklist **(CHFB_Form 11)**. The feedstock reception building is fitted with a drainage system that collects liquid released inside the building and transfers it into the process. The bay reception area has a sump that collects any leaks or drips from tanker deliveries and transfers them into the process for treatment. Both of these areas can be cleaned as required and the wash water will discharge into the process.

	• failure of containment, for example bund failure or drainage sumps overfilling • making the wrong connections in drains or other systems • failure to contain firefighting water • failure of abatement systems • hazardous atmospheres in confined spaces • failure of main services, for example power, steam or cooling water	Dirty areas will drain to the process for treatment. Areas of the site which are normally clean will drain to a sump within the secondary containment systems and will be contained pending a visual and olfactory check and then released to the lagoon if deemed appropriate or reused within the process or disposed of appropriately. The secondary containment systems are sized appropriately in accordance with CIRIA 736. The Site Drainage Plan **(CHFB_005)** and Process Pipework Plan **(CHFB_005a)** illustrate the layout of pipes including drainage. There is no surface water drainage on site. Surface run-off is captured and fed into the lagoon. Fire extinguishers (foam and CO2) are located at various locations throughout the facility. Firewater would be contained within the site's secondary containment system and handled appropriately. Failure of the abatement system (water tank) would trigger the alarms which report to the SCADA system. Monitoring is carried out daily. An Emergency Shutdown Procedure is in place **(SOP_3.26.2).** A DSEAR Risk Assessment and HAZID have been carried out. This ensures appropriate explosion protection measures are in place. Personal gas monitors are carried for personal safety. Accident Management Plan **(CHFB_AMP)** references individual procedures relevant to different abnormal operating procedures. There will be a stand-by diesel generator on site to be used in case of mains failure. The stand-by generator will be regularly maintained.

	• checking the composition of effluents before their emission • vandalism and arson • operator error	The probability of accidental emissions are minimised through process control procedures including the use of the SCADA system controls. Process Monitoring is detailed within Section 8 of the EMS Manual **(CHFB_EMSM).** The plant can be operated remotely via a secure remote login in system which ensures a direct link to the SCADA system. Emergency Response procedures are in place including but not limited to: • SCADA Alarm Response Procedure **(SOP_3.21.6)** • Emergency Shutdown Procedure **(SOP_3.26.2)** • Spillage Response Procedure **(SOP_3.22)**. Duplicate or standby plant, including the standby diesel generator, will be available in incident or accident scenarios. The roles and responsibilities of personnel involved in incident management are specified in the Accident Management Plan **(CHFB_AMP)** and associated procedures covering abnormal operations. All shift handovers are performed through the daily operations diary reported on SCADA. Staff training and management includes demonstrating the importance of accurate record keeping, and regular review of records created. Appropriate control techniques in place include: • the secondary containment (CIRIA standard) • drainage plan

	• accessibility of control equipment in emergency situations • extreme weather conditions, for example flooding or very high winds • having a contingency arrangement to divert waste feedstock when your ability to spread outputs to land, or inject gas to grid, is limited	• process pipe plan • provision of spill kits • provision of appropriate fire controls • visible signage • training on all emergency procedures. The site is not located in a floodplain. Hazards, risks and mitigation measures in relation to extreme weather conditions have been considered in the Climate Change Plan **(CHFB_CCP).** The procedure for post incident review is included within the Accident Management Plan **(CHFB_AMP)**. A procedure for responding to, reviewing and learning from incidents, near misses etc. is included in the Accident Management Plan **(CHFB_AMPlan)**. n) The sumps do not require a high-level alarm or sensor and pump as the sump will be a daily check **(CHFB_Form12**). The risk of spillages during operations has been considered within operational procedures and work instructions.
Appropriate Measures: Management Systems	**Accident Management Plan** You must assess the risk of accidents and their possible consequences. To help you do this you can either use:	The Risk Assessment within the Accident Management Plan **(CHFB_AMP)** identifies the likelihood and consequence of accidents and appropriate actions and considers the risk and impact of flooding and fires. A HAZOP is required for the site comprehensively completed for the main operations at the site. This is to cover the following areas: • Dosing feeder to Digesters

	• the Environment Agency's risk assessment guidance • a HAZOP or a similar detailed assessment that identifies hazards through possible deviations from the design intention	• Gas Engine No1 & Boiler • Digesters BF01 to BF02 • Pre-storage mobile tanks to digesters • Digestate Separator • Pasteurisation • Biogas Collection and Distribution Risk Assessments have been conducted for the site including • Fire Risk Assessment and HAZID • DSEAR Risk Assessment and HAZID Duplicate or standby plant, such as the pump arrangement in the condensate chamber and the standby generator, will be exposed to the same rigorous maintenance and testing as the main plant
Appropriate Measures: Management Systems	**Accident Management Plan** Risk is the combination of the likelihood that a hazard will occur and the severity of the impact resulting from that hazard. Having identified the hazards, you can assess the risks by addressing 6 questions: • how likely is it that the accident will happen? • what may be emitted and how much? • where will the emission go – what are the pathways and receptors? • what are the consequences?	The Risk Assessment within the Accident Management Plan **(CHFB_AMPlan)** has addressed the questions and considered all of the hazards listed in this Appropriate Measures point.

	• what is the overall significance of the risk? • what can you do to prevent or reduce the risk?	
Appropriate Measures: Management Systems	**<u>Accidental Management Plan</u>** The type and depth of accident risk assessment will depend upon the complexities. Main factors to consider: • scale and nature of the accident hazard presented by the facility and its activities • risks to area of population and the environment (receptors)	The risk factors considered include: • The size of the CHFB Facility and the associated equipment • The proximity of the receptors both sensitive human receptors and ecological receptors Sensitive Receptor Plan **(CHFB_004)** illustrates the surrounding area of population and the environment to support the risk assessment process. Accident Management Plan **(CHFB_AMP).**
Appropriate Measures: Management Systems	**<u>Accident Management Plan</u>** You must also: • establish how you will communicate with relevant authorities, emergency services and neighbours (as appropriate) before, during and after an accident • implement emergency procedures, including for safe plant shutdown and site evacuation	Corrective & Preventative Action Procedure **(SOP_3.21.5)**. Communication channels with the Fire and Rescue Service (FRS) have been put in place. The FRS have carried out an inspection of the site and have provided advice & guidance to CHFB. Complaints are managed and recorded in accordance with the Complaints Procedure **(SOP_3.25)**. Emergency Response Procedures include the Emergency Shutdown Procedure **(SOP_3.26.2)**.have been included within the EMS.

	• implement post-accident procedures that include doing an assessment of the harm an accident caused (or may have caused) and actions you will take to prevent further accidents • consider the impact of accidents on the function and integrity of plant and equipment • have contingency plans to relocate or remove waste from the facility and suspend incoming waste • test the accident management plan by carrying out emergency drills and exercises	Investigating incidents, (and near misses) including identifying suitable corrective action and following up is included in the Accident Management Plan **(CHFB_AMP)**.
Appropriate Measures: Management Systems	**<u>Preventing Accidental Emissions</u>** 1. You must have a drainage plan. In the event of an emergency this must be available to emergency service. The plan should clearly identify clean and dirty or foul drainage. 2. You must make sure that in an emergency you can contain on site: • process waters • contaminated site drainage waters • emergency firefighting water • chemically contaminated waters • spillages of chemicals	1. A drainage plan is held within the Accident Management Plan **(CHFB_AMP)** as part of the Environment Management System. 2. Procedures and measures are in place • Process waters **(SOP_3.22.6)** • Emergency firefighting water **(SOP_3.23.2)** • Chemically contaminated waters **(SOP_3.22.5)** • Spillages of chemicals **(SOP_3.22.4)** • Accident and Incident Reporting and Investigation Management Procedure **(SOP_3.21.7).**

	3. You must put spill contingency procedures in place to minimise the risk of an accidental emission of raw materials, products, and waste materials, and to prevent their entry into water, land and air.	3. A Spillage Response Procedure **(SOP_3.22)** is in place which covers raw materials, products and wastes. Staff training on procedures including emergency procedures will be carried out in accordance with the Training Procedure **(SOP_3.20)**.
XIV	Odour management plan	Refer to BAT 12.
XV	Noise and vibration management	Refer to BAT 17.
1.1 Waste Management Measure		
BAT 2	**In order to improve the overall environmental performance, BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features**	
Waste pre-acceptance		
a	Set up and implement waste characterisation and pre-acceptance procedures	In accordance with Section 8.3 of the EMS Manual Specified Waste Handling Operations: • Wastes are only accepted from approved suppliers which have been completed an 'agreement to supply waste' prior to acceptance at site. • Liquid waste will be sampled and analysed as per waste supply agreement or when deemed appropriate by the AD Manager. Any unsuitable material will not be accepted at the facility. Any new waste supplied will be analysed prior to acceptance. Feedstocks are tested for the following parameters:

		• pH • dry matter • chlorides • biochemical methane potential (BMP) • periodic bullet analyses and annual biological BMP. The frequency of feedstock testing depends on feedstock type. If it is a variable feedstock or there is e.g. potential for chloride issues then testing will be more frequent.
Appropriate Measures: Waste pre-acceptance and tracking	1. Wastes accepted at sites must be capable of biological treatment and be fully recovered and suitable for their intended end use. 2. A waste is only suitable for biological treatment if your treatment process is designed to: • treat the types of wastes included on your environmental permit • manage variability in feedstock and optimise process conditions • make sure there is sufficient capacity to treat waste within the retention time of the process	Only suitable energy crops, non-hazardous organic wastes and a small percentage of Animal-by-product wastes will be accepted at the site. There is an understanding by CHFB of the pressures upon waste producers to find a suitable recovery/disposal route for wastes and that acceptance of an unsuitable waste material may have far reaching impacts upon the biological processes, hence control measures are in place. If non-compliant remedial actions shall be undertaken to ensure improved quality of supply or termination of the contract. No waste shall be received in drums/containers. The clamps are SSAFO compliant with sealed drainage system. Solid feeder is located on impermeable surfacing with sealed drainage system inside the secondary containment area.

		All feedstock is pre-booked to the required quantities to ensure security in feedstock supply and no over-supply. Storage areas/volumes have been constructed to the known parameters. The design incorporates contingency volume. No waste will be accepted on site unless there is sufficient storage space.
Appropriate Measures: Waste pre-acceptance and characterisation	WM3 technical guidance on waste classification must be used to be able to assign the correct waste classification code.	It is a legal requirement that all waste producers must classify their waste and identify its hazardous properties in accordance with the Guidance on the classification and assessment of waste (1st Edition v1.2.GB) Technical Guidance WM3 document. CHFB has robust incoming waste procedures to prevent the acceptance of non-conforming or malodourous wastes entering the site. For all incoming waste streams, CHFB will ensure that they obtain sufficient information from the waste producer/supplier and on-site checks to determine if the waste is compliant with the site permit before acceptance to the facility. The site has the below environmental procedures and recording forms in place in respect to waste acceptance and segregation. • Waste Pre-Acceptance and Acceptance, Rejection and Quarantine Procedures • Waste Non-Conformance Report
Appropriate Measures: Waste pre-acceptance and characterisation	When you receive a customer enquiry and before the waste arrives at the facility, you must obtain the following in writing or in an electronic form:	Prior to receipt of new organic waste streams, the following actions shall be taken: 1. Request the following information in writing from potential supplier:

	• details of the waste producer including their organisation name, address and contact details • the source and nature of the waste, at the point of production (the process that gives rise to the waste) • a description of the waste including its physical form • the full characteristics of the waste including the variability of each waste (for example, liquid effluents must be individually assessed and tested, understanding of the waste's composition and characterisation must be based on representative samples) • a description of any hazardous properties including potential risks to process safety, occupational safety and the environment • the odour potential • the type of packaging and risks of contamination • an estimate of the quantity you expect to receive in each load and in a year • the potential for self-heating, self-reactivity or reactivity to moisture or air • the age of the waste You must check and validate all transfer documentation and resolve discrepancies before you accept the	(a) Source of waste e.g. type of chicken rearing facility. (b) Any chemicals or cleaning products that are used at the rearing facility. (c) Quantity of waste. (d) Designated EWC code(s). (e) Compositional analysis (check that the sample is representative of the waste. (f) and has been taken by a technically competent individual); and (g) Contingency for dealing with non-conforming waste and contingency. (h) planning in emergency. 2. Audit all information submitted by the waste supplier request further information if required so that the waste quality and any potential variations in quality can be assessed. a 3. If sample data has not been provided by the potential waste supplier, it will be arranged for a representative sample to be taken and send off to NRM laboratories for testing. Follow Sampling Input Procedure **(SOP_3.4.1)**.

	waste. If you believe the incoming waste classification and description is incorrect or incomplete, you must address this with the original waste producer during waste acceptance. You must obtain a representative sample or analysis, or analyse a representative sample of a waste, if: • the chemical composition or variability of the waste is unclear from the information supplied by the customer • there are doubts about whether the sample analysed is representative of the waste • you will treat the waste at your facility (this will allow you to carry out tests to determine if the planned treatment will be safe and effective) Where you rely on a customer sample you must record that you have done this and the reason why the customer sample is acceptable.	4. Check all sample test results against written description to see if it is consistent. Procedures in place: • Waste Acceptance Criteria (WAC) **(SOP_3.2)**. • Waste Rejection Procedure **(SOP_3.3.1)** • Feedstock Acceptance & Rejection Procedure **(SOP_3.2.4)**. • Sampling Input Procedure **(SOP_3.4.1)**. • Supplier Assessment Form **(CHFB_Form13)**.
Waste acceptance		
b	Set up and implement waste acceptance procedures	Quality requirements and waste acceptance criteria are clearly set out within the Clayton Hall Farm Bioenergy Feedstock Acceptance and Rejection Procedure **(SOP_3.2.4).**
Appropriate Measures:	You must visually check wastes and verify them against pre-acceptance information and	Weights shall be recorded along with details of the feedstock (type, description, origin, any interim storage and transportation). In

Waste acceptance	transfer documentation before you accept them on site. The extent of the initial visual check is determined by the waste type and how it is packaged.	addition, digestate removal (date, amount) and digestate spreading (date and locations) will be logged in the Site Diary and recorded electronically. A Feedstock Acceptance and Rejection Procedure is in place **(SOP_3.2.4)**. There are no dedicated quarantine arrangements in place but any rejected material would be stored separately from other feedstocks (isolated) on the impermeable surface with sealed drainage. The solids feeder records the tonnages of feedstock loaded and this data is retained within the SCADA system. SCADA also records all flows and volumes of liquids from the buffer tank to the digesters.
Appropriate Measures: Waste acceptance	You must make sure that your facility can comply with other regulatory requirements, for example the Animal By-Products Regulations.	The HACCP applies primarily to ensure material being adequately contained, treated and applied to the land such that it does not pollute the environment but also that the material does not cause contamination of future food crops. Refer to the HACCP **(CHFB_HACCP).** Approved laboratories According to A & PHA List of approved labs – Alliance and Technical, Ipswich The site is surrounded by arable (or energy cropped) land and there are no farm animals kept on the farmstead. It has been determined

		that there is minimal risk of a biosecurity related incident between the Anaerobic Digestion activities and any neighbouring farm.
Appropriate Measures: Waste Acceptance	You must have a sampling and testing plan to demonstrate how you will make sure the waste is as described and remains suitable for treatment. Sampling plans must meet the requirements of BS EN 14899:2005. The testing plan must adequately reflect the waste and include the: • objectives of the testing • details of the testing needed • test parameters based on chemical and physical characteristics • the sampling approach including population, number of sampling events, number of samples, sample weight and reliability of the outcome sampling methodology	Representative samples of non-waste and waste feedstocks will be undertaken in accordance with Sampling Input Procedure **(CHFB_3.4.1)** which includes the planned frequency and method of sampling for each feedstock type. Test results will be verified against specified criteria in the relevant contracts. The Animal By-Product Regulations require that the treated material be subjected at intervals of sampling and laboratory testing. This is to demonstrate at least for the indicator organisms that the material is acceptable for use on land. CHFB shall undertake sampling in accordance with the with their sampling procedures and the pre-requisite use of approved laboratories, approved means of courier to the lab and approved sampling equipment and sample pots. When sampling is undertaken, there will be no digestate released or dispatched until the Laboratory results confirm that the digestate has achieved the required parameters for use on land. A record of sampling to be made on EMS recording sheets and or Diary Records.
Appropriate Measures: Waste Acceptance	You must check and validate all transfer documentation and resolve discrepancies before you accept the waste. If you believe the incoming waste classification and	Waste Duty of Care Waste Transfer Notes (WTN's) shall be reviewed for each waste stream ensuring the following information is included:

	description is incorrect or incomplete, you must address this with the original waste producer during waste acceptance.	• Description of the waste being transferred • Correct classification of the waste • List of Waste Regulations code (EWC) • Quantity • Container used • Confirmation of duty to apply waste hierarchy • Producer/Carrier/broker details • Permit reference numbers • Sic code • Date/time/signatures
Appropriate Measures: Waste Acceptance	The person carrying out waste acceptance checks must be trained to effectively identify and manage any non-conformances in the loads received.	All staff will receive training on relevant operational procedures. All training will be formally recorded in the Training Matrix **(CHFB_TMX).**
Appropriate measures: Waste Acceptance	You must have clear criteria that you use to identify non-conforming wastes and wastes to be rejected. You must record any non-conformances.	If waste is rejected it will be done so in accordance with the Feedstock Acceptance and Rejection Procedure **(SOP_3.2.4).** A Feedstock Rejection Record shall be completed. The criteria for waste rejection are as follows: • Plant Operatives are responsible for carrying out a visual inspection of all loads brought into site.

		• The Plant Manager is responsible for making a final decision on whether the load should be rejected. • The Plant Manager makes a final decision on whether the load should be rejected. Following a rejection decision these actions shall be taken: • Haulier on site If the decision is made to reject the load and the haulier is still on site, then the Plant Operative will reload the vehicle. • Haulier left site If the decision is made to reject the load and the haulier has left site, then the Plant Manager will: o Isolate the rejected material so it cannot contaminate clean materials on site. o Contact the feedstock producer to arrange collection of the material. o Ensure all Site staff are aware of the load of unsuitable feedstock and that appropriate signage installed to ensure the load is not used in error until the load has been removed. o Complete Feedstock Rejection Record. The Plant Manager will: • Arrange removal of unsuitable feedstock as soon as possible, in all cases within 5 days.

		• Complete a Feedstock Rejection Record and put one copy in file in the site office. • Send a copy to the feedstock supplier and follow up with the feedstock supplier regarding the presence of unspecified materials and take steps to ensure ongoing feedstock quality.
Waste tracking		
C	Set up and implement a waste tracking system and inventory. A waste tracking system and inventory aims to track the location and quantity of waste in the plant. It holds all the information generated during waste pre-acceptance procedures (e.g., date of arrival at the plant and unique reference number of the waste, information on the previous waste holder(s), pre-acceptance and acceptance analysis results, intended treatment route, nature and quantity of the waste held on site including all identified hazards), acceptance, storage, treatment and/or transfer off site.	Waste is only delivered to the site once pre-booking is in place by the AD Manager. All incoming wastes are inspected and tested upon arrival. Consistent blends of feedstock are achieved by monitoring the dry matter at the buffer tanks every week and adjusting the amount of liquid added to the feedstock mix. Waste coming into site is measured at the pre-acceptance stage and agreed prior to acceptance on site. Pre-treated waste entering the AD process is measured through SCADA (daily feed program to D1 and D2) and verified through monitoring of levels within the 2 No. 422m^3 Buffer Tanks. The following data is recorded: 1. For each load: • Type of material (description) • European Waste Catalogue (EWC) code • Source • Waste Transfer note reference • Net weight of waste • Date and time accepted • Hauliers • Hauliers licence number • Origin of waste • Time and date

		• Record declaration of previous load acceptable and wash out certificate provided if required (e.g., ABP waste) • Vehicle registration number 2. For each load rejected: • Type of material • EWC code • Source • Waste Transfer note reference • Tonnage • Date & time rejected • Reason for rejection / potential hazard as appropriate • Rejected by (name of staff member) • Destination of rejected material For each load rejected in the Reception Building the AD Manager is responsible for recording the following for each load / part load rejected upon visual inspection on the Waste Rejection Record **(CHFB_Form4).** The AD Manager is responsible for checking the following data is recorded into the waste correctly: • Waste that has been received • Waste that is rejected
Appropriate Measures: Waste Tracking	You must use a waste tracking system which records information about the available capacity of the waste quarantine, reception, general and bulk storage areas of your facility. Your information must include treatment residues and end of waste product materials.	All feedstock is pre-booked to the required quantities to ensure security in feedstock supply and no over-supply. Capacity has been addressed within the design of the site. Storage areas/volumes have been constructed to the known parameters. The design incorporates contingency volume.

Appropriate Measures: Waste Tracking	The tracking system must be able to report: • the total quantity of waste present on site at any one time and how that compares with the limits authorised by your permit • the total quantity of end of waste product materials on site at any one time • a breakdown of the waste quantities you are storing pending on-site treatment or waiting for onward transfer • a breakdown of the waste quantities by hazardous property • where a batch or load of waste is located based on the site plan • the length of time a waste has been on site	Waste types (including solids & liquids), volumes received, date and time of acceptance, reference number, storage location and resident timescales will be recorded on the tracking system. The waste tracking system will be capable of recording all key information about the feedstock. It will also allow generation of reports showing total volumes of waste stored on site at any time. All waste reception and tracking data is available on site and will be retained for a minimum of three years The waste tracking system allows reporting against these criteria. waste will be held on site for storage only, all feedstocks that arrive on site will pass through the AD process unless rejected and quarantined.
Appropriate Measures: Waste Tracking	You must hold acceptance records for a minimum of 2 years after you have treated the waste or removed it off site. You may have to keep some records for longer if they are required for other purposes, for example hazardous waste consignment notes	Compositional analysis test results shall be maintained with the Waste Transfer Notes (WTN). All WTN's shall be maintained for a minimum of 2 years in a secure place in the site office.
Output quality		
d	Set up and implement an output quality management system	<u>Digestate quality</u> Clayton Hall Farm Bioenergy LLP is a registered producer under the Biofertiliser Certification Scheme (BCS) for PAS110 certified digestate

		as a 'Quality Output' achieving end of waste status under the AD Quality Protocol (ADQP). The digestate is classified as digestate liquor in accordance with PAS 110 as the dry matter is approximately 4-5% dry matter.
Waste segregation		
e	Ensure waste segregation. Waste is kept separated depending on its properties in order to enable easier and environmentally safer storage and treatment. Waste segregation relies on the physical separation of waste and on procedures that identify when and where wastes are stored.	Liquid food waste, delivered in tankers, is dispatched into the two liquid waste tanks (30m^3 each) within the Reception Building. Solid food waste is tipped in a reception pit inside the Reception Building. Most material is deposited directly by tipper vehicle into the reception pit. However, very dry material (>25% dry matter) is deposited into one of the holding bays for mixing with the food waste in the hopper as it is too dry to be fed directly into hammer mill.
f	Ensure waste compatibility prior to mixing or blending of waste	Due to the nature of the feedstocks and waste pre-acceptance checks there is no potential for issues with waste compatibility.
g	Sort incoming solid waste	Sorting of incoming solid waste is carried out as described above (e).
1.1 Waste Management Measure		
BAT 3	**In order to facilitate the reduction of emissions to water and air, BAT is to establish and to maintain an inventory of waste water and waste gas streams, as part of the environmental management system (see BAT 1), that incorporates all of the following features:**	
i	Information about the characteristics of the waste to be treated and the waste treatment	<u>Origin of Emissions / Emission Points</u> The Process Flow Diagram (Appendix A) shows inputs and outputs

processes, including:

- simplified process flow sheets that show the origin of the emissions.
- descriptions of process-integrated techniques and wastewater/waste gas treatment at source including their performances.

including the origin of any emissions.

Emissions to air are:

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
Generator Exhaust	Oxides of Nitrogen	Generator Exhaust	500mg/Nm³	Hourly Mean	Annual monitoring	ISO 10849: 1996
	Carbon monoxide	Generator Exhaust	1400mg/Nm³	Hourly Mean		ISO 12039: 2001
	Sulphur dioxide	Generator Exhaust	350mg/Nm³	Hourly Mean		ISO 11632: 1998
	Total volatile organic compounds including methane	Generator Exhaust	1000mg/Nm³	Hourly Mean		BS EN 12619: 1999 BS EN 13526: 2002
	Non methane volatile organic compounds	Generator Exhaust	75mg/Nm³	Instantaneous Reading		BS EN 13649: 2002
	Temperature	Generator Exhaust	Gas engine exhaust gas temperature where the exhaust leaves the engine shall be no less than 200 degrees Celsius.	Instantaneous Reading		BS 6069: 1993
Gas Flare	Oxides of Nitrogen	Gas Flare	150mg/Nm³	Hourly Mean	Annual monitoring	ISO 10849: 1996
	Carbon monoxide	Gas Flare	50mg/Nm³	Hourly Mean		ISO 12039: 2001
	Total volatile organic compounds including methane	Gas Flare	10mg/Nm³	Hourly Mean		BS EN 12619: 1999 BS EN 13526: 2002

No emissions to water specified within the permit.

The approach to biogas quality control is four-fold.

Step 1:
Limit contaminants
By addition of iron hydroxide powder to feedstock. 20 kg degradable bags of iron hydroxide powder will be added to the

		digester feed hoppers. The presence of iron will limit the amount of hydrogen sulphide in the biogas. **Step 2:** Dewatering - All biogas passes through a condensate chamber to remove water from the saturated biogas. Prior to the biogas CHP. **Step 3:** It is also a possibility to add an oxygen generation system that will be used to inject some oxygen into the digester headspace to give around 0.4% oxygen by volume in the biogas. This will promote the growth of sulphur oxidising bacteria within the digester headspace. This leads to the formation of elemental sulphur that falls back into the digester. Consideration given if regular foaming events were to occur **Step 4:** Activated Carbon Filtration are available and upgradable for retrospectively, fitting . These filters will remove H_2S, Ammonia and VOCs. Membrane filtration. will remove CO_2prior to energy pod The plant is designed to achieve >90% availability on the CHP engines. Achieving good quality biogas with low levels of contamination is a key operating principle. Biagas quality is measured online at the inlet of the plant and at the biogas CHP inlet. Changes to feedstock, iron hydroxide and oxygen dosing will be made if biogas quality deteriorates. The biogas flow measurement and quality measurements are continuous with values sent back to the central control system and

		recorded on the SCADA system. Alarms are provided for high H2S at the biogas CHP. If oxygen or H_2S are out of range, then the system alarms and shuts down.
ii	Information about the characteristics of the wastewater streams	There is no waste water as all dirty water generated is used in the AD process.
iii	Information about the characteristics of the waste gas streams, such as: • average values and variability of flow and temperature. • average concentration and load values of relevant substances and their variability (e.g., organic compounds, POPs such as PCBs); • flammability, lower and higher explosive limits, reactivity. • presence of other substances that may affect the waste gas treatment system or plant safety (e.g., oxygen, nitrogen, water vapour, dust).	Pressure is measured in the digester headspace -a high-pressure alarm is triggered if the gas storage is 100% full and the pressure reaches 4mbar. The pressure relief valves operate at Smbar. The biogas flare will start before the alarm setpoint. Therefore, the alarm should only operate in rare situations. There is no interlock to prevent feeding as the other measures described above will control the situation. If the liquid level in the digester exceeds the high-level alarm setpoint (indicating a blocked outlet) then the feeding is stopped. Biogas levels are measured at the energy pod boiler house Unit/Scada AII mechanical equipment and instrumentation in direct contact with biogas is ATEX certified. The site DSEAR assessment document is required to hold a full list of all ATEX certified equipment. Hydrogen sulphide levels in the biogas are measured at both the biogas CHP engines. High hydrogen sulphide levels will generate alarms at the biogas CHP. High H_25 will shut down maintaining good operation of the pre-treatment of both the biogas CHP is essential for successful operation of the AD plant.

1.1 Waste Storage		
BAT 4	**In order to reduce the environmental risk associated with the storage of waste, BAT is to use all of the techniques given below.**	
a	Optimised storage location. This includes techniques such as: • the storage is located as far as technically and economically possible from sensitive receptors, watercourses, etc. • the storage is located in such a way so as to eliminate or minimise the unnecessary handling of wastes within the plant (e.g., the same wastes are handled twice or more or the transport distances on site are unnecessarily long).	Solid waste feedstock is stored in the dedicated Reception Building benefiting from fast-acting roller shutter door. Solid food waste is tipped in a reception pit inside the Reception Building, which minimises handling of the waste. Most material is deposited directly by tipper vehicle into the reception pit. However, very dry material (>25% dry matter) is deposited into one of the holding bays for mixing with the food waste in the hopper as it is too dry to be fed directly into hammer mill.
b	Adequate storage capacity. Measures are taken to avoid accumulation of waste, such as: • the maximum waste storage capacity is clearly established and not exceeded taking into account the characteristics of the wastes (e.g., regarding the risk of fire) and the treatment capacity. • the quantity of waste stored is regularly monitored against the maximum allowed storage capacity. • the maximum residence time of waste is clearly established	The proposed maximum annual tonnage of waste is 100,000 tonnes per year which is an increase from 49,000, tonnes per year in current permit. See below the treatment capacity calculations based on proposed 100,000 tonnes per annum: *The two digester tanks (with a maximum working capacity of Digester Tank 1: 2,430 m^3 and Digester Tank 2: 3,060 m^3) operate in parallel. The Pre-storage tanks and the Digestate storage tank have not been included in the treatment capacity calculation as there is no gas collection from these tanks.* *Conversion factor for digesting material in tanks: 1m^3 is* *equivalent to 1 tonne The minimum hydraulic retention time*

		is 21 days; calculated as follows: • *Net capacity in D1 and D2 combined = 5,490m^3* • *100,000t/annum minus 3% for waste plastic rejects = 97,000t* • *97,000 divided by 365 days is= 265.75* • *5,490 divided by 265.75 = 20.66 HRT* *Treatment capacity of digester tank 1 = 2,430 / 21 = 116 tonnes per day* *Treatment capacity of digester tank 2 = 3,060 / 21 = 146 tonnes per day* *As there are 2 digesters - Total treatment capacity = 116 + 146 = 262 tonnes per day* The Depackaging Plant can process up to 12 tonnes per hour; the throughput is between 8 tonnes per hour and 12 tonnes per hour depending on feed rate. However, the type of feedstock currently accepted on site is not packaged and does not require being processed through the Depackaging plant. The maximum storage capacities and residence times are detailed in Table 1 below. The 3 x No Holding bays in the Reception Building (50 tonnes each) can be used for contingency storage if the Reception Pit becomes full.
c	Safe storage operation. This includes measures such as: • equipment used for loading, unloading and storing waste is clearly documented and labelled. • wastes known to be sensitive to heat, light, air, water, etc. are protected from	There is a dedicated telescopic handler for solid food waste. The wastes streams accepted for processing are not sensitive to heat, light, air, water etc. and therefore do not need to be protected from ambient conditions.

	such ambient conditions. • containers and drums are fit for purpose and stored securely.	
d	Separate area for storage and handling of packaged hazardous waste. When relevant, a dedicated area is used for storage and handling of packaged hazardous waste.	Hazardous waste is not accepted in accordance with the Clayton Hall Farm Feedstock Acceptance and Rejection Procedure **(SOP_3.2.4).**
1.1 Waste Handling and Transfer		
BAT 5	**In order to reduce the environmental risk associated with the handling and transfer of waste, BAT is to set up and implement handling and transfer procedures.**	
	Handling and transfer of waste are carried out by competent staff	All waste handling and transfer activities are carried out by trained staff in accordance with Standard Operating Procedures PAS 110 SOPs.
	Handling and transfer of waste are duly documented, validated prior to execution and verified after execution;	Waste is only accepted in line with a supplier agreement. Products delivered to site are pre booked by the AD Manager. All feedstocks coming into site are recorded and the data stored on the electronic system. This includes feedstock type, tonnage, date, and time. Pre-treated waste entering the AD process is measured through SCADA (daily feed program to D1 and D2) and verified through monitoring of levels within the Buffer Tanks.
	Measures are taken to prevent, detect and mitigate spills;	The Clayton Hall Farm Bioenergy Feedstock Acceptance and Rejection Procedure **(SOP_3.2.4)** includes measures for spillage prevention including a procedure for liquid waste dispatch. Spillages are managed in accordance with the Clayton Hall Farm Bioenergy Emergency Action Plan **(CHFB_EAP)**. All new starters are trained on the plan and refresher training is provided as required and includes spill response scenarios.

	Operation and design precautions are taken when mixing or blending wastes (e.g., vacuuming dusty/powdery wastes).	Waste is only mixed within the enclosed waste treatment infrastructure within the Reception Building and within the sealed tank infrastructure.
1.2 Monitoring		
BAT 6	**For relevant emissions to water as identified by the inventory of waste water streams (see BAT 3), BAT is to monitor key process parameters (e.g., waste water flow, pH, temperature, conductivity, BOD) at key locations (e.g., at the inlet and/or outlet of the pre-treatment, at the inlet to the final treatment, at the point where the emission leaves the installation).**	
Not applicable	There are no emissions to water. Dirty water from the Reception Building and, in the case of spillages, from the secondary containment sump is collected and reused in the process.	
1.2 Monitoring		
BAT 7	**BAT is to monitor emissions to water with at least the frequency given below, and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.**	
Not applicable	There are no emissions to water. Dirty water from the Reception Building and, in the case of spillages, from the secondary containment sump is collected and reused in the process.	

1.2 Monitoring of Point Source Emissions to Air		
BAT 8	**BAT is to monitor channelled emissions to air with at least the frequency given below, and in accordance with EN standards. If EN standards are not available, BAT is to use ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality.**	
H_2S	Once every six months. No EN standard available. See BAT 34	Odour monitoring will be carried out every 6 months as per BAT 34.
NH_3	Once every six months. No EN standard available. See BAT 34	Odour monitoring will be carried out every 6 months as per BAT 34.
Odour Concentration	The monitoring of NH_3 and H_2S may be used as an alternative to the monitoring of the odour concentration. See BAT 34	Odour monitoring will be carried out every 6 months as per BAT 34.
1.2 Monitoring of Diffuse Emissions to Air		
BAT 9	**BAT is to monitor diffused emissions of organic compounds to air from the regeneration of spent solvents, the decontamination of equipment containing POPs with solvents, and the physico-chemical treatment of solvents for the recovery of their calorific value, at least once per year using one or a combination of the techniques given below**	
Not applicable	There are no diffuse emissions of organic compounds to air from the regeneration of spent solvents, the decontamination of equipment containing POPs with solvents, and the physico-chemical treatment of solvents for the recovery of their calorific value.	
1.2 Monitoring Odour Emissions		
BAT 10	**BAT is to periodically monitor odour emissions.**	
	Odour emissions can be monitored using: • EN standards (e.g., dynamic olfactometry	Monitoring will be carried out in accordance with EN standards (e.g., dynamic olfactometry according to EN 13725 in order to determine the odour concentration) in accordance with BAT 8 and BAT 34. The

	according to EN 13725 in order to determine the odour concentration or EN 16841-1 or -2 in order to determine the odour exposure); • when applying alternative methods for which no EN standards are available (e.g., estimation of odour impact), ISO, national or other international standards that ensure the provision of data of an equivalent scientific quality. The monitoring frequency is determined in the odour management plan (see BAT 12).	Clayton Hall Farm Bioenergy Odour Management Plan **(CHFB_OMP)** incorporates biofilter monitoring.
1.2 Monitoring Resource Efficiency		
BAT 11	**BAT is to monitor the annual consumption of water, energy and raw materials as well as the annual generation of residues and waste water, with a frequency of at least once per year.**	
	Monitoring includes direct measurements, calculation or recording, e.g., using suitable meters or invoices. The monitoring is broken down at the most appropriate level (e.g., at process or plant/installation level) and considers any significant changes in the plant/installation	Clayton Hall Farm Bioenergy (CHFB) maintains a log of: • Wastes accepted for treatment accompanied with Waste Transfer Notes • Any residual waste removed off site (Waste Transfer Notes / Quarterly Waste Returns). Recorded on CHFB dashboard for internal review. • There is no wastewater produced on site as dirty water is recirculated through the AD plant for treatment. • Water usage is measured via a flow meter. • Energy used is measured via a meter which measures mains electricity imports. This is recorded weekly from the meter. • Raw materials used • Digestate produced • Biogas production, electricity, and heat generation

		Waste production is recorded and audited in accordance with the Waste Management Plan **(CHFB_WMP).** Clayton Hall farm Bioenergy will report the following to the Environment Agency on an annual basis, or as stipulated in the Environmental Permit. • Waste in and out (waste returns) on a quarterly basis • Digestate production • Raw material usage • CHP engine usage • CHP engine efficiency • Emergency flare operation – hours of usage • Electricity exported • Energy usage; and • Water usage
1.3 Emissions to Air		
BAT 12	**BAT is to monitor the annual consumption of water, energy and raw materials as well as the annual generation of residues and waste water, with a frequency of at least once per year.**	
	A protocol containing actions and timelines;	A Clayton Hall Farm Bioenergy Odour Management Plan **(CHFB_ OMP)** has been developed as part of the Environmental Management System and includes a protocol containing actions and timelines.
	A protocol for conducting odour monitoring as set out in BAT 10;	The OMP contains a section on odour monitoring as described in BAT 10. Point source emission monitoring from the odour abatement plant stack will be carried out periodically and in accordance with EN standards (e.g., dynamic olfactometry according to EN 13725 in order to determine the odour concentration).
	A protocol for response to identified odour incidents, e.g., complaints;	The OMP contains a section detailing the protocol for responding to odour incidents including complaints.

	An odour prevention and reduction programme designed to identify the source(s); to characterise the contributions of the sources; and to implement prevention and/or reduction measures.	The OMP includes an odour prevention and reduction programme designed to identify the source(s); to characterise the contributions of the sources; and to implement prevention and/or reduction measures.
1.3 Prevention or reduction of Odour Emissions		
BAT 13	**In order to prevent or, where that is not practicable, to reduce odour emissions, BAT is to use one or a combination of the techniques given below.**	
a	Minimising residence times	See BAT 4 b waste storage residence time.
b	Using chemical treatment	This technique is not used.
c	Optimising aerobic treatment	The digesters are fully enclosed - every effort is made to capture as much of the biogas generated as possible and to use it either in the biogas CHP. If the gas level reaches 100% full then the biogas flare will be utilised to draw down the level of gas. Prior to any release by PRV on the digesters an alarm will be activated, and CHFB will make efforts to prevent any release to the atmosphere. Clayton Hall Farm Bioenergy meets the PAS110 quality standard and has gained certification approval with the Biofertiliser Certification Scheme

1.3 Prevention or reduction of Diffuse Emissions to Air		
BAT 14	**In order to prevent or, where that is not practicable, to reduce diffuse emissions to air, in particular of dust, organic compounds and odour, BAT is to use an appropriate combination of the techniques given below.**	
a	Minimising the number of potential diffuse emission sources. This includes techniques such as: • appropriate design of piping layout (e.g., minimising pipe run length, reducing the number of flanges and valves, using welded fittings and pipes); • favoring the use of gravity transfer rather than using pumps. • limiting the drop height of material. • limiting traffic speed; and • using wind barriers.	The plant design is optimised to reduce pipe run lengths, flanges and valves. Vehicles are restricted to 5 miles per hour on site as a health and safety measure; this also reduces potential noise and dust emissions. Fugitive emissions of odour are monitored daily in accordance with the CHFB Odour Management Plan **(CHFB_OMP)** and recorded in the Clayton Hall Farm Bioenergy Site Daily Record Sheet.
b	Selection and use of high- integrity equipment. This includes techniques such as: • valves with double packing seals or equally efficient equipment. • high-integrity gaskets (such as spiral wound, ring joints) for critical applications. • pumps/compressors/agitators fitted with mechanical seals instead of packing. • magnetically driven pumps/ compressors/agitators.	All equipment and systems on site are supplied as per vendors original specification and are maintained to that standard thereafter when replacing. There are examples within the site infrastructure of all of the techniques listed.

c	Corrosion prevention	Materials are selected for suitability and longevity.
d	Containment, collection and treatment of diffuse emissions	The AD plant has been designed to minimise emissions to air. The pre-storage mobile tanks are housed within a building and connected to an odour control unit which draws air through it at 280 m3/hr. The pasteuriser tanks are linked to the main odour control system with 250m3/hr. being extracted from the outlet of each of the 2 tanks. The waste storage is enclosed and linked to the Scada, with the main extraction points focused on the areas of the highest odour potential. All material within the silage clamps will be refreshed within a 24hr period. Digestate will be stored in a lagoon. Digestate from the separator will be collected in a tanker and removed from site. The digesters are fully enclosed - every effort is made to capture as much of the biogas generated as possible and to use it either in the biogas CHP. If the gas level reaches 100% full then the biogas flare will be utilised to draw down the level of gas. Prior to any release by PRV on the digesters an alarm will be activated, and the operator will make efforts to prevent any release from the atmosphere. Fugitive emissions will be assessed on a daily basis and recorded on the Daily Check Sheet. If fugitive emissions are observed, procedures will be followed.
e	Dampening	Due to the hard surfaces throughout the site dust raising is not an issue. However, if there were any emissions of dust observed as part of daily site inspections then dampening would be carried out.

f	Maintenance	All plant and equipment are subject to a planned preventative maintenance programme in accordance with: • Clayton Hall Farm Bioenergy Daily Record Sheet • Daily Checks for mobile plant • Daily Maintenance Schedule
g	Cleaning of waste treatment and storage areas	Cleaning of the Reception Building is carried out in accordance with the Clayton Hall Farm Bioenergy Feedstock Acceptance and Rejection Procedure **(CHFB_3.2.4):** • Once unloaded, wash off the back and wheels of the vehicle using the jet washer. • Only when the vehicle is clean and ready to go can the exit door be opened. It should be ensured that the exit door is open for the minimum amount of time.
h	Leak detection and repair (LDAR) programme	A Leak Detection and Repair (LDAR) programme will be developed to measure diffuse emissions of ammonia, VOCs including methane and odour from all sources identified in the LDAR.
1.3 Emissions from Flaring		
BAT 15	**BAT is to use flaring only for safety reasons or for non-routine operating conditions (e.g. start-ups, shutdowns) by using both of the techniques given below.**	
a	Correct plant design. This includes the provision of a gas recovery system with sufficient capacity and the use of high-integrity relief valve	Biogas is not routinely flared to atmosphere. The flare is only used during periods of extended CHP maintenance and during abnormal operating conditions should the biogas storage become full. Digesters (D1 and D2) line wire gas level indicator sends a signal to

		SCADA which is then converted to a % level reading. A High gas level indication automatically triggers the start of the flare and if flare fails to start then SMS alert message is sent to the duty operator. Flaring is a more favorable environmental outcome than release of raw biogas through pressure relief valves. Venting is used only in extreme circumstances as a precautionary approach to prevent catastrophic pressure build up within the system. Both are minimised as much as possible by monitoring and efficient operation of the site.
b	Plant management. This includes balancing the gas system and using advanced process control.	Gas volume is monitored and regulated through process monitoring. The process is monitored and controlled in accordance with PAS110 Procedure **(SOP_3.7.1)** and resulting process management which includes regulation of feed rates and monitoring of dry matter content and biochemical methane potential of feedstocks.
1.3 Reducing Emissions from Flares		
BAT 16	**In order to reduce emissions to air from flares when flaring is unavoidable, BAT is to use (both of) the techniques given below.**	
a	Correct design of flaring devices. Optimisation of height and pressure, assistance by steam, air or gas, type of flare tips, etc., to enable smokeless and reliable operation and to ensure the efficient combustion of excess gases.	Flaring will only take place in the event of severe equipment failure at the site. Operational priority is to use biogas at the CHP before the flare is used. The flare will only operate if the biogas storage is full. The operational hours are recorded. If used for more than 10% of the annual operating hours, then monitoring of the flare would be undertaken. During start up the flare will be used until the biogas reaches sufficient quality to allow for use in the biogas CHP. This period will be kept to a minimum. The flare has a residence time of 0.3 seconds and temperature of 1050 deg C. A record of the amount of biogas that is burned in the flare will be recorded and kept by the plant manager.

		The flare will only operate if the biogas storage is full. The operational hours are recorded. If used for more than 10% of the annual operating hours, then monitoring of the flare would be undertaken.
b	Monitoring and recording as part of flare management. This includes continuous monitoring of the quantity of gas sent to flaring. It may include estimations of other parameters (e.g., composition of gas flow, heat content, ratio of assistance, velocity, purge gas flow rate, pollutant emissions (e.g., NOX, CO, hydrocarbons), noise). The recording of flaring events usually includes the duration and number of events and allows for the quantification of emissions and the potential prevention of future flaring events.	The number of operating hours for the flare is recorded on the SCADA System and this information will be submitted to the Environment Agency annually in accordance with the varied Environmental Permit. The flare incorporates a Digital Flow Transmitter to allow monitoring of the flow of gas to the flare. It is in economic interests of Clayton Hall Farm Bioenergy to reduce the amount of biogas lost to flaring and to conduct a root cause analysis to reduce the potential for future flaring events.
1.4 Noise and Vibration		
BAT 17	**In order to prevent or, where that is not practicable, to reduce noise and vibration emissions, BAT is to set up, implement and regularly review a noise and vibration management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:**	
I	A protocol containing appropriate actions and timelines;	The applicability of BAT 17 is restricted to cases where a noise or vibration nuisance at sensitive receptors is expected and/or has been substantiated. The Operator has confirmed that no noise complaints have been received and noise nuisance has not been detected. A Noise and Vibration Management Plan will be developed if noise and/or vibration become a nuisance.
II	A protocol for conducting noise and vibration monitoring;	As above.

III	A protocol for response to identified noise and vibration events, e.g., complaints;	As above.
IV	A noise and vibration reduction programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures.	As above.
1.4 Noise and Vibration		
BAT 18	**In order to prevent or, where that is not practicable, to reduce noise and vibration emissions, BAT is to use one or a combination of the techniques given below.**	
a	Appropriate location of equipment and buildings. Noise levels can be reduced by increasing the distance between the emitter and the receiver, by using buildings as noise screens and by relocating building exits or entrances	The closest residential receptor to the AD Facility is the onsite farm cottage known as 'The Bungalow' approximately 112m to the centre of the site. The CHP is partially screened from this receptor via the Reception Building and farm buildings. The closest offsite residential premises being located approximately 852m from the centre of the site.
b	Operational measures. This includes techniques such as: • inspection and maintenance of equipment. • closing of doors and windows of enclosed areas, if possible. • equipment operation by experienced staff. • avoidance of noisy activities at night, if possible. • provisions for noise control during maintenance, traffic, handling and treatment activities.	Operational measures to reduce noise emissions include: • Planned preventative maintenance of plant and equipment including the flare and the CHPs. • Only trained staff are able to operate equipment. • There is a 5mph speed limit on site.

c	Low-noise equipment. This may include direct drive motors, compressors, pumps and flares	The Enclosed Thermal Combustor of the flare reduces noise emissions.
d	Noise and vibration control equipment. This includes techniques such as: • noise reducers • acoustic and vibrational insulation of equipment • enclosure of noisy equipment • soundproofing of buildings.	The CHP is housed in a sound-proof container.
e	Noise attenuation. Noise propagation can be reduced by inserting obstacles between emitters and receivers (e.g., protection walls, embankments and buildings).	See BAT 18a above
1.5 Emissions to Water		
BAT 19	**In order to optimise water consumption, to reduce the volume of waste water generated and to prevent or, where that is not pr acticable, to reduce emissions to soil and water, BAT is to use an appropriate combination of the techniques given below.**	
a	Water management. Water consumption is optimised by using measures which may include: • water-saving plans (e.g., establishment of water efficiency objectives, flow diagrams and water mass balances); • optimising the use of washing water (e.g., dry cleaning instead of hosing down, using trigger control on all washing equipment)	Due to the low dry matter content of the feedstock mix and the recirculation of rainwater, additional water is generally not required for the process. Water is used to wash down vehicles which have dispatched solid waste inside the Reception Building. This water use is minimised via the use of trigger control hoses. All of the water collecting within the sump in the Reception Building is pumped to the Buffer Tanks for use in the AD process.

		Water collected within the secondary containment sump, if clean may be diverted to the lagoon for storage/future use if required.
b	Water recirculation	As described above the recirculation of clean and dirty water is optimised.
c	Impermeable surface. Depending on the risks posed by the waste in terms of soil and/or water contamination, the surface of the whole waste treatment area (e.g., waste reception, handling, storage, treatment and dispatch areas) is made impermeable to the liquids concerned.	The whole site, both clean and dirty areas, benefits from an impermeable concrete surface. The Reception Building benefits from a sealed drainage system from which dirty water is collected, stored in the Buffer Tanks and reused in the process.
d	Techniques to reduce the likelihood and impact of overflows and failures from tanks and vessels. Depending on the risks posed by the liquids contained in tanks and vessels in terms of soil and/or water contamination, this includes techniques such as: • overflow detectors. • overflow pipes that are directed to a contained drainage system (i.e., the relevant secondary containment or another vessel). • tanks for liquids that are located in a suitable secondary containment; the volume is normally sized to accommodate the loss of containment of the largest tank	All the tanks benefit from high level sensors and alarms and are connected to SCADA as detailed below: • The digesters (D1 and D2) benefit from pressure liquid level indicators which send a signal to SCADA which then converts the signal to a % level reading. The tanks are also equipped with inductive high level liquid sensors that is safety interlocked to automatically STOP feeding the digester with feedstock blend • from the buffer tank when the high liquid level is indicated. This then triggers an alert SMS alert message to be sent to the duty operator via the SCADA duty planner. • Buffer tanks (B1 and B2) are equipped with ultra-sonic level indicators that send mA signal to SCADA. When high level indication is seen this triggers SMS alert message to the duty operator. • Digestate storage tanks are equipped with a high-level

	within the secondary containment. • isolation of tanks, vessels and secondary containment (e.g., closing of valves).	float switch that sends current when closed to the SCADA indicating a high-level condition within the tank. This then stops the pasteurisation process via safety interlock. The stoppage of the pasteurisation process then triggers an alert SMS alert message to be sent to the duty operator via the SCADA duty planner. The containment capacity is in accordance with CIRIA C736, with the calculations demonstrating that the secondary containment capacity is greater than 110% of the largest tank (25% of the combined tank volume is less than 110% of the largest tank). A report on the suitability of the secondary containment system with respect to CIRIA C736 and forms a supporting document to the current permit variation application. The process of management of water collecting within the secondary containment sump is such that daily checks are carried out on the level in the drainage sump and if there is liquid in the sump then the manually operated pump is used to pump the liquid to either the liquid waste tanks or lagoon (if required and clean).
e	Roofing of waste storage and treatment areas	All waste storage and treatment are carried out in the Reception Building or within the enclosed AD plant infrastructure thus reducing production of dirty water.
f	Segregation of water streams	The site has been designed with segregation of clean and dirty water. The Reception Building is always designated as dirty. The secondary containment bund is normally clean, but all water is collected within sumps and can be diverted to dirty if a spillage occurs.

g	Adequate drainage infrastructure. The waste treatment area is connected to drainage infrastructure. Rainwater falling on the treatment and storage areas is collected in the drainage infrastructure along with washing water, occasional spillages, etc. and, depending on the pollutant content, recirculated or sent for further treatment.	As previously described the waste storage and treatment area benefits from a building and an appropriate drainage arrangement; all dirty water is reused in the process.
h	Design and maintenance provisions to allow detection and repair of leaks. Regular monitoring for potential leaks is risk- based, and, when necessary, equipment is repaired. The use of underground components is minimised. When underground components are used, and depending on the risks posed by the waste contained in those components in terms of soil and/or water contamination, secondary containment of underground components is put in place.	The pipework is as per the original vender specification fixed PVC pipe work single continuous HDPE pipe without any underground junctions. It is 8 inches in diameter and uses a secure fusion welding jointing system. All pipework and services run within a trench system which has been fully- lined with GCL, or over the surface of sidewalls, and there are no known breaches through the base or perimeter sidewall of the secondary containment area. The current arrangement is deemed to be acceptable and compliant with the general requirements of the European Commission BAT report.
i	Appropriate buffer storage capacity is provided for wastewater generated during other than normal operating conditions using a risk-based approach (e.g. taking into account the nature of the pollutants, the effects of downstream wastewater treatment, and the receiving environment). The discharge of wastewater from this buffer storage is only possible after appropriate measures are taken (e.g., monitor, treat, reuse).	Wastewater generated during abnormal operating conditions would be stored within the secondary containment systems, the sizing and suitability of which have been described in preceding sections.

1.5 Emissions to Water - Treatment		
BAT 20	**In order to reduce emissions to water, BAT is to treat wastewater using an appropriate combination of the techniques below**	
Not applicable	No treatment of wastewater.	
1.6 Emissions from Accidents and Incidents		
BAT 21	**In order to prevent or limit the environmental consequences of accidents and incidents, BAT is to use all of the techniques given below, as part of the accident management plan (see BAT 1)**	
a	Protection measures. These include measures such as: • protection of the plant against malevolent acts; fire and explosion protection system, containing equipment for prevention, detection, and extinction; and • accessibility and operability of relevant control equipment in emergency situations.	The plant can be operated remotely via a secure remote login in system which ensure a direct link to the SCADA system. The site benefits from CCTV monitoring and recording for the process shed, in front of the process shed where vehicles come into site and the yard area. The CCTV can be logged into remotely by site personnel. A DSEAR assessment has been carried out and recommendations for remedial action are being carried out. This ensures appropriate explosion protection measures are in place. A Fire Risk Assessment was carried out in 2023. Fire extinguishers (foam and CO2) are located at various locations throughout the premises.
b	Management of incidental/accidental emissions. Procedures are established and technical provisions are in place to manage (in terms of possible containment) emissions from accidents and incidents such as emissions from spillages, firefighting water, or safety valves	The CHFB Emergency Action Plan **(CHFB_EAP)** contains Standard Operating Procedures for emergency situations: • Fire/Explosion. • Gas Leak – CHP Engines. • Gas Leak – Inside the Building. • Tank Failure. • Electrical Failure. • Mechanical Failure.

		• Oil/Fuel/Chemical Spillage. • External flood. • Serious Injury. • Lightning Strike.
c	Incident/accident registration and assessment system. This includes techniques such as: • a log/diary to record all accidents, incidents, changes to procedures and the findings of inspections; and • procedures to identify, respond to and learn from such incidents and accidents.	In accordance with the Accident Management Procedure **(CHFB-3.21)** it is the responsibility of all staff to report incidents, including near misses to their line of report or the Tech EHS Manager as soon as possible. Team Leaders and Line Managers are responsible (with support from the Tech EHS Manager) for undertaking investigations following incidents. The level of investigation will be determined by the severity or potential of the incident, in accordance with the details in the Accident and Incident Reporting and Investigation Management Procedure **(SOP_3.21.7).** Any changes to procedures are made in accordance with Document Control Procedure **(SOP_3.29)**
1.7 Materials Efficiency		
BAT 22	**In order to use materials efficiently, BAT is to substitute materials with waste.**	
	Waste is used instead of other materials for the treatment of wastes (e.g., waste alkalis or waste acids are used for pH adjustment, fly ashes are used as binders).	The process makes good use of recycled dirty water and liquid waste to create a prepared feedstock in the correct dry matter range for anaerobic digestion. There is limited use of raw materials. The AD process uses primarily waste materials in order to recover biogas and digestate. Raw material use is minimised where possible and use will be reported annually to the Environment Agency in line with permit conditions as required. Opportunities will be sought to use waste materials in place of raw

		materials. A full and extensive list of raw materials has been produced and can be found in the Raw Materials Plan **(CHFB_RMP).** The list includes • Process Water • DEFRA-approved Disinfectant • Oils & Greases (for plant maintenance) • Iron Hydroxide (for desulphurisation) • Anti-Foaming Agents Raw Materials (and any relevant developments) will be reviewed The raw materials are acquired and procured for suppliers in the market and thus will be of a uniform purity content as outlined in the contractual agreements. Longer-term studies and investigations will be performed as part of the review of policies, procedures and documents. This may be done internally or an external consultant may be commissioned for the work
1.8 Energy Efficiency		
BAT 23	**In order to use energy efficiently, BAT is to use both of the techniques given below.**	
a	Energy efficiency plan. An energy efficiency plan entails defining and calculating the specific energy consumption of the activity (or activities), setting key performance indicators on an annual basis (for example, specific energy consumption expressed in kWh/tonne of waste processed) and planning periodic improvement targets and related actions.	Heat and electricity are provided by the CHP engines except in the case of power failure. Power will then be provided by the on-site stand-by generators. Heat reuse and distribution are shown on red lines on the Process Flow diagram (Drawing 006). Energy usage is monitored and reviewed annually. Records of primary energy used, energy generated, and energy

	The plan is adapted to the specificities of the waste treatment in terms of process(es) carried out, waste stream(s) treated, etc.	exported are maintained and an annual return will be made to the EA in accordance with permit requirements under an Installation permit.
b	Energy balance record. An energy balance record provides a breakdown of the energy consumption and generation (including exportation) by the type of source (i.e., electricity, gas, conventional liquid fuels, conventional solid fuels, and waste). This includes: • information on energy consumption in terms of delivered energy; • information on energy exported from the installation; • energy flow information (e.g., Sankey diagrams or energy balances) showing how the energy is used throughout the process. The energy balance record is adapted to the specificities of the waste treatment in terms of process(es) carried out, waste stream(s) treated, etc.	A Process Flow Diagram has been developed of this document (Drawing 006).
1.9 Reuse of Packaging		
BAT 23	**In order to reduce the quantity of waste sent for disposal, BAT is to maximise the reuse of packaging, as part of the residues management plan (see BAT 1).**	
	Packaging (drums, containers, IBCs, pallets, etc.) is reused for containing waste, when it is in good condition and sufficiently clean, depending on a compatibility check between the substances	There is a minimal amount of packaging waste due to the current type of feedstock being accepted and processed on site. Packaging removed from packaged waste feedstocks is washed in the

	contained (in consecutive uses). If necessary, packaging is sent for appropriate treatment prior to reuse (e.g., reconditioning, cleaning).	process to ensure maximum removal of organic materials. The resulting packaging material is compacted and sent off site to be used in an energy from waste plant which is currently the best option for this waste stream in line with the waste hierarchy.
2. BAT Conclusions For the Mechanical Treatment of Waste		
BAT 25 - BAT 32	**2.1 – 2.5 Not Applicable** (mechanical treatment of waste when it is not combined with biological treatment)	

3. BAT Conclusions For the Biological Treatment of Waste		
3.1 Overall Environmental Performance		
BAT 33	**In order to reduce odour emissions and to improve the overall environmental performance, BAT is to select the waste input.**	
	The technique consists of carrying out the pre-acceptance, acceptance and sorting of the waste input (see BAT 2) so as to ensure the suitability of the waste input for the waste treatment, e.g., in terms of nutrient balance, moisture or toxic compounds which may reduce the biological activity.	The EMS procedures for waste pre-acceptance and acceptance (see BAT 2) ensure that waste is only accepted at the facility if it is suitable for treatment within an anaerobic digester
BAT 34	**In order to reduce channelled emissions to air of dust, organic compounds and odorous compounds, including H_2S and NH_3, BAT is to use one or a combination of the techniques given below.**	

a	Adsorption	Not applicable
b	Biofilter	Not applicable
c	Fabric filter	Not applicable
d	Thermal oxidation	Not applicable
e	Wet scrubbing	Refer to CHFB_OMP

BAT - associated emission levels (BAT-AELs) for channelled NH_3, odour, dust and TVOC emissions to air from the biological treatment of waste			
Ref	**Parameter**	**BAT-AEL (Average over the sampling period)**	
Table 6.7	NH_3 - mg/Nm^3 *	0.3 - 20	Either the BAT-AEL for NH3 or the BAT-AEL for the odour concentration applies. It is proposed that odour monitoring will be carried out.
	Odour concentration - ou_E/Nm^3 *	200 - 1,000	Odour monitoring against this BAT-AEL will be carried out every 6 months in accordance with BAT 8
BAT 35	In order to reduce the generation of waste water and to reduce water usage, BAT is to use all of the techniques given below.		

a	Segregation of water streams	This is detailed within the response to BAT 19.
b	Water recirculation	This is detailed within the response to BAT 19.
c	Minimisation of the generation of leachate	Leachate may be produced from stored food waste stored in the Reception Building, but this is minimised through the short storage times; maximum of 24 hours. All leachate and dirty water are used in the AD process as a feedstock.
BAT 36-37 Not applicable 2.1 – 2.5 Not Applicable (mechanical treatment of waste when it is not combined with biological treatment)		

3.3 BAT Conclusions For the Anaerobic Treatment of Waste

3.3.1 Emissions to Air

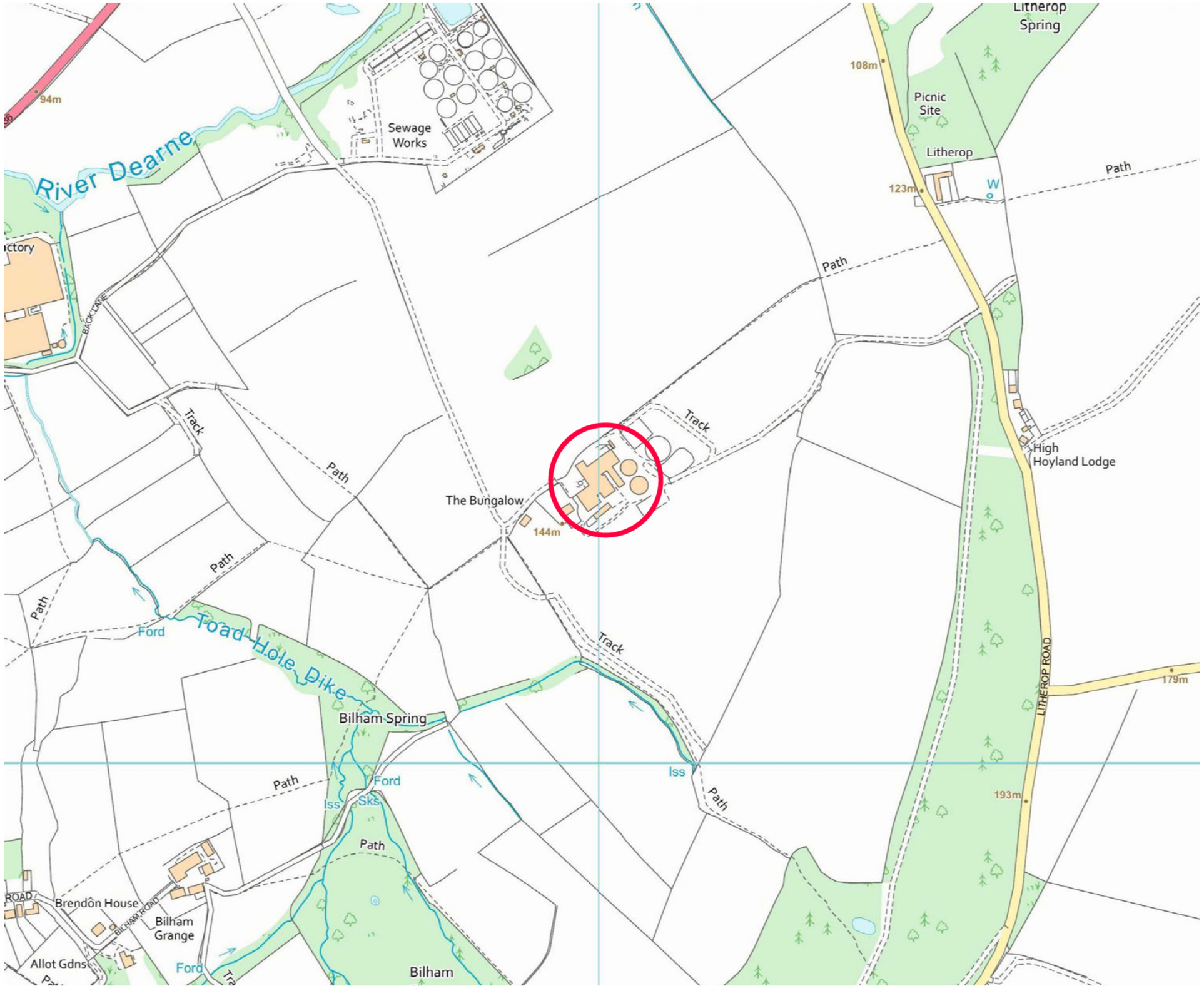
BAT 38	**In order to reduce emissions to air and to improve the overall environmental performance, BAT is to monitor and/or control the key waste and process parameters.**	
	Implementation of a manual and/or automatic monitoring system to: • ensure stable digester operation, • minimise operational difficulties, such as foaming, which may lead to odour emissions, • provide sufficient early warning of system failures which may lead to a	The following process monitoring takes place: ***Continuous monitoring (recorded on SCADA):*** 1. Gas production 2. Gas pressure 3. Gas volume 4. Temperature ***Daily Process Monitoring:*** 5. Odour at site boundary and main potential odour sources

	loss of containment and explosions. This includes monitoring and/or control of key waste and process parameters, e.g.: • pH and alkalinity of the digester feed • digester operating temperature • hydraulic and organic loading rates of the • digester feed • concentration of volatile fatty acids (VFA) and ammonia within the digester and digestate • biogas quantity, composition (e.g., H_2S) and pressure • liquid and foam levels in the digester.	6. Gas readings (CH_4, H_2S and O_2) – automated system which records gas quality every 6 hours prior to the CHP. The results are shown on SCADA. 7. Visual check on appearance and level of digesters (crust, foam, mixing speed) ***On-site testing:*** 8. The on-site testing equipment is used to test: • FOS/TAC in digesters on a weekly basis • pH and dry matter in digesters on a weekly basis • Dry matter testing of the buffer tanks on a weekly basis • Feedstock testing - dry matter content, pH and chlorides ***Samples for laboratory testing:*** 1. Feedstock - chlorides and bullet biochemical methane potential. 2. A sample is taken from each of the digesters approximately quarterly and sent off for analysis including: • pH • FOS/TAC • Dry matter • Ammonia • Volatile fatty acid speciation • Trace elements

Conclusions and Recommendations

The BAT review has highlighted that proposals are generally compliant with indicative BAT as stated in Best Available Techniques Reference Document for Waste Treatment.[1]

Section 8



NOTES

DRAWING IS A SITE SCHEMATIC

ANY ANOMALIES ON THIS DRAWING SHOULD BE BROUGHT TO THE ATTENTION OF OLIVE COMPLIANCE

LEGEND

THE SITE

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SITE
CLAYTON HALL FARM BIOENERGY LLP
CLAYTON HALL FARM, CLAYTON WEST, HUDDERSFIELD, WEST YORKSHIRE HD8 9QE

PROJECT
EA PERMIT APPLICATION

DRAWING TITLE
LOCATION PLAN

DRAWING NUMBER	REVISION
001	**0**
SCALE **1:5000 @ A3**	DATE **16.04.23**

OLIVE Compliance

NOTES

DRAWING IS A SITE SCHEMATIC

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LEGEND

PERMIT BOUNDARY

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SITE
CLAYTON HALL FARM BIOENERGY LLP
CLAYTON HALL FARM, CLAYTON WEST, HUDDERSFIELD, WEST YORKSHIRE HD8 9QE

PROJECT
EA PERMIT APPLICATION

DRAWING TITLE
CURRENT PERMITTED SITE BOUNDARY

DRAWING NUMBER	REVISION
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SCALE **1:1250 @ A3**	DATE **16.04.24**

OLIVE Compliance

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ANY ANOMALIES ON THIS DRAWING SHOULD BE BROUGHT TO THE ATTENTION OF OLIVE COMPLIANCE

LEGEND

PERMIT BOUNDARY

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SITE
CLAYTON HALL FARM BIOENERGY LLP
CLAYTON HALL FARM, CLAYTON WEST, HUDDERSFIELD, WEST YORKSHIRE HD8 9QE

PROJECT
EA PERMIT APPLICATION

DRAWING TITLE
PROPOSED PERMITTED SITE BOUNDARY

DRAWING NUMBER	REVISION
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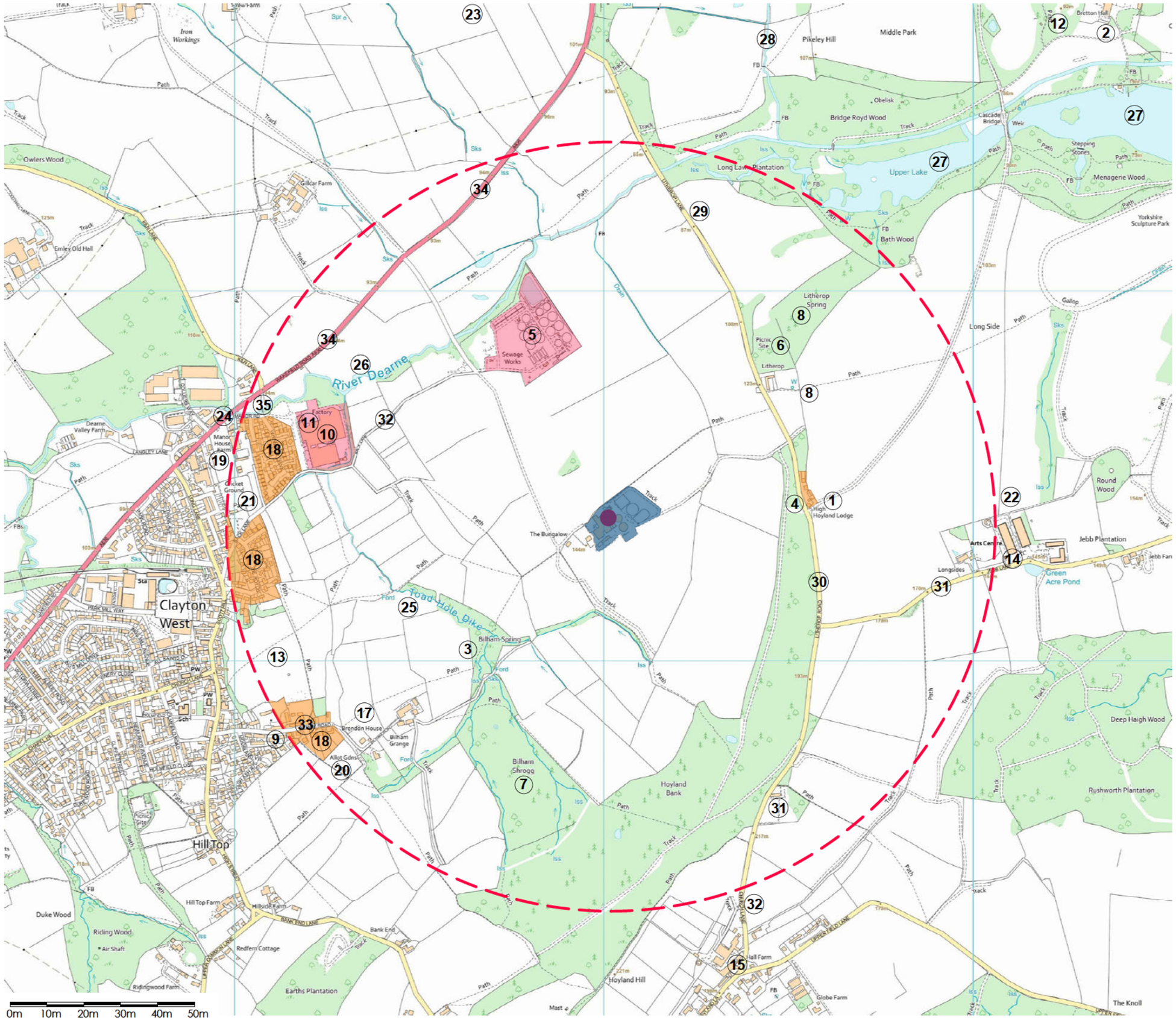
SCALE **1:1250 @ A3**	DATE **16.04.24**

OLIVE Compliance



NOTES

LEGEND

- SITE / SITE BOUNDARY
- 1KM OFF SET BOUNDARY
- RESIDENTIAL AREAS
- INDUSTRIAL/INDUSTRIAL PARK
- LIGHT INDUSTRIAL

SENSITIVE RECEPTORS

1. HIGH HOYLAND LODGE
2. BRETTON HALL GRADE II
3. BILHAM SPRING
4. BRETTON COUNTRY PARK KENNELS AND CATTERY
5. WATER SEWAGE TREATMENT WORKS
6. PICNIC SITE (LITHEROP)
7. BILHAM SHROGG
8. LITHEROP SPRING
9. BILHAM GRANGE (H WOOD & SONS) FARM
10. FACTORY
11. ADARE SEC
12. BRETTON WOODLANDS
13. KAYE'S MILLENIUM GARDEN
14. BRIAN FELL AND SON SCULPTURE & METALWORK
15. LIZ GRUNDY SCHOOL - SCULPTURE & STONE CARVING
16. CHURCH OF ALL HALLOWS
17. BRENDON HOUSE
18. DOMESTIC PREMISES
19. MANOR HOUSE FARM
20. ALLOTMENT GARDENS
21. PLAYING FIELD
22. ARTS CENTRE (ART GALLERY)
23. IRON MINING SHAFT MOUNDS AND MEDIEVAL EARTHWORKS - SOUTH OF BENTLEY GRANGE FARM
24. WOODMAN INN

LOCAL WATER COURSES

25. TOAD HOLE DIKE
26. RIVER DEARNE
27. BRETTON LAKES
28. BENTLEY BROOK

SURROUNDING ROADS/LANES

29. LITHEROP LANE
30. LITHEROP ROAD
31. JEBB LANE
32. BACK LANE
32. CHURCH LANE
33. BILAM ROAD
34. A636 WAKEFIELD ROAD
35. MANOR ROAD

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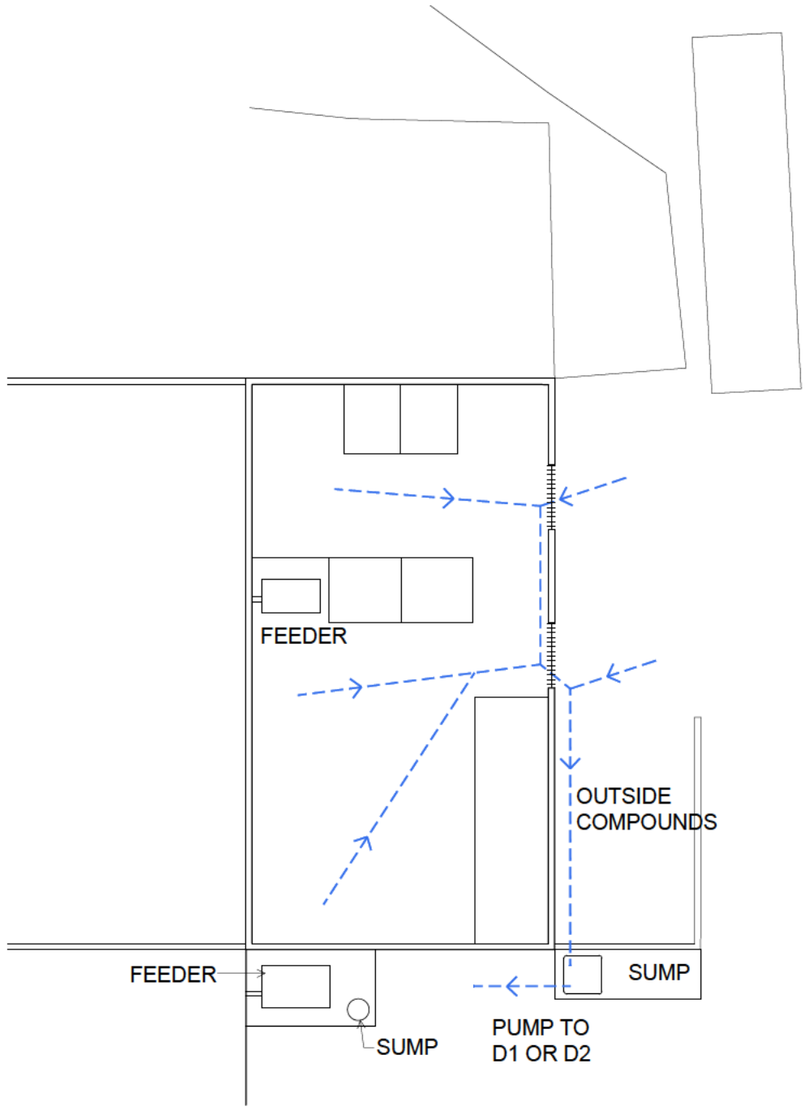
PROJECT
EA PERMIT APPLICATION

DRAWING TITLE
SENSITIVE RECEPTOR PLAN

DRAWING NUMBER	REVISION
004	**0**
SCALE **1:10000 @ A3**	DATE **16.04.24**

OLIVE Compliance



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NOTES

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ANY ANOMALIES ON THIS DRAWING SHOULD BE BROUGHT TO THE ATTENTION OF OLIVE COMPLIANCE

LEGEND

WASTE WATER FLOW

ROLLER SHUTTER DOORS

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SITE
CLAYTON HALL FARM BIOENERGY LLP
CLAYTON HALL FARM, CLAYTON WEST, HUDDERSFIELD, WEST YORKSHIRE HD8 9QE

PROJECT
EA Permit Application

DRAWING TITLE
DRAINAGE PLAN (FOOD WASTE SHED)

DRAWING NUMBER	REVISION
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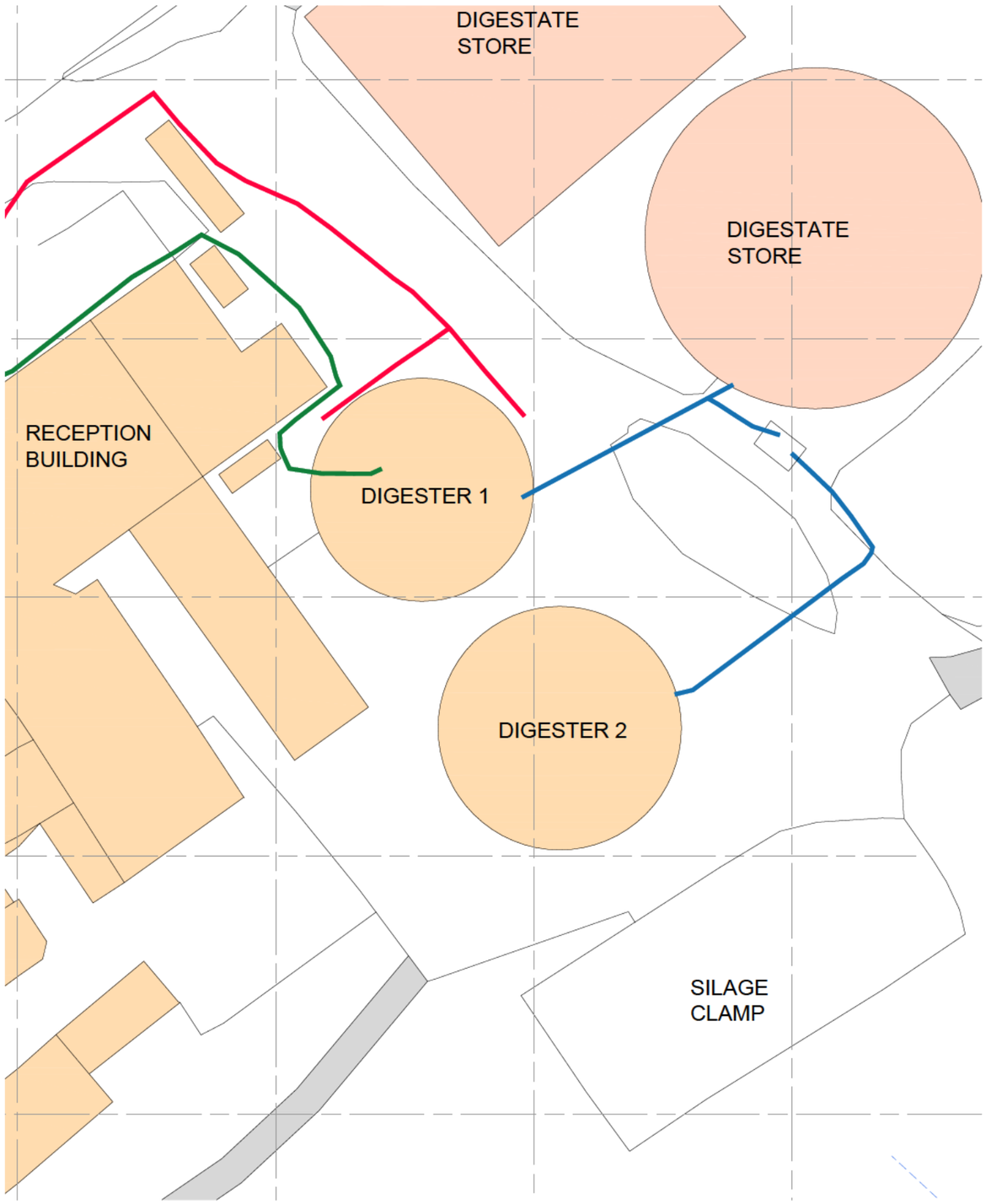
SCALE **1:200 @ A3**	DATE **16.04.24**

OLIVE Compliance



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NOTES

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ANY ANOMALIES ON THIS DRAWING SHOULD BE BROUGHT TO THE ATTENTION OF OLIVE COMPLIANCE

LEGEND

- RED LINE - YARD SURFACE WATER PUMPED INTO THE DIGESTER VIA GAS CONDENSATE PUMP
- GREEN LINE - GOOD WASTE SHED WASHINGS PUMPED INTO DIGESTER VIA MANIFOLD PUMP
- BLUE LINE - DIGESTER BUNDS FLOW TO SQUARE TANK

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CLAYTON HALL FARM BIOENERGY LLP
CLAYTON HALL FARM, CLAYTON WEST, HUDDERSFIELD, WEST YORKSHIRE HD8 9QE

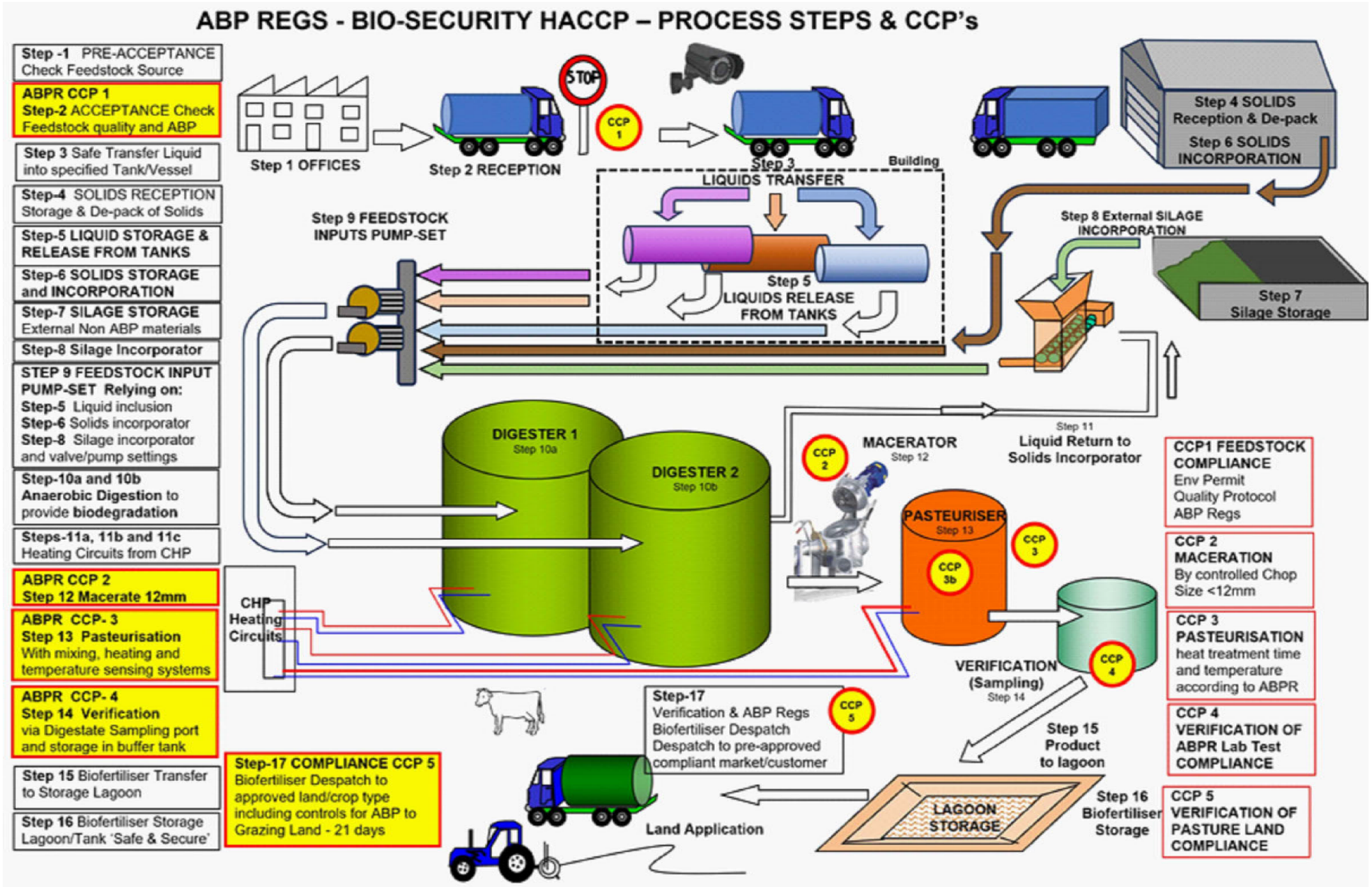
PROJECT
EA Permit Application

DRAWING TITLE
PROCESS PIPEWORK PLAN

DRAWING NUMBER	REVISION
005A	**0**
SCALE **1:200 @ A3**	DATE **05.05.24**

OLIVE Compliance

ABP REGS - BIO-SECURITY HACCP – PROCESS STEPS & CCP's



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SITE
CLAYTON HALL FARM BIOENERGY LLP
CLAYTON HALL FARM, CLAYTON WEST, HUDDERSFIELD, WEST YORKSHIRE HD8 9QE

PROJECT
EA PERMIT APPLICATION

DRAWING TITLE
AD PROCESS FLOW

DRAWING NUMBER	REVISION
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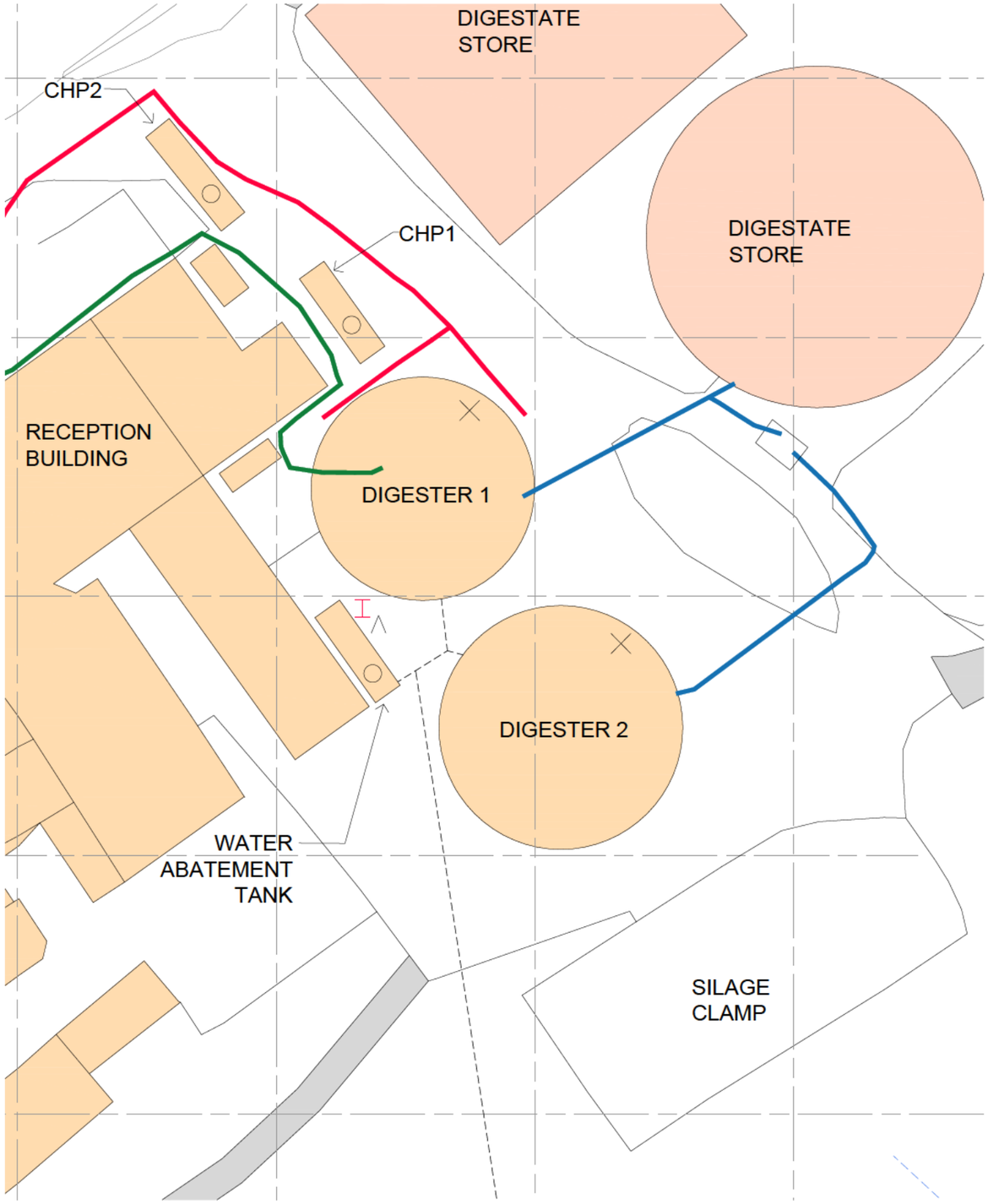
SCALE **NOT TO SCALE**	DATE **26.08.24**

OLIVE Compliance



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NOTES

DRAWING IS A SITE SCHEMATIC

ANY ANOMALIES ON THIS DRAWING SHOULD BE BROUGHT TO THE ATTENTION OF OLIVE COMPLIANCE

LEGEND

- RED LINE - YARD SURFACE WATER PUMPED INTO THE DIGESTER VIA GAS CONDENSATE PUMP
- GREEN LINE - GOOD WASTE SHED WASHINGS PUMPED INTO DIGESTER VIA MANIFOLD PUMP
- BLUE LINE - DIGESTER BUNDS FLOW TO SQUARE TANK
- PRV
- EMISSION POINTS
- INLET ABATEMENT TANK
- OUTLET ABATEMENT TANK

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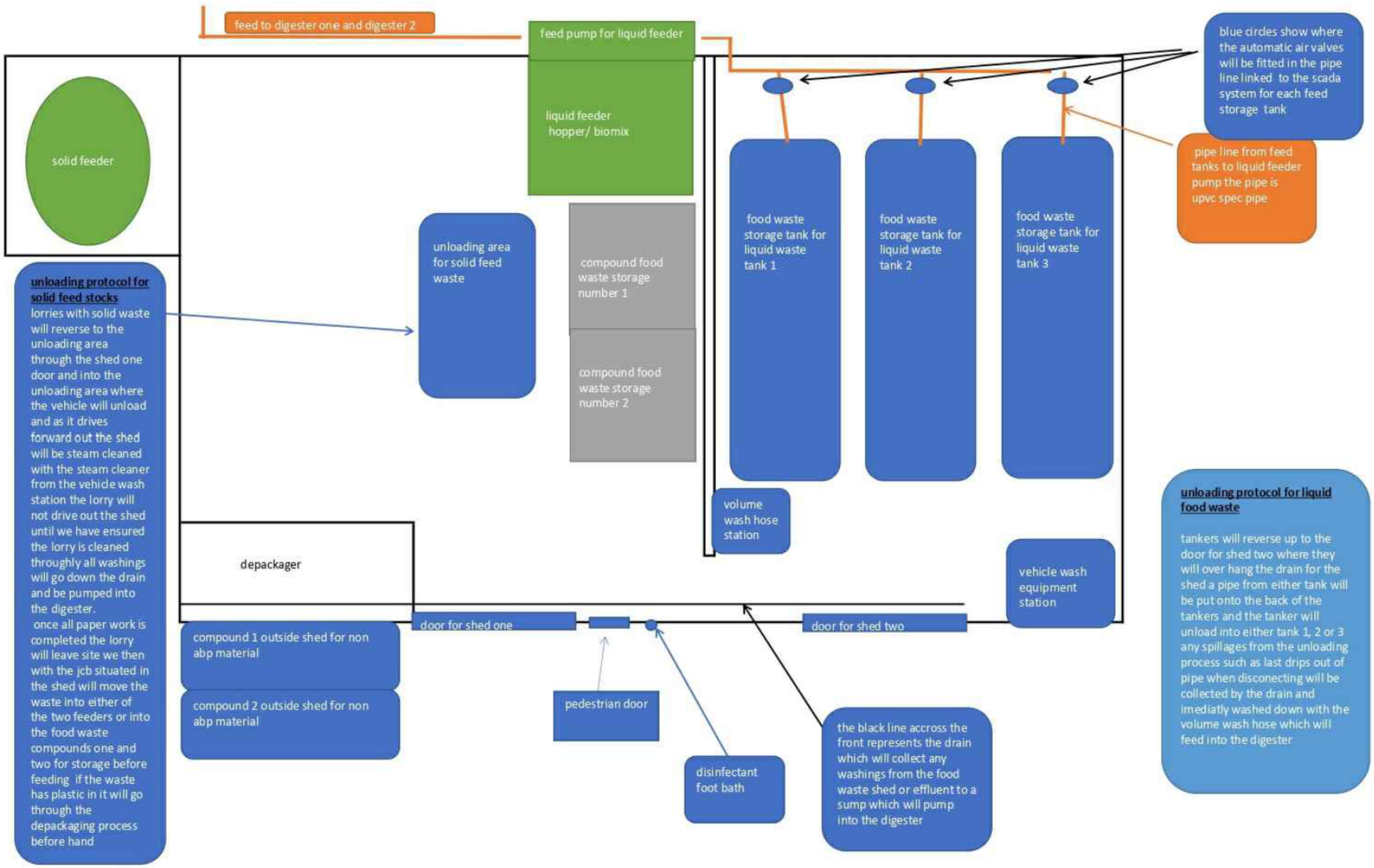
SITE
CLAYTON HALL FARM BIOENERGY LLP
CLAYTON HALL FARM, CLAYTON WEST, HUDDERSFIELD, WEST YORKSHIRE HD8 9QE

PROJECT
EA Permit Application

DRAWING TITLE
EMISSION POINTS AND ABATEMENT SYSTEMS

DRAWING NUMBER	REVISION
007	**0**
SCALE **1:200 @ A3**	DATE **24.08.24**

OLIVE Compliance



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CLAYTON HALL FARM BIOENERGY LLP
CLAYTON HALL FARM, CLAYTON WEST, HUDDERSFIELD, WEST YORKSHIRE HD8 9QE

PROJECT
EA PERMIT APPLICATION

DRAWING TITLE
FOOD WASTE SHED LAYOUT PLAN

DRAWING NUMBER	REVISION
008	**0**
SCALE **NOT TO SCALE**	DATE **26.08.24**

OLIVE Compliance

Section 9

OPERATING TECHNIQUES

CLAYTON HALL FARM BIOENERGY LLP

CLAYTON HALL FARM BIOENERGY PLANT

Clayton Hall Farm

Clayton West

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West Yorkshire

HD8 9QE

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CONTENTS

BASIS OF REPORT

This report has been prepared by Olive Compliance Ltd 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 Clayton Hall Farm Bioenergy LLP 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 Olive Compliance Ltd.

Olive Compliance Ltd disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

Information reported herein may be based on the interpretation of public domain data collected by Olive Compliance Ltd, and/or information supplied by the Client and/or its other advisors and associates. The data has been accepted in good faith as being accurate and valid.

1.0 Introduction

Clayton Hall Farm Bioenergy LLP (CHFB) have instructed Olive Compliance Limited (OCL) to prepare an application for a Bespoke Installations Environmental Permit Variation Application for their site located at Clayton West, Huddersfield, HD8 9QE.

This document provides a summary of the key operational techniques and control measures that will be implemented at the site as a result of the proposed changes.

1.1 Report Structure

This report describes the operating techniques that are to be implemented at the facility to ensure compliance with the conditions of the Environmental Permit. The report has been drafted to satisfy the requirements of Environmental Agency (EA) Guidance[1] and is divided into the following Sections.

Section 1 Introduction

Section 2 Management

Section 3 Operations

Section 4 Emissions and Monitoring

Section 5 Information

Section 6 Closure

[1]www.gov.uk/guidance/risk-assessments-for-your-environmental-permit

2.0 Management

2.1 Management System

CHFB operate their own in-house management system which ensures that:

- the risks that the activities pose to the environment are identified
- the measures that are required to minimise the risks are identified
- the activities are managed in accordance with the management system
- performance against the management system is audited at regular intervals and
- the Environmental Permit is complied with

The management system is supplemented by this document which outlines the operating techniques at the site and demonstrates conformance with the requirements of relevant Environment Agency guidance (Biological waste treatment: appropriate measures for permitted facilities).

2.1.1 Management Structure and Responsibilities

The Operator/Site Manager is responsible for day-to-day operations and compliance with the Environmental Permit with support from the site TCM.

Whenever the site is open to receive or dispatch wastes, or will carry out any of the waste management operations, it will be supervised by at least one member of staff who is suitably trained and fully conversant with the requirements of the permit regarding:

- waste acceptance and control procedures
- operational controls
- maintenance
- record-keeping
- emergency action plans and
- notifications to the Environment Agency

2.1.2 Technical Competence and Training

The site will be managed by sufficient staff, competent to operate the site. The management system will deliver the following:

- all staff will have clearly defined roles and responsibilities
- records will be maintained of the skills required for each post
- records will be maintained of the training and relevant qualifications undertaken by staff to meet the requirement of each post and
- operations will be governed by standard operating instructions

Operations at the site will be under the overall control of a technically competent person who holds the relevant Certificate of Technical Competence (COTC) under the Waste Management Industry Training and Advisory Board (WAMITAB) scheme.

Certificates are included within the application for the Technically Competent Manager.

An assessment of staff training needs will be carried out to identify the posts for which specific environmental awareness training is needed, and to determine the scope and level of such training.

The assessment of training needs will be reviewed on an annual basis.

Details of staff training procedures and recording are included in Section 11.2 of the management system.

The training programme will ensure that relevant staff are aware of the following:

- regulatory implications of the permit for the site and their specific work activity
- all potential environmental effects from operations under normal and abnormal circumstances
- the need to report deviations from the permit and
- prevention of accidental emissions and the action to be taken should accidental emissions occur

2.1.3 Site Security

Details of site security are included in Section 3.7 of the management system.

In order to prevent unauthorised access, a number of site security measures will be in place at the site including:

- Farmstead secure gates which will be locked when the site is not in use
- Fencing along the entire site boundary and
- CCTV coverage of all operational areas, with out of hours security monitoring

The site will be inspected at the commencement of each working day. Any defects or damage which compromises the integrity of the enclosure will be made secure by temporary repair as soon as is practicable. Permanent repairs will be affected as soon as practicable.

All inspections, any defects, damage or repairs will be recorded in the site diary.

2.1.4 Permit Surrender

To assist in permit surrender, records will be maintained to demonstrate how the land beneath the site has been protected at all times between the date of permit issue and the end of permit operations.

Records to be maintained will include:

- maintenance of site surfacing
- maintenance of drains and containment systems and
- actions taken to clean up incidents and spillages

2.1.5 Display of Environmental Permit

A copy of the Environmental Permit will be kept available for reference by all staff and contractors whose work may have an impact on the environment. All staff will be informed where the Environmental Permit is kept.

2.1.6 Managing Documentation and Records

Controls will be in place to ensure that all documents are issued, revised and maintained in a consistent fashion.

The documents that will be included within the scope of the controls are as follows:

- policies
- responsibilities
- maintenance records
- procedures
- inspections and monitoring records
- results of reviews
- complaints and incident records and
- training records

Records will be made and kept up to date on a daily basis to reflect deliveries, on site treatment and dispatches. All records relating to waste acceptance will be maintained and kept readily available on site and kept for a minimum of 2 years after the waste has been removed off site.

2.1.7 Reporting Non-Compliance and Taking Corrective Action

Procedures as detailed in the EMS will ensure appropriate corrective action is taken in response to problems identified at the site. The procedure will ensure that non-conformances are reported, investigated and rectified, and that failures and weaknesses are prevented. The following aspects will be considered:

- actual or potential non-compliance
- system failure discovered at internal audit
- suppliers or subcontractors breaking the agreed operating rules
- incidents, accidents, and emergencies
- malfunction, breakdown or failure of plant
- other operational system failure and
- complaints.

The action taken in response to the non-conformance may include:

- obtaining additional information on the nature and extent of the non-conformance
- discussing and testing alternative solutions
- modifying procedures and responsibilities
- seeking approval for additional resources and training and
- contacting suppliers and contractors (as applicable)

2.1.8 Inspections and Legal Compliance

There will be a formalised internal inspection and auditing procedure to ensure the facility is audited at defined intervals and that the progress of corrective and preventative action is monitored.

The frequency and nature of the audits is outlined in Section 3.8 of the EMS.

2.1.9 Monitoring, Measuring and Reviewing Environmental Performance

A formalised management structure will review environmental performance, and ensure any necessary actions are taken.

2.1.10 Operational Control, Preventative Maintenance and Calibration

The management system will complement operational procedures so as to ensure effective control of site operations, the use of approved suppliers and contract services, the maintenance of operational equipment and the calibration of monitoring equipment.

All plant and equipment will be subject to a programme of planned preventative maintenance which will follow the inspection and maintenance schedule recommended by the manufacturer.

2.1.11 Design and Construction Quality Assurance

All relevant elements of the site (not already constructed) will be designed in accordance with recognised standards, methodologies and practices.

The design process will use a risk-based approach and will be appropriately documented using drawings, specifications and method statements where appropriate to provide an adequate audit trail.

A competent and suitably qualified person will supervise the construction activities.

2.2 Accident Management Plan

The company recognises the importance of the prevention of accidents that may have environmental consequences and that it is crucial to limit those consequences.

An accident management plan will be implemented and maintained at the site to ensure the site and site staff are fully prepared for any such incidents. The accident management plan will be reviewed at least every four years or as soon as practicable after an incident, with changes made accordingly to minimise the risk of occurrence.

The following accident management plan describes the techniques that will be implemented to minimise the risks posed to the environment. Activities affecting the health and safety (H&S) of operatives, contractors and visitors will be separately managed in compliance with H&S regulation and company H&S Policy.

2.2.1 Hazard Identification

The following accident hazards have been identified from the Environment Agency's Generic Risk Assessments:

- Unauthorised Waste Acceptance
- Flooding
- Arson and/or Vandalism
- Accidental Fire and

- Spillage of Liquids

The company will employ a number of measures to prevent the realisation of these hazards to the environment and human health.

The Accident Procedure is included in Section 3.17 of the EMS.

2.2.2 Unauthorised Waste

Acceptance of unauthorised materials has the potential to cause harm to the environment and human health for example the receipt of dusty wastes could impact the amenity of the site's neighbours. All wastes received at the site will be subject to inspection and checking against the declaration on the hazardous waste consignment note. In the event that unauthorised waste is delivered to the site, the waste will be segregated and stored in a designated quarantine area within the building prior to export from site to a suitably permitted facility for recovery or disposal.

The waste acceptance procedures are included in Section 3.2 of the EMS.

2.2.3 Fire Prevention Plan

The risk of accidental combustion of the waste types accepted at the site is very low.

- incompatible materials will not be accepted at the site
- the plant inspection schedule will include checks of electrical equipment within the site to ensure that any faults are identified and repaired
- fire extinguishers will be provided at designated locations
- smoking will not be permitted in the operational areas of the site
- working practices will ensure the assessment of fire hazards and training of employees in fire prevention, e.g. the use of fire extinguishers and emergency procedures and
- no wastes will be burned on the site and any fire at the site will be treated as an emergency

In the event of a major fire, the following action will be taken:

- the Operator/Site Manager and Fire Brigade will be notified immediately and the Environment Agency as soon as practicable
- the burning area will be isolated, and attempts will be made to extinguish the fire utilising the onsite fire extinguishers if safe to do so and
- the site and buildings will be evacuated

The site has emergency fire procedures in place within the EMS supported by onsite measures such as traffic management plan, emergency contacts, fire extinguisher and hydrant location plans.

2.2.4 Loss of Containment

Loss of containment could lead to spillage and leakage of potentially contaminating liquids. To prevent loss of containment and minimise the risk and impact of releases the following measures will be implemented:

- *Containment system:* any facilities for the storage of oils, fuels or chemicals will be sited above ground on impervious bases and surrounded by impervious bund walls. The volume of the bunded compound will be at least the equivalent to the capacity of the tank plus 10%. All filling points, vents and gauges will be located within the bund.
- *Storage tanks:* storage tanks will be constructed to the appropriate British Standard CIRIA
- *Inspection:* tanks will be inspected visually on a daily basis by the site staff to ensure the continued integrity of the tanks, and identify the requirement for any remedial action
- *Spill kits*: materials suitable for absorbing and containing minor spillages will be maintained on site; and
- *Monitoring techniques:* the site staff will undertake daily monitoring for evidence of spillage and leakage.

In the event of any potentially polluting leak or spillage occurring on site, the following action will be taken:

- Minor spillages will be cleaned up immediately, using sand or proprietary absorbent. The resultant materials will be placed into containers and will then be removed from site and disposed of at a suitably permitted facility. The incident will be logged in the site diary.
- Any dry wastes spilled on site will be collected and transported to the appropriate area of the site.
- In the event of a major spillage, which is causing or is likely to cause polluting emissions to the environment, immediate action will be taken to contain the spillage and prevent liquid from entering surface water or drains. The spillage will be cleared immediately and placed in containers for offsite disposal, and the Environment Agency will be informed.

The spillage procedure (SOP_3.22) is included in Section 3.18 of the EMS.

2.2.5 Security and Vandalism

As detailed in Security Management the following security measures are in place:

- *Site perimeter*: the site benefits from fencing and hedgerows around the perimeter
- *Security gates*: will be locked at all times when the facility is unattended, and the site gate will be locked when the site is not in use at the entrance of the site
- *Inspection*: gates, fencing and hedgerows extending around the site will be inspected regularly by the operations staff to identify deterioration and damage, and the need for any repairs
- *Maintenance and repair*: gates. fencing and hedgerows will be maintained and repaired to ensure their continued integrity. In the event that damage is sustained repairs will be made by the end of the working day. If this is not possible, suitable measures will be taken to prevent any unauthorised access to the site and permanent repairs will be affected as soon as practicable
- *Authorised access system*: all visitors to the site will be required to register in the visitor's book and sign out again on exit to minimise the risk of unauthorised visitors being present on site
- *Monitoring techniques*: operational procedures, including regular inspections will ensure continual monitoring of security provision at the site

In the event of a breach of security at the site, the cause will be investigated, and appropriate mitigation measures implemented. Records to be maintained include inspections and maintenance of security fencing, gates and hedgerows, breaches of security, investigations and actions taken.

2.2.6 Flooding

The site is not identified to be in a flood risk area.

3.0 Operations

3.1 Process Description

Wastes will be accepted in accordance with waste acceptance procedures set out below. Wastes accepted at the site for processing will undergo one or a number of the following treatments prior to treatment or use on site.

- Pre-Acceptance
- Waste Acceptance
- Waste Carriers
- Waste Transfer Notes

3.2 Permitted Activities

The waste management carried out are described and limited to those within the site permit. The activities are specified in Annex I and Annex II of the Waste Framework Directive 2008 as follows.

Table S1.1 Activities		
Facility Type	**Description of activities for waste operations**	**Limits of activities**
A23 Biological Treatment Facility	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	Waste types as specified in Table 2.1 All wastes shall be stored and treated on an impermeable surface with sealed drainage, surrounded by a bund capable of holding 110% of the total takeage volume. Digestate shall be stored within covered containers or covered lagoons and should be of a design and capacity fit for purpose.
	R3: Recycling/reclamation of organic substances which are not used as solvents	Treatment of waste including shredding, sorting, screening, compaction, bailing, mixing, hydrolysis and maceration. Digestion of wastes including pasteurisation and chemical addition. Treatment of digestate including screening to remove plastic residues, centrifuge or pressing, addition of thickening agents (polymers) or drying. The following wastes shall not be subject to the Anerobic Digestion process unless they conform to BS EN 13432: 07 02 13 – waste plastic, 15 01 01 – paper and cardboard packaging, 15 01 02 – plastic packaging, 15 01 05 – composite packaging. The maximum throughput of animal waste shall be less than 10 tonnes per day.
	R1: Use principally as a fuel or other means to generate electricity.	The use of combustible gases produced as a by-product of the anaerobic digestion process as a fuel. Gas cleaning by biological or chemical scrubbing. Gas storage and Drying. All biogas condensate shall be discharged into a sealed drainage system.

Table S1.1 Activities		
Facility Type	**Description of activities for waste operations**	**Limits of activities**
A23 Biological Treatment Facility	D10: Incineration on land	Gas engine stack height shall be no less than 3 metres. Except for the auxiliary flare, the aggregate rated thermal input of all appliances used to burn biogas shall be less than 3 megawatts. Use of auxiliary flare required only for periods of breakdown and maintenance of the combined heat and power unit.
	D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)	All wastes shall be stored and treated on an impermeable surface with sealed drainage, surrounded by a bund capable of holding 110% of the total takeage volume.

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
How to comply with your Environmental Permit	All	N/A
Response to Schedule 5 Notice dated 26/05/10	Response to question 1 parts a to g. Also, response to question 2, 3 & 4.	11/06/10
Section 4. Clayton Hall Farm Bioenergy, Environmental Instruction Manual	All	15/07/10

3.2.1 Permitted Types and Quantities of Waste

The site can currently accept 49,000 tonnes per year; however, the site proposes to accept up to 100,000 tonnes of waste per annum.

The list of wastes is detailed within the current permit are as follows:

Table S2.1 Permitted waste types and quantities for the Anaerobic Digestion Facility referenced in condition 2.3.2 (a).

Table S2.1 Permitted waste types and quantities for the Anaerobic Digestion Facility	
Maximum quantities	**The total quantity of waste accepted at the site shall be less than 49,000 tonnes a year.**
Waste code	**Description**
02	**WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING**
02 01	**wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing**
02 01 01	sludges from washing and cleaning
02 01 02	animal-tissue waste
02 01 03	plant-tissue waste
02 01 06	animal faeces, urine and manure (including spoiled straw), effluent, collected separately and treated off-site
02 01 07	wastes from forestry
02 02	**wastes from the preparation and processing of meat, fish and other foods of animal origin**
02 02 01	sludges from washing and cleaning
02 02 02	animal-tissue waste
02 02 03	materials unsuitable for consumption or processing
02 02 04	sludges from on-site effluent treatment
02 02 99	wastes not otherwise specified – waste wood chips from meat products odour control biofilter
02 03	**wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation**
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation
02 03 02	wastes from preserving agents
02 03 04	materials unsuitable for consumption or processing
02 03 05	sludges from on-site effluent treatment
02 04	**wastes from sugar processing**
02 04 03	sludges from on-site effluent treatment
02 05	**wastes from the dairy products industry**
02 05 01	materials unsuitable for consumption or processing
02 05 02	sludges from on-site effluent treatment
02 06	**wastes from the baking and confectionery industry**
02 06 01	materials unsuitable for consumption or processing
02 06 03	sludges from on-site effluent treatment
02 07	**wastes from the production of alcoholic and non- alcoholic beverages (except coffee, tea and cocoa)**
02 07 01	wastes from washing, cleaning and mechanical reduction of raw materials
02 07 02	wastes from spirits distillation
02 07 03	wastes from chemical treatment
02 07 04	materials unsuitable for consumption or processing
03	**WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD**

03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 02	green liquor sludge (from recovery of cooking liquor)
03 03 08	wastes from sorting of paper and cardboard destined for recycling
03 03 10	fibre rejects, fibre-, filler- and coating-sludges from mechanical separation
04	**WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES**
04 01	**wastes from the leather and fur industry**
04 01 01	fleshings and lime split wastes
04 01 05	tanning liquor free of chromium
04 01 07	sludges, in particular from on-site effluent treatment free of chromium
04 02	**wastes from the textile industry**
04 02 10	organic matter from natural products (for example grease, wax)
04 02 20	sludges from on-site effluent treatment other than those mentioned in 04 02 19 as agreed with the Environment Agency
07	**WASTES FROM ORGANIC CHEMICAL PROCESSES**
07 02	**wastes from the MFSU of plastics, synthetic rubber and man-made fibres**
07 02 13	waste plastic
15	**WASTE PACKAGING, ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED**
15 01	**packaging (including separately collected municipal packaging waste)**
15 01 01	paper and cardboard packaging
15 01 02	plastic packaging
15 01 03	wooden packaging
15 01 05	composite packaging
19	**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**
19 02	**wastes from physico/chemical treatments of waste (including dechromatation, decyanidation, neutralisation)**
19 02 03	premixed wastes composed only of non-hazardous wastes
19 02 10	combustible wastes other than those mentioned in 19 02 08 and 19 02 09
19 02 99	wastes not otherwise specified - glycerol
19 05	**wastes from aerobic treatment of solid wastes**
19 05 01	non-composted fraction of municipal and similar wastes
19 05 02	non-composted fraction of animal and vegetable waste
19 05 03	off-specification compost
19 06	**wastes from anaerobic treatment of waste**
19 06 03	liquor from anaerobic treatment of municipal waste
19 06 04	digestate from anaerobic treatment of municipal waste
19 06 05	liquor from anaerobic treatment of animal and vegetable waste
19 06 06	digestate from anaerobic treatment of animal and vegetable waste
19 08	**wastes from waste water treatment plants not otherwise specified**
19 08 05	sludges from treatment of urban waste water
19 08 09	grease and oil mixture from oil/water separation containing only edible oil and fats
19 08 12	sludges from biological treatment of industrial waste water other than those mentioned in 19 08 11
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**

19 12 12	other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 - pre-treated biodegradable food waste arising from source segregated collection only
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**
20 01	**separately collected fractions (except 15 01)**
20 01 01	paper and cardboard
20 01 08	biodegradable kitchen and canteen waste
20 02	**garden and park wastes (including cemetery waste)**
20 02 01	biodegradable waste
20 03	**other municipal wastes**
20 03 01	mixed municipal waste
20 03 02	waste from markets

The additional waste codes are proposed:

02 06 02 Wastes from preserving agents (AN)

02 07 05 sludges from onsite effluent treatment (AN)

03 03 11 wastes not otherwise specified (AN)

07 07 12 sludges from on-site effluent treatment other than those mentioned in 07 07 11 (MN)

16 03 05 organic wastes containing hazardous substances (MH)

16 03 06 organic wastes other than those mentioned in 16 03 05 (MN)

19 05 99 wastes not otherwise specified (AN)

20 01 25 edible oil and fat (AN)

20 03 02 waste from markets (AN)

3.3 Waste Acceptance

3.3.1 Hours of Operation

Hours of operation for the receipt, treatment, disposal, and transfer of waste shall normally be 24/7 operation.

3.3.2 Load Inspection and Waste Control

All vehicles arriving on site will be booked in and waste loads agreed prior to arrival, where the load will be visually inspected upon collection, if possible, in order to confirm its description and composition against the transfer note and other accompanying documentation.

Wastes will only be accepted at the site if the description in the accompanying documentation is in accordance with the permit and that onsite inspection confirms waste is consistent with the description provided.

All wastes will be characterised during the pre-acceptance stage of the waste acceptance process, which will include the customer providing information such as WM3 analysis, to ensure that the waste has been correctly classified and permitted for acceptance and treatment.

Should the wastes be found not to conform during the initial visual inspection, then the details will be recorded and the vehicle turned away. Should wastes already be discharged within the stockpile area and deemed not to conform or otherwise not be permitted then the waste will be picked out and:

- reloaded and returned; or
- removed to a designated quarantine area as appropriate

Records of non-compliant waste received at the site will include details on:

- the quantity
- characteristics
- origin
- delivery date and time and
- the identity of the producer and carrier

Wastes will not be accepted unless the site is adequately resourced to receive the waste.

A record will be kept in the site diary of all rejected wastes. The waste producer and the Environment Agency will be notified of significant non- conformance.

3.3.3 Means of Measurement

The quantity of waste accepted and despatched from the facility will be measured via the onsite use of the weighbridge to record the volume of waste entering the site.

All wastes entering the site will be recorded upon arrival and the waste and recyclable components removed from site for disposal for further recovery or reuse will also be recorded on exit.

3.4 Waste Storage

Maximum waste storage on site at any one time will be managed in accordance with the site's Food Waste Shed Layout Plan (Plan 008).

All incoming wastes are stored inside the building with concrete impermeable surface.

3.5 Waste Treatment

Solid, semi solid and liquid organic matter is delivered to site and stored under cover in the incoming waste processing building. Liquids are stored in mobile tanks located within the building. If any, packaged waste food materials are accepted they are de-packaged prior to treatment. Solid and liquid material is fed into one of the two digesters by screw pumps and warmed by heat from the gas engines on the generators. Methane is given off and digested matter is drawn off and run through a Pasteuriser to kill off harmful

pathogens. It then transfers into one of the two concrete panelled tanks where it's stored awaiting transfer to farm land for use.

A large earth banked lined lagoon has been recently replaced with a new concrete lagoon built to CIRIA 736 standard. This lagoon receives rainwater from the perimeter bunds around the two digesters. Initially the rainwater is collected in a smaller intermediate tank and drained into the lagoon. In the event of the rainwater becoming contaminated (by for example spilled digestate), the material can be drained into the round concrete digestate tank. In the event of a major failure of one of the digesters there is sufficient capacity to contain the contents in one or other of the tanks or the lagoon.

As required, digestate in one of the tanks is drawn off and spread onto farmland as a fertiliser and soil improver.

Digestate can also be de-watered and spread as a fertiliser onto farm land. This is stored on an impermeable concrete surface before being transferred for use onto land. The digestate complies with the QP standard that satisfies the End of Waste PAS110 criteria.

Incoming wastes and other materials must be delivered directly into the incoming waste processing building and not placed outside. The only exception is for the solid wastes to be delivered and temporarily placed on the concreted surface external to the reception storage shed with the intention to transfer indoors with immediate effect.

The site is permitted to accept up to 10 tonnes per day of animal by-products, of the total incoming waste and invokes a separate set of regulations: Animal By-Products (Enforcement) (England) Regulations 2013. The regulations are designed to prevent biological contamination of foodstuffs and staff. A requirement of these regulations is that a Hazard and Critical Control Point (HCCP) plan is produced and adhered to.

Only Category 3 Animal By-Product (Low Risk) materials are permitted**,** which consists of the following:

- carcasses or body parts passed fit for humans to eat, at a slaughterhouse
- products or foods of animal origin originally meant for human consumption but withdrawn for commercial reasons, not because it's unfit to eat
- domestic catering waste
- shells from shellfish with soft tissue
- eggs, egg by-products, hatchery by-products and eggshells
- aquatic animals, aquatic and terrestrial invertebrates
- hides and skins from slaughterhouses
- animal hides, skins, hooves, feathers, wool, horns, and hair that had no signs of infectious disease at death
- processed animal proteins (PAP)

The digestion process takes place in one of two sealed tanks. The digesters have small bunds around the base which are directed into an intermediate tank. The main principle is to divert clean rain water to the new concrete panel lagoon, but if a leak or spill occurred at the digesters, the matter would be contained.

Digestate is drawn off into one of the two concrete tanks. It is critical that the tank and lagoon structures are inspected and maintained as stated in the Environment Management System.

All plant and equipment must comply to PUWER regulations and operators must carry out pre start inspections on all plant and equipment.

A maintenance schedule is in place which includes servicing, calibration and preventive maintenance.

Return valves are installed where required, gate valves are also secured to prevent accidental release and all operators must be trained, competent and authorised by the Site Manager to operate plant and equipment.

Emergency procedures will be put in place which will include for the following:

- Maintain a stock of repair patches
- Spill kits to be kept on site
- Emergency spillage drills to be carried out
- A maintenance schedule is in place which includes servicing, calibration and preventive maintenance
- 24hr Remote CCTV surveillance in operation.

The anaerobic digester will be in operation 24/7.

Site Infrastructure and Equipment

3.5.1 Site Identification Board

A site identification board which is easily readable from outside the entrance during hours of daylight will be provided at or near the main site entrance.

The identification board will be inspected at least once per week. In the event of damage or defect that significantly affects the legibility of the board it will be repaired or replaced within a timescale agreed with the Environment Agency.

The board will display the following information:

- Site name and address.
- Permit holder.
- Permit number (s).
- Emergency contact name and telephone number.
- Environment Agency national telephone numbers; and
- Days and hours site is open to receive waste.

3.5.2 Plant and Equipment

All items of plant and equipment used on site will be maintained in accordance with manufacturer's recommendations.

4.0 EMISSIONS AND MONITORING

The site will be operated so that there will be no fugitive emissions to air, surface water, groundwater or land.

4.1 Surface Water and Groundwater

The site will accept permitted wastes only and will be operated to prevent fugitive emissions to surface water and groundwater.

4.1.1 Engineered Containment

All waste will be stored on an impermeable surface with a sealed drainage system.

4.1.2 Containment Bunding

All potentially polluting materials for example oils and fuels will be stored in containers provided with secondary containment. Containers and secondary containment will be impermeable, resistant to the stored materials and constructed to the appropriate British Standard.

Containers will be surrounded by a leakage containment bund capable of containing at least 110% of the volume of the largest container within the bund or 25% of the total container volume within the bund, whichever is the greater.

Pipework will be routed within bunded area ensuring no penetration of the secondary container. Tanker connection points will be within the bund.

Containers/Tanks will be inspected visually on a daily basis by the site staff to ensure the continued integrity of the containment and identify the requirement for any remedial action.

4.2 Odour

No putrescible or readily degradable wastes will be accepted at the site. Due to the strict control of the waste that will be accepted at the site, odour is not expected to pose a significant risk.

4.3 Dust

No waste consisting solely or mainly of dusts, powders or loose fibres will be accepted at the site. Due to the types of waste accepted and the strict control of the waste that will be accepted at the site, dust is not expected to pose a significant risk.

In the event the generation of dust occurs during storage or treatment of wastes, this will be monitored and mitigation methods such as dampening will be employed to reduce the risk of fugitive dust emissions.

These wastes will not be stored longer than 48 hours unless otherwise agreed with the Environment Agency.

Daily site inspections will be carried out by site staff during the course of their normal working activities.

The procedure for managing complaints is detailed below.

Upon receiving a complaint initially, a site diary entry will be made, with a complaint report completed and discrepancy log will be completed by the Site Manager/TCM.

A record of the below will be made.

- Time
- Date
- Nature of complaint/description of noise
- Duration of event
- Weather conditions
- Location – where noise was heard (e.g. site perimeter), receptor location
- Contact details of complaint if available
- Further monitoring and locations

Then a review of the below would be made.

- Site activities at the time of the report must be conducted (e.g. processing, increased vehicle movements, waste deliveries)
- Findings of external/receptor monitoring.
- Finding of any other external sources of noises (e.g. construction/development)
- CCTV system to view site operations.

As part of the Environmental Management System, a customer care and complaints procedure will be implemented. The customer care and complaints procedure apply to all complaints, feedback and requests made by third parties regarding the site's operational activities, environmental, health and safety performance or quality of service/product.

The management of dust emissions is detailed in Section 3.15 of the EMS.

Permit Monitoring Requirements

Odour Management under the permit will be managed in accordance with BAT34 as to prevent or where that is not practicable to reduce odorous emissions from the Permitted Installation, in particular by:

In accordance with BAT 8 and BAT 34 the emission points will be monitored for odour concentration every six months. The monitoring will be carried out by an MCERTS contractor in accordance with EN standard EN 13725. The emission test results will be compared to the BAT-AEL stated within BAT 34 and actions taken, as required, to comply within the odour concentration BAT- AEL.

All monitoring will comply with MCERTS accreditation.

Monitoring of VOCs will be conducted in line with the relevant monitoring standard Monitoring stack emissions: techniques and standards for periodic monitoring - GOV.UK.

Table S1.1 Activities		
Facility Type	**Description of activities for waste operations**	**Limits of activities**
A23 Biological Treatment Facility	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	Waste types as specified in Table 2.1 All wastes shall be stored and treated on an impermeable surface with sealed drainage, surrounded by a bund capable of holding 110% of the total takeage volume. Digestate shall be stored within covered containers or covered lagoons and should be of a design and capacity fit for purpose.
	R3: Recycling/reclamation of organic substances which are not used as solvents	Treatment of waste including shredding, sorting, screening, compaction, bailing, mixing, hydrolysis and maceration. Digestion of wastes including pasteurisation and chemical addition. Treatment of digestate including screening to remove plastic residues, centrifuge or pressing, addition of thickening agents (polymers) or drying. The following wastes shall not be subject to the Anerobic Digestion process unless they conform to BS EN 13432: 07 02 13 – waste plastic, 15 01 01 – paper and cardboard packaging, 15 01 02 – plastic packaging, 15 01 05 – composite packaging. The maximum throughput of animal waste shall be less than 10 tonnes per day.
	R1: Use principally as a fuel or other means to generate electricity.	The use of combustible gases produced as a by-product of the anaerobic digestion process as a fuel. Gas cleaning by biological or chemical scrubbing. Gas storage and Drying. All biogas condensate shall be discharged into a sealed drainage system.

4.4 Noise

Waste treatment operations will only be carried out during operational hours. All equipment will be maintained and operated in accordance with manufacturer's guidance and will be maintained in good working order.

The site will be operated so as to minimise noise emissions from the site. Measures that will be taken at the site include:

- locating plant away from noise-sensitive receptors where possible.
- the avoidance of dropping materials from height.
- switching plant off when not in use.
- the imposition of a speed limit for vehicles delivering waste to the site. The site has 10mph Speed Limit This will reduce noise associated with high engine speeds.
- the training of all personnel in the need to minimise site noise and will be responsible for monitoring and reporting excessive noise when carrying out their everyday roles.
- regularly maintaining site plant and machinery to minimise noise resulting from inefficient operation of pumps, generators and engines.
- in the event that reversing alarms are found to give rise to complaints, alternative alarms or technology will be investigated.
- the regular maintenance of site surfaces to prevent the development of potholes will significantly reduce the noise generated particularly by empty vehicles exiting the site.
- consideration will be given to the fitting of noise suppression kits on items of plant and equipment; and
- all plant will be maintained in accordance with manufacturer's recommendations to minimise noise emissions.

Any complaint received will be logged in the site diary. The Site Manager will investigate the complaint and will take action to identify the source of the noise and implement remedial measures where appropriate.

The measures employed at the site to minimise the emission of noise will be regularly reviewed by the Site Manager and additional measures will be employed where required.

The management of noise emissions is detailed further in Section 3.11 of the EMS.

4.5 Pests

Due to the nature of the wastes proposed to be accepted at the site, it is not anticipated that pests will pose a risk at the facility.

The facility will be inspected by both site management and operatives for infestations of pests, vermin and insects on a routine basis.

A specialist pest control contractor will be deployed if required.

The management of pests is further detailed in Section 3.13 of the EMS.

4.6 Litter

Due to the nature of the waste to be accepted on site, it is not anticipated that litter will pose a serious risk. However, the boundary of the site and its environs will be regularly checked and any litter and clean it up. The site will be benefit from a perimeter fence which will limit the potential for litter to escape off-site.

It will be the responsibility of the site staff to monitor the site for any signs of escaping materials either from within the site or from vehicles delivering or removing materials to and from the site.

Inspections will be carried out on a daily basis and a record maintained within the site diary.

The management of litter is detailed further in Section 3.14 of the EMS.

4.7 Mud and Debris

The top section of the road site is surfaced with concrete, tarmacadam and hardstanding and fully drained. It is therefore not expected that mud will feature as a problem for the site within the site, the following measures will be taken in order to prevent the deposition or tracking of mud or debris from the site onto public areas or highways:

- site surfaces will be maintained free of significant quantities of mud.
- wheel cleaning facility on site.
- all operational areas will be subject to monitoring by staff throughout the working day.
- all vehicles leaving operational areas will, before leaving the site be checked to ensure that they are clear of loose waste and that any products being exported from the site are secure.

In the event that mud, debris or waste arising from the site is deposited onto public areas outside the site, the following remedial measures will be implemented:

- the affected public areas outside the site will be cleaned; and
- traffic will be isolated from sources of mud and debris within the site to prevent further tracking of mud and debris, and measures will be taken to clear any such sources as soon as practicable.

4.7.1 Monitoring

The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring and any other actions specified in the permit.

The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

5.0 INFORMATION

All relevant notifications and submissions to the Environment Agency regarding the site will be made in writing and will quote the permit reference number and the name of the permit holder.

Records will be maintained for at least 3 years, however in the case of off-site environmental effects, and matters which affect the condition of land and groundwater the records shall be kept until permit surrender. Duty of Care records will be kept for a minimum of 2 years with hazardous consignment notes retained for 3 years or the lifetime of the permit.

5.1 Reporting and Notifications

5.1.1 Changes in Technically Competent Persons

The Environment Agency will be informed in writing of any changes in the technically competent management of the site and the name of any incoming person, together with evidence that such person has the required technical competence.

5.1.2 Waste Types and Quantities

A summary report of waste types and quantities accepted and removed from the site for each quarter, will be submitted to the Environment Agency within 1 month of the end of the quarter unless otherwise required by the permit conditions.

5.1.3 Relevant Convictions

The Environment Agency will be notified of the following events:

- The company or directors being convicted of any relevant offence; and
- any appeal against a conviction for a relevant offence and the results of such an appeal.

5.1.4 Notification of Change of Operator's or Holder's Details

The Environment Agency will be notified of the following:

- any change in the operator's trading name, registered name or registered office address; and
- any steps taken with a view to the company going into administration, entering into a company voluntary arrangement or being wound up.

5.1.5 Adverse Effects

The Agency will be notified without delay following the detection of the following:

- any malfunction, breakdown or failure of equipment or techniques.
- any accident.
- fugitive emissions which have caused, is causing or may cause significant pollution; and
- any significant adverse environmental and/or health effect.

5.1.6 Reporting

The operator shall send reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

A report or reports on the performance of the activities over the previous year ('the annual report') shall be submitted to the Environment Agency by 31st January each year or such other date as may be agreed

in writing by the Agency. The report(s) shall include as a minimum:

(a) a review of the results of the monitoring and assessment carried out in accordance with this permit against the relevant assumptions, parameters and results in the risk assessments submitted in relation to this activity and any agreed amendments thereto. The review will include written descriptions of the improvements made to operational performance during the year, action plans developed and planned improvements for the coming year.

Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

(b) in respect of the parameters and emission points specified in Schedule 4, table S4.1.

(c) for the reporting periods specified in Schedule 4, table S4.1 and using the forms specified in Schedule 4, table S4.2 or other reporting format as agreed in writing with the Environment Agency; and

(d) giving the information from such results and assessments as may be required by the forms specified in those tables.

Within one month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

5.1.7 Notifications

In the event:

a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately.

- inform the Environment Agency.
- take the measures necessary to limit the environmental consequences of such an incident or accident, and
- take the measures necessary to prevent further possible incidents or accidents.

b) of a breach of any permit condition the operator must immediately

- inform the Environment Agency, and
- take the measures necessary to ensure that compliance is restored within the shortest possible time.

c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

6.0 Closure

This report has been prepared by Olive Compliance Ltd 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 Clayton Hall Farm LLP, 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 Olive Compliance Ltd.

Olive Compliance Ltd disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

Section 10

CLAYTON HALL FARM BIOENERGY LLP

SITE CONDITION REPORT

Clayton Hall Farm

Clayton West

Huddersfield

West Yorkshire

HD8 9QE

EPR/FP3596EY

Olive Compliance Ltd
Planet House
Northumbrian Way
Killingworth
NE12 6EH
Company Number:12861220

Issue and Revision Record

Revision	Date	Originator	Description of Change
V1	01/08/2024	Olive Compliance Ltd	New for Permit Variation
V2			
V3			

BASIS OF REPORT

This report has been prepared by Olive Compliance Ltd 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 Clayton Hall Farm Bioenergy LLP, 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 Olive Compliance Ltd.

Olive Compliance Ltd disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

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1.0 SITE DETAILS	
Name of the applicant	CLAYTON HALL FARM BIOENERGY LLP
Activity address	Clayton Hall Farm, Clayton West, Huddersfield, West Yorkshire, HD8 9QE
National grid reference	SE 27040 11388

Document reference and dates for Site Condition Report at permit application and surrender	No previous SCR submitted
Document reference for site plans (including location and boundaries)	See Drawing 002 and Drawing 002a

Note:

COMPLETE SECTIONS 1-3 AND SUBMIT WITH APPLICATION

DURING THE LIFE OF THE PERMIT: MAINTAIN SECTIONS 4-7

AT SURRENDER: ADD NEW DOC REFERENCE IN 1.0; COMPLETE SECTIONS 8-10; & SUBMIT WITH YOUR SURRENDER APPLICATION

2.0 CONDITION OF THE LAND	
Environment setting including: • Geology • Hydrology • Surface waters	*Flood Risk* Checks made on the Environment Agency (EA) Long Term Flood Risk Assessment website [1] shows that the Site is not at risk of flooding from surface waters, groundwater, reservoirs, rivers or sea without defences. The Site location lies within Flood Zone 1. The area around Clayton Hall Farm Plant, Clayton West, Huddersfield, HD8 9QE has a • very low risk of surface water flooding (Less than 0.1% chance each year of flooding) • very low risk of flooding from rivers and the sea • Flooding from Groundwater is unlikely in this area • Flooding from Reservoirs is unlikely in this area Land within flood zone 1 has a low probability of flooding from rivers and the sea. Most developments that are less than 1 hectare (ha) in flood zone 1 do not need a flood risk assessment (FRA) as part of a planning application.

[1] Your long term flood risk assessment - GOV.UK (check-long-term-flood-risk.service.gov.uk) accessed February 2024

Geology, Hydrogeology & Hydrology

Artificial Ground

The ground investigation established the site to be underlain by sandstone of the Pennine Middle Coal Measure, with an artificial deposit of infilled ground mantled by Made Ground.

Superficial Geology

Alluvium Flandrian clay, silt, sand and gravel

Bedrock Geology

Reference to publication of the British Geological Survey indicates that the site is underlain by Middle Coal Measures. The Pennine Middle Coal Measures Formation generally comprises layers of mudstone, siltstone, sandstone and coal seams.

Mineral Mining

The Envirocheck report shows that the site is not located within an area which is noted to be affected by coal mining activity. However, there has been several historical mineral mining works recorded, predominately sandstone mining within 1km of the site boundary.

Hydrogeology

Groundwater Vulnerability

Source Protection Zones (SPZs) are defined for groundwater sources (e.g. wells, boreholes and springs) used for public drinking water supply. These zones show the risk of contamination from activities that might cause pollution in the area, the closer the activity to the source the greater the risk.

There are no Source Protection Zones within 1km of the site boundary.

Groundwater Vulnerability Map (England)

Classification Medium – High

Aquifer Designation Map (Bedrock) (England)

Typology Secondary Bedrock

Aquifer Designation Map (Superficial Drift) (England)

Typology Secondary A

Discharges to Groundwater

There have been twenty discharge consents identified with only eight active discharge consents with six of those

	associated with the Sewage Treatment Works, listed within 500m of the Site recorded within the Envirocheck report. • 2 x Discharge Consents to Land/Soakaway • 6 x Discharge Consents to Freshwater Stream/River *Surface & Groundwater Abstractions* There are three groundwater abstractions listed within 2km of the site recorded within the Envirocheck report. *Ecology* A search was conducted on the magic map application and information sourced from the Envirocheck report shows sites of ecological importance fall outside 1km of the site. The nearest designated Special Area of Conservation (SAC) is Denby Grange Colliery Ponds which is located approximately 2.84km from the Site and the nearest designated Local Nature Reserve (LNR) within Bretton Country Park is approximately a distance of 1.67km from the Site. Following the searches carried out there is no need to carry out a further habitats assessment in relation to these receptors. *Cultural Heritage* Searches on the MAGIC website[2] confirm that there are no sites of significant interest located within 500m of the application site. *Environmental Stewardship Agreements (England)* Higher level stewardship 276m It is considered that the identified receptors will not be affected by the activities proposed at the site. *Landfills* There are records within the Envirocheck report of five historic landfills located within 1km of the site.
Pollution history including: • Pollution incidents that may have affected land • Historical land uses and associated contamination • Any visual/olfactory evidence of existing contamination	No pollution history on site recorded since permit issue. The site as an excellent compliance history - See CAR reports (2010-2023)

Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)	None available.
Baseline soil and groundwater reference data	N/A
Supporting information	**Information References** Your long-term flood risk assessment - GOV.UK (check-long-term-flood-risk.service.gov.uk) accessed February 2024 [1] https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit Magic Map Application (defra.gov.uk) accessed in February 2024 Envirocheck Report 01/02/2024.

3.0 PERMITTED ACTIVITIES	
Permitted activities	The Clayton Hall Farm site at Clayton West has been in farming use since the end of the 1800's. Searches undertaken via the Envirocheck report that the past land use in the area has remained rural/agricultural. The Envirocheck Historical Ordnance Survey maps are included in Appendix 1 of this report. The current permit allows to carry out anaerobic digestion of wastes and also use of the biogas in compression and spark ignition engines with an aggregate rated thermal input of up to 3 megawatts. The permit also allows the use of standard commercial gas turbines, fuel cells (e.g. Molten Carbonate or Solid Oxide) or treatment followed by injection into the gas grid. The permit reference is EPR/FP3596EY. Currently the site accepts up to 49,000 tonnes per year. Any wastes controlled by the Animal By-Products Regulations must be treated and handled in accordance with any requirements imposed by those Regulations. Proposed Changes The variation application seeks to make the following changes to the site's operations: This variation is being applied for in response to the EA Bio biowaste treatment waste permit review. The site is not an installations permit, and post the EA review, they propose to we restrict the permitted activity to a capacity to treat

	less than 75 tonnes per day for composting or less than 100 tonnes per day for anaerobic digestion.1 They also restrict the annual tonnage to reflect this. The Operator in response currently holds a 'bespoke' permit at the above location where the activity is listed as an Anaerobic Digestion operation. This application is to vary the permit to an installation permit to incorporate the below changes. Site Boundary The permitted boundary will be extended to include the new silage clamp and solid biowaste storage. All wastes shall be treated and stored on an impermeable surface with a sealed drainage system. There are no changes to site point emission points. Waste Tonnages The site intends to increase waste acceptance and treat up to 100,000 tonnes of waste per annuum. EWC Waste description Additional EWC waste codes to be included in the permit variation: 02 06 02 Wastes from preserving agents (AN) 02 07 05 sludges from onsite effluent treatment (AN) 03 03 11 wastes not otherwise specified (AN) 07 07 12 sludges from on-site effluent treatment other than those mentioned in 07 07 11 (MN) 16 03 05 organic wastes containing hazardous substances (MH) 16 03 06 organic wastes other than those mentioned in 16 03 05 (MN) 19 05 99 wastes not otherwise specified (AN) 20 01 25 edible oil and fat (AN) 20 03 02 waste from markets (AN)
Non-permitted activities	The site is also located on a working arable farm.
Document references for:	See ERA_CHFB

• Plan showing activity • Environmental risk assessment.	See Drawings 002/002a

4.0 CHANGES TO THE ACTIVITY	
Have there been any changes to the activity boundary?	No
Have there been any changes to the permitted activities?	Yes - see the below permit log covering all changes to the permit since 2010.
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	No
Checklist of supporting information	See EA Permit EPR/FP3596EY

Status log of the permit

Description	Date	Comments
Permit determined EPR/FP3596EY	06/08/10	Original permit issued to Clayton Hall Farm Bioenergy LLP.
Application EPR/FP3596EY/V002	Duly made 20/06/22	Application to add several waste codes to Table S2.1.
Response to Schedule 5 notice dated 08/12/22	06/04/23	Email with attachments containing sludge analysis results: - Clayton Hall Farm Howarth sludge pesticide analysis; Clayton Hall Farm digestate pesticide results before bmp; Clayton Hall Farm digestate pesticide results after bmp; Clayton Hall Farm (Howard Screening Sludge) Report; Clayton Hall Farm Howard sludge bmp pesticide report (Final).
Variation determined EPR/FP3596EY	22/05/23	Notice of variation issued.

5.0 MEASURES TAKEN TO PROTECT THE LAND	
N/A	
Checklist of supporting information	N/A

6.0 POLLUTION INCIDENTS THAT MAY HAVE HAD AN IMPACT ON LAND AND THEIR REMEDIATION

N/A

Checklist of supporting information	

7.0 SOIL GAS AND WATER QUALITY MONITORING (WHERE UNDERTAKEN)
N/A

Checklist of supporting information	

8.0 DECOMMISSIONING AND REMOVAL OF POLLUTION RISK
N/A

Checklist of supporting information	

9.0 REFERENCDE DATA AND REMEDIATION (WHERE RELEVANT)
N/A

10.0 STATEMENT OF SITE CONDITION
N/A

Envirocheck® Report:

Datasheet

Order Details:

Order Number:
333683478_1_1

Customer Reference:
CHF0124

National Grid Reference:
427070, 411380

Slice:
A

Site Area (Ha):
4.88

Search Buffer (m):
1000

Site Details:

Clayton Hall Farm Bioenergy, Clayton Hall Farm
Back Lane
Clayton West
HUDDERSFIELD
HD8 9QE

Client Details:

Mrs K Dowling
Olive Compliance Ltd
19 Main Street
ponteland
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Julie Dingwall
Olive Compliance Ltd
FOR:Clayton Hall BioEnergy LLP

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Contents

Introduction

The Environment Act 1995 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination.
For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency/Natural Resources Wales and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.
In this datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

Report Version v53.0

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
BGS Groundwater Flooding Susceptibility	pg 1	Yes	Yes	Yes	n/a
Contaminated Land Register Entries and Notices					
Discharge Consents	pg 3			20	27
Prosecutions Relating to Controlled Waters			n/a	n/a	n/a
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 15				1
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 15		Yes		
Pollution Incidents to Controlled Waters	pg 15			2	6
Prosecutions Relating to Authorised Processes					
Registered Radioactive Substances					
River Quality	pg 17				4
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register	pg 17				3
Water Abstractions	pg 18				(*4)
Water Industry Act Referrals					
Groundwater Vulnerability Map	pg 19	Yes	n/a	n/a	n/a
Groundwater Vulnerability - Soluble Rock Risk			n/a	n/a	n/a
Groundwater Vulnerability - Local Information			n/a	n/a	n/a
Bedrock Aquifer Designations	pg 19	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
OS Water Network Lines	pg 19		1	11	63

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Waste					
BGS Recorded Landfill Sites	pg 29			1	
Historical Landfill Sites	pg 29			1	
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)	pg 29	1			
Local Authority Landfill Coverage		1	n/a	n/a	n/a
Local Authority Recorded Landfill Sites	pg 29			1	
Potentially Infilled Land (Non-Water)	pg 29			1	2
Potentially Infilled Land (Water)	pg 30		1		1
Registered Landfill Sites					
Registered Waste Transfer Sites					
Registered Waste Treatment or Disposal Sites					
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Geological					
BGS 1:625,000 Solid Geology	pg 31	Yes	n/a	n/a	n/a
BGS Estimated Soil Chemistry	pg 31	Yes		Yes	Yes
BGS Recorded Mineral Sites	pg 31			1	6
BGS Urban Soil Chemistry					
BGS Urban Soil Chemistry Averages					
CBSCB Compensation District			n/a	n/a	n/a
Coal Mining Affected Areas	pg 33	Yes	n/a	n/a	n/a
Mining Instability	pg 33	Yes	n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards	pg 33	Yes		n/a	n/a
Potential for Compressible Ground Stability Hazards	pg 33	Yes	Yes	n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 33	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 34	Yes	Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 34	Yes		n/a	n/a
Radon Potential - Radon Affected Areas	pg 34	Yes	n/a	n/a	n/a
Radon Potential - Radon Protection Measures	pg 34	Yes	n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 35				2
Fuel Station Entries					
Points of Interest - Commercial Services					
Points of Interest - Education and Health					
Points of Interest - Manufacturing and Production	pg 35				5
Points of Interest - Public Infrastructure	pg 35	1		4	2
Points of Interest - Recreational and Environmental	pg 36			2	
Gas Pipelines					
Underground Electrical Cables					

Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Ancient Woodland	pg 37			3	1
Areas of Adopted Green Belt	pg 37	1		1	1
Areas of Unadopted Green Belt	pg 37	1			
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves					
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones	pg 37	1			
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					
World Heritage Sites					

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (W)	0	1	427067 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	0	1	427200 411400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (N)	0	1	427067 411400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (E)	0	1	427150 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	28	1	427200 411500
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (S)	41	1	427050 411250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (NW)	43	1	426900 411500
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (E)	47	1	427250 411350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	48	1	427250 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	49	1	427250 411400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (E)	50	1	427250 411450
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	52	1	426900 411250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	78	1	427200 411550
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (N)	79	1	427000 411550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NW (NW)	80	1	426950 411550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (W)	81	1	426850 411450
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (E)	97	1	427300 411300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (E)	97	1	427300 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	99	1	427300 411400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (E)	100	1	427300 411450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (N)	129	1	427050 411600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (W)	131	1	426800 411450

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (W)	133	1	426800 411300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	142	1	427100 411150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (E)	147	1	427350 411350
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (E)	148	1	427350 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (N)	179	1	427067 411650
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (W)	181	1	426750 411400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	193	1	427150 411100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	204	1	427300 411650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (N)	228	1	427100 411700
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	228	1	427200 411700
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (N)	229	1	427067 411700
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12NE (W)	231	1	426700 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13SW (SW)	243	1	426900 411050
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	273	1	427350 411700
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	275	1	426800 411050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	278	1	427100 411750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	278	1	427150 411750
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (S)	290	1	426950 411000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A18SW (NW)	292	1	426850 411750
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NE (S)	294	1	427200 411000
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SE (SW)	301	1	426700 411100
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SE (SW)	316	1	426650 411150

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	328	1	427100 411800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NE (W)	331	1	426600 411400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (S)	341	1	427000 410950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (NE)	342	1	427300 411800
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14NW (E)	359	1	427550 411550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A18SW (NW)	376	1	426750 411800
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12NE (W)	381	1	426550 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NE (W)	431	1	426500 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A17SE (NW)	434	1	426600 411750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A17SE (NW)	473	1	426550 411750
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18SE (N)	478	1	427100 411950
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12NE (W)	481	1	426450 411381
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A7NE (SW)	482	1	426650 410900
1	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: Sewage Disposal Works - Water Company Location: Clayton West Wwtw Old Hall Lane, Clayton West, Barnsley, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 10 Effective Date: 31st March 2010 Issued Date: 25th February 2005 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A18SW (NW)	355	2	426800 411800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: Sewage Disposal Works - Water Company Location: Clayton West Wwtw Old Hall Lane, Clayton West, Barnsley, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 12 Effective Date: 4th March 2009 Issued Date: 25th February 2005 Revocation Date: 31st March 2009 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A18SW (NW)	355	2	426800 411800
2	**Discharge Consents** Operator: Mr Nicholas W L Rose Property Type: DOMESTIC PROPERTY (MULTIPLE) (INCL FARM HOUSES) Location: Litherup Farm & Barn, Clayton West, Huddersfield, West Yorkshire, Hd8 9lt Authority: Environment Agency, North East Region Catchment Area: Not Supplied Reference: Eprgp3423kz Permit Version: 1 Effective Date: 14th January 2011 Issued Date: 14th January 2011 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Into Land Via Old Soakaway **Status: New issued under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	374	2	427426 411770
3	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West (Old) Wpc Works Final, Effluent (Ceased) Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: E129 Permit Version: 1 Effective Date: 1st January 1982 Issued Date: 1st January 1982 Revocation Date: 19th July 1991 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	467	2	426600 411800
3	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West (Old) Wpc Works Final, Effluent (Ceased) Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: E129 Permit Version: 1 Effective Date: 1st January 1982 Issued Date: 1st January 1982 Revocation Date: 19th July 1991 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	467	2	426600 411800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 14 Effective Date: 3rd March 2010 Issued Date: 3rd March 2010 Revocation Date: 2nd September 2021 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 13 Effective Date: 1st April 2009 Issued Date: 14th October 2008 Revocation Date: 2nd March 2010 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 9 Effective Date: 6th October 2004 Issued Date: 6th October 2004 Revocation Date: 31st December 2005 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 7 Effective Date: 18th March 2003 Issued Date: 18th March 2003 Revocation Date: 5th October 2004 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 8 Effective Date: 1st January 2006 Issued Date: 18th March 2003 Revocation Date: 31st March 2009 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 4 Effective Date: 17th September 1998 Issued Date: 17th September 1998 Revocation Date: 31st December 1998 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 5 Effective Date: 1st January 1999 Issued Date: 17th September 1998 Revocation Date: 29th February 2000 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 6 Effective Date: 1st March 2000 Issued Date: 17th September 1998 Revocation Date: 31st December 2000 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 11 Effective Date: 1st January 2001 Issued Date: 17th September 1998 Revocation Date: 17th March 2003 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 3 Effective Date: 29th October 1996 Issued Date: 29th October 1996 Revocation Date: 16th September 1998 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 2 Effective Date: 23rd July 1984 Issued Date: 23rd July 1984 Revocation Date: 28th October 1996 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 2 Effective Date: 23rd July 1984 Issued Date: 23rd July 1984 Revocation Date: 28th October 1996 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: Undefined Or Other Location: Clayton West New Wpc Works Storm Ta, Nks Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 2539 Permit Version: 1 Effective Date: 1st January 1982 Issued Date: 1st January 1982 Revocation Date: 19th July 1991 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Not Supplied **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: Undefined Or Other Location: Clayton West New Wpc Works Storm Ta, Nks Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 2539 Permit Version: 1 Effective Date: 1st January 1982 Issued Date: 1st January 1982 Revocation Date: 19th July 1991 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Not Supplied Receiving Water: Not Supplied **Status: Authorisation revoked** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: Undefined Or Other Location: Clayton West New Wpc Works Storm Ta, Nks Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 1 Effective Date: 1st January 1982 Issued Date: 1st January 1982 Revocation Date: 22nd July 1984 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A17SE (NW)	488	2	426700 411900
4	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 15 Effective Date: 3rd September 2021 Issued Date: 3rd September 2021 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A17SE (NW)	531	2	426700 411948

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: Sewage Disposal Works - Water Company Location: Clayton West Wwtw Old Hall Lane, Clayton West, Barnsley, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 10 Effective Date: 31st March 2010 Issued Date: 25th February 2005 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	609	2	426780 412060
5	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: Sewage Disposal Works - Water Company Location: Clayton West Wwtw Old Hall Lane, Clayton West, Barnsley, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 12 Effective Date: 4th March 2009 Issued Date: 25th February 2005 Revocation Date: 31st March 2009 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	609	2	426780 412060
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 14 Effective Date: 3rd March 2010 Issued Date: 3rd March 2010 Revocation Date: 2nd September 2021 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 13 Effective Date: 1st April 2009 Issued Date: 14th October 2008 Revocation Date: 2nd March 2010 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 9 Effective Date: 6th October 2004 Issued Date: 6th October 2004 Revocation Date: 31st December 2005 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 7 Effective Date: 18th March 2003 Issued Date: 18th March 2003 Revocation Date: 5th October 2004 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 8 Effective Date: 1st January 2006 Issued Date: 18th March 2003 Revocation Date: 31st March 2009 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 6 Effective Date: 1st March 2000 Issued Date: 17th September 1998 Revocation Date: 31st December 2000 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 11 Effective Date: 1st January 2001 Issued Date: 17th September 1998 Revocation Date: 17th March 2003 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 4 Effective Date: 17th September 1998 Issued Date: 17th September 1998 Revocation Date: 31st December 1998 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 5 Effective Date: 1st January 1999 Issued Date: 17th September 1998 Revocation Date: 29th February 2000 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A18NW (NW)	619	2	426780 412070
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 15 Effective Date: 3rd September 2021 Issued Date: 3rd September 2021 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A18NW (N)	623	2	426782 412075

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 3 Effective Date: 29th October 1996 Issued Date: 29th October 1996 Revocation Date: 16th September 1998 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Pre National Rivers Authority Legislation where issue date < 01/09/1989** Positional Accuracy: Located by supplier to within 100m	A18NW (N)	644	2	426800 412100
5	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: WWTW/SEWAGE TREATMENT WORKS (WATER COMPANY) Location: Clayton West Stw Back Lane (Track Off), Clayton West, Huddersfield, West Yorkshire, Hd8 9qe Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: 3809(Ss) Permit Version: 2 Effective Date: 23rd July 1984 Issued Date: 23rd July 1984 Revocation Date: 28th October 1996 Discharge Type: Sewage Discharges - Final/Treated Effluent - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Post National Rivers Authority Legislation where issue date > 31/08/1989** Positional Accuracy: Located by supplier to within 100m	A18NW (N)	644	2	426800 412100
6	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Back Lane Cso Back Lane, Clayton West, Huddersfield, West Yorkshire, Hd8 9pp Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: Wra9265 Permit Version: 2 Effective Date: 31st March 2018 Issued Date: 26th February 2018 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Clvrt Trib Of Toad Hole Dike **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A12NW (W)	766	2	426166 411492
7	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Back Lane Cso Back Lane, Clayton West, Huddersfield, West Yorkshire, Hd8 9pp Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: Wra9265 Permit Version: 1 Effective Date: 4th September 2007 Issued Date: 4th September 2007 Revocation Date: 30th March 2018 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: Tributary Of Toad Hole Dike **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A12NW (W)	851	2	426080 411410

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
7	**Discharge Consents** Operator: Yorkshire Water Services Ltd Property Type: Sewage Disposal Works Location: Clayton West Stw, Back Lane, DENBY DALE, West Yorkshire Authority: Environment Agency, North East Region Catchment Area: Aire And Calder Navigation Reference: S/UD/71 Permit Version: Not Supplied Effective Date: Not Supplied Issued Date: Not Supplied Revocation Date: Not Supplied Discharge Type: Storm /emergency overflow Discharge Environment: Freshwater Stream/River Receiving Water: Culverted Tributary Of Toad Hole Dike **Status: Not Supplied** Positional Accuracy: Located by supplier to within 100m	A12NW (W)	851	2	426080 411410
8	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Park Mill Cso Opp Design Hse 6 Wakefield Rd, A636 Off Clayton West, Huddersfield, West Yorkshire, Hd8 9qb Authority: Environment Agency, North East Region Catchment Area: Calder Reference: 3212 Permit Version: 2 Effective Date: 31st March 2004 Issued Date: 26th February 2004 Revocation Date: 30th March 2018 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Modified (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A11NE (W)	950	2	426000 411660
8	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Park Mill Cso Opp Design Hse 6 Wakefield Rd, A636 Off Clayton West, Huddersfield, West Yorkshire, Hd8 9qb Authority: Environment Agency, North East Region Catchment Area: Calder Reference: 3212 Permit Version: 1 Effective Date: 2nd March 1977 Issued Date: 2nd March 1977 Revocation Date: 30th March 2004 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Transferred from Rivers (Prevention of Pollution) Act 1951-1961** Positional Accuracy: Located by supplier to within 10m	A11NE (W)	950	2	426000 411660
8	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Park Mill Cso Opp Design Hse 6 Wakefield Rd, A636 Off Clayton West, Huddersfield, West Yorkshire, Hd8 9qb Authority: Environment Agency, North East Region Catchment Area: Calder Reference: 3212(Ss) Permit Version: 2 Effective Date: 9th April 2018 Issued Date: 9th April 2018 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A11NE (W)	953	2	425999 411667

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
8	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Park Mill Cso Opp Design Hse 6 Wakefield Rd, A636 Off Clayton West, Huddersfield, West Yorkshire, Hd8 9qb Authority: Environment Agency, North East Region Catchment Area: Calder Reference: 3212 Permit Version: 3 Effective Date: 31st March 2018 Issued Date: 19th March 2018 Revocation Date: 8th April 2018 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A11NE (W)	953	2	425999 411667
8	**Discharge Consents** Operator: Yorkshire Water Services Limited Property Type: STORM TANK/CSO ON SEWERAGE NETWORK (WATER COMPANY) Location: Park Mill Cso Opp Design Hse 6 Wakefield Rd, A636 Off Clayton West, Huddersfield, West Yorkshire, Hd8 9qb Authority: Environment Agency, North East Region Catchment Area: Calder Reference: 3212(Ss) Permit Version: 1 Effective Date: 31st March 2018 Issued Date: 19th March 2018 Revocation Date: 8th April 2018 Discharge Type: Sewage Discharges - Stw Storm Overflow/Storm Tank - Water Company Discharge Environment: Freshwater Stream/River Receiving Water: River Dearne **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A11NE (W)	953	2	425999 411667
9	**Discharge Consents** Operator: COBEX LTD Property Type: MINING OF COAL + LIGNITE Location: Dearne Lea Occs (Proposed) Litherop Lane, Clayton West, Nr Wakefield, West Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: WRA7522 Permit Version: 1 Effective Date: 30th July 1999 Issued Date: 30th July 1999 Revocation Date: 24th December 2001 Discharge Type: Trade Effluent Discharge Environment: Freshwater Stream/River Receiving Water: RIVER DEARNE **Status: Revoked (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A24SW (N)	980	2	427450 412420
10	**Discharge Consents** Operator: Yorkshire Sculpture Park Property Type: CULTURAL/ZOO/COMMUNITY CENTRE/MUSEUM/LIBRARY/ARCHIVE Location: Longside Barns, Jebb Lane, Barnsley, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: Wra7623 Permit Version: 3 Effective Date: 26th July 2012 Issued Date: 26th July 2012 Revocation Date: Not Supplied Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Trib Of Dearne **Status: Varied under EPR 2010** Positional Accuracy: Located by supplier to within 10m	A15NW (E)	1000	2	428200 411460

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
10	**Discharge Consents** Operator: Yorkshire Sculpture Park Property Type: CULTURAL/ZOO/COMMUNITY CENTRE/MUSEUM/LIBRARY/ARCHIVE Location: Longside Barns, Jebb Lane, Barnsley, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: Wra7623 Permit Version: 2 Effective Date: 19th January 2001 Issued Date: 19th January 2001 Revocation Date: 25th July 2012 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Trib Of Dearne **Status: Varied by Application - (Water Resources Act 1991, Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A15NW (E)	1000	2	428200 411460
10	**Discharge Consents** Operator: Yorkshire Sculpture Park Property Type: CULTURAL/ZOO/COMMUNITY CENTRE/MUSEUM/LIBRARY/ARCHIVE Location: Longside Barns, Jebb Lane, Barnsley, South Yorkshire Authority: Environment Agency, North East Region Catchment Area: Don Tributaries Reference: Wra7623 Permit Version: 1 Effective Date: 1st August 2000 Issued Date: 1st August 2000 Revocation Date: 18th January 2001 Discharge Type: Sewage Discharges - Final/Treated Effluent - Not Water Company Discharge Environment: Land/Soakaway Receiving Water: Trib Of Dearne **Status: New Consent (Water Resources Act 1991, Section 88 & Schedule 10 as amended by Environment Act 1995)** Positional Accuracy: Located by supplier to within 10m	A15NW (E)	1000	2	428200 411460
11	**Local Authority Pollution Prevention and Controls** Name: Adare Halcyon Location: Park Mill, Manor Park, Clayton West, Hd8 9qq Authority: Kirklees Metropolitan Borough Council, Environmental Health Department Permit Reference: Ppc W 163 Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG6/16 Printworks **Status: Permitted** Positional Accuracy: Manually positioned to the address or location	A12NW (W)	732	3	426220 411644
	Nearest Surface Water Feature	A13SW (S)	158	-	426976 411132
12	**Pollution Incidents to Controlled Waters** Property Type: Farm Location: Bretton/Source Dearne Afu Authority: Environment Agency, North East Region Pollutant: Agricultural: General Note: Not Supplied Incident Date: 17th April 1991 Incident Reference: 121392 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A14SW (E)	297	2	427500 411300
13	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Sewage Treatment Works Location: Sewage Treatment Works, CLAYTON WEST Authority: Environment Agency, North East Region Pollutant: Sewage - Treated Effluent Note: No Fish Killed Incident Date: 4th July 1997 Incident Reference: SH970376 Catchment Area: Dearne Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A18SW (NW)	450	2	426800 411900

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
14	**Pollution Incidents to Controlled Waters** Property Type: Industrial Premises Location: Bretton/Source Dearne Afu Authority: Environment Agency, North East Region Pollutant: Milk/Creamery Wastes Note: Not Supplied Incident Date: 29th April 1990 Incident Reference: 115570 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A12NW (W)	644	2	426300 411600
15	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Sewage Treatment Works Location: Bretton/Source Dearne Afu Authority: Environment Agency, North East Region Pollutant: Sewage - Treated Effluent Note: Not Supplied Incident Date: 13th October 1989 Incident Reference: 104108 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A18NW (N)	742	2	426800 412200
16	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Sewage Treatment Works Location: River Dearne At, Litherop Lane Authority: Environment Agency, North East Region Pollutant: Sewage - Treated Effluent Note: Fish Killed: No Information Incident Date: 19th September 1997 Incident Reference: SH970508 Catchment Area: Dearne Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A23SE (N)	928	2	427200 412400
17	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Sewage Treatment Works Location: Bretton/Source Dearne Afu Authority: Environment Agency, North East Region Pollutant: Sewage - Storm Overflow Note: Not Supplied Incident Date: 6th November 1990 Incident Reference: 116808 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 2 - Significant Incident Positional Accuracy: Located by supplier to within 100m	A11NE (W)	958	2	426000 411695
17	**Pollution Incidents to Controlled Waters** Property Type: Industrial Premises Location: Bretton/Source Dearne Afu Authority: Environment Agency, North East Region Pollutant: Milk/Creamery Wastes Note: Not Supplied Incident Date: 2nd July 1989 Incident Reference: 100894 Catchment Area: Not Given Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A11NE (W)	959	2	426000 411700
18	**Pollution Incidents to Controlled Waters** Property Type: Water Company Sewage: Sewage Treatment Works Location: Calder 02C Authority: Environment Agency, North East Region Pollutant: Other Sewage Note: Fish Killed: No Information; Calder 02C Incident Date: 1st August 1995 Incident Reference: SL950785 Catchment Area: Calder Tributaries Receiving Water: Freshwater Stream/River Cause of Incident: Not Given Incident Severity: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 100m	A19NW (NE)	967	2	427700 412300

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	River Quality Name: River_Dearne GQA Grade: River Quality C Reach: Park_Gate_Dike_Clayton_West_St Estimated Distance (km): 1.5 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A17SE (NW)	502	2	426655 411889
	River Quality Name: River_Dearne GQA Grade: River Quality D Reach: Clayton_West_Stw_Bentley_Broo Estimated Distance (km): 1.1 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A18NW (N)	621	2	426850 412086
	River Quality Name: River_Dearne GQA Grade: River Quality C Reach: Bentley_Brook_Bretton_Lake_Outle Estimated Distance (km): 1.6 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A19NW (NE)	899	2	427556 412298
	River Quality Name: Bentley_Brook GQA Grade: River Quality B Reach: Furnace_Grange_River_Dearn Estimated Distance (km): 3.1 Flow Rate: Flow less than 0.31 cumecs Flow Type: River Year: 2000	A19NW (NE)	899	2	427556 412298
19	**Substantiated Pollution Incident Register** Authority: Environment Agency - North East Region, Yorkshire Area Incident Date: 17th July 2016 Incident Reference: 1453346 Water Impact: Category 2 - Significant Incident Air Impact: Category 4 - No Impact Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: Sewage Materials: Final Effluent	A18SW (NW)	603	2	426787 412055
19	**Substantiated Pollution Incident Register** Authority: Environment Agency - North East Region, Yorkshire Area Incident Date: 14th April 2004 Incident Reference: 229489 Water Impact: Category 2 - Significant Incident Air Impact: Category 4 - No Impact Land Impact: Category 3 - Minor Incident Positional Accuracy: Located by supplier to within 10m Pollutant: Sewage Materials: Sludge	A18NW (N)	612	2	426810 412070
20	**Substantiated Pollution Incident Register** Authority: Environment Agency - North East Region, Yorkshire Area Incident Date: 4th January 2006 Incident Reference: 368861 Water Impact: Category 2 - Significant Incident Air Impact: Category 4 - No Impact Land Impact: Category 4 - No Impact Positional Accuracy: Located by supplier to within 10m Pollutant: Sewage Materials: Grey Water	A12NW (W)	770	2	426161 411489

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: British Coal; North Yorkshire Area Licence Number: 2/27/08/103 Permit Version: Not Supplied Location: Location Description Not Available Authority: Environment Agency, North East Region Abstraction: Unclassified Combinations Abstraction Type: Not Supplied Source: Surface Daily Rate (m3): 818 Yearly Rate (m3): 196420 Details: Licence Revoked Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A11NE (W)	1033	2	425920 411680
	Water Abstractions Operator: Mr A D Brook Licence Number: 2/27/13/173 Permit Version: 100 Location: Borehole - Coal Measures - Emley Authority: Environment Agency, North East Region Abstraction: General Farming And Domestic Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 20 Yearly Rate (m3): 7300 Details: Gilcar Farm,Emley,Huddersfield, Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 22nd September 1994 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A17NW (NW)	1043	2	426300 412300
	Water Abstractions Operator: Mr J S Auckland Licence Number: 2/27/08/112 Permit Version: 100 Location: Borehole Authority: Environment Agency, North East Region Abstraction: Other Industrial/Commercial/Public Services: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 18 Yearly Rate (m3): 6570 Details: Car Spares & Accessaries, Car Wash Of A636, Scissett, Denby Dale Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 20th June 1996 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(W)	1801	2	425200 410800
	Water Abstractions Operator: Mr J S Auckland Licence Number: 2/27/08/112 Permit Version: 100 Location: Borehole - Coal Measures - Scissett Authority: Environment Agency, North East Region Abstraction: Retail: General Use (Medium Loss) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Car Spares & Accessaries, Car Wash Of A636, Scissett, Denby Dale Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 20th June 1996 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(W)	1801	2	425200 410800

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Groundwater Vulnerability Map Combined Classification: Secondary Bedrock Aquifer - Medium Vulnerability Combined Vulnerability: Medium Combined Aquifer: Productive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: Low Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: <40% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A13NW (W)	0	4	427000 411381
	Groundwater Vulnerability Map Combined Classification: Secondary Bedrock Aquifer - High Vulnerability Combined Vulnerability: High Combined Aquifer: Productive Bedrock Aquifer, No Superficial Aquifer Pollutant Speed: High Bedrock Flow: Well Connected Fractures Dilution: 300-550 mm/year Baseflow Index: >70% Superficial Patchiness: <90% Superficial Thickness: <3m Superficial Recharge: No Data	A13NW (W)	0	4	427067 411381
	Groundwater Vulnerability - Soluble Rock Risk None				
	Bedrock Aquifer Designations Aquifer Designation: Secondary Aquifer - A	A13NW (W)	0	4	427067 411381
	Superficial Aquifer Designations No Data Available				
	Extreme Flooding from Rivers or Sea without Defences None				
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				
21	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 389.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A13SW (S)	158	5	426977 411132
22	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 20.6 Watercourse Level: Underground Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A13SW (SW)	251	5	426819 411067

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
23	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 10.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A13SW (SW)	268	5	426801 411058
24	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 8.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A13SW (SW)	274	5	426797 411053
25	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 94.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A13SW (SW)	275	5	426791 411055
26	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.0 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A13SW (SW)	275	5	426798 411051
27	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 154.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A13SW (SW)	277	5	426803 411046
28	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 372.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12SE (SW)	319	5	426703 411069
29	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 71.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12SE (SW)	320	5	426704 411068
30	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 430.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18SE (N)	359	5	427173 411831
31	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 207.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A7NE (SW)	376	5	426676 411016

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
32	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 411.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A7NE (SW)	376	5	426676 411016
33	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 741.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dearne Catchment Name: Don and Rother Primacy: 1	A17SE (NW)	512	5	426648 411897
34	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 133.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12SE (W)	514	5	426426 411204
35	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 333.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A7NE (SW)	530	5	426640 410849
36	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 130.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A7NE (SW)	530	5	426640 410849
37	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 239.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12SW (W)	594	5	426339 411289
38	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 178.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12NW (W)	617	5	426319 411542
39	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 180.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A8SW (S)	619	5	426870 410675
40	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 108.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A8SW (S)	619	5	426870 410675

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
41	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 316.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A7NE (SW)	627	5	426666 410723
42	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 20.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A7NE (SW)	627	5	426652 410730
43	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 8.1 Watercourse Level: Underground Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12NW (W)	651	5	426304 411644
44	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 67.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12NW (W)	654	5	426303 411652
45	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 279.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	665	5	426785 412136
46	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 120.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A17SE (NW)	669	5	426537 412011
47	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 21.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dearne Catchment Name: Don and Rother Primacy: 1	A18NW (N)	674	5	426812 412134
48	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 20.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	674	5	426812 412134
49	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 165.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dearne Catchment Name: Don and Rother Primacy: 1	A18NW (N)	677	5	426855 412143

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
50	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 30.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12NW (W)	678	5	426254 411507
51	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.7 Watercourse Level: Underground Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12NW (W)	678	5	426254 411507
52	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12NW (W)	678	5	426254 411506
53	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Toad Hole Dike Catchment Name: Don and Rother Primacy: 1	A12NW (NW)	680	5	426298 411718
54	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.1 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	682	5	426792 412138
55	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 9.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	682	5	426828 412144
56	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 408.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dearne Catchment Name: Don and Rother Primacy: 1	A17SW (NW)	683	5	426297 411724
57	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1.9 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	692	5	426827 412154
58	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 134.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	694	5	426827 412156

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
59	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12NW (W)	709	5	426224 411511
60	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 65.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A12NW (W)	716	5	426216 411511
61	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 562.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dearne Catchment Name: Don and Rother Primacy: 1	A18NW (N)	727	5	426982 412197
62	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 188.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A17NE (NW)	787	5	426446 412089
63	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 13.7 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A8SW (S)	791	5	426870 410502
64	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 17.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A8SW (S)	804	5	426866 410489
65	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 128.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NE (NE)	811	5	427747 412071
66	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 5.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	820	5	426795 412279
67	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 15.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	824	5	426791 412282

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
68	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NE (N)	828	5	427343 412288
69	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 115.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NE (N)	836	5	427343 412296
70	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 2.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NE (N)	836	5	427343 412296
71	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 4.4 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	837	5	426780 412293
72	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 139.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NE (N)	837	5	427345 412297
73	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 74.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NW (N)	841	5	426780 412297
74	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 55.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	848	5	427589 412227
75	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 138.5 Watercourse Level: On ground surface Permanent: True Watercourse Name: Bretton Lakes Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	852	5	427597 412226
76	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 182.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	864	5	427557 412259

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
77	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 6.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NE (N)	867	5	427246 412338
78	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 9.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A18NE (N)	872	5	427249 412343
79	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 103.3 Watercourse Level: Not Supplied Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A17NE (N)	891	5	426726 412337
80	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 25.5 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	896	5	427731 412194
81	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 36.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	907	5	427718 412216
82	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 7.6 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (N)	931	5	427461 412366
83	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 19.7 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (N)	938	5	427462 412373
84	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 78.8 Watercourse Level: On ground surface Permanent: True Watercourse Name: Bretton Lakes Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	940	5	427725 412252
85	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 180.1 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A17NE (NW)	953	5	426629 412373

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
86	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 60.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	963	5	427617 412341
87	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 568.2 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dearne Catchment Name: Don and Rother Primacy: 1	A11NE (W)	969	5	425984 411676
88	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 158.9 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A11NE (W)	969	5	425984 411676
89	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 123.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A17NW (NW)	969	5	426328 412228
90	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 16.8 Watercourse Level: Underground Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A17NW (NW)	969	5	426328 412228
91	**OS Water Network Lines** Watercourse Form: Lake Watercourse Length: 147.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A19NW (NE)	969	5	427646 412333
92	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 1554.0 Watercourse Level: On ground surface Permanent: True Watercourse Name: River Dearne Catchment Name: Don and Rother Primacy: 1	A24SW (N)	972	5	427479 412403
93	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 341.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Bentley Brook Catchment Name: Don and Rother Primacy: 1	A24SW (N)	972	5	427479 412403
94	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 84.4 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A17NW (NW)	981	5	426311 412230

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
95	**OS Water Network Lines** Watercourse Form: Inland river Watercourse Length: 446.3 Watercourse Level: On ground surface Permanent: True Watercourse Name: Not Supplied Catchment Name: Don and Rother Primacy: 1	A15NW (E)	998	5	428198 411466

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
96	**BGS Recorded Landfill Sites** Site Name: Litherop Tip Location: Litherop Lane, Clayton West, HUDDERSFIELD, West Yorkshire Authority: British Geological Survey, National Geoscience Information Service Ground Water: Information not available Surface Water: Information not available Geology: N/A Positional Accuracy: Positioned by the supplier Boundary Accuracy: Moderate	A19SW (NE)	370	-	427413 411776
97	**Historical Landfill Sites** Licence Holder: Denby Dale Rural District Council Location: Litherop Lane, Clayton West, Huddersfield, West Yorkshire Name: Litherop Tip Operator Location: Not Supplied Boundary Accuracy: As Supplied Provider Reference: EAHLD04801 First Input Date: 31st December 1955 Last Input Date: 31st December 1971 Specified Waste Type: Deposited Waste included Household Waste EA Waste Ref: 0 Regis Ref: Not Supplied WRC Ref: Not Supplied BGS Ref: 1743 Other Ref: 4400/(169), 4400/(150)	A19SW (NE)	369	2	427413 411774
98	**Licensed Waste Management Facilities (Locations)** Licence Number: 101347 Location: Clayton Hall Farm, Clayton West, Huddersfield, West Yorkshire, HD8 9QE Operator Name: Clayton Hall Farm Bioenergy Llp Operator Location: Not Supplied Authority: Environment Agency - North East Region, Yorkshire Area Site Category: Treatment - Biological **Licence Status: Issued** Issued: 6th August 2010 Last Modified: Not Supplied Expires: Not Supplied Suspended: Not Supplied Revoked: Not Supplied Surrendered: Not Supplied IPPC Reference: Not Supplied Positional Accuracy: Located by supplier to within 10m	A13SW (W)	0	2	427030 411380
	Local Authority Landfill Coverage Name: Kirklees Metropolitan Borough Council - Has not been able to supply Landfill data		0	6	427067 411381
	Local Authority Landfill Coverage Name: Barnsley Metropolitan Borough Council - Has supplied landfill data		265	7	427473 411356
	Local Authority Landfill Coverage Name: Wakefield Metropolitan Borough Council - Has not been able to supply Landfill data		849	8	427588 412228
99	**Local Authority Recorded Landfill Sites** Location: Not Supplied Reference: 169 Authority: Barnsley Metropolitan Borough Council, Environmental Health and Trading Standards **Last Reported Status: Unknown** Types of Waste: Not Supplied Date of Closure: Not Supplied Positional Accuracy: Positioned by the supplier Boundary Quality: Moderate	A19SW (NE)	370	7	427413 411776
100	**Potentially Infilled Land (Non-Water)** Bearing Ref: NE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A18SE (NE)	427	-	427398 411851
101	**Potentially Infilled Land (Non-Water)** Bearing Ref: NW Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A17SW (NW)	871	-	426205 411950
102	**Potentially Infilled Land (Non-Water)** Bearing Ref: SE Use: Unknown Filled Ground (Pit, quarry etc) Date of Mapping: 1989	A9NE (SE)	917	-	428029 410895

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
103	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1955	A13SW (SW)	23	-	427006 411269
104	**Potentially Infilled Land (Water)** Use: Unknown Filled Ground (Pond, marsh, river, stream, dock etc) Date of Mapping: 1955	A12NW (W)	782	-	426159 411592

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS 1:625,000 Solid Geology Description: Pennine Lower Coal Measures Formation And South Wales Lower Coal Measures Formation (Undifferentiated)	A13NW (W)	0	1	427067 411381
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A13NW (W)	0	1	427067 411381
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 25 - 35 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 120 - 180 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 30 - 45 mg/kg	A18SW (NW)	364	1	426747 411784
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A14NE (E)	780	1	427981 411402
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: <15 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A9NE (SE)	815	1	427929 410924
	BGS Estimated Soil Chemistry Source: British Geological Survey, National Geoscience Information Service Soil Sample Type: Rural Soil Arsenic Concentration: 15 - 25 mg/kg Cadmium Concentration: <1.8 mg/kg Chromium Concentration: 60 - 90 mg/kg Lead Concentration: <100 mg/kg Nickel Concentration: 15 - 30 mg/kg	A15NW (E)	896	1	428097 411402
105	**BGS Recorded Mineral Sites** Site Name: Litherop Lane Quarry Location: Clayton West, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 13374 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	438	1	427405 411860

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
106	**BGS Recorded Mineral Sites** Site Name: Litherop Location: High Hoyland, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 94607 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Emley Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A19SW (NE)	572	1	427422 412000
107	**BGS Recorded Mineral Sites** Site Name: Jebb Lane Location: Haigh, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 25943 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A14SE (E)	633	1	427813 411123
108	**BGS Recorded Mineral Sites** Site Name: Bretton Lakes Location: High Hoyland, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 25930 Type: Underground **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	860	1	427833 412055
109	**BGS Recorded Mineral Sites** Site Name: Gillcar Quarry Location: Emley, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 94608 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Emley Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	880	1	426197 411955
109	**BGS Recorded Mineral Sites** Site Name: Gillcar Quarry Location: Emley, Huddersfield, West Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 94609 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Emley Rock Commodity: Sandstone Positional Accuracy: Located by supplier to within 10m	A17SW (NW)	898	1	426160 411930
110	**BGS Recorded Mineral Sites** Site Name: Deep Hargh Wood Location: Clayton West, Barnsley, South Yorkshire Source: British Geological Survey, National Geoscience Information Service Reference: 103070 Type: Opencast **Status: Ceased** Operator: Unknown Operator Operator Location: Not Supplied Periodic Type: Carboniferous Geology: Pennine Lower Coal Measures Formation Commodity: Iron Ore - Ironstone Positional Accuracy: Located by supplier to within 10m	A9NE (SE)	913	1	428018 410882

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Measured Urban Soil Chemistry No data available				
	BGS Urban Soil Chemistry Averages No data available				
	Coal Mining Affected Areas Description: In an area which may be affected by coal mining activity. It is recommended that a coal mining report is obtained from the Coal Authority. Contact details are included in the Useful Contacts section of this report.	A13NW (W)	0	9	427067 411381
	Mining Instability Mining Evidence: Inconclusive Coal Mining Source: Ove Arup & Partners Boundary Quality: As Supplied	A13NW (W)	0	-	427067 411381
	Non Coal Mining Areas of Great Britain No Hazard				
	Potential for Collapsible Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	427067 411381
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	427074 411394
	Potential for Compressible Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	427067 411381
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	40	1	426900 411268
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	58	1	427024 411231
	Potential for Compressible Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	233	1	426887 411062
	Potential for Ground Dissolution Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	427067 411381
	Potential for Landslide Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	427067 411381
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (W)	28	1	426904 411354
	Potential for Landslide Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	48	1	426867 411426
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	123	1	426894 411174
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	150	1	427324 411557
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A13SE (SE)	194	1	427269 411111
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A14SW (E)	197	1	427405 411295
	Potential for Landslide Ground Stability Hazards Hazard Potential: Moderate Source: British Geological Survey, National Geoscience Information Service	A14SW (E)	232	1	427435 411343
	Potential for Landslide Ground Stability Hazards Hazard Potential: Low Source: British Geological Survey, National Geoscience Information Service	A14NW (NE)	241	1	427430 411545

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Potential for Running Sand Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	427067 411381
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	427074 411394
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	40	1	426900 411268
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (S)	58	1	427024 411231
	Potential for Running Sand Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	233	1	426887 411062
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	427067 411381
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: Very Low Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	427074 411394
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	40	1	426900 411268
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13SW (SW)	75	1	426929 411215
	Potential for Shrinking or Swelling Clay Ground Stability Hazards Hazard Potential: No Hazard Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	181	1	427364 411551
	Radon Potential - Radon Affected Areas Affected Area: The property is an Intermediate probability radon area (3 to 5% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	427067 411381
	Radon Potential - Radon Affected Areas Affected Area: The property is in an Intermediate probability radon area (1 to 3% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	426975 411381
	Radon Potential - Radon Affected Areas Affected Area: The property is in a Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level). Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	427100 411400
	Radon Potential - Radon Protection Measures Protection Measure: Basic radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	427067 411381
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NW (W)	0	1	426975 411381
	Radon Potential - Radon Protection Measures Protection Measure: No radon protective measures are necessary in the construction of new dwellings or extensions Source: British Geological Survey, National Geoscience Information Service	A13NE (NE)	0	1	427100 411400

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
111	**Contemporary Trade Directory Entries** Name: Adare S E C Ltd Location: Park Mill, Wakefield Road, Clayton West, Huddersfield, HD8 9QQ Classification: Printers **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A12NW (W)	725	-	426221 411618
112	**Contemporary Trade Directory Entries** Name: Ecocute Ltd Location: Unit 3, Longsisde Barns, Jebb Lane, Haigh, Barnsley, S75 4BS Classification: Electricity Generating & Distributing Equipment **Status: Inactive** Positional Accuracy: Automatically positioned to the address	A15SW (E)	999	-	428202 411311
113	**Points of Interest - Manufacturing and Production** Name: H Wood & Sons Location: Bilham Grange Farm, Bilham Road, Clayton West, Huddersfield, HD8 9PA Category: Farming Class Code: Livestock Farming Positional Accuracy: Positioned to address or location	A7NE (SW)	667	10	426452 410830
114	**Points of Interest - Manufacturing and Production** Name: Factory Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	712	10	426230 411595
114	**Points of Interest - Manufacturing and Production** Name: Factory Location: HD8 Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to address or location	A12NW (W)	725	10	426220 411612
115	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	846	10	426095 411596
116	**Points of Interest - Manufacturing and Production** Name: Works Location: Not Supplied Category: Industrial Features Class Code: Unspecified Works Or Factories Positional Accuracy: Positioned to an adjacent address or location	A12NW (W)	847	10	426084 411483
117	**Points of Interest - Public Infrastructure** Name: Slurry Bed Location: HD8 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A13NE (NE)	0	10	427077 411402
118	**Points of Interest - Public Infrastructure** Name: Sewage Works Location: HD8 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A18SW (NW)	424	10	426757 411857
118	**Points of Interest - Public Infrastructure** Name: Sewage Works Location: HD8 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	A18SW (NW)	429	10	426804 411880
118	**Points of Interest - Public Infrastructure** Name: Sewage Works Location: HD8 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to address or location	A18SW (NW)	469	10	426820 411926
118	**Points of Interest - Public Infrastructure** Name: Sludge Tanks Location: HD8 Category: Infrastructure and Facilities Class Code: Waste Storage, Processing and Disposal Positional Accuracy: Positioned to an adjacent address or location	A18SW (NW)	471	10	426730 411896

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
119	**Points of Interest - Public Infrastructure** Name: Graveyard Location: S75 Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A9SW (SE)	745	10	427435 410586
119	**Points of Interest - Public Infrastructure** Name: Graveyard Location: Not Supplied Category: Infrastructure and Facilities Class Code: Cemeteries and Crematoria Positional Accuracy: Positioned to an adjacent address or location	A9SW (SE)	750	10	427454 410587
120	**Points of Interest - Recreational and Environmental** Name: Picnic Area Location: HD8 Category: Recreational Class Code: Picnic Areas Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	480	10	427434 411891
120	**Points of Interest - Recreational and Environmental** Name: Picnic Area Location: Litherop Lane, HD8 Category: Recreational Class Code: Picnic Areas Positional Accuracy: Positioned to an adjacent address or location	A19SW (NE)	482	10	427431 411895

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
121	**Ancient Woodland** Name: Bilham Shrogg Reference: 1103292 Area(m²): 113151.21 Type: Plantation on Ancient Woodland	A13SW (SW)	259	11	426796 411071
122	**Ancient Woodland** Name: Hoyland Bank Wood Reference: 1103296 Area(m²): 22322.91 Type: Plantation on Ancient Woodland	A14SW (E)	274	11	427483 411342
123	**Ancient Woodland** Name: Hoyland Bank Wood Reference: 1103296 Area(m²): 147811.87 Type: Ancient and Semi-Natural Woodland	A14SW (SE)	304	11	427464 411139
124	**Ancient Woodland** Name: High Wood Reference: 1103298 Area(m²): 697857.87 Type: Plantation on Ancient Woodland	A9NE (SE)	908	11	427998 410853
125	**Areas of Adopted Green Belt** Authority: Kirklees Metropolitan Borough Council Plan Name: Kirklees Unitary Development Plan **Status: Adopted** Plan Date: 1st March 1999	A13NW (W)	0	12	427067 411381
126	**Areas of Adopted Green Belt** Authority: Barnsley Metropolitan Borough Council, Planning Department Plan Name: Proposal Map **Status: Adopted** Plan Date: 3rd January 2019	A14SW (E)	265	13	427474 411348
127	**Areas of Adopted Green Belt** Authority: Wakefield City Metropolitan District Council Plan Name: Proposal Map **Status: Adopted** Plan Date: 12th September 2012	A19NW (NE)	851	14	427579 412235
128	**Areas of Unadopted Green Belt** Authority: Kirklees Metropolitan Borough Council Plan Name: Kirklees Local Plan **Status: Submission Draft** Plan Date: 25th April 2017	A13NW (W)	0	12	427067 411381
129	**Nitrate Vulnerable Zones** Name: River Dearne Nvz Description: Surface Water Source: Environment Agency, Head Office	A13NW (W)	0	4	427067 411381

Agency & Hydrological	Version	Update Cycle
Contaminated Land Register Entries and Notices		
Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards	January 2020	Annual Rolling Update
Environment Agency - Head Office	November 2023	Annually
Kirklees Metropolitan Borough Council - Planning Services	October 2017	Annual Rolling Update
Wakefield City Metropolitan District Council - Environmental Health	October 2017	Annual Rolling Update
Discharge Consents		
Environment Agency - North East Region	October 2023	Quarterly
Enforcement and Prohibition Notices		
Environment Agency - North East Region	March 2013	
Integrated Pollution Controls		
Environment Agency - North East Region	January 2009	
Integrated Pollution Prevention And Control		
Environment Agency - North East Region	January 2023	Quarterly
Local Authority Integrated Pollution Prevention And Control		
Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards	April 2014	Variable
Kirklees Metropolitan Borough Council - Environmental Health Department	April 2014	Variable
Wakefield City Metropolitan District Council - Environmental Health	December 2020	Variable
Local Authority Pollution Prevention and Controls		
Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards	April 2014	Annual Rolling Update
Kirklees Metropolitan Borough Council - Environmental Health Department	April 2014	Annual Rolling Update
Wakefield City Metropolitan District Council - Environmental Health	December 2020	Annual Rolling Update
Local Authority Pollution Prevention and Control Enforcements		
Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards	April 2014	Variable
Kirklees Metropolitan Borough Council - Environmental Health Department	April 2014	Variable
Wakefield City Metropolitan District Council - Environmental Health	June 2014	Variable
Nearest Surface Water Feature		
Ordnance Survey	December 2023	
Pollution Incidents to Controlled Waters		
Environment Agency - North East Region	December 1998	
Prosecutions Relating to Authorised Processes		
Environment Agency - North East Region	July 2015	
Prosecutions Relating to Controlled Waters		
Environment Agency - North East Region	March 2013	
Registered Radioactive Substances		
Environment Agency - North East Region	June 2016	As notified
Environment Agency - Head Office	May 2023	Quarterly
River Quality		
Environment Agency - Head Office	November 2001	Not Applicable
River Quality Biology Sampling Points		
Environment Agency - Head Office	April 2012	
River Quality Chemistry Sampling Points		
Environment Agency - Head Office	April 2012	
Substantiated Pollution Incident Register		
Environment Agency - North East Region - Ridings Area	October 2023	Quarterly
Environment Agency - North East Region - Yorkshire Area	October 2023	Quarterly
Water Abstractions		
Environment Agency - North East Region	October 2023	Quarterly
Water Industry Act Referrals		
Environment Agency - North East Region	October 2017	
Groundwater Vulnerability Map		
Environment Agency - Head Office	June 2018	As notified

Data Currency

Agency & Hydrological	Version	Update Cycle
Bedrock Aquifer Designations Environment Agency - Head Office	January 2018	As notified
Superficial Aquifer Designations Environment Agency - Head Office	January 2018	As notified
Source Protection Zones Environment Agency - Head Office	September 2022	Bi-Annually
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	December 2023	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	December 2023	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	February 2023	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	January 2024	Quarterly
Flood Defences Environment Agency - Head Office	August 2022	Quarterly
OS Water Network Lines Ordnance Survey	January 2024	Quarterly
Surface Water 1 in 30 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 100 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 1000 year Flood Extent Environment Agency - Head Office	May 2018	Annually
Surface Water Suitability Environment Agency - Head Office	February 2016	Annually
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	As notified

Waste	Version	Update Cycle
BGS Recorded Landfill Sites		
British Geological Survey - National Geoscience Information Service	November 2002	As notified
Historical Landfill Sites		
Environment Agency - Head Office	July 2023	Quarterly
Integrated Pollution Control Registered Waste Sites		
Environment Agency - North East Region	January 2009	Not Applicable
Licensed Waste Management Facilities (Landfill Boundaries)		
Environment Agency - North East Region - Ridings Area	January 2024	Quarterly
Environment Agency - North East Region - Yorkshire Area	January 2024	Quarterly
Licensed Waste Management Facilities (Locations)		
Environment Agency - North East Region - Ridings Area	January 2023	Quarterly
Environment Agency - North East Region - Yorkshire Area	January 2023	Quarterly
Local Authority Landfill Coverage		
Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards	February 2003	Not Applicable
Kirklees Metropolitan Borough Council - Planning Services	February 2003	Not Applicable
Wakefield City Metropolitan District Council - Environmental Health	February 2003	Not Applicable
Local Authority Recorded Landfill Sites		
Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards	October 2018	
Kirklees Metropolitan Borough Council - Planning Services	October 2018	
Wakefield City Metropolitan District Council - Environmental Health	October 2018	
Potentially Infilled Land (Non-Water)		
Landmark Information Group Limited	December 1999	
Potentially Infilled Land (Water)		
Landmark Information Group Limited	December 1999	
Registered Landfill Sites		
Environment Agency - North East Region - Ridings Area	March 2006	Not Applicable
Environment Agency - North East Region - Yorkshire Area	March 2006	Not Applicable
Registered Waste Transfer Sites		
Environment Agency - North East Region - Ridings Area	April 2018	
Environment Agency - North East Region - Yorkshire Area	April 2018	
Registered Waste Treatment or Disposal Sites		
Environment Agency - North East Region - Ridings Area	June 2015	
Environment Agency - North East Region - Yorkshire Area	June 2015	
Hazardous Substances	**Version**	**Update Cycle**
Control of Major Accident Hazards Sites (COMAH)		
Health and Safety Executive	March 2023	Bi-Annually
Explosive Sites		
Health and Safety Executive	March 2017	
Notification of Installations Handling Hazardous Substances (NIHHS)		
Health and Safety Executive	August 2001	
Planning Hazardous Substance Enforcements		
Kirklees Metropolitan Borough Council - Planning Services	August 2015	Variable
Barnsley Metropolitan Borough Council - Planning Department	January 2016	Variable
Wakefield City Metropolitan District Council	July 2023	Variable
Planning Hazardous Substance Consents		
Kirklees Metropolitan Borough Council - Planning Services	August 2015	Variable
Wakefield City Metropolitan District Council	February 2016	Variable
Barnsley Metropolitan Borough Council - Planning Department	January 2016	Variable

Geological	Version	Update Cycle
BGS 1:625,000 Solid Geology British Geological Survey - National Geoscience Information Service	January 2009	As notified
BGS Estimated Soil Chemistry British Geological Survey - National Geoscience Information Service	December 2015	As notified
BGS Recorded Mineral Sites British Geological Survey - National Geoscience Information Service	June 2023	Bi-Annually
CBSCB Compensation District Cheshire Brine Subsidence Compensation Board (CBSCB) Cheshire Brine Subsidence Compensation Board (CBSCB)	August 2011 November 2020	As notified
Coal Mining Affected Areas The Coal Authority - Property Searches	February 2023	Annual Rolling Update
Mining Instability Ove Arup & Partners	June 1998	Not Applicable
Non Coal Mining Areas of Great Britain British Geological Survey - National Geoscience Information Service	May 2015	Not Applicable
Potential for Collapsible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	April 2020	As notified
Potential for Compressible Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Ground Dissolution Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Landslide Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Running Sand Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Potential for Shrinking or Swelling Clay Ground Stability Hazards British Geological Survey - National Geoscience Information Service	January 2019	As notified
Radon Potential - Radon Affected Areas British Geological Survey - National Geoscience Information Service	October 2023	Annually
Radon Potential - Radon Protection Measures British Geological Survey - National Geoscience Information Service	October 2023	Annually

Data Currency

Industrial Land Use	Version	Update Cycle
Contemporary Trade Directory Entries Thomson Directories	October 2023	Quarterly
Fuel Station Entries Catalist Ltd - Experian	November 2023	Quarterly
Gas Pipelines National Grid	October 2021	Bi-Annually
Points of Interest - Commercial Services PointX	December 2023	Quarterly
Points of Interest - Education and Health PointX	December 2023	Quarterly
Points of Interest - Manufacturing and Production PointX	December 2023	Quarterly
Points of Interest - Public Infrastructure PointX	December 2023	Quarterly
Points of Interest - Recreational and Environmental PointX	December 2023	Quarterly
Underground Electrical Cables National Grid	February 2023	Bi-Annually

Sensitive Land Use	Version	Update Cycle
Ancient Woodland		
Natural England	October 2023	Bi-Annually
Areas of Adopted Green Belt		
Barnsley Metropolitan Borough Council - Planning Department	August 2023	Quarterly
Kirklees Metropolitan Borough Council	August 2023	Quarterly
Wakefield City Metropolitan District Council	August 2023	Quarterly
Areas of Unadopted Green Belt		
Barnsley Metropolitan Borough Council - Planning Department	August 2023	Quarterly
Kirklees Metropolitan Borough Council	August 2023	Quarterly
Wakefield City Metropolitan District Council	August 2023	Quarterly
Areas of Outstanding Natural Beauty		
Natural England	November 2023	Bi-Annually
Environmentally Sensitive Areas		
Natural England	August 2023	
Forest Parks		
Forestry Commission	May 2023	Not Applicable
Local Nature Reserves		
Natural England	August 2023	Bi-Annually
Marine Nature Reserves		
Natural England	October 2023	Bi-Annually
National Nature Reserves		
Natural England	August 2023	Bi-Annually
National Parks		
Natural England	February 2018	Bi-Annually
Nitrate Sensitive Areas		
Natural England	April 2023	Not Applicable
Nitrate Vulnerable Zones		
Department for Environment, Food and Rural Affairs (DEFRA - formerly FRCA)	April 2016	
Environment Agency - Head Office	March 2023	Bi-Annually
Ramsar Sites		
Natural England	October 2023	Bi-Annually
Sites of Special Scientific Interest		
Natural England	November 2023	Bi-Annually
Special Areas of Conservation		
Natural England	October 2023	Bi-Annually
Special Protection Areas		
Natural England	October 2023	Bi-Annually

Data Suppliers

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Scottish Environment Protection Agency	
The Coal Authority	
British Geological Survey	
Centre for Ecology and Hydrology	
Natural Resources Wales	
Scottish Natural Heritage	
Natural England	
Public Health England	
Ove Arup	
Stantec UK Ltd	

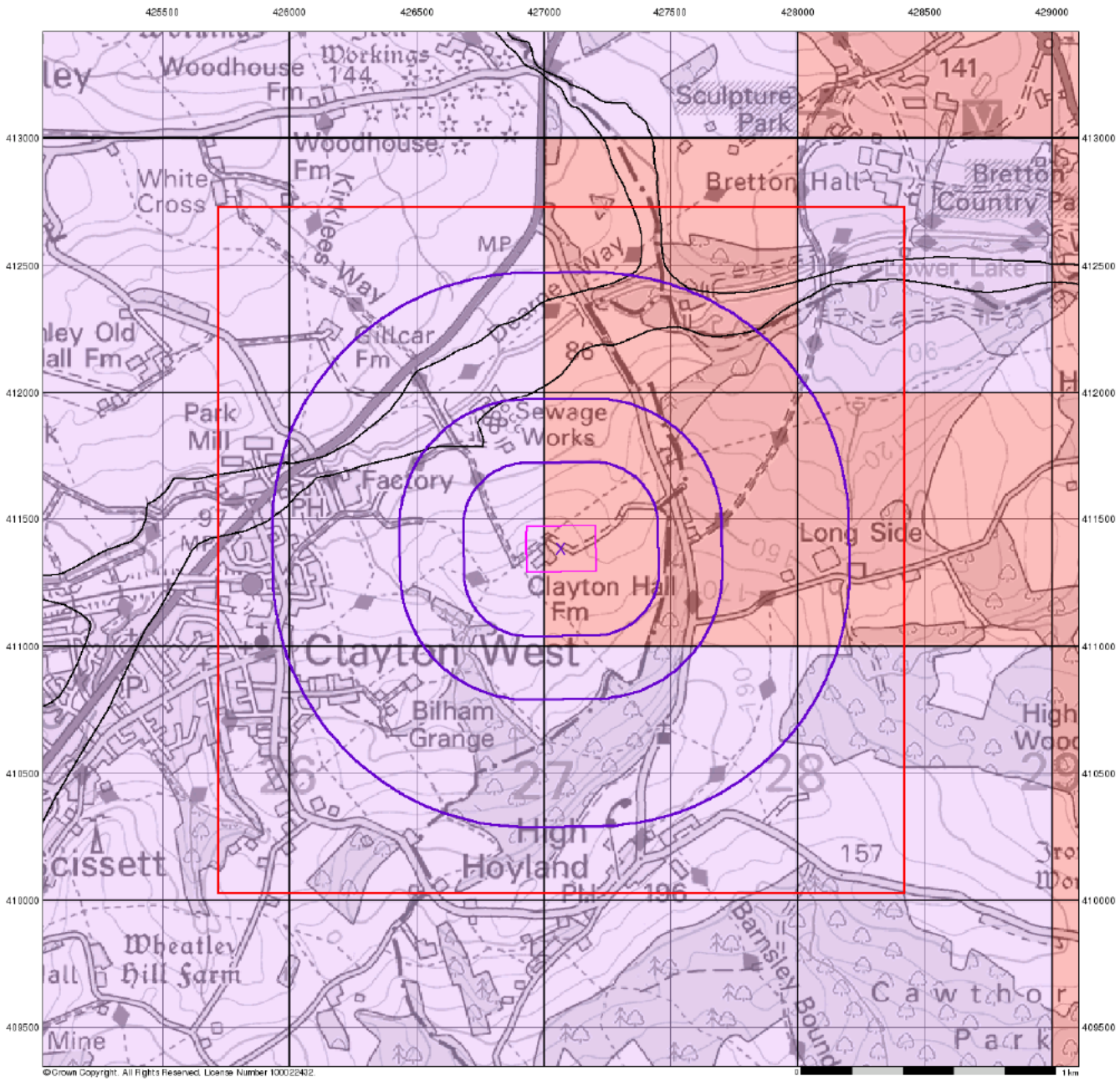
Useful Contacts

Contact	Name and Address	Contact Details
1	**British Geological Survey - Enquiry Service** British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
2	**Environment Agency - National Customer Contact Centre (NCCC)** PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 03708 506 506 Email: enquiries@environment-agency.gov.uk
3	**Kirklees Metropolitan Borough Council - Environmental Health Department** West Riding House, 9 Manchester Road, Huddersfield, West Yorkshire, HD1 3HH	Telephone: 01484 221000 Email: customer.relations@kirklees.gov.uk Website: www.kirklees.gov.uk
4	**Environment Agency - Head Office** Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409
5	**Ordnance Survey** Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
6	**Kirklees Metropolitan Borough Council - Planning Services** PO BOX B93, Civic Centre III, Off Market Street, Huddersfield, West Yorkshire, HD1 2JR	Telephone: 01484 221000 Fax: 01484 221613 Website: www.kirklees.gov.uk
7	**Barnsley Metropolitan Borough Council - Environmental Health and Trading Standards** Central Offices, Kendray Street, Barnsley, South Yorkshire, S70 2TN	Telephone: 01226 770770 Fax: 01226 772599 Website: www.barnsley.gov.uk
8	**Wakefield City Metropolitan District Council - Environmental Health** Newton Bar, Wakefield, West Yorkshire, WF1 2TX	Telephone: 01924 306090 Website: www.wakefield.gov.uk
9	**The Coal Authority - Property Searches** 200 Lichfield Lane, Mansfield, Nottinghamshire, NG18 4RG	Telephone: 0345 762 6848 Fax: 01623 637 338 Email: groundstability@coal.gov.uk Website: www2.groundstability.com
10	**PointX** 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Website: www.pointx.co.uk
11	**Natural England** County Hall, Spetchley Road, Worcester, WR5 2NP	Telephone: 0300 060 3900 Email: enquiries@naturalengland.org.uk Website: www.naturalengland.org.uk
12	**Kirklees Metropolitan Borough Council** Town Hall, Civic Centre, Huddersfield, West Yorkshire, HD1 2TA	Telephone: 01484 221000 Fax: 01484 442768 Website: www.kirklees.gov.uk
13	**Barnsley Metropolitan Borough Council - Planning Department** Central Offices, Kendray Street, Barnsley, South Yorkshire, S70 2TN	Telephone: 01226 770770 Fax: 01226 772599 Website: www.barnsley.gov.uk
14	**Wakefield City Metropolitan District Council** Newton Bar, Wakefield, West Yorkshire, WF1 2TX	Telephone: 01924 306090 Fax: 01924 378532 Website: www.wakefield.gov.uk

Useful Contacts

Contact	Name and Address	Contact Details
-	**Public Health England - Radon Survey, Centre for Radiation, Chemical and Environmental Hazards** Chilton, Didcot, Oxfordshire, OX11 0RQ	Telephone: 01235 822622 Fax: 01235 833891 Email: radon@phe.gov.uk Website: www.ukradon.org
-	**Landmark Information Group Limited** Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

Please note that the Environment Agency / Natural Resources Wales / SEPA have a charging policy in place for enquiries.



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Groundwater Vulnerability

General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

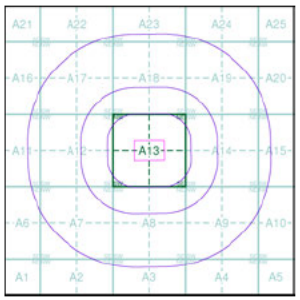
Agency and Hydrological

Bedrock Aquifers	Superficial Aquifers
High Vulnerability, Principal Aquifer	High Vulnerability, Principal Aquifer
High Vulnerability, Secondary Aquifer	High Vulnerability, Secondary Aquifer
Medium Vulnerability, Principal Aquifer	Medium Vulnerability, Principal Aquifer
Medium Vulnerability, Secondary Aquifer	Medium Vulnerability, Secondary Aquifer
Low Vulnerability, Principal Aquifer	Low Vulnerability, Principal Aquifer
Low Vulnerability, Secondary Aquifer	Low Vulnerability, Secondary Aquifer

Unproductive Aquifer

Soluble Rock

Site Sensitivity Context Map - Slice A



Order Details

Order Number:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Search Buffer (m):	1000

Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE

Landmark INFORMATION GROUP

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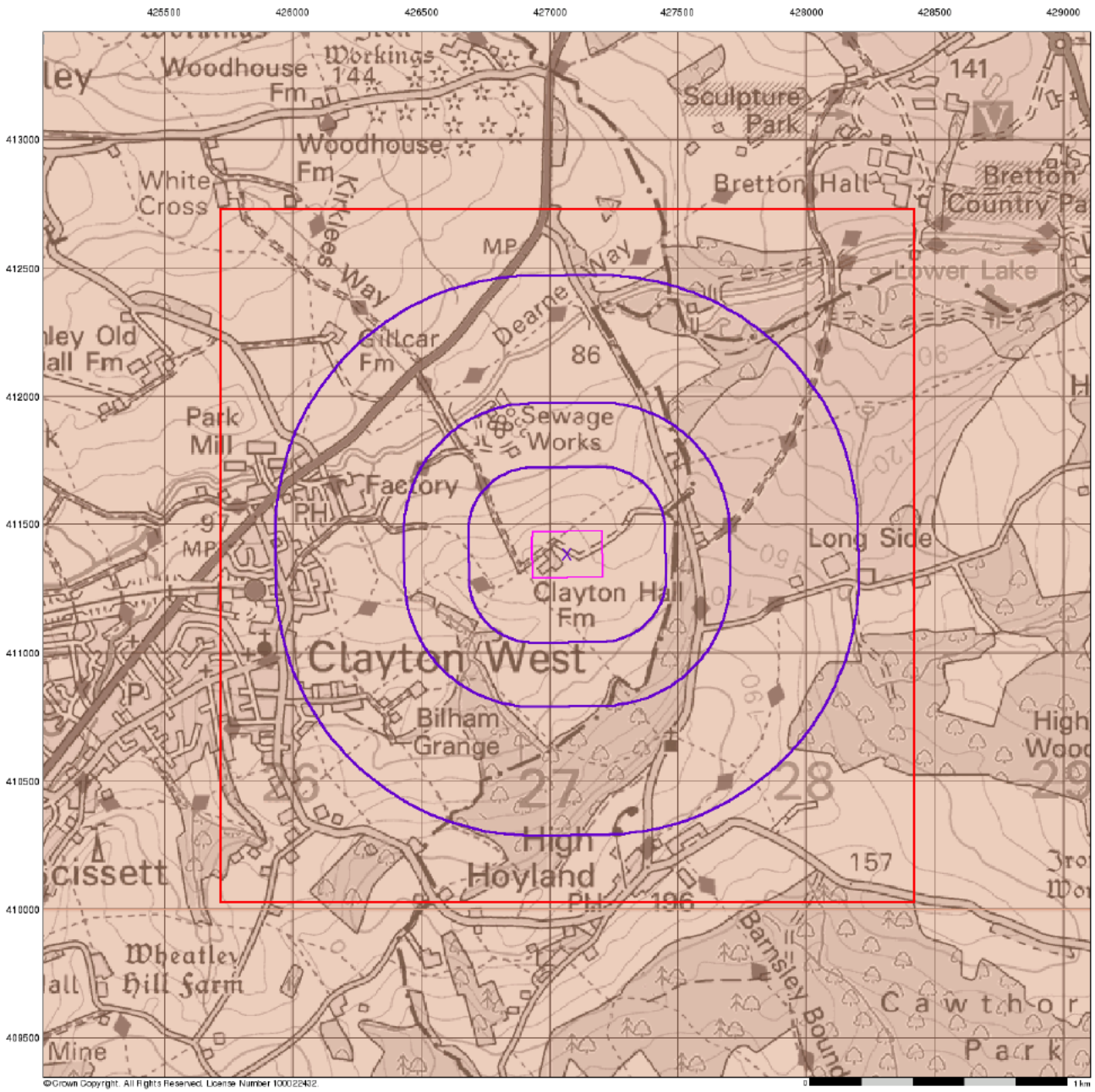
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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Bedrock Aquifer Designation

General

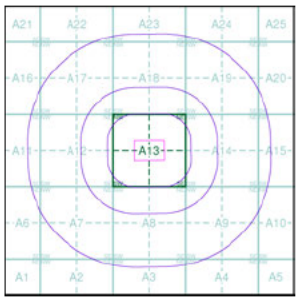
Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



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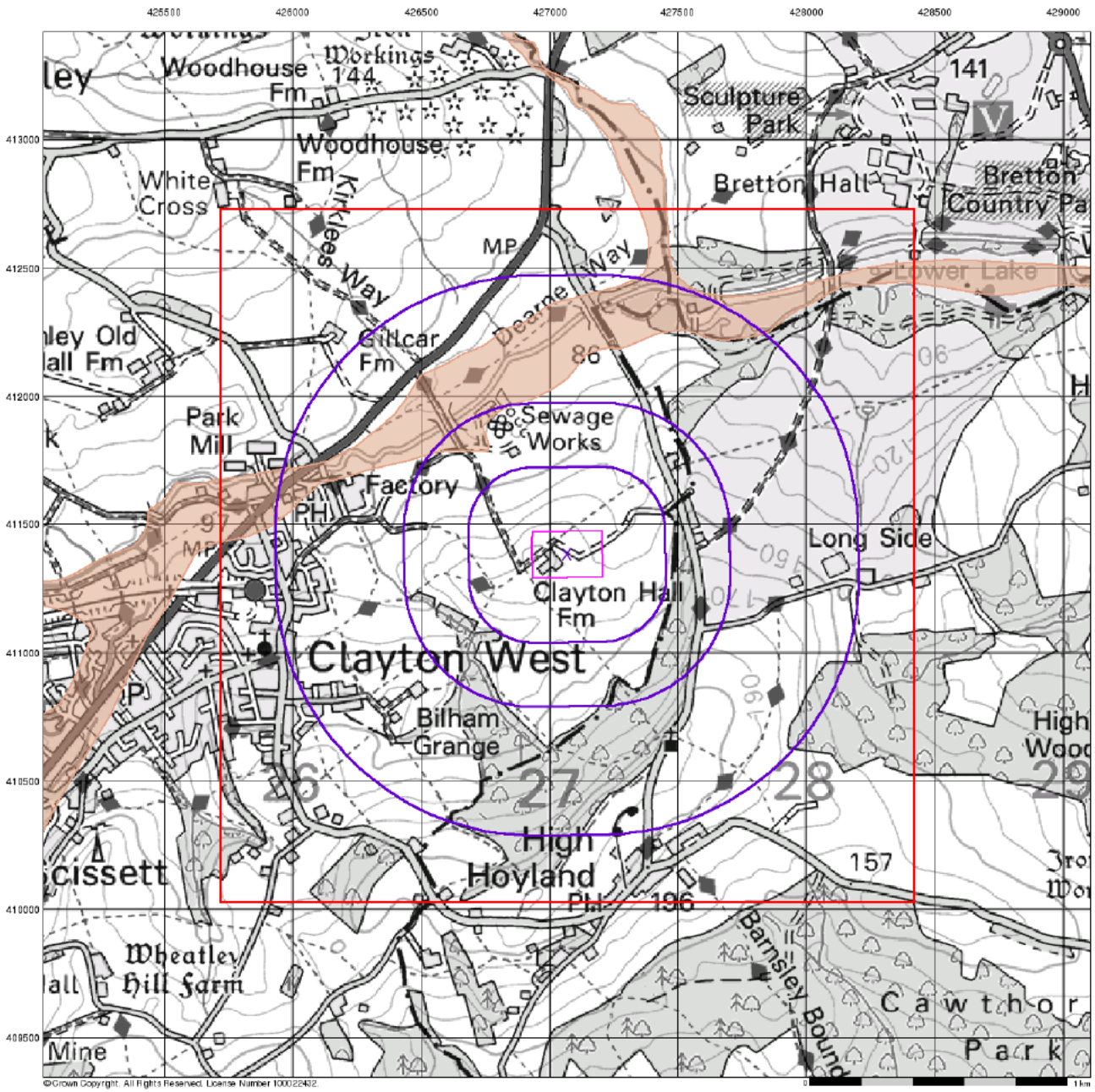
Order Number:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Search Buffer (m):	1000

Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE



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Superficial Aquifer Designation

General

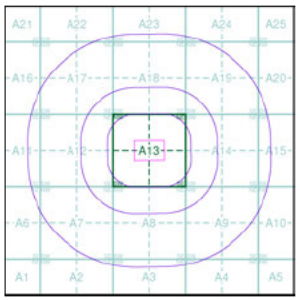
Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

Geological Classes

- Principal Aquifer
- Secondary A Aquifer
- Secondary B Aquifer
- Secondary Undifferentiated
- Unproductive Strata
- Unknown
- Unknown (Lakes and Landslip)

Site Sensitivity Context Map - Slice A



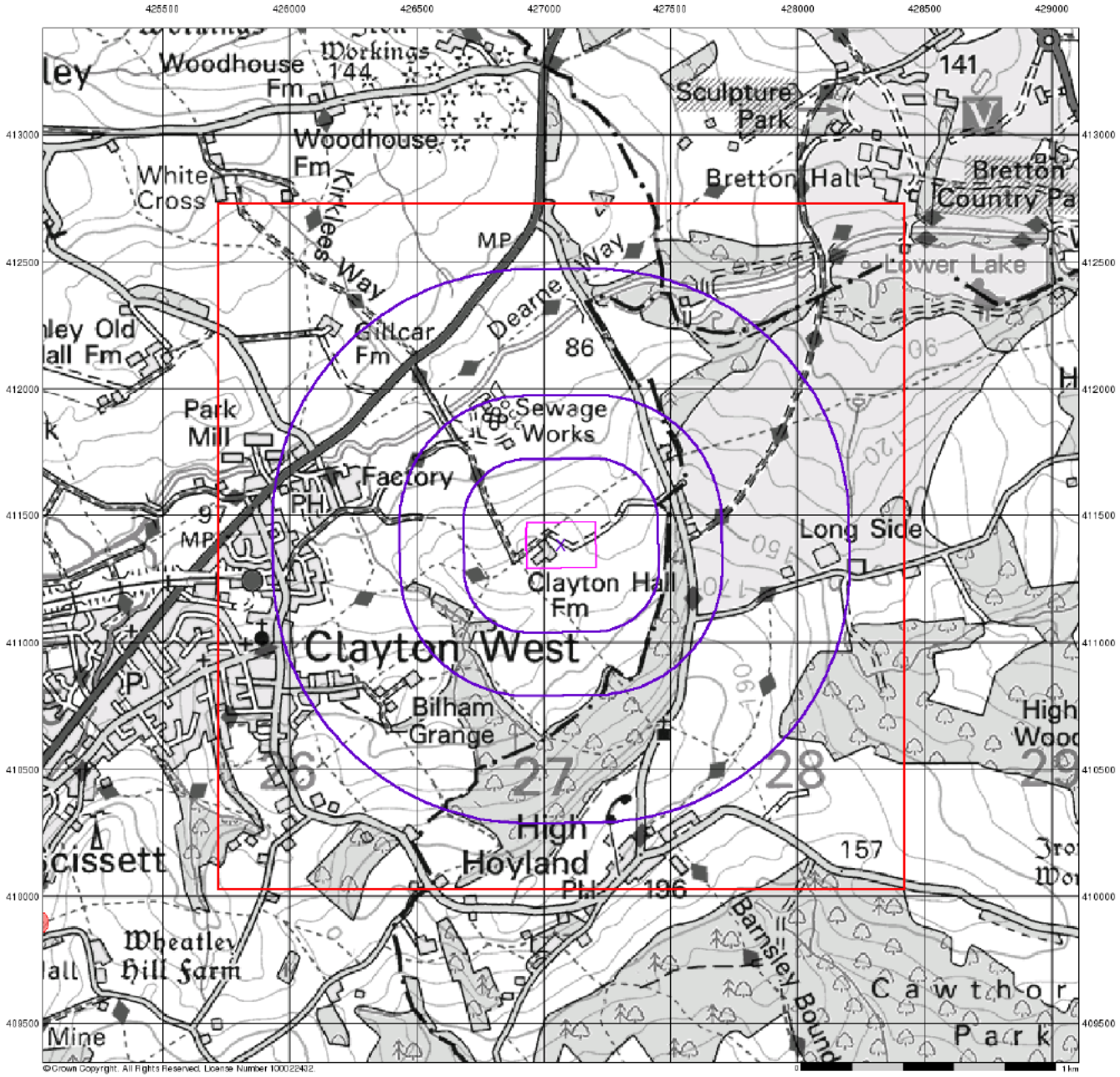
Order Details

Order Number:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Search Buffer (m):	1000

Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE

Landmark INFORMATION GROUP
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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LANDMARK INFORMATION GROUP

Source Protection Zones

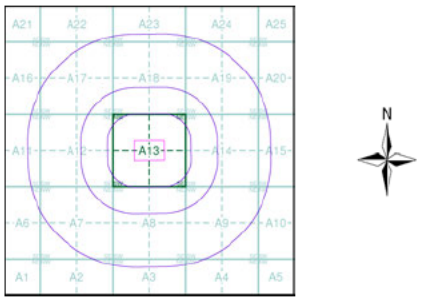
General

Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Agency and Hydrological

- Inner zone (Zone 1)
- Inner zone - subsurface activity only (Zone 1c)
- Outer zone (Zone 2)
- Outer zone - subsurface activity only (Zone 2c)
- Total catchment (Zone 3)
- Total catchment - subsurface activity only (Zone 3c)
- Special interest (Zone 4)

Site Sensitivity Context Map - Slice A



Order Details

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Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Search Buffer (m):	1000

Site Details

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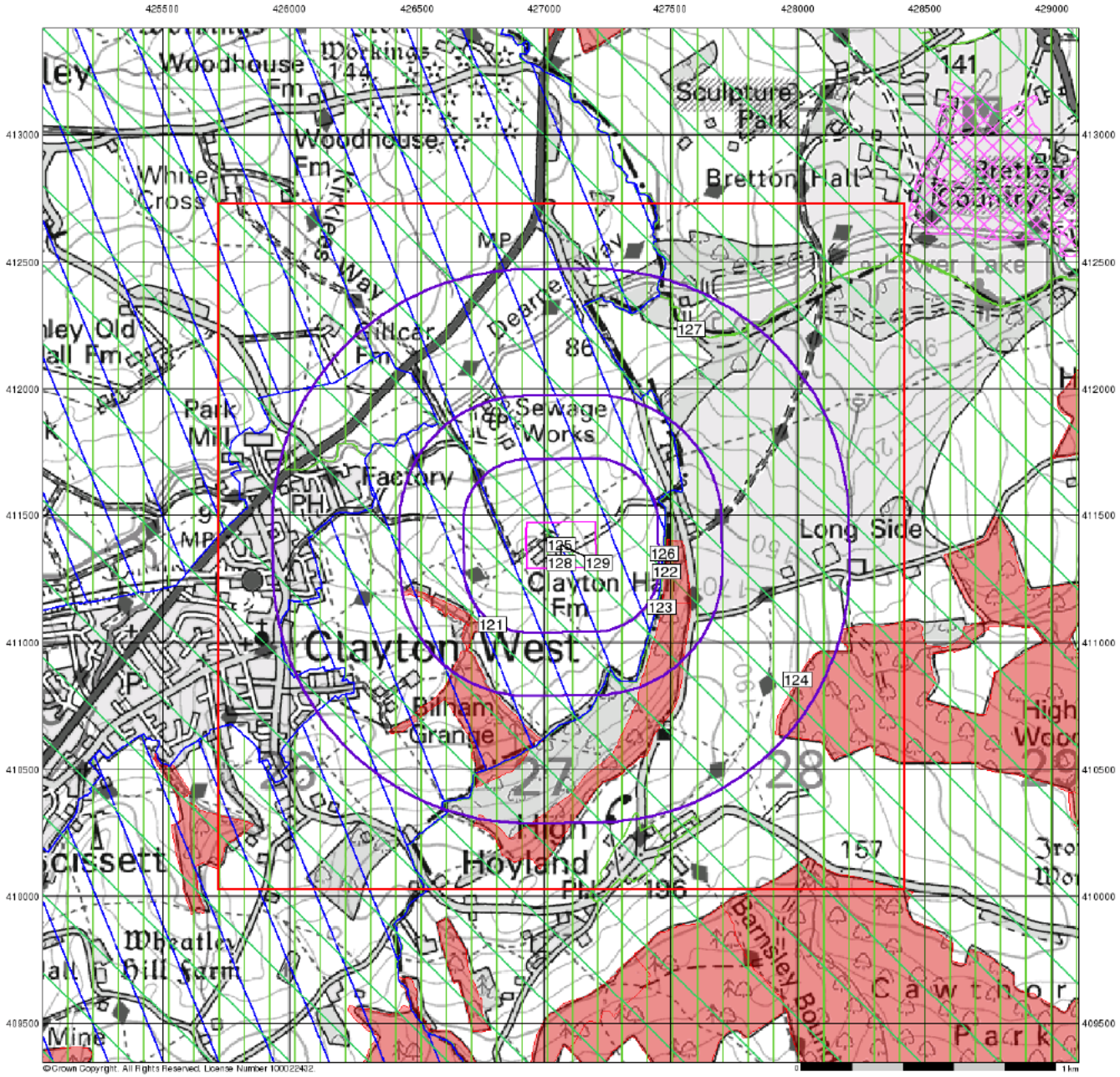

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Sensitive Land Uses

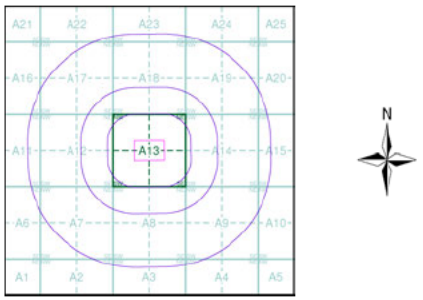
General

Specified Site | Specified Buffer(s) | Bearing Reference Point
Slice | Map ID

Sensitive Land Uses

- Ancient Woodland
- Area of Adopted Green Belt
- Area of Unadopted Green Belt
- Area of Outstanding Natural Beauty
- Environmentally Sensitive Area
- Forest Park
- Local Nature Reserve
- Marine Nature Reserve
- National Nature Reserve
- National Park
- Nitrate Sensitive Area
- Nitrate Vulnerable Zone
- Ramsar Site
- Site of Special Scientific Interest
- Special Area of Conservation
- Special Protection Area
- World Heritage Sites

Site Sensitivity Context Map - Slice A



Order Details

Order Number:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Search Buffer (m):	1000

Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE

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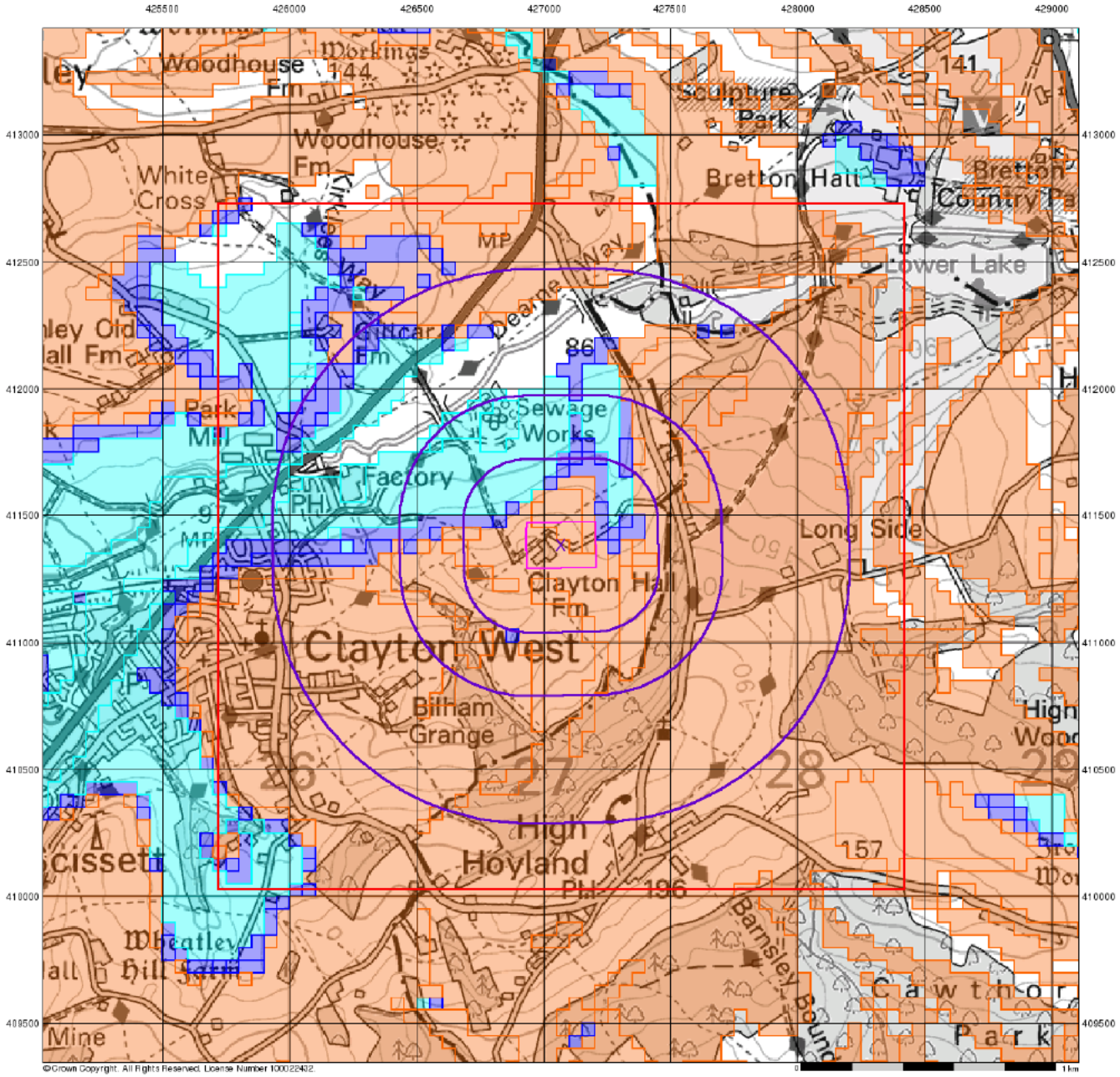
Web: www.envirocheck.co.uk



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BGS Flood GFS Data

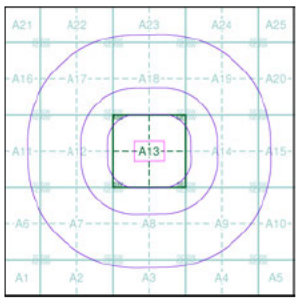
General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Slice

Agency and Hydrological (Flood)

- Limited Potential for Groundwater Flooding to Occur
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Potential for Groundwater Flooding to Occur at Surface

Site Sensitivity Context Map - Slice A



Order Details

Order Number:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Search Buffer (m):	1000

Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE

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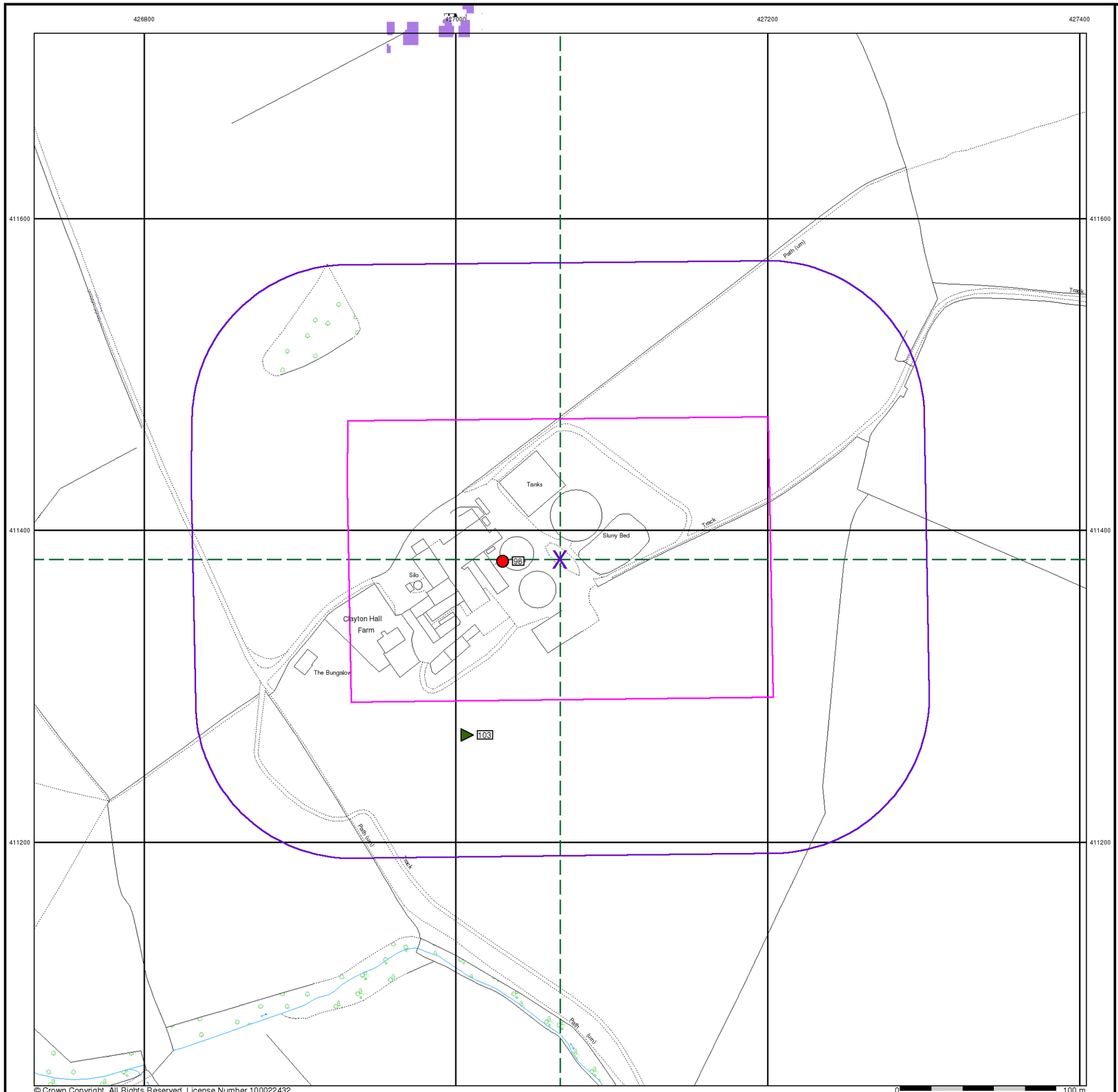

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General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location
- Pylon
- Overhead Transmission Line

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

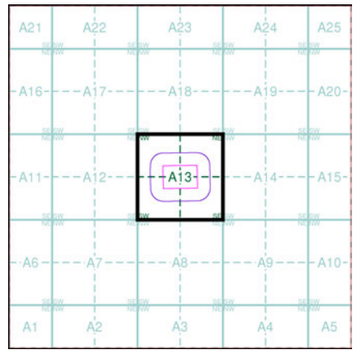
Geological

- BGS Recorded Mineral Site

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

Site Sensitivity Map - Segment A13



Order Details

Order Number:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Plot Buffer (m):	100

Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE

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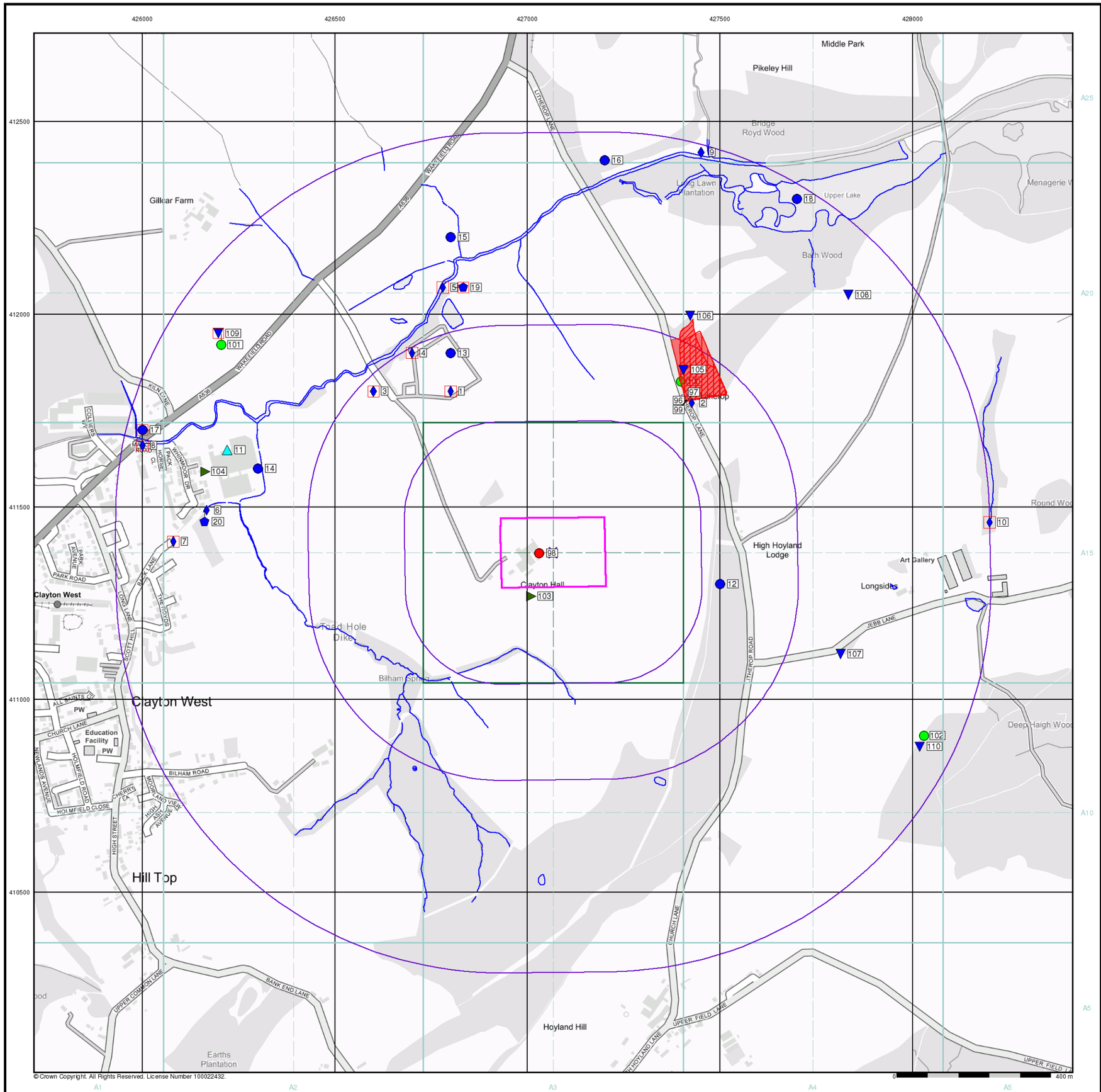
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



0 400 m

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LANDMARK INFORMATION GROUP®

General

Specified Site | Specified Buffer(s) | Bearing Reference Point | Map ID

Several of Type at Location

Agency and Hydrological

- Contaminated Land Register Entry or Notice (Location)
- Contaminated Land Register Entry or Notice
- Discharge Consent
- Enforcement or Prohibition Notice
- Integrated Pollution Control
- Integrated Pollution Prevention Control
- Local Authority Integrated Pollution Prevention and Control
- Local Authority Pollution Prevention and Control
- Local Authority Pollution Prevention and Control Enforcement
- Pollution Incident to Controlled Waters
- Prosecution Relating to Authorised Processes
- Prosecution Relating to Controlled Waters
- Registered Radioactive Substance
- River Network or Water Feature
- River Quality Sampling Point
- Substantiated Pollution Incident Register
- Water Abstraction
- Water Industry Act Referral

Waste

- BGS Recorded Landfill Site (Location)
- BGS Recorded Landfill Site
- EA Historic Landfill (Buffered Point)
- EA Historic Landfill (Polygon)
- Integrated Pollution Control Registered Waste Site
- Licensed Waste Management Facility (Landfill Boundary)
- Licensed Waste Management Facility (Location)
- Local Authority Recorded Landfill Site (Location)
- Local Authority Recorded Landfill Site
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Non-water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Potentially Infilled Land (Water)
- Registered Landfill Site
- Registered Landfill Site (Location)
- Registered Landfill Site (Point Buffered to 100m)
- Registered Landfill Site (Point Buffered to 250m)
- Registered Waste Transfer Site (Location)
- Registered Waste Transfer Site
- Registered Waste Treatment or Disposal Site (Location)
- Registered Waste Treatment or Disposal Site

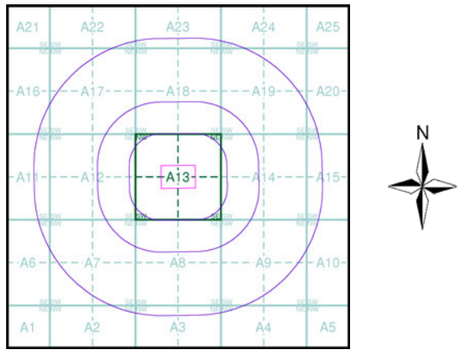
Hazardous Substances

- COMAH Site
- Explosive Site
- NIHHS Site
- Planning Hazardous Substance Consent
- Planning Hazardous Substance Enforcement

Geological

- BGS Recorded Mineral Site

Site Sensitivity Map - Slice A



Order Details

Order Number:	333683478_1_1
Customer Ref:	CHF0124
National Grid Reference:	427070, 411380
Slice:	A
Site Area (Ha):	4.88
Search Buffer (m):	1000

Site Details

Clayton Hall Farm Bioenergy, Clayton Hall Farm, Back Lane, Clayton West, HUDDERSFIELD, HD8 9QE

Landmark INFORMATION GROUP

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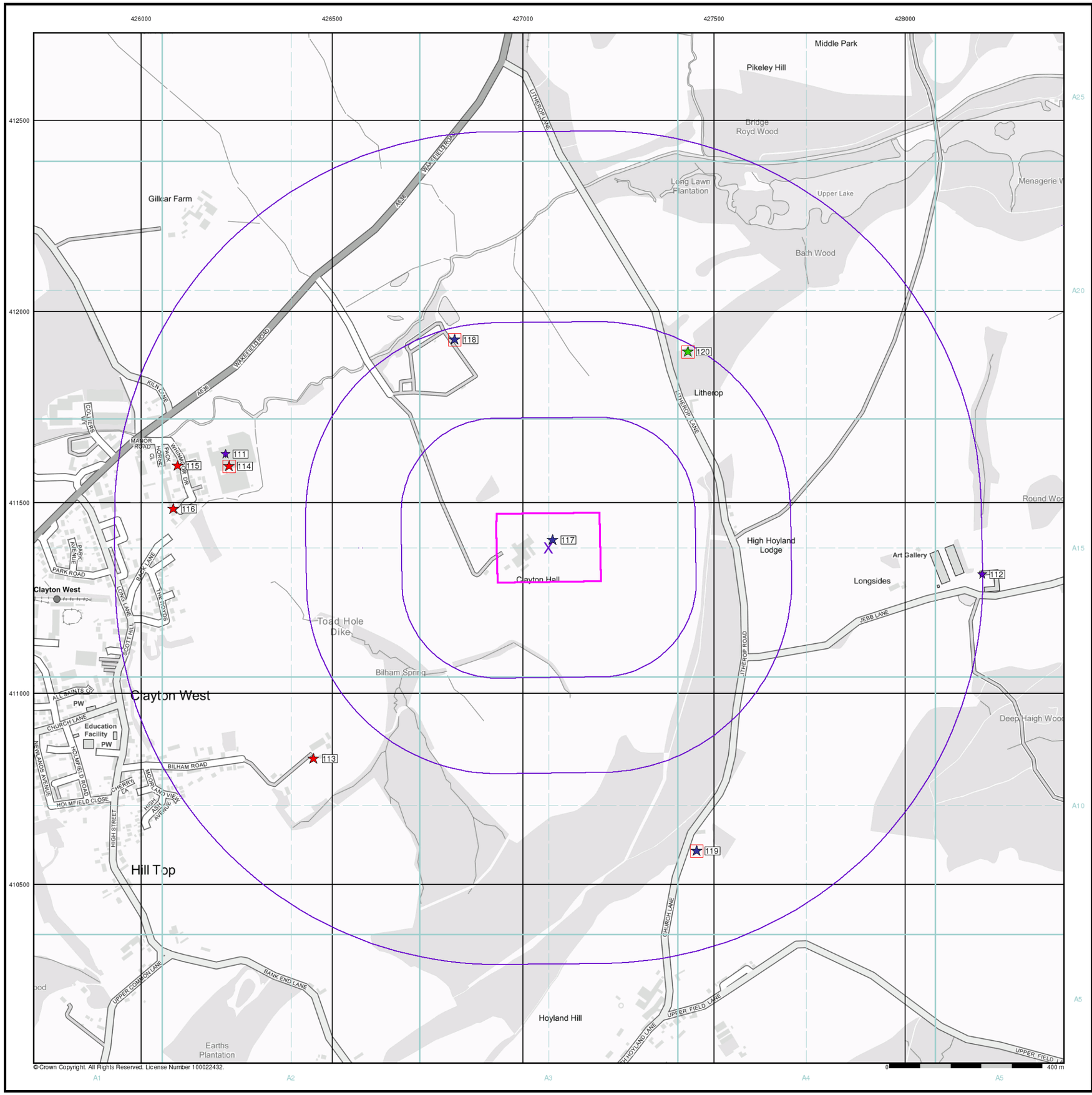

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Industrial Land Use Map

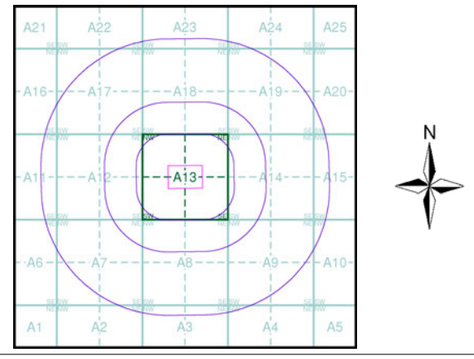
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice
- Map ID

Industrial Land Use

- Contemporary Trade Directory Entry
- Fuel Station Entry
- Gas Pipeline
- Points of Interest - Commercial Services
- Points of Interest - Education and Health
- Points of Interest - Manufacturing and Production
- Points of Interest - Public Infrastructure
- Points of Interest - Recreational and Environmental
- Underground Electrical Cables

Industrial Land Use Map - Slice A



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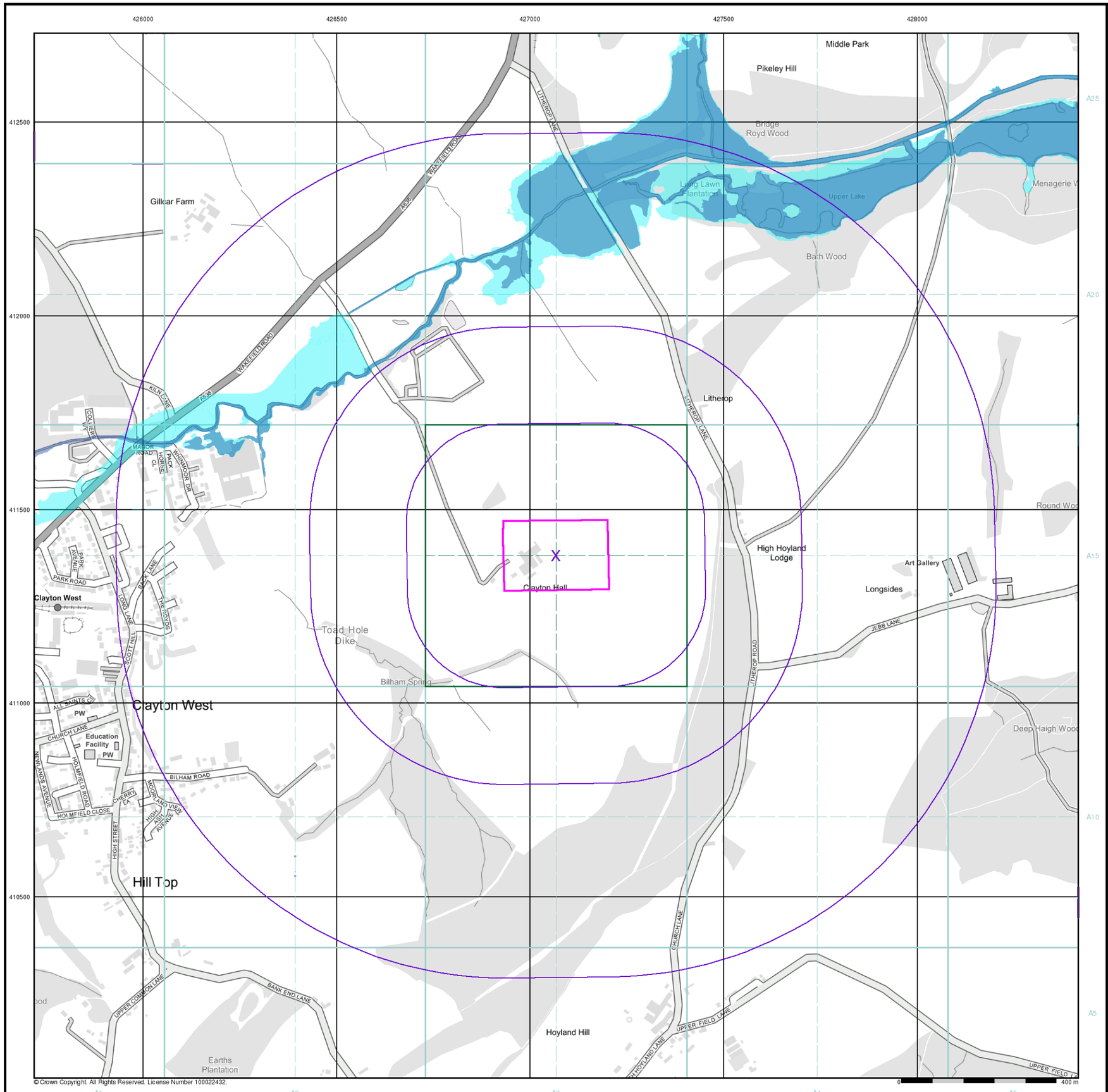

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LANDMARK INFORMATION GROUP®

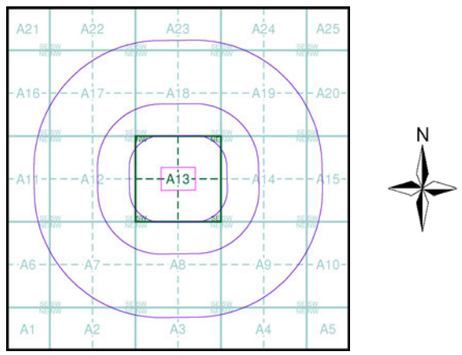
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Agency and Hydrological (Flood)

- Extreme Flooding from Rivers or Sea without Defences (Zone 2)
- Flooding from Rivers or Sea without Defences (Zone 3)
- Area Benefiting from Flood Defence
- Flood Water Storage Areas
- Flood Defence

Flood Map - Slice A



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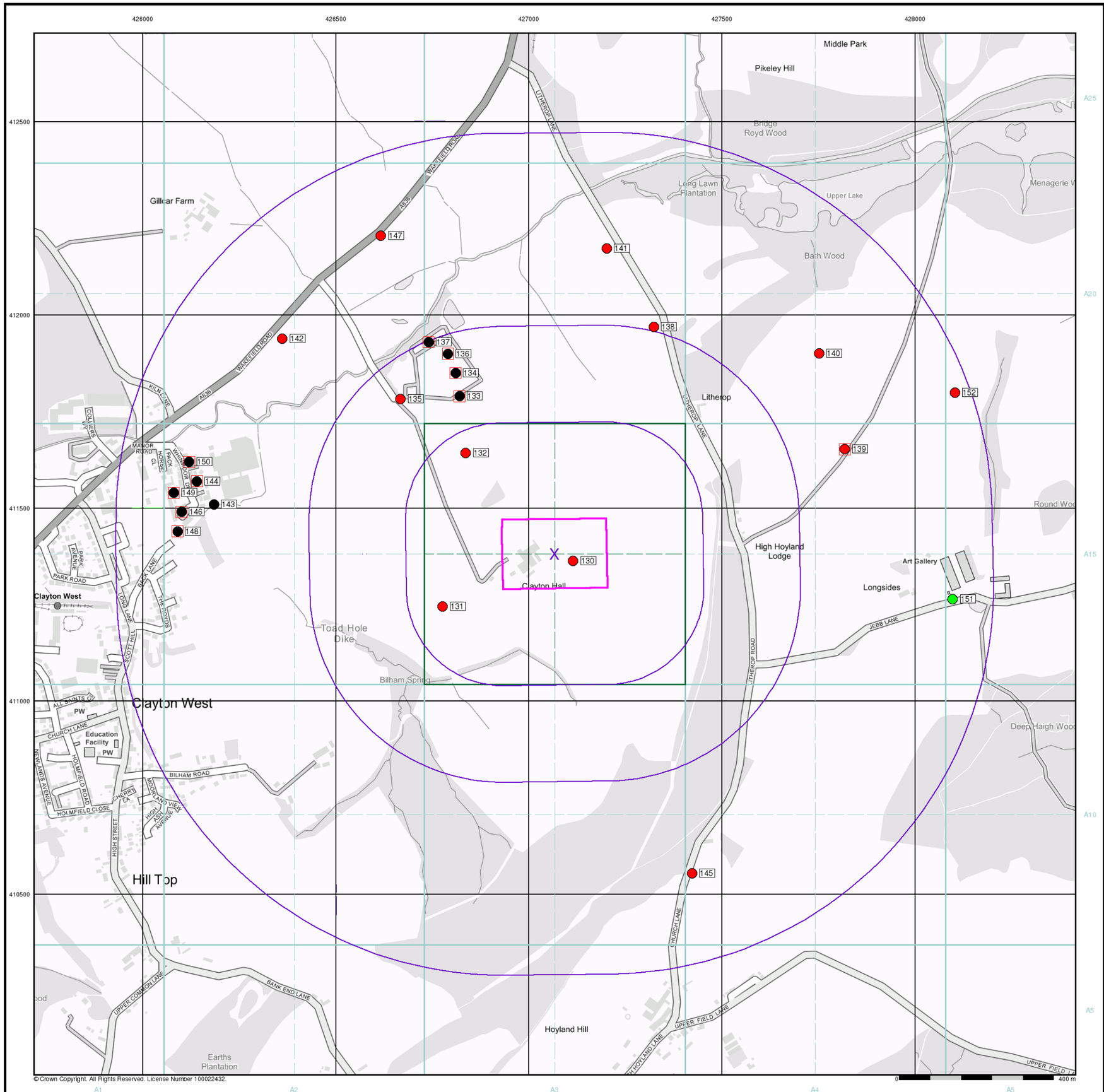

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LANDMARK INFORMATION GROUP®

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID
- Several of Type at Location

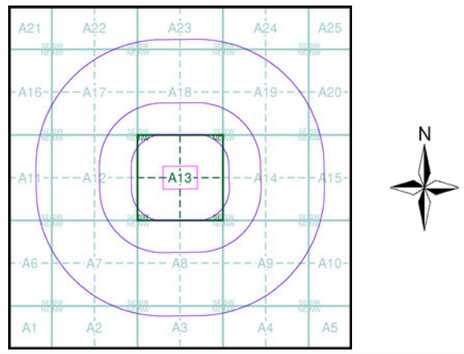
Agency and Hydrological (Boreholes)

- BGS Borehole Depth 0 - 10m
- BGS Borehole Depth 10 - 30m
- BGS Borehole Depth 30m +
- Confidential
- Other

For Borehole information please refer to the Borehole .csv file which accompanied this slice.

A copy of the BGS Borehole Ordering Form is available to download from the Support section of www.envirocheck.co.uk.

Borehole Map - Slice A



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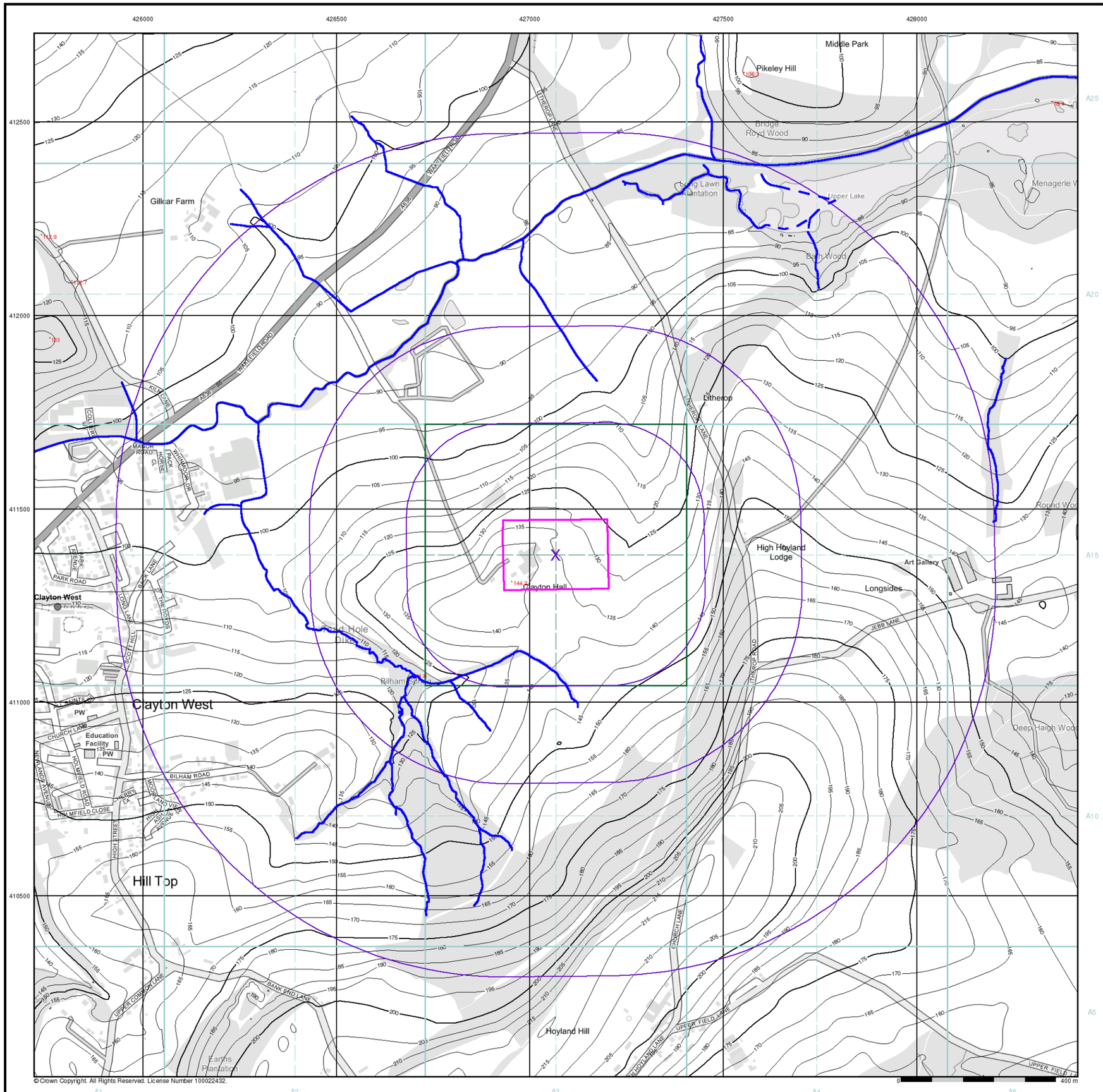

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LANDMARK INFORMATION GROUP®

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

OS Water Network Data

- Canal
- Reservoir
- Foreshore
- Marsh
- Tidal River
- Inland River
- Drain
- Other
- Lake
- Transfer
- Lock Or Flight Of Locks
- Sea

Contours (height in meters)

Standard Contour 105

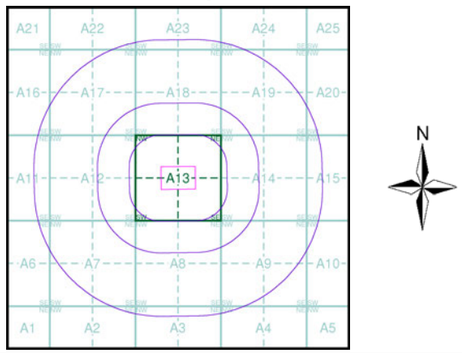
Master Contour 100

Spot Height 167.3

MLW Mean Low Water

MHW Mean High Water

OS Water Network Map - Slice A



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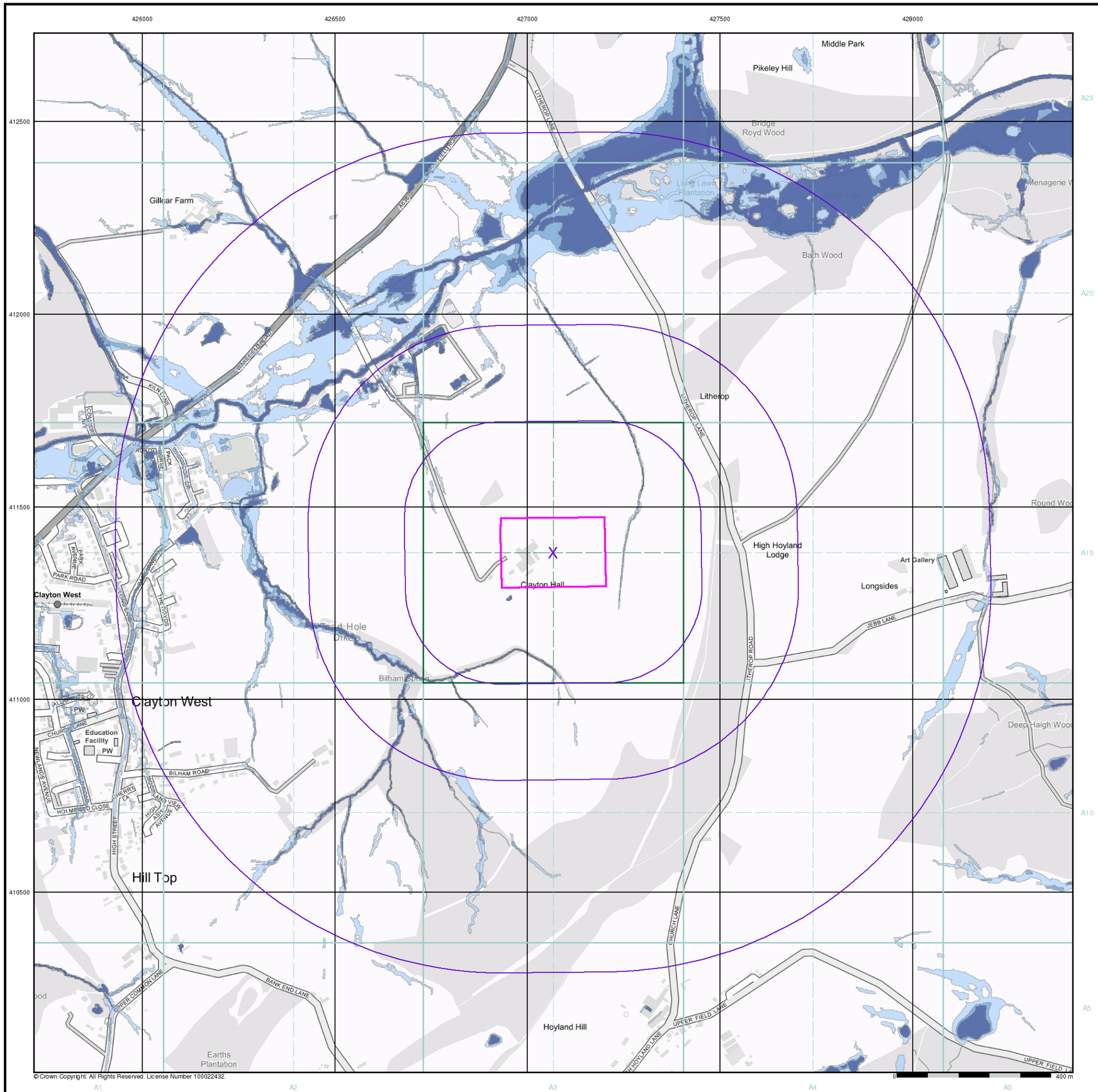

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LANDMARK INFORMATION GROUP®

General

- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point

Risk of Flooding from Surface Water

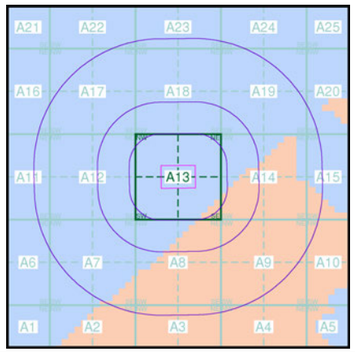
- High - 30 Year Return
- Medium - 100 Year Return
- Low - 1000 Year Return

Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

EA/NRW Suitability Map - Slice A



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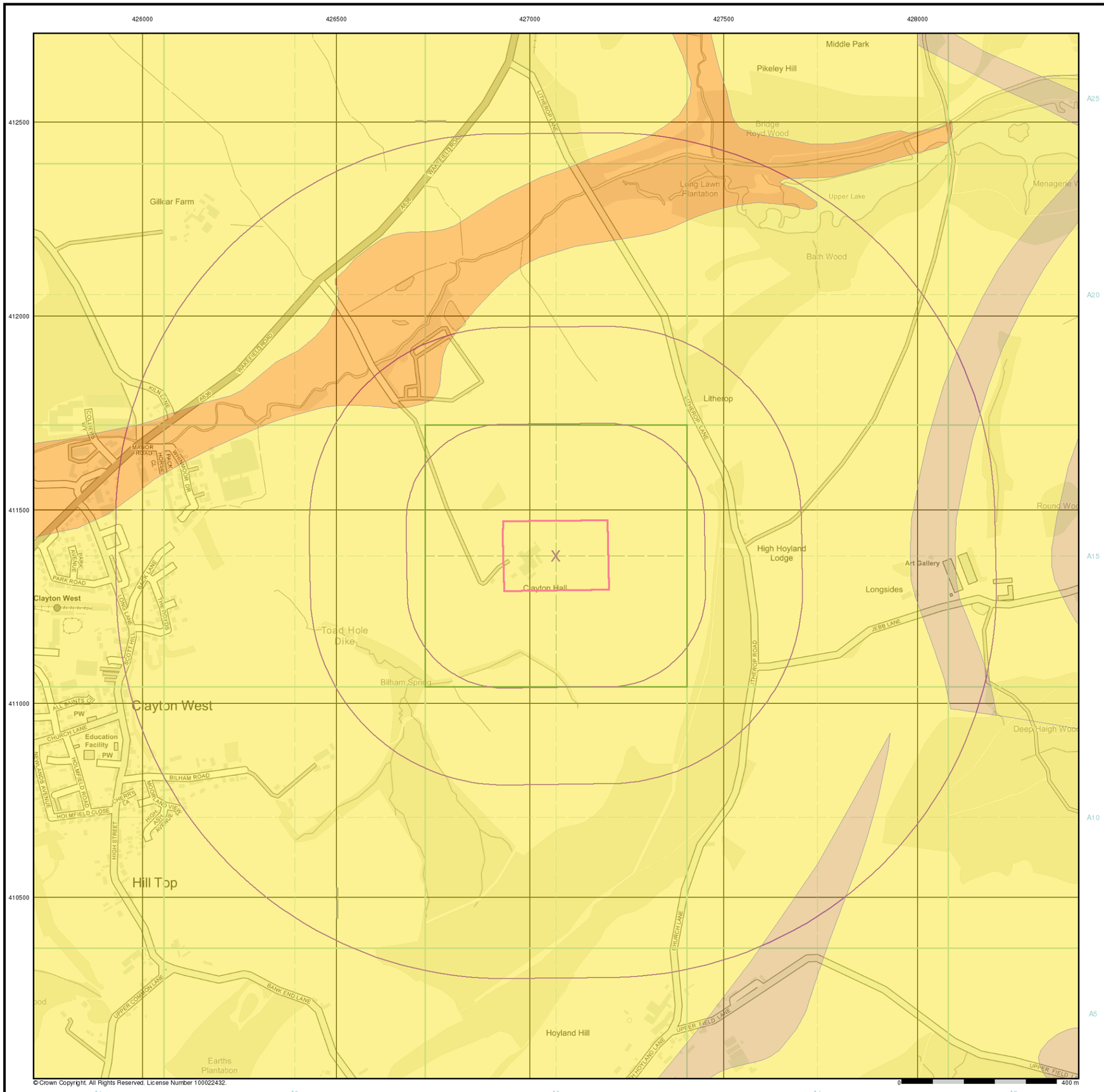

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LANDMARK INFORMATION GROUP®

General

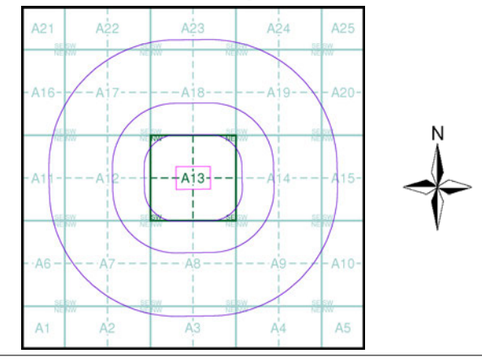
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Arsenic

Arsenic Concentrations mg/kg

- < 15
- 15 - 25
- 25 - 35
- 35 - 45
- 45 - 60
- 60 - 120
- > 120

Estimated Soil Chemistry Arsenic - Slice A



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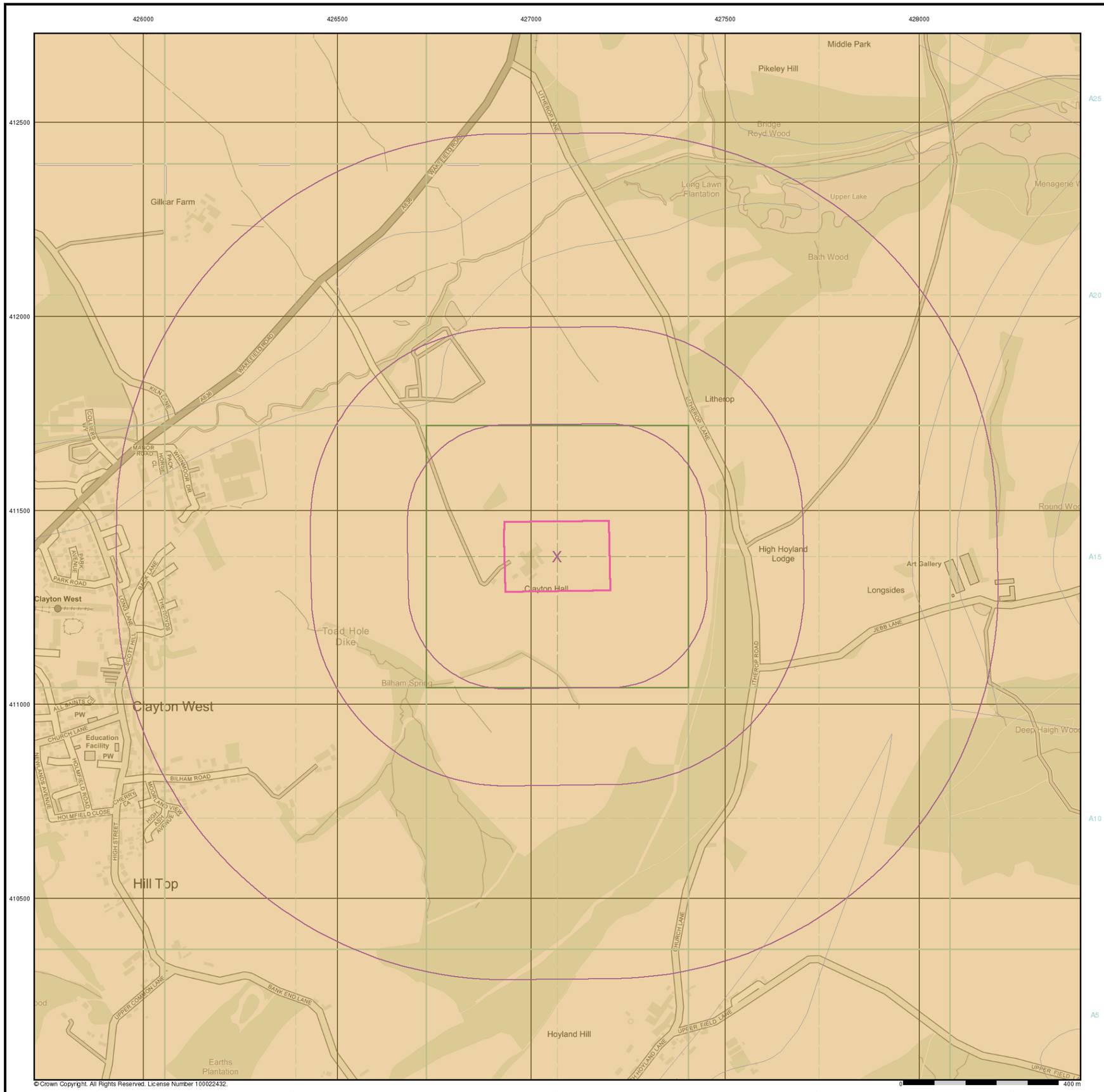

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General

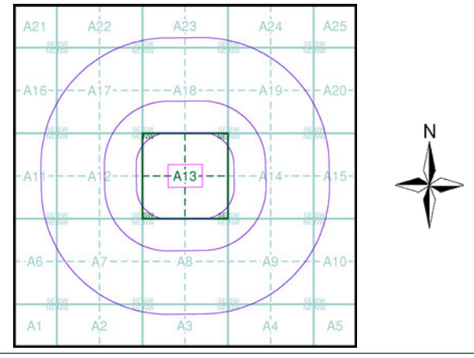
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Cadmium

Cadmium Concentrations mg/kg

- < 1.8
- 1.8 - 2.2
- 2.2 - 3.0
- > 3.0

Estimated Soil Chemistry Cadmium - Slice A



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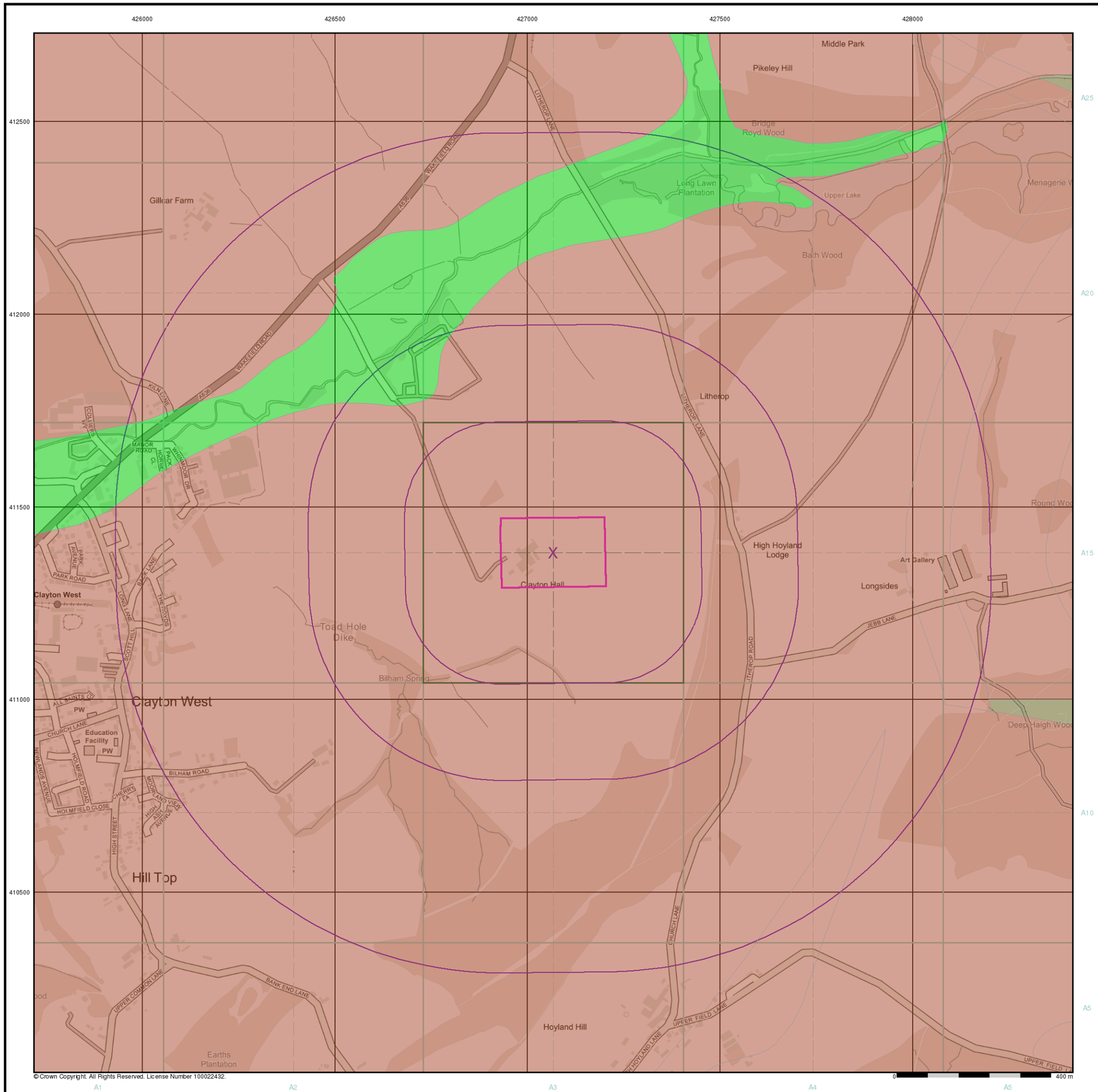

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General

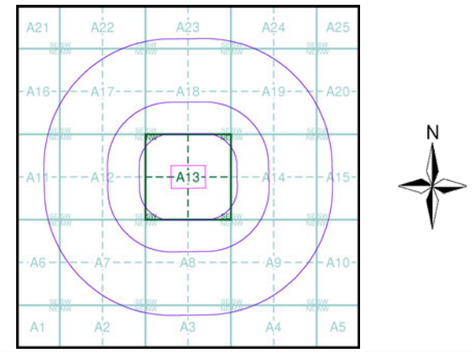
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Chromium

Chromium Concentrations mg/kg

- < 20
- 20 - 40
- 40 - 60
- 60 - 90
- 90 - 120
- 120 - 180
- > 180

Estimated Soil Chemistry Chromium - Slice A



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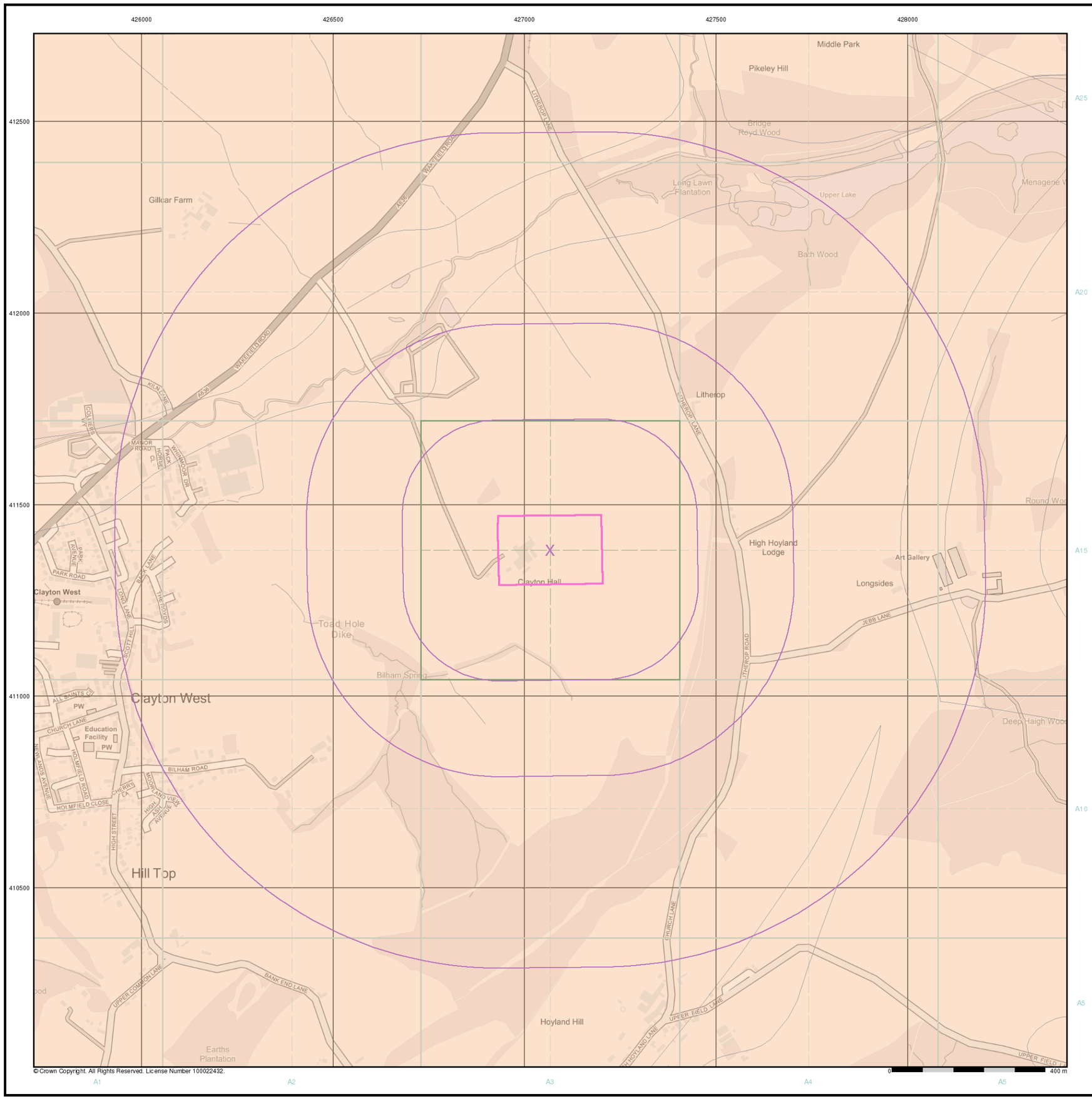

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LANDMARK INFORMATION GROUP®

General

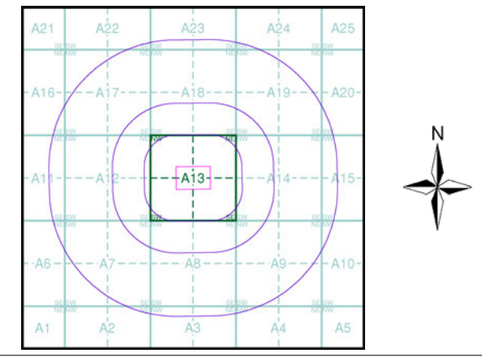
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Lead

Lead Concentrations mg/kg

- <100 mg/kg
- 100 - 200
- 200 - 300
- 300 - 600
- 600 - 1200
- >1200

Estimated Soil Chemistry Lead - Slice A



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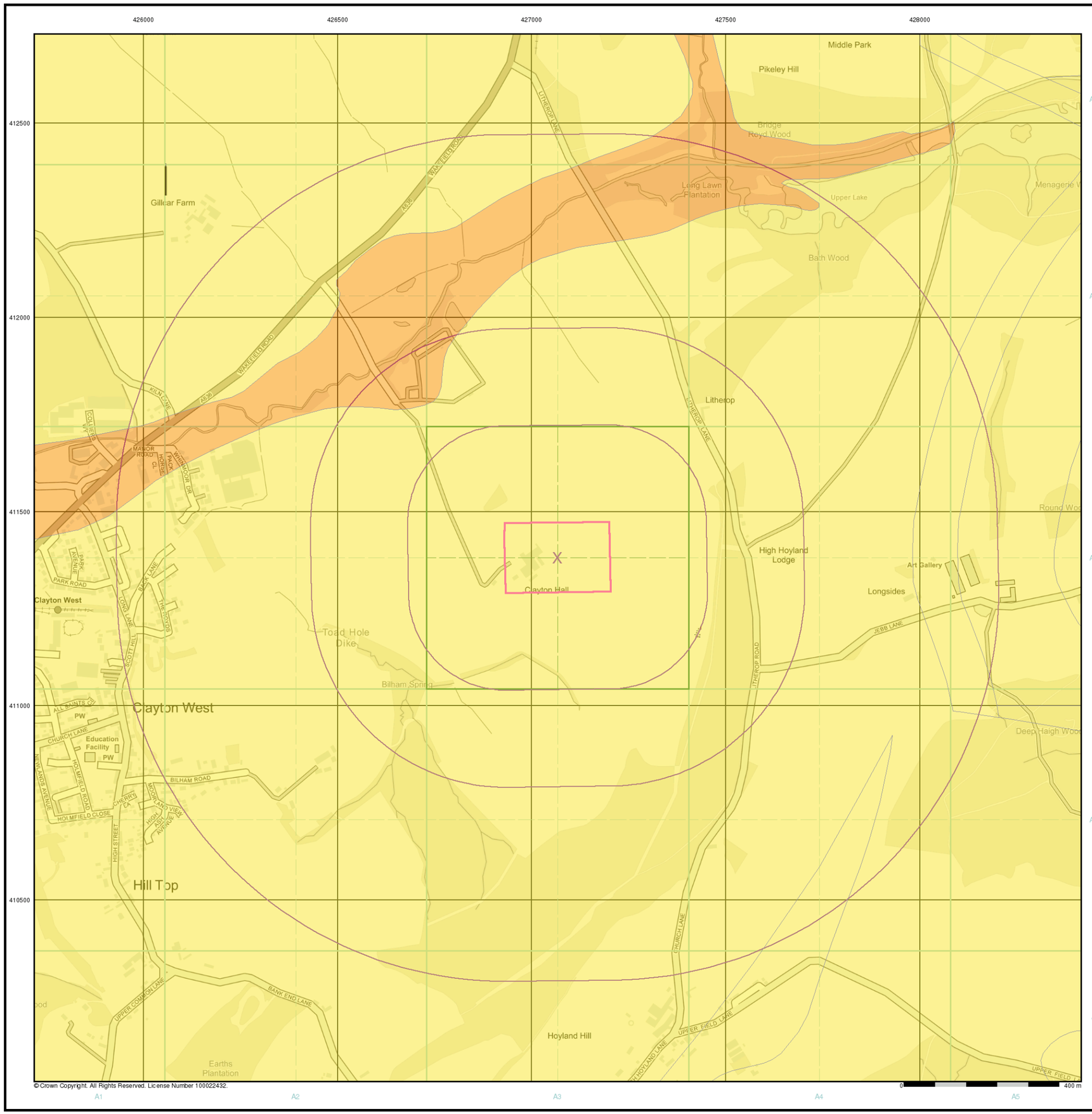


Envirocheck®

LANDMARK INFORMATION GROUP®

General

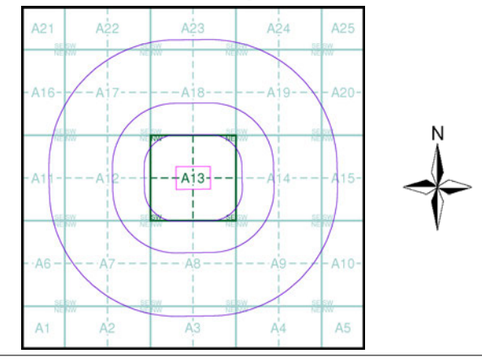
Specified Site | Specified Buffer(s) | X Bearing Reference Point

Estimated Soil Chemistry Nickel

Nickel Concentrations mg/kg

- < 15
- 15 - 30
- 30 - 45
- 45 - 60
- 60 - 80
- 80 - 100
- > 100

Estimated Soil Chemistry Nickel - Slice A



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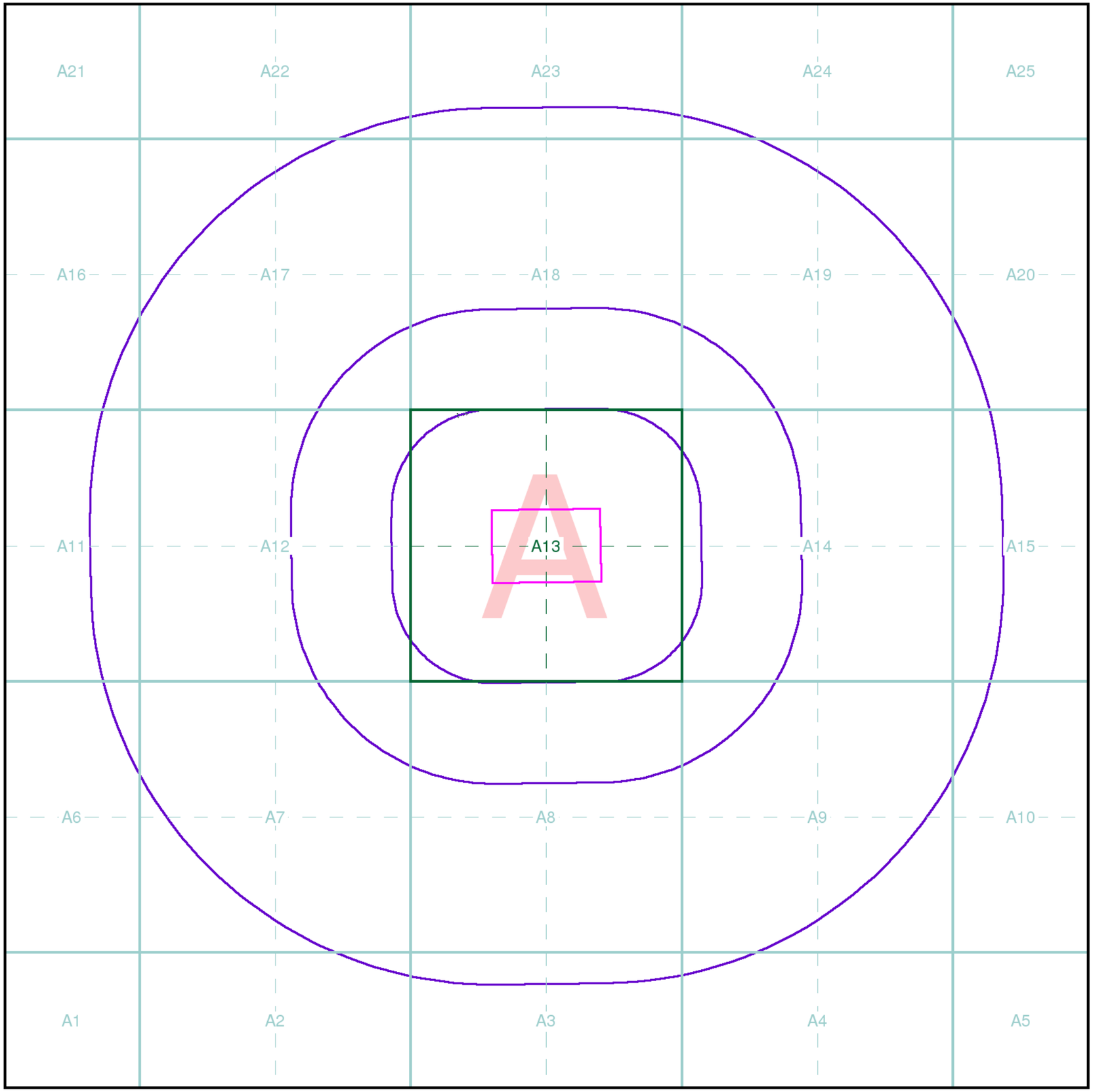

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Index Map

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

Slice
Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice "grid". This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

Segment
A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

Quadrant
A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

A selection of organisations who provide data within this report:

Map data | British Geological Survey, Natural Environment Research Council | Environment Agency | Natural England

Envirocheck reports are compiled from 136 different sources of data.

Prepared For

Julie Dingwall
Olive Compliance Ltd
FOR:Clayton Hall BioEnergy LLP

Client Details

Mrs K Dowling, Olive Compliance Ltd, 19 Main Street, ponteland, Newcastle, Newcastle, Northumberland, NE20 9NH

Order Details

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Full Terms and Conditions can be found on the following link:
http://www.landmarkinfo.co.uk/Terms/Show/515

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Section 11

ODOUR MANAGEMENT PLAN

CLAYTON HALL FARM BIOENERGY PLANT

Clayton Hall Farm

Clayton West

Huddersfield

West Yorkshire

HD8 9QE

Olive Compliance Ltd, Planet House, Northumbrian Way, Newcastle Upon Tyne, NE12 6EH

www.olivecompliance.com

Basis of Report

This report has been prepared by Olive Compliance Ltd 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 CLAYTON HALL FARM BIOENERGY PLANT; 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 Olive Compliance Ltd.

Olive Compliance Ltd disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

Information reported herein may be based on the interpretation of public domain data collected by Olive Compliance Ltd, information supplied by the Client and its other advisors and associates. The data has been accepted in good faith as being accurate and valid.

Issue and Revision Record

Revision	Date	Originator	Description of Changes
V1	July 2024	OLIVE COMPLIANCE LTD	Produced for the Permit Application

CONTENTS

APPENDICES

APPENDIX 1 ODOUR REPORT FORM

APPENDIX 2 ODOUR LOG

APPENDIX 3 ODOUR DIARY

REFERENCED DRAWINGS

Drawing 001 Site Location Plan

Drawing 002 Permit Boundary

Drawing 003 Site Layout Plan

Drawing 004 Receptor Plan

Drawing 005 Site Drainage Plan

Drawing 005A Process Pipework Plan

Drawing 006 AD Process Flow

Drawing 007 Emission Points and Abatement Systems

Drawing 008 Food Waste Shed Layout Plan

1.0 Introduction

This Odour Management Plan (OMP) has been prepared to support the current permit variation (2024) and will be implemented as part of the Environmental Management System (EMS) for Clayton Hall Farm Bioenergy LLP (CHF) for their site located at Clayton Hall Farm Bioenergy Plant at Clayton Hall Farm, Clayton West, Huddersfield, West Yorkshire, HD8 9QE.

1.1 Scope

The Environment Agency guidance for odour management is provided by Technical Guidance Note H4, Odour Management: Environment Agency Guidance for H4 Odour Management.

This Odour Management Plan (OMP) has been prepared in accordance with the principles set out in this technical guidance document.

This OMP is designed to outline management system arrangements to:

- Identify potential sources of odour, receptors and pathways;
- Assess the risks of odour pollution having a negative effect on local amenity;
- Detail appropriate methods of odour control that are being employed, including monitoring and contingencies to control odour risk;
- Prevent unacceptable odour pollution effecting amenity both on, but particularly offsite;
- Reduce and minimise the severity of any odour releasing incidents by anticipating them and planning accordingly.

Appendices are included in line with recommended formats for odour reporting, complaints and an odour diary are included which are taken from the H4 document.

2.0 Site Location

The National Grid Reference for the site is SE 27040 11388.

The site (Clayton Hall Farm Bioenergy Plant) is located at Clayton Hall Farm, Clayton West, Huddersfield, West Yorkshire, HD8 9QE. Clayton Hall Farm is located approximately 14km (9 miles) south-east of Huddersfield and approximately 11km (7 miles) north-west of Barnsley. The village of Clayton West lies 0.8km (0.5 mile) of the site. Clayton West is located between the villages of High Hoyland, Scissett and Skelmanthorpe. The River Dearne runs through the village.

Clayton Hall Farm is situated on top of a hill at an elevation of about 50m above the sewage works to the north. An electricity sub-station is located to the north-west of the site with agricultural land surrounding the site to the north, east and south.

A summary of the immediate environmental site setting is provided in Table 1 below and show in Image 1 and 2 (Site Setting).

Table 1
Surrounding Land Uses

Boundary	Description
North	Sewage Treatment Works/Rural/Agricultural
East	Rural/Agricultural
South	Rural/Agricultural
West	Rural/Agricultural

Image 1 – Site Location and Immediate Surroundings

Image 2 – Ariel View of the Site

3.0 Permitted Activities

The current permit allows to carry out anaerobic digestion of wastes and also use of the biogas in compression and spark ignition engines with an aggregate rated thermal input of up to 3 megawatts. The permit also allows the use of standard commercial gas turbines, fuel cells (e.g. Molten Carbonate or Solid Oxide) or treatment followed by injection into the gas grid.

The permit reference is EPR/FP3596EY.

Currently the site accepts up to 49,000 tonnes per year. Any wastes controlled by the Animal By-Products Regulations must be treated and handled in accordance with any requirements imposed by those Regulations.

3.1 Changes to Permitted Activities

This variation proposes to make the below changes.

Site Boundary

The permitted boundary will be extended to include the new silage clamp and solid biowaste storage.

Waste Tonnages

The site intends to increase waste acceptance and treat up to 100,000 tonnes of waste per annuum.

EWC Waste description

Additional EWC waste codes to be included in the permit variation:

02 06 02	Wastes from preserving agents (AN)
02 07 05	sludges from onsite effluent treatment (AN)
03 03 11	wastes not otherwise specified (AN)
07 07 12	sludges from on-site effluent treatment other than those mentioned in 07 07 11 (MN)
16 03 05	organic wastes containing hazardous substances (MH)
16 03 06	organic wastes other than those mentioned in 16 03 05 (MN)
19 05 99	wastes not otherwise specified (AN)
20 01 25	edible oil and fat (AN)
20 03 02	waste from markets (AN)

3.2 Environmental Permit Conditions

Site operations under their current permit EPR/FP3596EY.

3.2.1 Permit Odour Conditions

Odour Management under the permit will be managed in accordance with BAT34 as to prevent or where that is not practicable to reduce odorous emissions from the Permitted Installation, in particular by:

In accordance with BAT 8 and BAT 34 the emission points will be monitored for odour concentration every six months. The monitoring will be carried out by an MCERTS contractor in accordance with EN standard EN 13725. The emission test results will be compared to the BAT-AEL stated within BAT 34 and actions taken, as required, to comply within the odour concentration BAT- AEL.

All monitoring will comply with MCERTS accreditation.

Monitoring of VOCs will be conducted in line with the relevant monitoring standard Monitoring stack emissions: techniques and standards for periodic monitoring - GOV.UK.

	Monitoring				Analysis					
Parameter	Standard	Technical Procedure	Sampling Status	Testing Lab	Analytical Procedure	Analytical Technique	Analysis Status	Analysis Lab	Overall Status	LOD (Average)
Sulphur Dioxide	EN 14791	MD 009	MCERTS	EET	CAT-AP-01	IC	MCERTS	EET	MCERTS	0.198 mg/m³
Water Vapour	EN 14790	MD 005	MCERTS	EET	MD 105	Gravimetric	MCERTS	EET	MCERTS	0.10 % v/v
Total VOCs (as Carbon)	EN 12619:2013	MD 020	MCERTS	EET	Flame Ionisation Detection by Sick 3006				MCERTS	0.32 mg/m³
Oxides of Nitrogen (as NO_2)	EN 14792	MD 039	MCERTS	EET	Chemiluminescence by Horiba PG-350E				MCERTS	0.41 mg/m³
Carbon Monoxide	EN 15058	MD 039	MCERTS	EET	NDIR by Horiba PG-350E				MCERTS	0.25 mg/m³
Oxygen	CEN/TS 17021	MD 039	MCERTS	EET	Dry Paramagnetic Cell by Horiba PG-350E				MCERTS	0.1 %

Table 2 – Current Permitted Activities

Table S1.1 Activities		
Facility Type	**Description of activities for waste operations**	**Limits of activities**
A23 Biological Treatment Facility	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)	Waste types as specified in Table 2.1 All wastes shall be stored and treated on an impermeable surface with sealed drainage, surrounded by a bund capable of holding 110% of the total takeage volume. Digestate shall be stored within covered containers or covered lagoons and should be of a design and capacity fit for purpose.
	R3: Recycling/reclamation of organic substances which are not used as solvents	Treatment of waste including shredding, sorting, screening, compaction, bailing, mixing, hydrolysis and maceration. Digestion of wastes including pasteurisation and chemical addition. Treatment of digestate including screening to remove plastic residues, centrifuge or pressing, addition of thickening agents (polymers) or drying. The following wastes shall not be subject to the Anerobic Digestion process unless they conform to BS EN 13432: 07 02 13 – waste plastic, 15 01 01 – paper and cardboard packaging, 15 01 02 – plastic packaging, 15 01 05 – composite packaging. The maximum throughput of animal waste shall be less than 10 tonnes per day.
	R1: Use principally as a fuel or other means to generate electricity.	The use of combustible gases produced as a by-product of the anaerobic digestion process as a fuel. Gas cleaning by biological or chemical scrubbing. Gas storage and Drying. All biogas condensate shall be discharged into a sealed drainage system.

3.2.2 Emissions to Air

The following point source air emissions currently permitted and will then be further under the IPPC permit. There are no changes to point source emissions proposed within the permit variation.

Table 3 – Point Source Emissions and Limits

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
Generator Exhaust	Oxides of Nitrogen	Generator Exhaust	500mg/Nm³	Hourly Mean	Annual monitoring	ISO 10849: 1996
	Carbon monoxide	Generator Exhaust	1400mg/Nm³	Hourly Mean		ISO 12039: 2001
	Sulphur dioxide	Generator Exhaust	350mg/Nm³	Hourly Mean		ISO 11632: 1998
	Total volatile organic compounds including methane	Generator Exhaust	1000mg/Nm³	Hourly Mean		BS EN 12619: 1999 BS EN 13526: 2002
	Non methane volatile organic compounds	Generator Exhaust	75mg/Nm³	Instantaneous Reading		BS EN 13649: 2002
	Temperature	Generator Exhaust	Gas engine exhaust gas temperature where the exhaust leaves the engine shall be no less than 200 degrees Celsius.	Instantaneous Reading		BS 6069: 1993
Gas Flare	Oxides of Nitrogen	Gas Flare	150mg/Nm³	Hourly Mean	Annual monitoring	ISO 10849: 1996
	Carbon monoxide	Gas Flare	50mg/Nm³	Hourly Mean		ISO 12039: 2001
	Total volatile organic compounds including methane	Gas Flare	10mg/Nm³	Hourly Mean		BS EN 12619: 1999 BS EN 13526: 2002

3.2.3 Emission Limits

The limits for emissions to air for the parameters and emission points set out in Table 3.1 in the permit shall not be exceeded as shown in Table 4 below.

Table 4 – Permit Emission Limits

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
Generator Exhaust	Oxides of Nitrogen	Generator Exhaust	500mg/Nm³	Hourly Mean	Annual monitoring	ISO 10849: 1996
	Carbon monoxide	Generator Exhaust	1400mg/Nm³	Hourly Mean		ISO 12039: 2001
	Sulphur dioxide	Generator Exhaust	350mg/Nm³	Hourly Mean		ISO 11632: 1998
	Total volatile organic compounds including methane	Generator Exhaust	1000mg/Nm³	Hourly Mean		BS EN 12619: 1999 BS EN 13526: 2002
	Non methane volatile organic compounds	Generator Exhaust	75mg/Nm³	Instantaneous Reading		BS EN 13649: 2002
	Temperature	Generator Exhaust	Gas engine exhaust gas temperature where the exhaust leaves the engine shall be no less than 200 degrees Celsius.	Instantaneous Reading		BS 6069: 1993
Gas Flare	Oxides of Nitrogen	Gas Flare	150mg/Nm³	Hourly Mean	Annual monitoring	ISO 10849: 1996
	Carbon monoxide	Gas Flare	50mg/Nm³	Hourly Mean		ISO 12039: 2001
	Total volatile organic compounds including methane	Gas Flare	10mg/Nm³	Hourly Mean		BS EN 12619: 1999 BS EN 13526: 2002

The plant generates methane from anaerobic digestion of organic matter. The gas is stored in the roof of the digester and drawn off as a fuel to power a gas engine which drive electric generators. Combustion of methane results in exhaust gases, mainly carbon dioxide and water vapour but also oxides of nitrogen, carbon monoxide, sulphur dioxide, and volatile organic compounds which include methane.

In the event of there being excess methane produced which cannot be burned in the generators, it is burned off in a flare, which also results in the same combustion products.

Release of gaseous products to air is controlled by the environmental permit which requires that the exhaust products are monitored and reported on an annual basis.

Records are to be maintained of times when the flare is used and the reasons for this. The flare exhaust gases need to be monitored if it is in use for more than 10% of the time.

The requirements of the permit are achieved by regular maintenance of combustion equipment.

3.2.4 Abnormal/emergency situations

The digester is built with many safeguards and lock downs to protect against abnormal releases. In the event of gaseous emissions being released to atmosphere which are not controlled by the flare, Environment Agency and Fire Service must be notified.

3.3 Site Management

The site will be supervised overall by the Operations Manager supported by the qualified Technically Competent Front-Line Manager they, along with the competent management team, are responsible for the general management of the site including the acceptance and handling of any potentially odorous wastes. Support is provided by the addition of trained nominated site personnel.

The roles and responsibilities for the management and implementation of this document are detailed below.

1. **Operations Manager** – To ensure the overall implementation of this plan.

2. **Technically Competent Manager** – To manage a programme to reduce odour risk on an ongoing basis by improvements to plant process engineering as part of the CHFB process safety management system. To ensure abatement measures are such as to reduce the risk of odour causing emissions to the maximum extent reasonably practicable and to below permit thresholds. To ensure any plant breakdowns/ faults with the potential to cause odour issues are delt with promptly. To ensure fugitive emissions from maintenance operations are adequately controlled.

3. **All Employees** – To ensure they comply with all working procedures and ensure the odour risks from fugitive emissions are minimised by adherence to control measures. To report any potential failings in odour control arrangements to management promptly and to cooperate fully with management regarding odour control.

The Standard Operating Procedures for the site include considerations of emissions to the environment in all site activities, and site employees are made aware of their responsibilities under the Environmental Permit and the consequences for compliance of any incidents or abnormal releases.

The OMP is kept in the site office as a hardcopy for access at all times, and electronically on the company computer systems.

Odour management training is provided for all operational employees via formal training sessions which are provided by internal trainers and external training companies as and when required.

Nominated employees will be trained on the odour scoring system and the monitoring point locations, to ensure that odour monitoring is scored on a consistent basis and trigger levels are understood.

The site management are committed to ensure that all relevant employees will be trained on the requirements of the OMP and follow-up refresher toolbox talks will be held periodically, no later than annually. The individual training plans for employees on site must record all training on the aspects of the OMP.

4.0 Odour Risk Assessment and Sensitive Receptors

4.1 Methodology

This OMP has been completed to identify where the likely risks are in relation to surrounding land uses. This assessment has been used to inform Section 5.0 of this OMP with regard to specific odour monitoring procedures.

4.2 Receptor Sensitivity

The below table (Table 5) shows the receptors that could potentially be affected by an odour impact within 2km of the site boundary.

Sensitive receptors considered include:

- Local schools, hospitals, nursing and care homes, residential areas, workplaces
- Local protected sites and species
- Local factories and other businesses
- Footpaths, public green space
- Homes, or groups of homes (such as villages or housing developments)
- Playing fields and playgrounds

The site is located within a largely open space area with neighbouring industrial estates and processes.

4.3 Sensitive Receptors

Table 1 below identifies key sensitive receptors within 2km of the site.

Table 5 – Local Receptors

Sensitive Receptors	Distance (m) from Site
High Hoyland Lodge	389m
Bretton Hall Grade II	276m
Bilham Spring	350m
Bretton Country Park Kennels and Cattery	439m
Water Sewage Treatment Works	462m
Picnic site (Litherop)	474m
Bilham Shrogg	480m
Litherop Spring	566m

Bilham Grange (H Wood & Sons) Farm	650m
Factory	693m
Adare SEC	712m
Bretton Woodlands	720m
Kaye's Millenium Garden	750m
Brian Fell and Son Sculpture & Metalwork	750m
Liz Grundy School – Sculpture & Stone Carving	770m
Church of All Hallows	801m
Brendon House	804m
Domestic Premises	806m
Manor House Farm	850m
Allotment Gardens	850m
Playing Field	873m
Arts Centre (Art Gallery)	927m
Iron mining shaft mounds and medieval earthworks – South of Bentley Grange Farm	951m
Woodman Inn	979m

5.0 Review of potential sources of odour

Potential odour sources from the facility are characterised and presented in Table 6 below.

Table 6 – Potential Odour Sources

Process/Activity/ Equipment	Potential impact	Is impact controlled by equipment?	Is equipment included on maintenance checklist?	Is the impact controlled by a procedure?	Has the responsible person received training?	Comments
Potential odour from vehicle upon entry/exit	Yes	Yes	Yes	Yes	Yes	Wastes are transferred in covered/enclosed vehicles. Each vehicle

Potential odour from onsite waste acceptance	Yes	Yes	Yes	Yes	Yes	Wastes are accepted directly into the waste processing shed (liquid waste is transferred from vehicle tanker to mobile tanks housed within the building.
Potential odour from storage tanks	Wastes incorrectly digested, leading to potential odours giving rise to complaints	Yes	Yes	Yes	Yes	Refer to SOP_3.3 Non-Conforming Waste Procedure. Wastes have not previously produced an unacceptable odour
Potential odour from liquid digestate in the lagoons	Potential risk of odour from storage of digestate/ liquor in open lagoons.	Yes	Yes	Yes	Yes	A lagoon crust forms that acts as a cover and provides a seal, preventing odour escaping.
Potential odour from dewatered digestate	Potential risk of odour from storage of dewatered digestate.	Yes	Yes	Yes	Yes	Dewatered digestate is sealed and covered to prevent odour release.

5.1 Odorous Materials and Activities

The site accepts and processes some potentially odorous materials, which have the potential to impact amenity in the areas adjacent to the site without the layers of controls detailed in the odour risk assessment being implemented.

5.2 Pathways

Odours emitted from the sources identified are released as point source and fugitive emissions. They are then dispersed to atmosphere where they have the potential to be dispersed to nearby receptors. This dispersion is predominantly controlled by meteorological conditions (wind).

Odour pathways cannot be mitigated against; however, past meteorological data can be analysed in order to determine areas likely to be affected and thus the associated risk.

6.0 Other considerations

6.1 Meteorological

Fugitive odour releases are minimised by effective odour management procedures to lower the risk of significant nuisance at receptor locations in the vicinity of the site. However, certain circumstances (as discussed elsewhere in this plan) can cause an increase in the intensity, offensiveness, frequency and duration of any odorous release. The risk of such releases causing a nuisance to local receptors can be increased where local atmospheric conditions fail to dilute and disperse the emissions.

Extreme meteorological conditions that can promote the generation of odour and inhibit its effective dispersion (i.e. high temperatures and stable conditions) may result in an increased risk of impact at receptor locations.

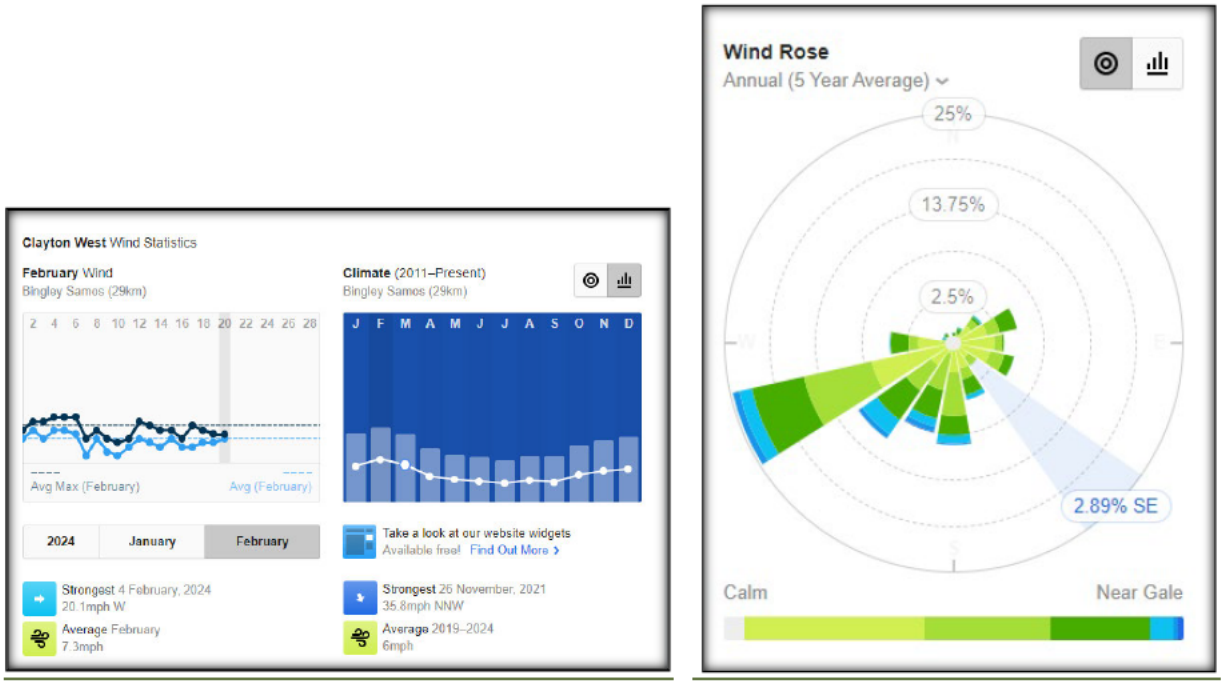
6.1.1 Prevailing Wind Direction

Wind data demonstrates that the prevailing winds are largely from the southwest. Thus, odours would be expected to be transported north north east in the majority of cases. Therefore, significantly reducing risk to both residential and industrial/municipal receptors located to the southwest of the site.

Wind data does however demonstrate that localised odours may cause temporary nuisance in the tourist areas frequented primarily for leisure purposes during summer/autumn periods.

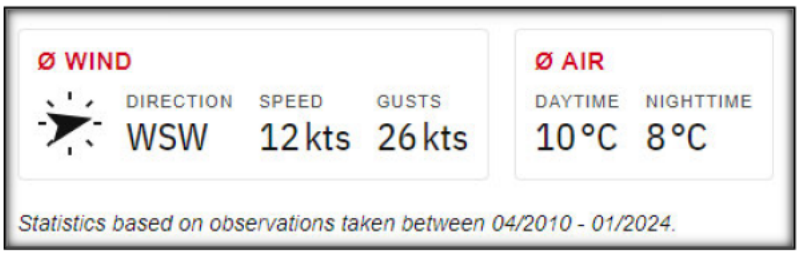
The below diagram below shows the prevailing wind direction.

Diagram 1 - Prevailing Wind Direction – Clayton West Wind Statistics



Clayton West wind statistics displayed in graphs and wind rose (Willy Weather Website - February 2024)

Diagram 2 – Emley Moor Weather Station Wind Statistics



Annual wind & weather statistics for Emley Moor Weather Station, Huddersfield (Wind Finder website February 2024)

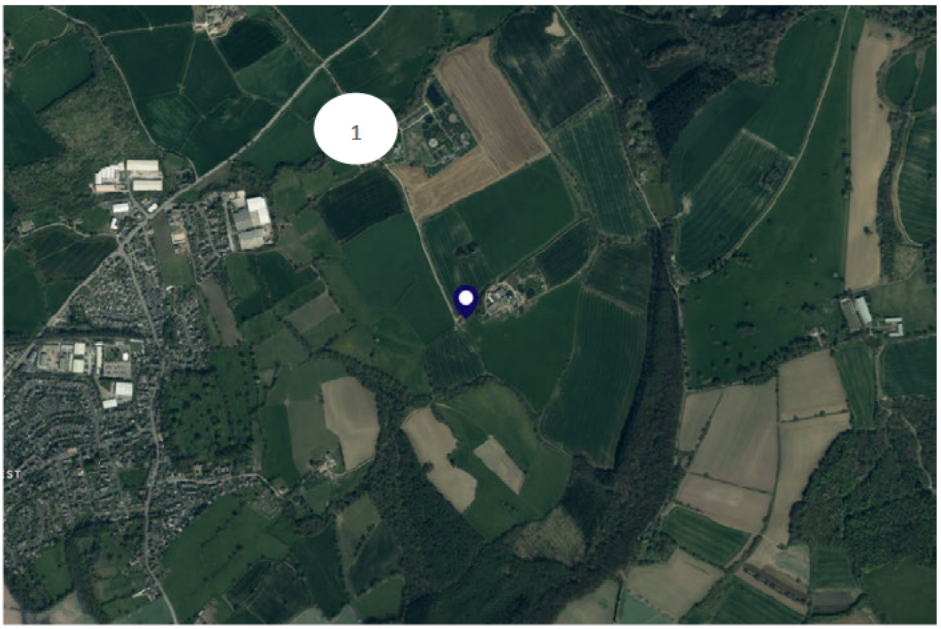
6.2 External local odour sources

There are other potential odour sources outside and within 2km radius of the site, which can produce unpleasant odours, which could be detectable within the vicinity of the site and the surrounding industrial and coastal areas.

There are significant potentially odorous activities between the site and sensitive residential receptors including a landfill site and other waste management activities (See Image 2). Which will potentially cause confusion at residential receptors and make external odour monitoring more challenging.

- **Other waste management facilities (Wastewater Treatment Works)** surrounding the site have the high potential to produce strong fouling odour which could be detected on or around the site through poor operational practices (Point 1).
- **Farming Activities** odour arising from spreading digestate (Operator spreads PAS110 digestate to farmland) and other agricultural activities from neighbouring farms.

Image 2 – Site location and surrounding features



Offensive odours arising from external sources will be noted in the site diary. If a significant odour is noted as coming from any external facility, a decision will be made by the Technically Competent Manager or Operations Manager whether to report the odour to the Environment Agency and/or local authority.

7.0 Odour management and control measures

While the site does deal with potentially odorous input waste materials the site's geographical location (distance from residential/business properties) and the prevailing winds reduce significantly both the potential for amenity affecting odours and their severity at sensitive receptors. Odours are likely to result in temporary minor nuisance to these receptors on any rare occasions of control failure coinciding with wind in the necessary direction and at the right strength.

7.1 Odour Risk Reduction

The development, implementation and continual improvement of process control measures and good working are seen as the key requirements to minimise the generation of odours likely to cause a nuisance and, for those which are unavoidable to minimise their release to atmosphere in a manner likely to cause nuisance.

The sites planned preventive management system is seen as the vital tool to reduce the risk of odours. The PPM adopts the following hierarchy of controls:

1. Plant Design Safety – avoiding/ eliminating the hazard at source and/or making things inherently safer by design
2. Elimination – of process risks, where reasonably practicable to do so
3. Substitution - So far as is reasonably practicable using less hazardous alternatives
4. Engineering Controls – so far as is reasonably practicable by segregation, enclosures, positioning, ventilation/extraction etc.

5. Administrative Controls – So far as is reasonably practicable will control residual risk by necessary procedural/behavioural controls.

In terms of odour management, the PPM hierarchy can be interpreted as follows.

7.1.1 Prevention of Odours in the First Instance (at source)

- Robust pre-acceptance/acceptance of waste procedures to reduce the acceptance of odorous wastes in the first instance to reduce risk, including odours
- No point source emissions are permitted other than the exhaust from the gas-powered generator and flare. These are routinely monitored, and the test results are submitted to the EA annually.

7.1.2 Minimisation of Odorous Releases by Effective Engineering Controls (Control of releases)

- Odour abatement systems (point source)
- Engineering controls, such as containment, building design, LEV, ventilation etc.
- Engineering improvements identified by process risk assessment i.e. HAZOP to minimise potential losses of containment.
- Process safety maintenance systems

7.1.3 Minimisation of Odorous Releases by Effective Working & Workplace Controls

- Systems of work to ensure potential releases of odour are minimised such as maintaining containment, minimising duration of atmospheric expose, spillage control, housekeeping, inventory control, acceptance & storage procedures for raw materials, effective waste management and additional controls identified in workplace risk assessments, COSHH assessments and other safe systems of work.
- Proactive monitoring such as daily management walk arounds, senior management audits, odour monitoring and management system audits.
- Where odours are identified either on site, or via reports off site, to promptly investigate causes and taking prompt corrective/ preventative action.
- Record and investigate as necessary all loss of containment incidents as part of the management systems
- Management review to constantly seek continual improvement as part of the process safety management system.

7.1.4 Dilution and Dispersion of Odours within the Atmosphere

- Systems to ensure both point source and fugitive emissions are minimised to levels unlikely to cause odour nuisance.

The below addresses the general site management guidelines and identifies specific controls and procedures implemented to mitigate against odorous emissions.

7.2 CONTROL MEASURES

Limiting odour from the installation can best be achieved through employing effective site management and good general practice. It is much easier minimising odours in the first instance than dealing with problems once they occur.

This section addresses the general site management guidelines and identifies specific controls and procedures implemented to mitigate against odorous emissions in further detail.

A comprehensive range of physical control measures are implemented at the site.

7.2.1 Waste Acceptance Building

The site has a site-specific waste acceptance building, the building is a steel framed structures with breeze block walls, with a metal cladded roof and walls and internal cladding.

The waste acceptance building is fully enclosed, with one external fire escape opening door, that is sealed with a heavy-duty draft strip. This assists with the attenuation of odour generated within the building.

The processing building encompasses waste reception, storage and processing, which is fully enclosed, with fast acting roller shutter doors ensuring no escape of potentially odorous air.

All site infrastructure including all containment, pipe work and stacks will be regularly inspected for damage and leaks as part of the site's preventative maintenance programme.

The incoming wastes have the potential to be slightly odorous, but this has shown to be unlikely to cause offence beyond the installation boundary. Should it become an issue the incoming waste processing building door should be kept closed except at delivery time.

The site also has two external concrete bunded bays for the acceptance of incoming waste. In the event these are utilised, wastes materials are only stored for up to 48hours.

Image 1 – Waste Treatment Building

Image 2 & 3 – Internal Waste Reception Areas

7.2.2 Site Infrastructure

The site has the below fixed containment infrastructure in place for the storage of waste, digestate and process wastes to mitigate against odour and odour release.

Table 7 – Site Infrastructure

Material	Maximum quantity	Type and size of storage	Type and size of secondary containment
solid wastes awaiting digestion	1000 tonnes	Closed building with sealed concrete flooring	30 cm bunds installed in doorways
liquid wastes awaiting digestion	2 x 60 + 40 m3	Mobile tankers on sealed concrete floor	30 cm bunds installed in doorways. Provides 115 m3 containment requires 66 m3.
wastes undergoing digestion – digester 1	2430 m3	Cast concrete above ground tank	bund surrounding base draining rainwater into concrete 'dirty water' lagoon
wastes undergoing digestion – digester 2	3060 m3	Concrete panel above ground tank	bund surrounding base draining rainwater into concrete 'dirty water' lagoon
emergency spillage lagoon	2500 m3	Concrete panel lagoon	Concrete with earth surround
liquid digestate	3200 m3	Square concrete panel tank	Concrete with earth surround
liquid digestate	5000 m3	Round concrete panel tank	Concrete with earth surround
dewatered digestate	500 tonnes	Indoors on concrete surface	Concreted surface
intermediate rainwater collection tank	24 m3	Square concrete panel tank	Drain to concrete 'dirty water' lagoon
Pasteuriser tank 1	10 m3	Steel tank	Drain to digester bund
Pasteuriser tank 2	10 m3	Steel tank	Drain to digester bund

7.2.3 Odour Abatement System

The site has a water abatement system which at the EA request will be an Improvement Condition to include:

- include the water tank and what triggers are in place for e.g. water replacement, carbon filter saturation
- monitoring the inlet and outlet

Image 3 – Water Abatement Tank

7.2.4 Leachate

The leachate has the potential to reside in drainage pipework and tanks, which could cause odour in hot periods. Therefore, daily checks and, if required, clearing/ flushing the drainage pipework's channels will be included within the maintenance procedures.

7.2.5 Silage Clamp

Dry digestate is stored in a sealed and secure silage clamp and covered with heavy duty plastic to secure the material and prevent any odour release.

7.2.6 Liquid Digestate

Separated liquid digestate is transferred for storage into two digestate storage lagoons which are located within the permitted boundary. Transfer is made via a dedicated pipeline and digestate removed from the lagoons for further use/spreading as needed by tanker.

Potentially the storage of digested food waste in open tanks could be the largest source of odour.

Each digestate lagoon is fully sealed with a hard crust to contain and mitigate against any odour.

7.2.7 Equipment

Routine maintenance plans and inspection schedules for equipment and critical infrastructure that is in in use on-site will be undertaken by the Operator in order to minimise the risk of breakdowns and operational delays which may increase potential for odour emissions.

Plant maintenance records will be kept at the site in the site office and shall be open to inspection.

A list of critical spares required and the procedure for reordering is included as part of the site maintenance plans.

An inventory of spare critical equipment will be held at the site. This will include key items of processing equipment such as pumps and pump casings and motors.

7.2.8 Water and Wastewater

Some water from the AD process will be recirculated within the secondary containment system drainage system back to the AD process.

Clean rainwater is also directed to the lagoon from the site impermeable surfaces.

Clean water from hard surfaces not associated with AD activities is collected separately and the excess is discharged via the system.

The dirty water storage lagoon is fully sealed with a hard crust to contain and mitigate against any odour.

The Site will monitor odour via a daily site boundary ‘sniff’ test and will check emissions during daily site AD plant checks.

7.2.9 Communication and complaints

Communications with the company are managed via the below management procedures.

- Complaints Procedure SOP 3.25

7.2.10 Spreading to land

7.2.11

7.2.12 Communication and complaints

Communications with the company are managed via the below management procedures.

- Complaints Procedure SOP 3.25

7.2.13 Storage Arrangements

Restricted external storage takes place to limit the risk of odours arising from incoming handling and storage activities.

Offloading and storage awaiting treatment is carried out within the building. The incoming wastes can be potentially odorous, but this has shown to be unlikely in causing an offence beyond the installation boundary. Should it become an issue the incoming waste processing building door should be kept closed except at delivery time.

Storage arrangements on site are located as far from boundaries or closest receptors as far as is reasonably practicable using current site layout.

Wastes and storage arrangements are stored in accordance with Drawing 003.

7.2.14 Management Control Measures

A comprehensive range of management control measures are implemented at the site.

The site Environmental Management System and Risk Assessments underpin all site activities.

Process control and safety management inspections and programmes managed by the Operations Manager.

Arriving wastes and other materials must be delivered directly into the incoming waste processing building and not placed outside. The only exception is for the solid wastes to be delivered and temporarily placed on the concreted surface external to the reception storage shed with the intention to transfer indoors with immediate effect.

Although primarily the responsibility of the haulage operator, if incoming wastes are a source of nuisance, they should be covered with immediate effect. The wastes need to be inspected and tested upon arrival and if they are unsatisfactory, they must not be accepted for treatment on site.

Daily site inspections cover various aspects of daily site management such as:

- Operational plant capability
- Stack inspections
- Buildings and surfacing
- Drainage inspections
- Plant and equipment
- Breakdowns (critical processing plant/mobile plant)
- Complaints
- Amenity checks (dust/litter/noise/odour/pests and noise)
- Waste management
- Environmental impact prevention
- Pollution Prevention Equipment (spill kits/dust netting)
- Fire Prevention Measures
- Accidents
- Security Measures (e.g.: fencing/hedging/CCTV)

- Reporting
- Recording (e.g.: non-conformances)
- Staff levels
- Storge of product/hazardous materials
- TCM cover
- Weather conditions

If there are any issues identified not in the scope of the inspection checklist, these comments will also be recorded and reported to the Operations Manager (or other nominated person).

Audits are conducted monthly, with actions and non-conformances record with a planned corrective action plan produced and implemented.

All plant and equipment are recorded on a preventative maintenance programme so that all plant and equipment is regularly maintained.

Emergency response plans are in place to manage incidents and accidents on site in line with company H&S procedures.

The Operations Manager and/or designated responsible person(s) has responsibility for ensuring that nuisances and hazards arising from site operations due to odour are minimised.

Regular meetings between site management will be instigated to discuss current and planned site operations that have the potential to generate odour emissions.

All key management controls are underpinned by the company Environmental Management System.

Referenced EMS procedures are as detailed below.

- Maintenance Procedure SOP_3.24
- Site Audit Procedure SOP_3.28.4

7.2.15 Emissions Testing

Point source emissions to air and emission limits and monitoring requirements are detailed within the permit.

Emissions limits are monitored in conducted line with the timescales listed in the permit and reported to the EA yearly.

The company shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

In addition to scheduled formal emission testing, site management will conduct a daily visual inspection of emissions points to check there is no visible pollution arising from key emission’s points.

Any findings will be reported immediately, and further investigation undertaken.

Any non-conformances will be recorded and recorded on the non-conformance and actions registers.

Any abnormal emissions recorded/identified will be reported to the Environment Agency via a Schedule 5 report.

See EMS procedure Emissions to Air Procedure SOP 3.13.

7.2.16 Waste Treatment and Management

Management of any non-conforming feedstock materials are collected on a regular scheduled basis to prevent malodours.

All waste is stored in enclosed, sealed dedicated storage areas, located away from site boundaries.

Feedstock that are potentially odorous (packaging/residues) are removed from site within 48-72hours.

All waste collection and storage containers are subject to frequent deep cleaning to ensure that any dropped or spilt waste materials are not able to accumulate and cause malodours.

Executed correctly, the digestion process causes minimal odour as it is carried out in a sealed tank. The gaseous products, methane and carbon dioxide are odourless. It is possible if the digestion process goes wrong that more pungent gases such as hydrogen sulphide could be generated. This is carefully controlled by waste inputs, running of the digester and robust monitoring.

Any waste liquid mixes will be channelled to bulk storage tanker or IBC to await onward delivery to recycling activities.

Site operatives are fully trained on the safe loading and transfer of wastes from tankers to prevent loss of containment and the risk of odour release from the transfer process.

All connection pipping for the transfer of liquid wastes is maintained and subject to testing to ensure integrity to prevent the escape of liquid and potential odour release.

All waste is contained in enclosed, sealed or covered containers and/or vehicles when leaving site.

Competent waste management contractors are contracted to manage the waste collection and recovery/disposal process.

See EMS procedures:

- Waste Storage Procedure (SOP_3.2.3)
- Non-Conforming Waste Procedure (SOP_3.3)
- Maintenance Procedure (SOP_3.24)

7.2.17 Training

All new employees are inducted, the induction program includes (but not limited too) an overview of the site, the environmental permit and site compliance history.

Staff will receive training on the OMP and Environmental Management Procedures including the environmental policy and emergency procedures.

Employees receive refresher training throughout their employment on different subjects as required, these can be delivered via toolbox talks, briefs or formal training.

Visitors are supervised whilst on site. At the visitors sign in area, there is an instruction sheet to the site that makes them aware of the correct safety and site instruction procedures whilst on site.

Contractors are inducted before permitted to enter site and this induction includes environmental awareness and odour prevention on site. The company operates a Permit to Work system to control contracted activities and manage potential risks to the environment.

See procedures:

- Permit To Work Procedure (SOP_3.1.6)

See EMS procedure Training Procedure:

- Training Procedure (SOP 3.20)
- Training Matrix (CHFB_TMX)

7.2.18 Accident and Incident Management

The site maintains an accident management plan as required by the Environmental Permitting Regulations.

The accident plan sets out the actions to be taken and measures required to prevent incidents and where an incident occurs the appropriate mitigation action to be taken.

The plan considers the following scenarios

- Any spillage / leaks or loss of containment
- Any vandalism which could cause damage to the plant and equipment resulting in spillage of waste
- Storage and containment of failure
- Flooding
- Fire due to plant malfunction or electrical equipment causing an ignition source
- Production failures
- Failure of main services
- Failure of major plant and equipment; and
- Failure or unavailability of any environmentally critical plant.

Refer to the EMS procedures and plans, including but not limited to the following:

- SOP_3.21 (Accident Management Procedure)

- SOP_3.22 (Spillage Response Procedure)
- SOP_3.23.1 (Fire & Explosion Response Procedure)
- SOP_3.26.1 (Breakdowns Procedure)
- SOP_3.26.2 (Emergency Shutdown Procedure)
- Accident Management Plan (CHFB_AMP)
- Emergency Action Plan (CHFB_EAP)

7.2.19 Equipment and Maintenance

The site has a supply of critical spares will be maintained onsite for the immediate repair of key plant.

The site will employ skilled contractors to promptly repair any faults.

All plant and equipment will be maintained and regularly serviced in accordance with the manufacturer's recommendations and planned maintenance procedures to minimise breakdowns.

In the event that repairs cannot be promptly carried out relevant activities will be suspended were there is an increased risk of odour emissions or offsite impact.

Operations will be ceased until the plant has been repaired.

If necessary, the facility will remain closed until the breakdown is complete.

See EMS procedures:

- Maintenance Procedure (SOP_3.24)
- Calibration Procedure (SOP_3.24.1)

7.2.20 Housekeeping

Inspections of plant and equipment are made by the Site Manager (or nominated person) every shift, ensuring that they are kept free of any spilled odorous materials, wastes and litter, in addition to general housekeeping, which could lead to the unnecessary/uncontrolled build-up of odorous material.

The site being a 24 hour 7 days per week operation, employs an ongoing clean as you go policy applicable to all employees.

The buildings are checked and cleaned on an ongoing basis. Staff inspect all process areas daily to prevent the risk of any product residues or historic wastes building up and odours building up including eternal storage areas. Management audits occur weekly in all process areas.

Frequent site cleaning takes place on site covering essential daily housekeeping, monthly tasks and deep cleans of site infrastructure and the drainage system and tracker on the Housekeeping Rota.

Shutdowns include deep cleaning, where necessary, and planned, condition-based maintenance.

Washing and Cleaning Procedures for Feedstock Reception

Once materials have entered the AD processing system, there is the potential for the residues of any odorous material on the clamp/storage areas to carry on generating odours even after the main mass of material has been taken into the enclosed system.

Where the concrete storage areas then this will be cleaned daily, in order to remove remnants of the material and so minimise the further release of malodour.

The following management of processes and cleaning procedures will be employed to minimise evaporation of odorous chemicals from materials:

- early removal of potential odorous feedstock into the processing system;
- removal of odorous feedstocks and the residues of that feedstock, using mechanical cleansing followed by;

- water-based wash-down procedures;
- quarantined feedstocks e.g. contrary material removed from the feedstock will be removed within 5 days.
- Quarantined malodourous feedstock will be removed within 24-hours.

The following measures will be undertaken to reduce the potential for odour:

- Carry out daily inspection, monitoring and maintenance of abatement equipment to ensure working effectively and operational
- Carry out daily inspection of all pipework and process storage tanks to ensure that they are sound
- Auditing housekeeping and maintenance records
- All litter/detritus shall be removed from working areas, around the interior perimeter walls, underneath pipe work, on a daily basis
- Any faults/damage to be recorded on the relevant maintenance form and the Daily Inspection
- Carry out regular housekeeping to ensure any spills cleaned up immediately in accordance with Spill Procedure and wash-down of all hardstanding areas, as follows:

    - routine cleaning of clamp – once monthly as a minimum (or more frequently if needed) using pressure washer
    - planned cleaning of critical infrastructure including rotors is implemented in accordance with the maintenance planner
    - external surfaces washed-down quarterly as a minimum (or more frequently if needed) using pressure washer
    - routine monitoring to measure the quantity of grit levels in the base of the digesters is carried out to ensure that grit capacity is not exceeded, which could impact on the digester capability and operational performance resulting with poor quality, potentially odorous material from the process
    - external areas of AD plant – once weekly as a minimum (or more frequently if needed) using pressure washing etc.
    - external area around digestate store

7.2.21 Monitoring of metrological data

The use of the meteorological data will be applied at the site for the following reasons:

- To identify wind direction, as the site may be impacted by other industrial processes i.e. maintenance, processing or waste collection operations when the wind is in a particular direction.
- To predict when periods and conditions for the dispersion of odour are likely to be poor, enabling additional monitoring to be scheduled or cessation of site activities.
- To identify times when plant conditions need to be adjusted to account for adverse conditions.
- In the investigation of odour complaint.

7.2.22 Emergency and contingency measures

In accordance with the EA's guidance on OMPs, contingency plans have been prepared to react to situations 'where monitoring indicates that a potential odour source is not completely under control, meteorological conditions are unfavourable or that adverse impact has occurred'.

These further control measures are detailed in Table 8 below.

Table 8: Scenarios involving abnormal events, emergency and remedial actions

Problem / Scenario	Issue	Action
Power Failure	Loss of power can cause uncontrolled odour release points	Consultation with has control of the electricity supply. All vessels/ equipment/ buildings shutdown cooled & secured to minimise odour.
Fire on Site	Management of the fire is the priority	A Fire Evacuation Plan is in place if serious, refer to Emergency Response Plan
Failure of odour equipment	Plant breakdowns	Temporary site shut down. Critical infrastructure analysis has been carried out and the site stores critical parts on site Service agreement with plant/equipment supplier to support with repair requirements.
Employees issues	Shortage of responsible employees to deal with odour	Implement holiday booking procedures to ensure that a trained member of employees responsible for odour issues is always on site during working hours. Training for nominated employees on odour issues to allow for stand-in, in the event of sickness of a designated odour controller. Provide a call-out register so that employees are aware of who will be on stand-by in the event of sickness or emergency. Implement agency support for long term staff absences.

8.0 Monitoring

8.1 Operational monitoring

The operator will monitor the emissions at source (on site) to ensure releases do not result in odour nuisance at sensitive receptors.

Monitoring includes both emissions monitoring, monitoring of odour and inspections of the process, to check that any potential odour emissions are being contained and controlled to meet the accepted standards of good practice in relevant guidance.

Monitoring can include the following:

- Proactive inspections and maintenance of plant equipment
- Process monitoring
- Daily sniff test
- Meteorological data monitoring
- Complaints monitoring; and
- Odour diaries from local residents.

8.2 Olfactory Monitoring

8.2.1 Proactive Monitoring

The following systems of proactive monitoring will be undertaken in addition to other EHS management system monitoring arrangements.

8.2.1.1 Onsite Odour Monitoring

This will be undertaken once per day. Reports will be prepared for follow up and investigation as necessary. All reports of onsite odour will be investigated by the Operations Manager and entered onto the Site Diary.

Where investigations reveal that reports are justified these will be recorded as an incident, where they will be investigated and managed as part of wider management systems.

Sniff testing will be carried out by trained competent staff.

The assessor should not:

a) Smoke or consume strongly flavoured food or drink for at least 30 minutes before the assessment;
b) Consume confectionary or soft drinks immediately before the assessment; and
c) Apply scented toiletries, such as perfumes or aftershave immediately before an assessment.

Should the monitoring conclude that the site is giving rise to odour which may migrate offsite, steps will be made to reduce the impact of this activity, which may include but is not limited to:

- cessation of site activities
- quarantine and removal of waste products/material offsite to a suitably licensed facility

- removal of product, storage areas or waste to a more suitable area of the site prior to removal; and
- applying odour neutraliser to mitigate until removed off site.

8.2.2 Offsite Odour Monitoring

This will be undertaken on an ad hock basis when deemed required by management (i.e., non-routine plant activities posing potential significant risk, or following incidents involving losses of containment etc.).

All reports of offsite odour will be investigated by the Operations Manager and entered onto the Site Diary.

Where investigations reveal that reports are justified these will be recorded and if appropriate, they will be reported to the EA.

Planned off-site monitoring will be undertaken by persons who have not been on site that day to ensure there are not accustomed to potential odours. The site will endeavour to do this also, for unplanned off- site monitoring (i.e., following complaint) i.e., utilising the weekly TCM, or any support staff working from home. However, under no account will off-site monitoring be undertaken by persons having recently accessed process areas.

Additional external support can also be arranged to conduct odour monitoring by competent third party (Consultants).

8.2.3 Reactive Monitoring – Odour Complaints

8.2.4 Onsite Odour Complaints

Any onsite odour complaints will be investigated by Operations Manager and entered onto the Site Diary and Incident report prepared.

8.2.2.1 External Odour Complaints

Any external odour complaints will be investigated by the Operations Manager and entered onto the Odour Log. Where investigations reveal that reports are justified these will be entered as an incident, where they will be investigated and managed as part of wider management system.

All complaints will be reported to the Environment Agency via a Schedule 5 report.

Monitoring in the form of the Trigger Level Action procedure (Section 8.4) will be undertaken by persons who have not been on site that day to ensure there are not accustomed to potential odours. The site will endeavour to do this also, for unplanned off- site monitoring (i.e., following complaint) i.e., utilising the temporary staff working from home. However, under no account will off-site monitoring be undertaken by persons having recently accessed process areas.

Additional external support can also be arranged to conduct odour monitoring by competent third party (Consultants).

8.3 Weather conditions

Meteorological forecasts and conditions are monitored using most recent information from the met-office website, to enable remedial actions to be taken, such as increased monitoring.

Meteorological data will be recorded in the daily diary as per the table below.

Table 9 - Meteorological data

Monitoring Requirements	Frequency
Observed description of conditions: precipitation, drizzle, rain, sleet, snow, temperature, winds, etc	Recorded daily
Wind direction	Recorded daily

Additional monitoring will be conducted in the event the following weather conditions which could cause a potential on or off-site odour issue.

- High winds >30mph which could exaggerate an odour and wind direction north east;
- Periods of hot weather exceeding 3 major dry days which could lead to water shortages, hosepipe bans and excessive odour; and
- Flooding.

8.3.1 Investigation and monitoring records

Daily records shall be maintained and include the following detail if applicable:

- Results of inspections and odour monitoring carried out by site personnel;
- If odour is identified what is the extent of odour – how long has it been apparent? Is it arising from site operations;
- Weather conditions including wind speed and wind direction;
- Operational problems including date, time, duration, prevailing weather conditions and problem loads;
- Complaints received including address of complainant (if available);
- Details of corrective action taken, and any subsequent changes to operational procedures; and
- An evaluation of the effectiveness of control and abatement techniques used.

8.4 Trigger level actions

All odour complaints will be investigated promptly, and appropriate remedial action will be taken if the complaint is substantiated e.g. remove odorous materials off site as soon as reasonably possible.

Complaints will be recorded on the form found in Appendices 1.

Complaints to the EA will also be recorded and investigated. An olfactory assessment survey will be carried out from where the complaint was made and from any locations between the complainant/receptor and the site so that the complaint can be validated or rejected.

If odour is detected during routine olfactory monitoring and is judged to be moderate (Odour Intensity Rank 3) then the TCM (or nominated representative) is notified immediately and the olfactory survey will continue and attempt to determine the scope and extent of the odour, as follows:

- A suitable location downwind of the facility and potentially sensitive receptor at which the odour plume is unlikely to extend will be selected for assessment;
- Survey continues toward the site until an unpleasant odour is perceived; and
- Where odour is detected, this point is recorded, and reported to the TCM, who must take steps to reduce or prevent the odour spreading.
- If the source of the odour is anticipated to be from an external source, the survey will also progress away from the site boundary towards the potential source until an unpleasant odour is perceived (this will be carried out if the odour detected is unusual for the site e.g. an agricultural foul odour or smells from adjacent sites burning waste).

This will involve as necessary:

- A review of the site activities at the time of the olfactory survey;
- A review of the meteorological conditions at the time of the olfactory survey; and
- A review of the effectiveness of process operations and odour control procedures.

8.4.1 Complaint investigation procedure

Once a complaint has been received and the details collected the matter will be reported to the appointed-on site odour controller, either the TCM on duty or Operations Manager/or nominated site personnel. The nominated person will contact the complainant for a full understanding of the report and site complaint response.

As part of the site's accredited EMS system, the site has robust complaints procedures which are used to investigate all complaints received, including complaints in relation to environmental performance and the environmental permit.

Internal and external communications and complaints are manged in accordance the below procedures.

- Complaint Report
- External Complaints

The odour controller will carry out an investigation in accordance with the trigger level actions in section 8.4 to identify potential sources, where sources are identified, will request a rectification.

The site would normally consider the following as part of an incident investigation:

- Is the process under control? (Have we received exceptionally odorous wastes, for example? Have we had any breakdowns?)
- Have odour containment measures failed? (Has a door been left open, for example? Have odorous materials been stored outside a containment area? Have adverse conditions, such as weather, overwhelmed containment structures?)
- Have atmospheric conditions concentrated an odorous plume?

The odour complaint data will then be reviewed to assess the magnitude of exposure, to identify any patterns, which may help to identify likely cause of the problem.

Communications with the complainant will continue throughout the process to conclusion with regular updates and findings from their initial report. All communications with residents will be recorded to evidence updates, time and dates.

8.5 Review

After the complaint has been resolved, there will be a review to identify whether the site procedures and OMP were effective in dealing with the issue.

Once confirmed as justified, odour complaints will be classified as incidents for management to review. This will include the determination and control of corrective and preventative actions and review.

Please note – where the odour has resulted from another incident i.e., such as a loss of containment (LOPC), the incident will be recorded against the most appropriate definition (i.e., LOPC). Records specific to odours will be traceable via the Scada system.

Valid odour complaints will be considered a lagging indicator as part of the PPM Management System and will be reviewed, as necessary, with the TCM weekly. Reviews will be aimed at continual improvement.

Where there are any improvements to be made, these will be identified to the Environment Agency and the any relevant procedures and OMP will be updated accordingly.

9.0 Complaints and External Liaison

The company recognises the importance of engaging with the people who may be affected by site activities. If an issue occurred where neighbours were affected by the activities, then the company would like to propose to use the following community outreach activities to engage with local community in order to understand the issues and provide detailed information about actions taken to mitigate any problems.

Odour complaints will be investigated immediately upon receipt and the below response will apply, this procedure forms part of the company response to internal odour response to ensure a consistent response and ease for implementation for all trained staff.

Upon a complaint from a resident/business the TCM (or nominated representative) is notified immediately, and the olfactory survey will continue and attempt to determine the scope and extent of the odour, as follows:

- A suitable location downwind of the facility, monitoring points and at the potentially sensitive receptor source will be selected for assessment;
- Survey continues toward the site until an unpleasant odour is perceived; and
- Where odour is detected, this point is recorded, and reported to the TCM, who must take steps to reduce or prevent the odour spreading.
- If the source of the odour is anticipated to be from an external source, the survey will also progress away from the site boundary towards the potential source until an unpleasant odour is perceived (this will be carried out if the odour detected is unusual for the site e.g. an agricultural foul odour or smells from adjacent sites burning waste).

This will involve as necessary:

- A review of the site activities at the time of the olfactory survey;
- A review of the meteorological conditions at the time of the olfactory survey; and
- A review of the effectiveness of process operations and odour control procedures.

The TCM/nominated person will keep complainants updated throughout the process.

Odour reports will be justified based on the substantiation of site findings through any odour assessment or support from internal findings from the complaint and investigation process (abnormal event/containment failure).

Findings where other offsite odours/sources (not attributed to the site) are found, these will be communicated to the complaint but not substantiated.

9.1 Our community outreach activities

9.1.1 Newsletter / leaflet

We may from time to time publish a Leaflet explaining about site activities, remedial actions and information about complaint procedures. The company may choose to communicate with residents regarding any incidents or issues via this media.

The frequency of this communication method will depend on the reason for communications. For example, updating the community on remail work may require one notification, however in the event of a substantial odour incident would require regular communications to the community.

9.1.2 Website Information

Website update explaining about site activities, remedial actions and information about complaint procedures. The company may choose to communicate with residents regarding any incidents or issues via this media.

9.1.3 Meeting with residents

In the event of a major incident or an issue which may lead to complaints regarding odour, the company will carry out a formal letter drop to inform local residents about the OMP and future improvements to the site and invite residents to contact us through the appropriate methods and/or to attend a public meeting regarding the issues on site.

This OMP will be updated to include actions and outcomes from any community engagement meetings.

The company publicise within the meeting the availability of an odour diary to residents who wish to participate in recording odour issues.

The company will then issue the odour diary to residents who wish to participate. A copy of the Odour diary is provided in Appendix 3. This information will be used to form the basis of discussion at community group meetings. Copies of the completed forms will be retained in the site records. A list of scores from residents participating in odour diaries will be summarised in future revisions of the OMP.

9.2 Site contact

Members of the public are able to contact the company with any odour complaints about the facility by the following means.

- By telephone (01484 862387) the contact number is manned 24 x 7;
- By email george@claytonhallfarm.co.uk and dawn@claytonhallfarm.co.uk

These methods of contacting the site are displayed at the site entrance and on the company's website.

10.0 Document Review

This Odour Management Plan is considered to be a 'working' document that will be reviewed and updated annually as part of the company's management system or as required should any of the following occur:

- the results of any testing of this OMP indicate that changes are required;
- changes to processes and equipment on site;
- a change or review of legislation or regulatory guidance ; or
- if the site is instructed to do so by the EA.

The document if required will be updated accordingly, unless a profile of complaints is received in which case the OMP will be updated as appropriate to account for any such issues. Any changes in relation to site operations and abatement methods will be sent to the Environment Agency for review and comment.

Any updates to this OMP, either as a result of specific incidents or identified during its testing/review, will be submitted to the EA for its approval prior to implementation of the proposed changes at the site.

11.0 Closure

This report has been prepared by Olive Compliance Limited (OCL) 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 Clayton Hall Bio Energy Plant 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 OCL.

OCL disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

APPENDICIES

Appendix 1 – ONSITE ODOUR MONITORING FORM

Odour report form				**Date**	
Time of test					
Location of test e.g. street name etc					
Weather conditions (dry, rain, fog, snow etc):					
Temperature (very warm, warm, mild, cold, or degrees if known)					
Wind strength (none, light, steady, strong, gusting)					
Wind direction (e.g. from NE)					
Intensity (see below)					
Duration (of test)					
Constant or intermittent in this period					
What does it smell like?					
Location sensitivity (see below)					
Is the source evident?					
Any other comments or observations					

Appendix 2 – ODOUR LOG/INCIDENT REPORT

Odour Complaint Report Form	
Time and date of complaint:	Name and address of complainant:
Telephone number of complainant:	
Date of odour:	
Time of odour:	
Location of odour, if not at above address:	
Weather conditions (i.e., dry, rain, fog, snow):	
Temperature (very warm, warm, mild, cold or degrees if known):	
Wind strength (none, light, steady, strong, gusting):	
Wind direction (e.g. from NE):	
Complainant's description of odour: ○ What does it smell like?	
○ Intensity (see below):	
○ Duration (time):	
○ Constant or intermittent in this period:	
○ Does the complainant have any other comments about the odour?	
Are there any other complaints relating to the installation, or to that location? (either previously or relating to the same exposure):	
Any other relevant information:	
Do you accept that odour likely to be from your activities?	
What was happening on site at the time the odour occurred?	
Operating conditions at time the odour occurred (e.g. flow rate, pressure at inlet and pressure at outlet):	

Actions taken:		
Form completed by:	Date	Signed

Appendix 3 – ODOUR DIARY

Odour Diary					Form version 110319	Sheet No
Name: Telephone Number:	Address:					
Date of odour:						
Time of odour:						
Location of odour, if not at above address (indoors, outside):						
Weather conditions (dry, rain, fog, snow etc):						
Temperature (very warm, warm, mild, cold or degrees if known):						
Wind strength (none, light, steady, strong, gusting):						
Wind direction (eg from NE):						
What does it smell like? How unpleasant is it? Do you consider this smell offensive?						
Intensity – How strong was it? (see below 1-5):						
How long did go on for? (time):						
Was it constant or intermittent in this period:						
What do believe the source/cause to be?						
Any actions taken or other comments:						

Intensity

0 No odour
1 Very faint odour
2 Faint odour
3 Distinct odour
4 Strong odour
5 Very strong odour
6 Extremely strong odour

Section 12

Julie Dingwall
Clayton Hall Farm,
Clayton West,
Huddersfield,
West Yorkshire,
HD8 9QE

Ref:FP3506EY/P001

Our reference: EPR/FP3506EY Date: 22/12/2022

Dear Julie

Application Reference: EPR/FP3506EY/P001
Operator: Clayton Hall Farm Bioenergy Llp
Facility : Clayton Hall Farm Bioenergy plant

Date of estimate: 22/12/2023

I am pleased to provide you with your enhanced level of pre-application advice. This advice is based on the information provided on your pre application advice form and conversations emails recorded on the following dates:

What enhanced pre application covers

Further information on the enhanced pre-application service is detailed on section 2 of the Environmental permitting charges guidance on GOV.UK.

As part of this service we have provided you with the following information:

Application reference number	EPR/LP31290PF/A001
Habitat's screening	May be required installation screening distances are d different for installations
Documents attached	
Application charge required	Section 5.4 (a)(i) and (b)(i) - non-hazardous waste installation – biological treatment.

Application reference number	EPR/LP31290PF/A001
	charging ref. 1.16.2.1 - = Variation - £6,992.00 + Waste activity charge ? Substantial Variation £12,586 (permitting officer will decide on whether it's a substantial variation or not) Odour management plan – £1,246.
Forms required to be submitted	Part A , Part C2, Part C3, Part F1
Additional documents required	**Non-Technical Summary** **Site Condition Report** **Odour Management Plan** - As set out in our guidance on controlling odour emissions, A new or updated plan will be required if your risk assessment shows that the changes will lead to increased odour risk. **Bioaerosols risk assessment – may be required if activities within 250 m of human receptors** A bioaerosols site-specific risk assessment (SSBRA) will be required where: The SSBRA must demonstrate that the process and/or abatement measures adequately prevent or where this is not possible significantly reduce the risk of bioaerosols release and that the resulting activity will be unlikely to expose the nearest sensitive receptor to elevated concentrations of bioaerosols. The detail and level of risk assessment must be site specific, process and location dependant. To control and minimise the risks identified, measures and process controls must be in place and clearly stated. Link to technical guidance: https://www.gov.uk/government/publications/bioaerosol-monitoring-at-regulated-facilities-use-of-m9-rps-209

Application reference number	EPR/LP31290PF/A001
	https://www.gov.uk/government/publications/m9-environmental-monitoring-of-bioaerosols-at-regulated-facilities Habitats Risk Assessment – may be required H1 Risk assessment Process flow diagrams - The application should contain process flow diagrams for treatment processes on site. **BAT** The operational procedures should comply with the Waste Treatment BAT Conclusions as described in the Commission Implementing Decision1 and the BAT Reference Document for Waste Treatment (the BREF)2. It would be helpful to present the BAT assessment in a tabular format – a comparison of the relevant BAT points and how the installation complies with the BAT points. • A description of the abatement techniques for all necessary substances and receptor media • An assessment of energy usage /efficiency techniques • Monitoring frequencies, standards and proposals including MCERTS • Raw materials inventory and annual throughput • Raw material usage efficiency techniques • Raw material storage arrangements • Digestate /compost storage capacity and contingency plans

[1] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018D1147&from=EN

[2] http://eippcb.jrc.ec.europa.eu/reference/BREF/WT/JRC113018_WT_Bref.pdf

Application reference number	EPR/LP31290PF/A001
	• List all the waste codes proposed for the facility, using the EWC Catalogue. Justification for the use of 99 codes must be provided where appropriate. • A description of the proposed waste handling (including storage and segregation). • A review of waste minimisation at the facility.
Additional information	Medium Combustion Plant The aggregated thermal input of your combustion plant(s) and/or generator(s), including any additional back-up diesel generators. **Primary and secondary containment** A detailed assessment of site infrastructure should be provided (e.g. secondary containment, tank specification, surfacing, storage lagoon etc.). The site infrastructure should be compared with the relevant industry /construction standards (e.g. CIRIA guidance C736 for secondary containment and C535 for above-ground tanks etc.). The assessment should include: • The physical condition of primary containment systems (storage and treatment vessels), secondary containment (bunds), loading and unloading areas, transfer pipework/pumps, temporary storage areas and liners underlying the site. • The suitability for providing containment when subjected to the dynamic and static loads caused by catastrophic tank failure; • Any work required to ensure compliance with the industry standards or equivalent; and • A preventative maintenance and inspection regime for site infrastructure.

Application reference number	EPR/LP31290PF/A001

You must ensure you provide dates of birth for all appropriate people as per Appendix 1 in form Part A. Failure to do so will delay your application being put into our systems. Please note that these details will not be made available on the Public Register.

A complete application must contain the following information below:

Declaration	Please ensure the declaration section is completed by each relevant person. For a limited company, this must be a director/company secretary as listed on Companies House.
Site Plan	Site plan must be clearly marked with site boundary clearly marked and show any emission points
Payment	Please note your application will not be processed until we receive the full payment.

What happens next?

If you submit an environmental permit application, then please quote this pre-application reference number: EPR/LP/3120PF/A001

If the advice above details using the online digital application form, your application can be submitted using this method. If not, please send your completed application documents via email to:

psc@environment-agency.gov.uk

Please email applications where possible. If email is not possible you can submit by post to:

Environment Agency, Permitting Support Centre, Quadrant 2, 99 Parkway Avenue, Sheffield, S9 4WF

Current application timescales

Our current queues are large and we are taking longer than usual to allocate work for initial assessment, known as duly making. The table below shows our estimated queue times by application type. Please note, this is based on our average times and some applications may be picked up before or after the timescales listed below.

Application type	Estimated time to allocation

New bespoke	29-33 weeks
New standard rules	27-31 weeks
Admin variation	24-28 weeks
Minor variation	24-28 weeks
Normal variation	30-32 weeks
Substantial variation	29-33 weeks
Transfer	18-22 weeks
Surrender	18-22 weeks
Medium Combustion Plant	16-20 weeks
Intensive Farming New bespoke	17-21 weeks
Intensive Farming Admin variation	16-20 weeks
Intensive Farming Normal variation	25-29 weeks
Intensive Farming Substantial variation	20-24 weeks
Intensive Farming Transfer	16-20 weeks
Intensive Farming Surrender	16-20 weeks

Disclaimer

The advice given is based on the information you have provided, and does not constitute a formal response or decision of the Environment Agency with regard to future permit applications. Any views or opinions expressed are without prejudice to the Environment Agency's formal consideration of any application. Please note that any application is subject to duly making and then full technical checks during determination, and additional information may be required based on your detailed submission and site specific requirements and the advice given is to address the specific pre-application request.

This advice covers installations only.

Other permissions from the Environment Agency and/or other bodies may be required for associated or other activities.

Enhanced pre application cost estimate

At this stage the pre-application advice is expected to cost up to £400 plus VAT. An invoice will be sent separately at a later date.

This pre-application request is now closed.

We consider this pre application request is now closed however if you have any questions regarding this letter please contact john. Murray

If you require additional enhanced pre-application advice please complete our online form.

We look forward to working with you on this project.
If you have any questions please call 03708 506 506.

Yours sincerely john Murray
John.murray@environment-agency.gov.uk