BESPOKE ENVIRONMENTAL PERMIT VARIATION APPLICATION

HOLME FARM

Marsh Lane

Ince

Cheshire

CH2 4NR

Prepared for: JH Willis & Son

[redacted]

September 2020

APPLICATION CHECKLIST

SITE DETAILS	
Name of the operator	**JH WILLIS & SON**
Operator address	Holme Farm Marsh Lane Ince Cheshire CH2 4NR

Question reference	Document title	Document reference
F1 - 6	Application checklist	
	Application form	Part A
	Application form	Part B2
	Application form	Part B4
	Application form	Part F1
A – 5c	Company information	Appendix 1
B2 – 3b	Technical competency	Appendix 2
B2 – 5a	Site plans	Appendix 3
B2 – 5b	Site Condition Report	Appendix 4
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BESPOKE ENVIRONMENTAL PERMIT APPLICATION

Application forms

Prepared for: JH WILLIS & SON

[redacted]

September 2020

Application for an environmental permit Part A – About you

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

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

The form can be:

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

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

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1 About you
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3 Applications from an organisation of individuals or charity
4 Applications from public bodies
5 Applications from companies or corporate bodies
6 Your address
7 Contact details
8 How to contact us
9 Where to send your application
Appendix 1 – Date of birth information for installation and waste activities (applications for a new permit or transferring a permit) only

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

Partnership

3 Applications from an organisation of individuals, continued

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) Mrs

First name Rachael

Last name Willis

Address Holme Farm

Marsh Lane

Ince

Cheshire

Postcode CH2 4NR

Contact numbers, including the area code

Phone 01513 560351

Fax

Mobile

Email rachael@jhwillis.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

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)

First name: Graeme

Last name: Kennett

Address: 360 Environmental Ltd
The Oak Business Centre
79 - 93 Ratcliffe Road
Sileby

Postcode: LE12 7PU

Contact numbers, including the area code

Phone

Fax

Mobile: 07743 988951

Email: graeme.kennett@360environmental.co.uk

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): Mrs

First name: Rachael

Last name: Willis

Address: Holme Farm
Marsh Lane
Ince
Cheshire

Postcode: CH2 4NR

Contact numbers, including the area code

Phone: 01513 560351

Fax:

Mobile:

Email:

8 How to contact us

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

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

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

Email: enquiries@environment-agency.gov.uk

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 Centre
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 ☐

Crystal Mark 19101
Clarity approved by Plain English Campaign

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 Appendix 1

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 B2 – General – new bespoke permit

Environment Agency

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

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

The form can be:

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

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

Contents

1 About the permit
2 About the site
3 Your ability as an operator
4 Consultation
5 Supporting information
6 Environmental risk assessment
7 How to contact us
Appendix 1 – Low impact installation checklist
Appendix 2 – Date of birth information for Relevant offences and/or Technical ability questions only

1 About the permit

1a Discussions before your application

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

Permit or document reference

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

Site ☑ Now go to section 2

Mobile plant ☐ Now go to question 1c

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

Mobile plant

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

No ☐

Yes ☐

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

No ☐ Now go to section 3

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

Document reference

Now go to section 3

2 About the site

But not mobile plant

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

Site name

Address

2 About the site, continued

Postcode CH2 4NR

National grid reference for the site (for example, ST 12345 67890) SJ 45706 77173

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

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

Installation ☐

Waste operation ☑

Mining waste operation ☐

Water discharge activity ☐

Groundwater activity (point source) ☐

Groundwater activity (discharge onto land) ☐

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

As in 2a above ☐

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

National grid reference for the regulated facility

Now go to question 2d

2 About the site, continued

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

See the guidance notes on part B2.

Regulated facility 1

National grid reference

What is the regulated facility type?

Installation ☐

Waste operation ☐

Mining waste operation ☐

Water discharge activity ☐

Groundwater activity (point source) ☐

Groundwater activity (discharge onto land) ☐

Regulated facility 2

National grid reference

What is the regulated facility type?

Installation ☐

Waste operation ☐

Mining waste operation ☐

Water discharge activity ☐

Groundwater activity (point source) ☐

Groundwater activity (discharge onto land) ☐

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

Document reference

Now go to question 2d

2 About the site, continued

2d Low impact installations (installations only)

2d1 Are any of the regulated facilities low impact installations?

No ☑

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

Document reference

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

2e Treating batteries

2e1 Are you planning to treat batteries? (See the guidance notes on part B2.)

No ☑

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

Document reference for the explanation

2f Ship recycling

2f1 Is your activity covered by the Ship Recycling Regulations 2015? (See the guidance notes on part B2.)

No ☑

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

Document reference for the explanation

Document reference for the facility recycling plan

2g Multi-operator installation

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

Table 1 – Other permit application references

3 Your ability as an operator

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

3a Relevant offences

Applies to all except standalone surface water discharges and groundwater discharges (see the guidance notes on part B2).

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/YYYY)

3 Your ability as an operator, continued

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

Relevant waste operations only (see the guidance notes on part B2).

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

ESA/EU skills

Please select **one** of the following:

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

or

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

CIWM/WAMITAB scheme

Please select **one** of the following:

- I have enclosed a copy of:
  - the relevant qualification certificate/s ☐

  or
  - evidence of deemed competence ☐

  or
  - Environment Agency assessment ☐

  or
  - evidence of nominated manager status under the transitional provisions for previously exempt activities ☐

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

  I have enclosed a copy of the relevant current continuing competence certificate/s ☐
- I will complete my qualification within four weeks of starting the permitted activities and have enclosed evidence of my registration with WAMITAB or my EPOC booking as appropriate ☐
- **For medium- and high-risk tier activities other than landfill**
  I will complete the qualification within 12 months and have enclosed evidence of registration with WAMITAB and, where relevant, EPOC booking. I understand I must complete either four specified units of the relevant qualification or an EPOC within four weeks of the permitted activities commencing ☑

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

Title (Mr, Mrs, Miss and so on)

First name

Last name

Phone

Mobile

Email

3 Your ability as an operator, continued

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

Permit number	Site address	Postcode

Document reference Appendix 2

Now go to question 3c

Please also complete the details in Appendix 2.

3c Finances

Installations, waste operations and mining waste operations only.

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

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

No ☑

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

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

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

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

Bonds ☐

Escrow account ☐

Trust fund ☐

Lump sum ☐

Other ☐

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

Document plan reference

Now go to question 3d

3d Management systems (all)

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

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

You 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

3 Your ability as an operator, continued

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) ☐

Green dragon ☐

Own management system ☑

EC Eco-Management and Audit Scheme (EMAS) ☐

~~EMAS~~ Easy ☐

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

Document reference/s: Appendix 9

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

4d Is the installation on a site for which:

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

No ☑

Yes ☐

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

No ☑

Yes ☐

5 Supporting information

5a Provide a plan or plans for the site

But not any mobile plant

Clearly mark the site boundary or discharge point, or both. Also include site drainage plans, site layout plans, and plant design drawings/process flow diagrams (as required). (See the guidance notes on part B2.)

Document reference/s of the plans: Appendix 3

5b Provide the relevant sections of a site condition/baseline report if this applies

See the guidance notes on part B2 for what needs to be marked on the plan.

Document reference of the report: Appendix 4

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

5 Supporting information, continued

5c Provide a non-technical summary of your application

See the guidance notes on part B2.

Document reference of the summary: Appendix 5

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

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

No ☑

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

Document reference of the plan

6 Environmental risk assessment

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

Document reference for the assessments: Appendix 3

For Waste and Installation Permits only

All bespoke waste and installations permit applications must carry out a climate change risk assessment if the planned duration of the operation is more than 5 years. This will normally be reviewed and discussed with you as part of our compliance activities. However, we may require you to submit your climate change risk assessment as part of your application depending on your risk screening score. We will consider the information contained within your climate change risk assessment when we grant your permit. Conditions may be applied to some permits to manage climate risks.

6b Climate change risk screening

See the guidance to Part B2.

Mark your score in each category in the table below. Add each individual score to give a total.

CATEGORY	SCREENING QUESTIONS	SCORE	YOUR SCORE
1 TIMESCALES	How long will a permit be required for this site/activity?		
	5 years or less of operation. No need to fill in the rest of the screening. You do not need to fill in a risk assessment. Please go straight to question 7.	0	
	Less than 20 years of operation	1	
	Until between 2040 and 2060 (between 20 and 40 years from now)	3	
	Until 2060 or beyond (more than 40 years from now)	5	3
1 FLOODING	What is your site's risk of flooding from rivers or the sea?		
	Not in a flood-risk zone	0	
	Very low or Low	1	
	Medium	2	
	High	5	1
3 WATER USE	If you use water for your site operations or fire prevention, what is the source of your water?		
	Water not required	0	
	Mains water	1	
	Surface water or groundwater abstraction	5	0
		TOTAL SCREENING SCORE	4

If your total screening score is 5 or more, complete the climate change risk assessment and submit it with your permit application.

If you expect to operate for 5 years or less, you do not need to submit a risk assessment with your application, regardless of your screening score.

You must enter your score for every category in the table above. If you expect to operate for 5 years or less you may enter 'Not Applicable' for categories 2 and 3.

6 Environmental risk assessment, continued

Document reference of the risk assessment
(if submitted with application) Appendix 6

If your total screening score is less than 5 we may still request your risk assessment as part of determining this application if we believe you face unmanaged climate risks.

If we do not review your risk assessment as part of your application, it will form part of your Environmental Management System and we will discuss it with you as part of our compliance activities.

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

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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 19103
Clarity approved by Plain English Campaign

For Environment Agency use only

Date received (DD/MM/YYYY)

Our reference number

Payment received?

No ☐

Yes ☐ Amount received

£

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

Appendix 1 – Low impact installation checklist

See the guidance notes on part B2.

Installation reference				
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

Date of birth (DD/MM/YY)

3 Technical ability - date of birth information

Name

Date of birth (DD/MM/YY)

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

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

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

The form can be:

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

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

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1 What waste operations are you applying for?

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

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

Document reference

Types of waste accepted

For each line in Table 1a, fill in a separate document to list those wastes you will accept on the site for that operation, giving the List of Wastes catalogue code (search for 'Technical guidance on how to assess and classify waste' at www.gov.uk/government/organisations/environment-agency). 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.

1 What waste operations are you applying for?, continued

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

Name of the waste operation	Description of the waste operation	Annex I (D codes) and Annex II (R codes) and descriptions	Hazardous waste treatment capacity (if this applies) (See note 1)	Non-hazardous waste treatment capacity (if this applies) (See note 1)
Add extra rows if you need them. If you do not have enough room, go to the line below or send a separate document and give us the document reference here	Use the description from the guidance. Include any extra detail that you think would help to accurately describe what you want to do			
Holme Farm LWTS	Storage of wastes to be used in land treatment Liming of sewage sludge	R3 R4 R13	0.00	250.00
For all waste operations	Total storage capacity (see note 2)			1,300.00
	Annual throughput (tonnes each year)			75,000.00

Notes

1 By 'capacity', we mean the total landfill capacity (cubic metres), the total deposit for recovery capacity (cubic metres), the total treatment capacity (tonnes each day) for waste treatment and the total storage capacity (tonnes) for waste storage operations.

2 By 'total storage capacity', we mean the maximum amount of waste in tonnes you store on the site at any one time.

1 What waste operations are you applying to vary?, continued

Please provide the document reference. 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 in the document.

Document reference Appendix 10

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

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

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

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

No ☑ Go to section 2

Yes ☐

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

No ☐ Go to section 2

Yes ☐

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

No ☐

Yes ☐

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

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

Document reference

2 Emissions to air, water and land

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

Fill in one table for each waste operation.

Table 2 – Emissions

Name of the waste operation	Holme Farm LWTS			
Point source emissions to air				
Emission point reference and location	Source	Parameter	Quantity	Unit
n/a				

2 Emissions to air, water and land, continued

Point source emissions to water (other than sewers)				
Emission point reference and location	Source	Parameter	Quantity	Unit
n/a				
Point source emissions to sewers, effluent treatment plants or other transfers off site				
Emission point reference and location	Source	Parameter	Quantity	Unit
n/a				
Point source emissions to land				
Emission point reference and location	Source	Parameter	Quantity	Unit
n/a				

Supporting information

3 Operating techniques

3a Technical standards

Fill in Table 3a for each waste operation you refer to in Table 1a above and list the 'appropriate measures' you are planning to use. If you are using the standards set out in the relevant technical guidance(s) (TGN) there is no need to justify using them within your documents in Table 3a.

You must justify your decisions in a separate document if:

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

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

The documents in Table 3a should summarise the main measures you use to control the main issues identified in your risk assessment or technical guidance. For each of the activities listed in Table 3a, describe the type of operation and the options you have chosen for controlling emissions from your process.

3 Operating techniques, continued

Table 3a – Technical standards

Fill in a separate table for each waste operation.

Waste operation	Holme Farm	
Description of the waste operation	Appropriate measure (TGN reference)	Document reference (if appropriate)
Liquid waste storage	S 5.06	
Sludge storage	S 5.06	
Sludge liming	S 5.06	

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

Document reference Appendix 5

3b General requirements

Fill in a separate table for each waste operation.

Table 3b – General requirements

Name of the waste operation	Holme Farm LWTS
If the TGN or your risk assessment shows that emissions of substances not controlled by emission limits are an important issue, send us your plan for managing them	Document reference or references n/a
If the TGN or your risk assessment shows that odours are an important issue, send us your odour management plan. **If your activity type is listed in the guidance document 'Control and monitor emissions for your environmental permit' as needing an odour management plan, or your risk assessment shows that odours are an important issue, you need to send us your odour management plan.**	Document reference or references Appendix 8
If the TGN or your risk assessment shows that noise or vibration are important issues, send us your noise or vibration management plan (or both)	Document reference or references n/a

We may need to ask for management plans or risk assessments in other circumstances based on our regulatory experience. If you are unsure as to whether you need to submit a management plan with your application, please discuss this with the Environment Agency prior to submission.

Search for 'Risk assessment for your environmental permit' at www.gov.uk/government/organisations/environment-agency.

3c Information for specific sectors

For some of the sectors, we need more information to be able to set appropriate conditions in the permit. This is as well as the information you may provide in sections 5, 6 and 7. For those activities listed in Table 3c, you must answer the questions in the related document.

Table 3c – Questions for specific sectors

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

General information

4 Monitoring

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

You should also describe any environmental monitoring. Tell us:

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

Document reference n/a

4b Point source emissions to air only

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

Document reference of the assessment n/a

5 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 ☐

Crystal Mark 19105
Clarity approved by Plain English Campaign

For Environment Agency use only

Date received (DD/MM/YYYY)

Our reference number

Payment received?

No ☐

Yes ☐ Amount received

£

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

Appendix 1 – Specific questions for clinical transfer and treatment waste operations

These questions apply to sites that store and/or treat clinical wastes listed in sub-tables 2.1a to 2.1b, EPR 5.07 'Technical guidance for managing clinical waste'. If other hazardous waste is received you should additionally refer to Appendix 2.

1 Are you proposing to either

- accept additional waste for thermal or chemical disinfection not included in Table 2.1a of EPR 5.07?
- treat a waste in Table 2.1a or Table 2c other than by the specified methods?

No ☐

Yes ☐ Please provide justification for the treatment of this waste

Document reference

2 Provide a summary description of the treatment activities carried out on the waste facility which cover the standards set out in the relevant technical guidance note(s) (TGN)

Document reference

3 Provide layout plans detailing the location of:

- waste storage (including areas and structures for separately storing wastes which may be dangerous to store together)
- each treatment plant
- main plant items

Also provide process flow diagrams for each treatment plant and capacity of waste storage areas and structures

Document reference

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

1 Provide a summary description of the treatment activities carried out on the waste facility which cover the standards set out in the relevant technical guidance note(s) (TGN)

Document reference

2 Provide layout plans detailing the location of:

- waste storage (including areas and structures for separately storing wastes which may be dangerous to store together)
- each treatment plant
- main plant items

Also provide process flow diagrams for each treatment plant and capacity of waste storage areas and structures

Document reference(s)

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

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

Document reference

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

Document reference

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

- locations where the waste will be stored and spread
- any spring, well or borehole used to supply water for domestic or food production purposes that is within 250 metres of the area being treated

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

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

Document reference

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

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

Document reference

Yes ☐

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

1 Please provide your Environmental Setting and Site Design (ESSD) report

Document reference

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

2 Please provide your Waste Acceptance Procedures (including Waste Acceptance Criteria)

Document reference

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

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

Yes ☐ Document reference

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

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

Yes ☐ Document reference

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

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

Yes ☐ Document reference

6 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

Yes ☐ Document reference

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

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

Yes ☐ For inert waste landfill you must provide a closure plan

Document reference

Spreading waste to support plant growth

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

No ☐ Now go to question 9

Yes ☐

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

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

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

No ☐

Yes ☐

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

No ☐ Please explain why

Document reference

Yes ☐

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

Application for an environmental permit Part F1 – Charges and declarations

Environment Agency

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

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

The form can be:

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

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

Contents

1 Working out charges
2 Payment
3 Privacy notice
4 Confidentiality and national security
5 Declaration
6 Application checklist
7 How to contact us
8 Where to send your application

Each individual who is applying for their name to appear on the permit must complete the declaration in section 5. You will have to print a separate copy of the declaration page for each additional individual to complete.

1 Working out charges

You must fill in this section.

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

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

Table 1 – Type of application (fill number of activity being applied for in each column)

Installation	Waste	Mining waste	Medium Combustion Plant (MCP)/Specified Generator (SG)	Water discharge/point source discharge to groundwater	Groundwater spreading onto land
	2				

Table 2 – Charge type (A)

Charge activity reference	Charge activity description	What are you applying to do? E.g. new, minor variation, normal variation, substantial variation, surrender, low risk surrender, transfer	Amount
e.g. 1.17.3	e.g. Sect 5.2 landfill for hazardous waste	e.g. transfer	e.g. £5,561
1.16.14	Physical and chemical treatment of waste.	New	£ 7,930.00
1.16.8	Storage of wastes to be used in land treatment.	New	£ 2,641.00
Total A			£ 10,571.00

1 Working out charges (you must fill in this section), 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	£1,231	☐
1.19.2	Habitats assessment (except where the application activity is a flood risk 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 emissions risk assessment (intensive farming applications only)	£620	☐
1.19.9	Dust and bio-aerosol management plan (intensive farming applications only)	£620	☐
	Advertising	£500	☐
Total B			£ 1,246.00

Total charges

Total A plus total B £ 11,817.00

2 Payment

Tick below to show how you have paid.

Cheque ☐

Postal order ☐

Cash ☐ Tick below to confirm you are enclosing cash with the application

Credit or debit card ☐

Electronic transfer (for example, BACS) ☑

Remittance number

Date paid (DD/MM/YYYY)

How to pay

Paying by cheque, postal order or cash

Cheque details

Cheque made payable to

Cheque number

Amount £

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

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

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

I have enclosed cash with my application ☐

2 Payment, continued

Paying by credit or debit card

If you are paying by credit or debit card we can call you. We will destroy your card details once we have processed your payment. We can accept payments by Visa, MasterCard or Maestro card only.

Please call me to arrange payment by debit or debit card ☐

Paying by electronic transfer BACS reference

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

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

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

You should also email your payment details and reference number to ea_fsc_ar@sscl.gse.gov.uk.

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

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

Now read section 3 below

3 Privacy notice

The Environment Agency runs the environmental permit application service.

We are the data controller for this service. A data controller determines how and why personal information is processed.

Our personal information charter explains:

- your rights
- what we do with your personal information

We're allowed to process your personal information because we have official authority as the environmental regulator. We need this information to carry out a task in the public interest that is set out in law. As the data controller, when you apply for an environmental permit, we have a legal obligation to process your personal data under the Environmental Permitting Regulations. The second lawful basis for processing your personal data is to comply with this legal obligation.

We need your personal information to process your environmental permit application. If you do not give us this information we cannot issue a permit to you. After we've issued a permit to you, we use your personal information:

- to check that you're complying with your permit
- during any potential enforcement action

What personal information we collect

If you're the individual applicant, director or company secretary of a company applying or a technically competent manager we need your:

- name
- date of birth
- address
- email address

If you're the agent, consultant, employee responsible for the activity or the employee responsible for billing and invoicing we need your:

- name
- address
- email address

3 Privacy notice, continued

If you're the applicant we need details of any:

- convictions
- bankruptcy

We also collect any questions or feedback you leave, including your email address if you contact us.

Your responsibility with other people's personal information

If you've included personal information about other people on your application, you must tell them. You must provide them with a copy of this privacy notice so that they know how their personal information will be used.

What we do with your personal information

We use your personal information to help us decide whether to issue you with a permit.

The information (except dates of birth) is available online on our consultation website during the consultation period. This website is available to everyone so your information may be seen outside the European Economic Area.

After consultation we put all the information (except dates of birth) you give us in your application on our public register.

If you can demonstrate that any information you send us is commercially or industrially confidential, we'll consider withholding that information from our public register.

If you think that the information you'll send us may be a threat to national security you must contact the Secretary Of State before you apply. You must still send us that information with your application. We will not include this information on our public register unless the Secretary of State decides it can be included.

See the environmental permitting guidance for guidance on national security.

We may use your email address to contact you for user research to improve our service. You don't have to take part in the research.

Where your personal information is processed and stored

We store and process your personal information on servers in the UK. We will not host your personal information outside the European Economic Area.

We do not use your personal information to make an automated decision or for automated profiling.

How long we keep your personal information

We keep your personal information while your permit is in use and for 7 years after you surrender your permit. If the permit is for a landfill site, we keep the data for 10 years after surrender.

Removing personal information from the public register

We will remove your personal information from the public register if:

- you withdraw your application
- we refuse your application and the time limit for appealing the decision has expired or an appeal is dismissed
- the information is no longer relevant for public participation purposes under the Environmental Permitting Regulations

Contact

Our Data Protection Team gives independent advice. They monitor how the Environment Agency uses your personal information.

If you have questions or concerns about how we process personal information, or to make a complaint or request relating to data protection, please contact:

Address: Data Protection Team
Environment Agency
Horizon House
Deanery Road
Bristol
BS1 5AH

Email: dataprotection@environment-agency.gov.uk

You can also make a complaint to the Information Commissioner's Office (ICO).

The ICO is the supervisory authority for data protection legislation. The ICO website has a full list of your rights under data protection legislation.

Now read section 4 below

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 via our website at www.gov.uk/government/organisations/environment-agency.

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

Please treat the 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 via our website at www.gov.uk/government/organisations/environment-agency.

You cannot apply for national security via this application.

Now fill in section 5

5 Declaration

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

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

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

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

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

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

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

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

Name

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

First name: David

Last name: Willis

on behalf of
(if relevant; for example, a company or organisation and so on): JH Willis & Son

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

5 Declaration, continued

Today's date (DD/MM/YYYY) 03/09/2020

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.

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 (Mr, Mrs, Miss and so on)

First name

Last name

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

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

Today's date (DD/MM/YYYY)

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, speak to us before you submit your application.

You must do the following:

Complete legibly all parts of this 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. If necessary, continue on a separate sheet. This separate sheet also needs to have a reference number and you should include it in the table below ☑

For new permits 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

Question reference	Document title	Document reference
Please see application		
checklist		

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 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, or you would like us to review a decision we have made, please let us know. More information on how to do this is available at: https://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.

8 Where to send your application

For how many copies to send see the guidance note on part F1.

Please send your filled in application form to:

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

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

Or

Environment Agency Permitting and Support Centre
Environmental Permitting Team
Quadrant 2
99 Parkway Avenue
Parkway Business Park
Sheffield
S9 4WF

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

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

Feedback

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

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

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

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

Would you like a reply to your feedback?

Yes please ☐

No thank you ☐

For Environment Agency use only

Date received (DD/MM/YYYY)

Our reference number

Payment received?

No ☐

Yes ☐ Amount received

£

BESPOKE ENVIRONMENTAL PERMIT APPLICATION

Supporting documents

Prepared for: JH Willis & Son

[redacted]

September 2020

BESPOKE ENVIRONMENTAL PERMIT APPLICATION

Appendix 1 Business information

Prepared for: JH Willis & Son

[redacted]

September 2020

Date of birth information for Partners.

Partnership Name:

JH Willis & Son

Companies House Link:

Not applicable

Date:

3rd September 2020

	Name	Date of Birth
1	David John WILLIS	[redacted]
2	John Hugh WILLIS	
3		
4		
5		
6		
7		
8		

BESPOKE ENVIRONMENTAL PERMIT APPLICATION

Appendix 2 Technical competency

Prepared for: JH Willis & Son

September 2020

Elleteq

Company Agreement

BUSINESS/COMPANY DETAILS

Candidate Name:	WILLIAM JOHN HUGHES					
Company Name:	JH WILLIS AND SON					
Company Status: (please tick)	Limited Company		Sole Trader		Partnership/LLP	✓
Company Registration Number: (if applicable)	N/A					
Business Address:	HOLME FARM INCE CHESTER CH2 4NR					
Contact Name:	RACHAEL WILLIS / WILLIAM HUGHES					
Contact Number:	0151 356 0351 07947 441589					
Assessment/COTC Address:	AS ABOVE					
Contact Number:						
Invoice Address (If different):	AS ABOVE					
Accounts Contact Name:	RACHAEL WILLIS					
Accounts Contact Number:	0151 356 0351					
Email for electronic invoice:	rachael@jhwillis.co.uk					
Authorised Signatory Name:	RACHAEL WILLIS					
Authorised Signatory Position:	OFFICE MANAGER					
Signature:			Date:	30.1.20		

APPLICATION CHECKLIST

To enable Elleteq to process your application, have you remembered to return:	
Purchase Order No: (if applicable)	
Candidate Registration Form:	
Surrogate Site Approval Form: (if applicable)	
Signed Training & Assessment Engagement Form:	
Equality & Diversity Form:	

Elleteq

Candidate Registration

Candidate Details

Candidate Name:	WILLIAM JOHN HUGHES.		
Title (i.e. Mr/Mrs/Miss/Dr):	MR		
Date of Birth:	[redacted]		
Candidate Home Address:	HOMESTEAD BRIMSTAGE LANE BRIMSTAGE. CH63 6HY		
Candidate Email Address:	johnhughes181077@hotmail.com.		
Candidate Contact No:	—		
Candidate Job Role/Position	TRACTOR DRIVER / WASTE OPERATIVE.		
Company Name:	J.H. WILLIS AND SON.		
Manager Name:	DAVID WILLIS.		
Manager Contact Number:	07774 694509		
Assessment Site Address:	HOLME FARM INCE CHESTER CHESHIRE CH2 4NR.		
Site Contact Number:	0151 356 0351.		
WAMITAB Award(s) Applied For:	MEOC1 + MEOC6b		
Does the Candidate need any additional assistance with any aspect of learning?	NO		
Existing WAMITAB Reg? (Please enter number if known)	—		
Unique Learner Number if known	—		
I confirm I have read the WAMITAB Fair Processing Notice provided	YES		
Correspondence Address: (Please tick preferred option)	Home	Site	—
Signature of Candidate:	J Hughes	Date	30.1.20.

This information is gathered purely for the purposes of registering you as a candidate with WAMITAB. We will share this information with the Awarding Organisation and no other.

This information will be kept securely at our offices in Melksham both electronically and a physical hard copy in a locked cabinet. The information will be available to the Centre Manager, Centre Coordinator, your allocated Assessor and the Quality Assurance team, all of whom will treat the data with the utmost confidence.

wamitab

Equality and Diversity Monitoring Form

Equality monitoring helps us comply with legislation but also tells us who contacts us. Recording personal circumstances allows us to analyse how well we are meeting our commitments to different groups of stakeholders and customers.

Please provide the following information, which will be treated in strictest confidence and used only for statistical monitoring purposes.

Please describe your gender identity?
Please tick the appropriate box

Male	☒	Female	☐	Prefer not to say	☐

How old are you?
Please tick the appropriate box

0 to 9	☐	10 to 19	☐
20 to 29	☐	30 to 49	☒
50 to 64	☐	65 to 74	☐
75+	☐	Prefer not to say	☐

The Equality Act 2010 defines disability as 'a physical or mental impairment which has a substantial & long term effect on a person's ability to carry out normal day to day activities'.

Do you consider yourself to have a disability?

Yes	☐
No	☒

How would you describe your ethnic origin?
Please tick one box only

A) White

English	☐
Welsh	☐
Scottish	☒
Northern Irish	☐
Irish	☐
Gypsy or Traveller	☐
Other White Background	☐

C) Asian or Asian British

Indian	☐
Pakistani	☐
Bangladeshi	☐
Chinese	☐
Other Asian Background	☐

B) Mixed / Multiple ethnicity

White & Black Caribbean	☐
White & Black African	☐
White & Asian	☐
Other Mixed / multiple background	☐

D) Black or Black British

Caribbean	☐
African	☐
Other Black Background	☐

E) Other ethnic group (please state) _____

Prefer not to say ☐

Elleteq

Elleteq

Candidate Registration

Candidate Details

Candidate Name:	JOSHUA WILLIS		
Title (i.e. Mr/Mrs/Miss/Dr):	MR		
Date of Birth:	[redacted]		
Candidate Home Address:	14 INCE LANE WIMBOLDS TRAFFORD CHESTER CH2 4JP		
Candidate Email Address:	willis josh@hotmail.com		
Candidate Contact No:	07876 882361		
Candidate Job Role/Position	TRACTOR DRIVER / WASTE OPERATIVE		
Company Name:	J.H. WILLIS AND SON		
Manager Name:	DAVID WILLIS		
Manager Contact Number:	07774 694509		
Assessment Site Address:	HOLME FARM INCE CHESTER CH2 4NR		
Site Contact Number:	0151 356 0351		
WAMITAB Award(s) Applied For:	MRQC1 + MRQC6b		
Does the Candidate need any additional assistance with any aspect of learning?	NO		
Existing WAMITAB Reg? (Please enter number if known)	—		
Unique Learner Number if known	—		
I confirm I have read the WAMITAB Fair Processing Notice provided	YES		
Correspondence Address: (Please tick preferred option)	Home		Site —
Signature of Candidate:	J Willis	Date	30.1.20

This information is gathered purely for the purposes of registering you as a candidate with WAMITAB. We will share this information with the Awarding Organisation and no other.

This information will be kept securely at our offices in Melksham both electronically and a physical hard copy in a locked cabinet. The information will be available to the Centre Manager, Centre Coordinator, your allocated Assessor and the Quality Assurance team, all of whom will treat the data with the utmost confidence.

Elleteq

Company Agreement

BUSINESS/COMPANY DETAILS

Candidate Name:	JOSHUA WILLIS					
Company Name:	J.H. WILLIS AND SON					
Company Status: (please tick)	Limited Company		Sole Trader		Partnership/LLP	✓
Company Registration Number: (if applicable)	N/A					
Business Address:	HOLME FARM INCE CHESTER CH2 4NR					
Contact Name:	RACHAEL WILLIS / JOSHUA WILLIS					
Contact Number:	0151 356 0351 07876 882361					
Assessment/COTC Address:	AS ABOVE.					
Contact Number:						
Invoice Address (If different):	AS ABOVE.					
Accounts Contact Name:	RACHAEL WILLIS					
Accounts Contact Number:	0151 356 0351					
Email for electronic invoice:	rachael@jhwillis.co.uk					
Authorised Signatory Name:	RACHAEL WILLIS					
Authorised Signatory Position:	OFFICE MANAGER					
Signature:			Date:	30.1.20.		

APPLICATION CHECKLIST

To enable Elleteq to process your application, have you remembered to return:	
Purchase Order No: (if applicable)	
Candidate Registration Form:	
Surrogate Site Approval Form: (if applicable)	
Signed Training & Assessment Engagement Form:	
Equality & Diversity Form:	

wamitab

Equality and Diversity Monitoring Form

Equality monitoring helps us comply with legislation but also tells us who contacts us. Recording personal circumstances allows us to analyse how well we are meeting our commitments to different groups of stakeholders and customers.

Please provide the following information, which will be treated in strictest confidence and used only for statistical monitoring purposes.

Please describe your gender identity?
Please tick the appropriate box

Male	☑	Female	☐	Prefer not to say	☐

How old are you?
Please tick the appropriate box

0 to 9	☐	10 to 19	☐
20 to 29	☑	30 to 49	☐
50 to 64	☐	65 to 74	☐
75+	☐	Prefer not to say	☐

The Equality Act 2010 defines disability as 'a physical or mental impairment which has a substantial & long term effect on a person's ability to carry out normal day to day activities'.

Do you consider yourself to have a disability?

Yes	☐
No	☑

How would you describe your ethnic origin?
Please tick one box only

A) White		**C) Asian or Asian British**	
English	☑	Indian	☐
Welsh	☐	Pakistani	☐
Scottish	☐	Bangladeshi	☐
Northern Irish	☐	Chinese	☐
Irish	☐	Other Asian Background	☐
Gypsy or Traveller	☐		
Other White Background	☐		

B) Mixed / Multiple ethnicity		**D) Black or Black British**	
White & Black Caribbean	☐	Caribbean	☐
White & Black African	☐	African	☐
White & Asian	☐	Other Black Background	☐
Other Mixed / multiple background	☐		

E) Other ethnic group (please state) _____

Prefer not to say ☐

Elleteq

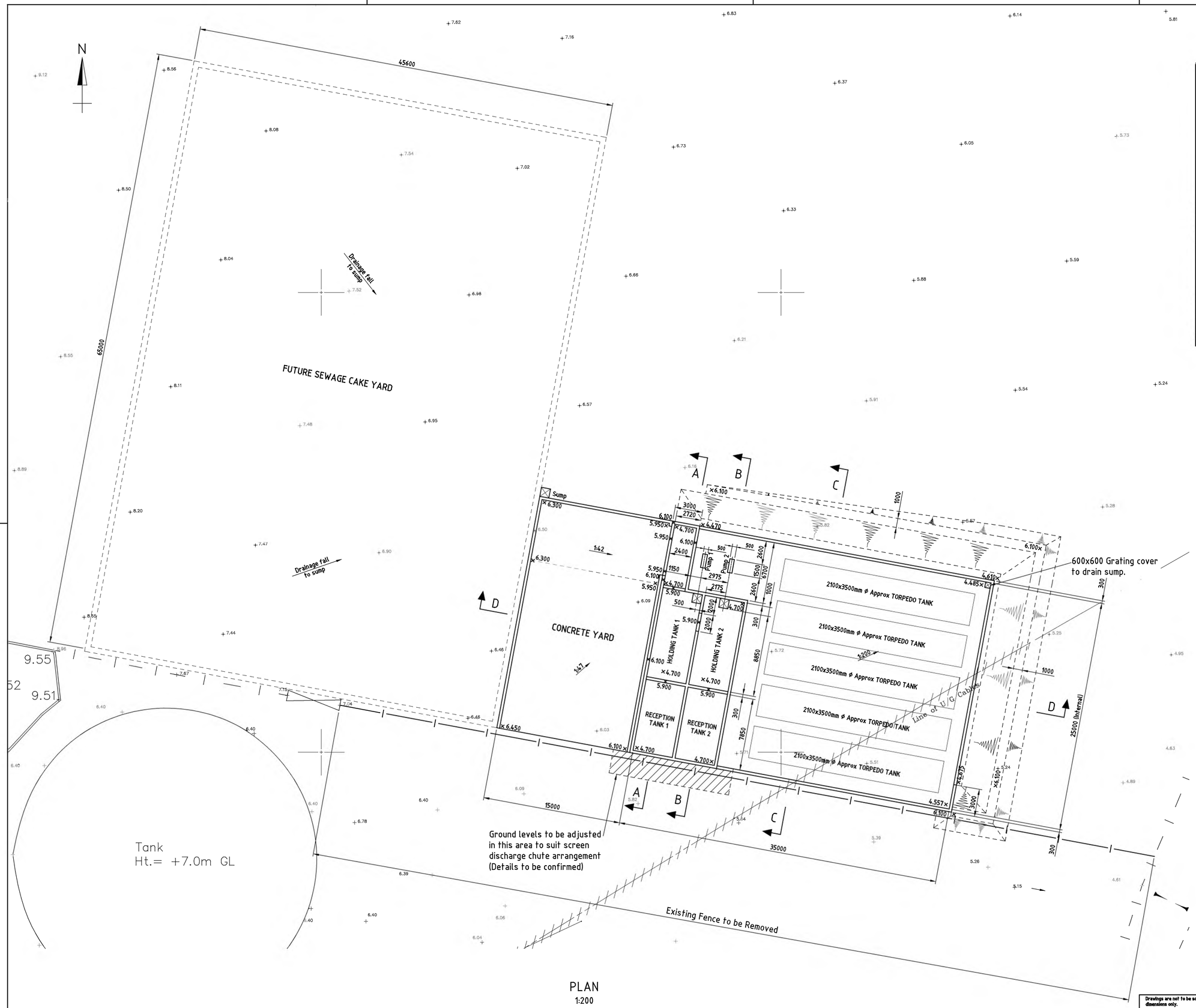
BESPOKE ENVIRONMENTAL PERMIT APPLICATION

Appendix 3 Site plans

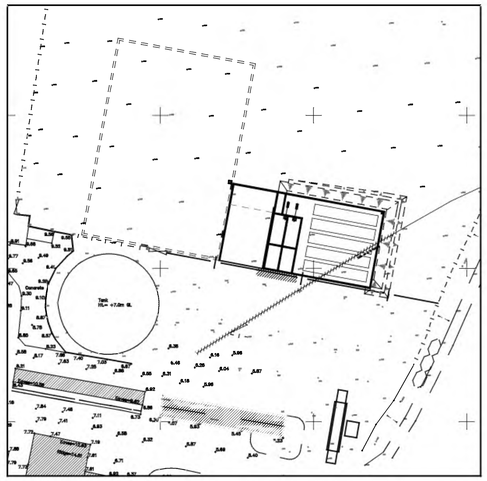
Prepared for: JH Willis & Son

September 2020

Drawing No.
4548-03-10A



PLAN
1:200



KEY PLAN
1:1000

NOTES

1. This drawing is based on MSURV topographical survey drawing No 1215/372/2 dated 28 November 2009.
2. This drawing does not purport to show all required construction details and shows general requirements and layout only.
3. This drawing to be read in conjunction with all relevant civil works drawings and the Specification.

Ref.	Amendment	Ch'kd	Date
A	SCALE REDUCED. TANK AREA REVISED. 300mm WIDE KERB ADDED. LEVELS REVISED. FUTURE SEWAGE CAKE YARD ADDED.	HDW	20.07.20

STIRLINGMAYNARD
Construction Consultants

Stirling House Rightwell Bretton Peterborough PE3 8DJ
Tel 01733 262319 Fax 01733 331527
Email enquiries@stirlingmaynard.com www.stirlingmaynard.com

Client
J H WILLIS & SON

Scheme Title
HOLME FARM - INCE
WASTE TREATMENT PLANT

Drawing Title
CIVIL WORKS GENERAL ARRANGEMENT

Drawings are not to be scaled. Work to stated dimensions only.

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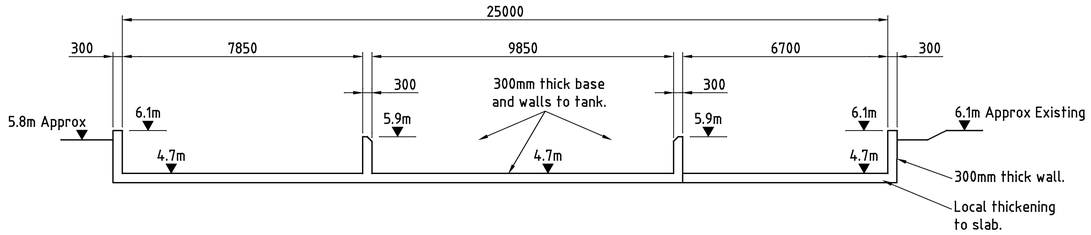
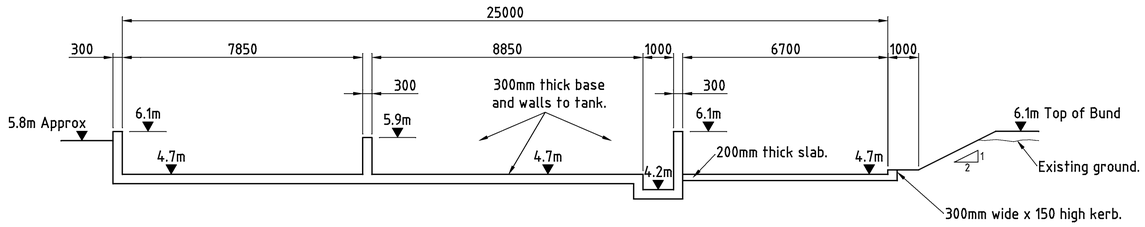
Project Manager	H D WEST	Drawing Status	PRELIMINARY
Drawn	SA	Scale	As Shown @ A1
Checked	HDW	Drawing No.	4548-03-10A
Date	24/06/20		

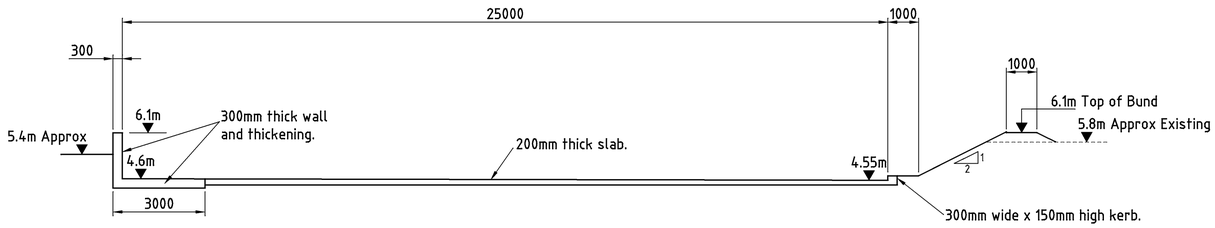
Drawing No.
4548-03-11A



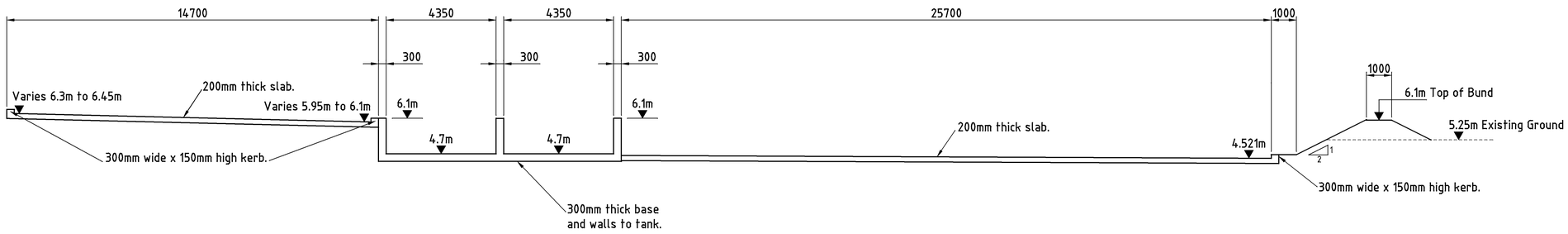
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

NOTES

1. This drawing does not purport to show all required construction details and shows general requirements and layout only.
2. This drawing to be read in conjunction with all relevant civil works drawings and the Specification.

Ref.	Amendment	Ch'kd	Date
A	DIMENSIONS AND LEVELS REVISED.	HDW	20.07.20

STIRLINGMAYNARD
Construction Consultants

Stirling House Rightwell Bretton Peterborough PE3 8DJ
Tel 01733 262319 Fax 01733 331527
Email enquiries@stirlingmaynard.com www.stirlingmaynard.com

Client
J H WILLIS & SON

Scheme Title
HOLME FARM - INCE
WASTE TREATMENT PLANT

Drawing Title
SECTIONS

Drawings are not to be scaled. Work to stated dimensions only.

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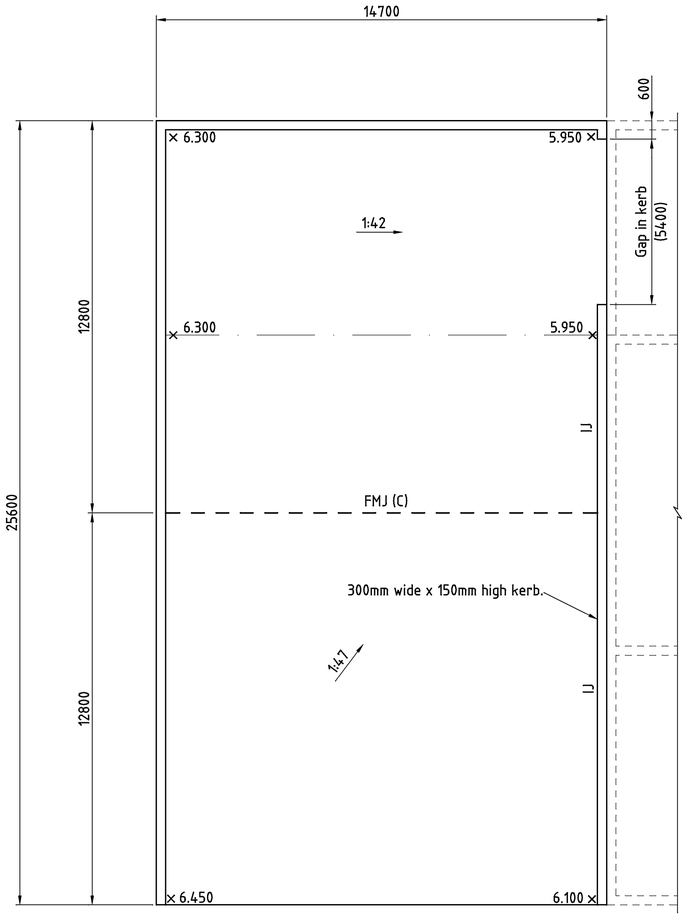
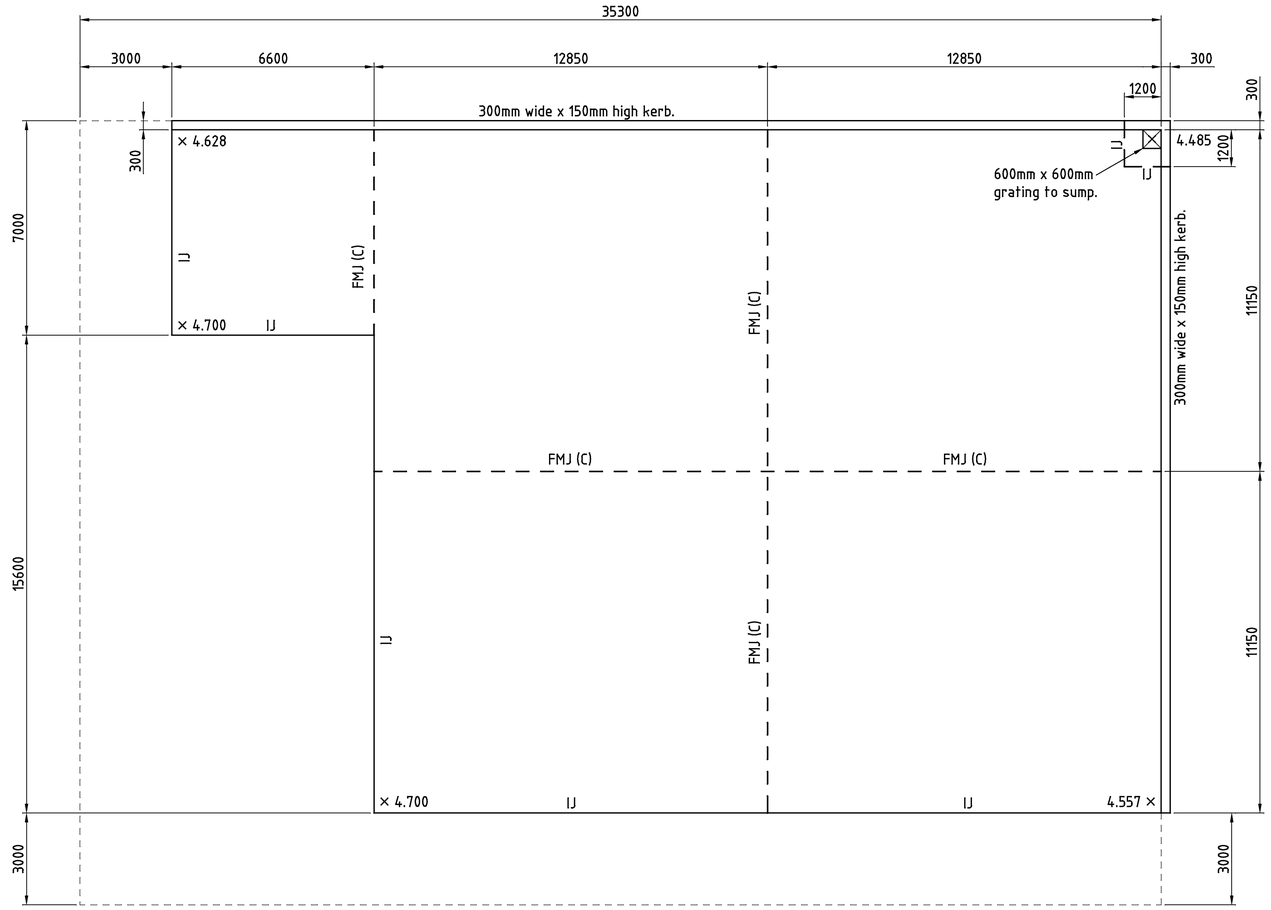
Project Manager	H D WEST	Drawing Status	PRELIMINARY
Drawn SA	Scale 1:100 @ A1	Drawing No.	4548-03-11A
Checked HDW			
Date 24/06/20			

Drawing No.
4548-03-12A



CONCRETE YARD AREA SLAB LAYOUT
1:100



'TORPEDO TANK' AREA SLAB LAYOUT
1:100

NOTES

1. Concrete for slabs to be designated mix reference PAV2 to BS 8500-1:2015. Concrete to be produced in accordance with BS8500-2.
2. Concrete works to comply generally with BS EN 13670, execution class 2, or where appropriate other requirements as set out on the drawings or within the specification.
3. Reinforcement to be grade B500B, welded fabric in accordance with BS 4483:2005
4. Loose bars / dowel bars to be grade B500B to BS 4449.
5. Minimum cover to reinforcement 50mm
6. Minimum lap length between panels of mesh, 300mm.
7. Minimum lap length for loose bars, 40x smaller bar diameter unless noted otherwise.
8. Sub-base to be MOT type 1 to Specification for Highway Works Clause 803.
9. Blinding concrete to be mix reference ST2 to BS 8500-1:2015.
10. Sand protection layer to Bunded area liner to be clean natural sand, 0/4 grading to BS EN 13242.
11. Slab surface to have a light brushed finish.

KEY

FMJ (C)	Free Movement Joint (Contraction)
IJ	Isolation Joint

Ref.	Amendment	Ch'kd	Date
A	300mm WIDE KERB ADDED. LEVELS REVISED.	HDW	20.07.20

STIRLINGMAYNARD
Construction Consultants

Stirling House Rightwell Bretton Peterborough PE3 8DJ
Tel 01733 262319 Fax 01733 331527
Email enquiries@stirlingmaynard.com www.stirlingmaynard.com

Client
J H WILLIS & SON

Scheme Title
HOLME FARM - INCE
WASTE TREATMENT PLANT

Drawing Title
SLAB AREAS - GENERAL ARRANGEMENT

Drawings are not to be scaled. Work to stated dimensions only.

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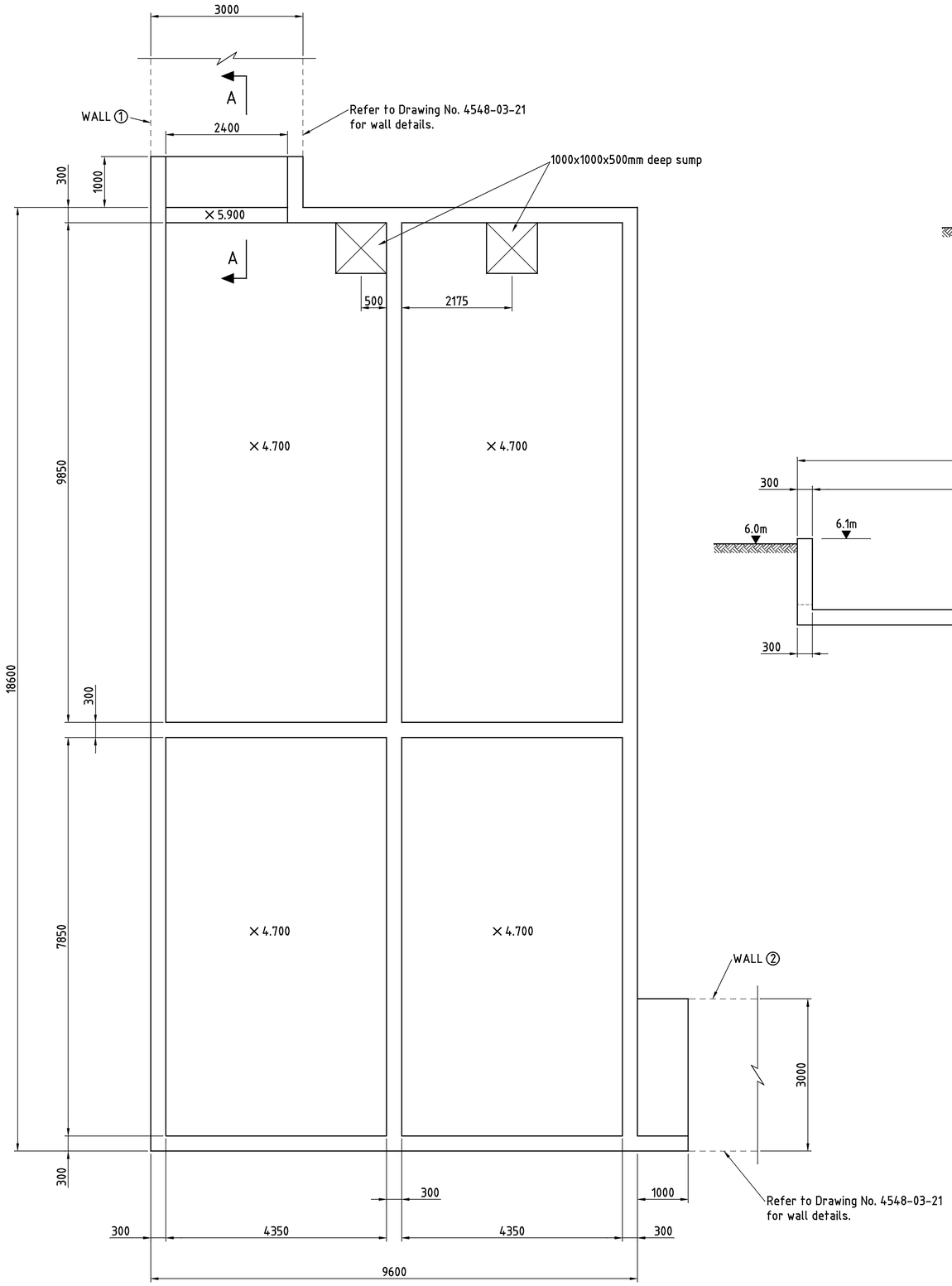
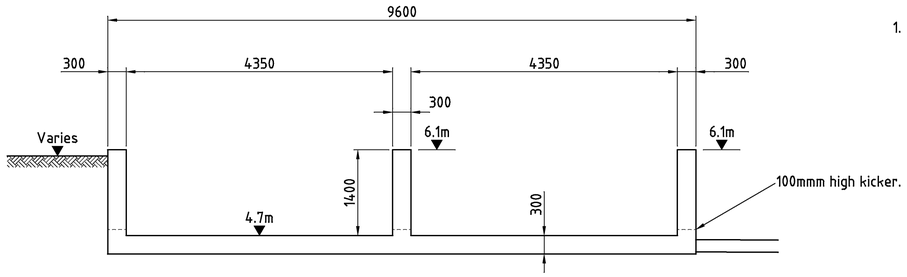
Project Manager	H D WEST	Drawing Status	PRELIMINARY
Drawn SA	Scale	Drawing No.	
Checked HDW	As Shown @ A1	4548-03-12A	
Date 29/06/20			

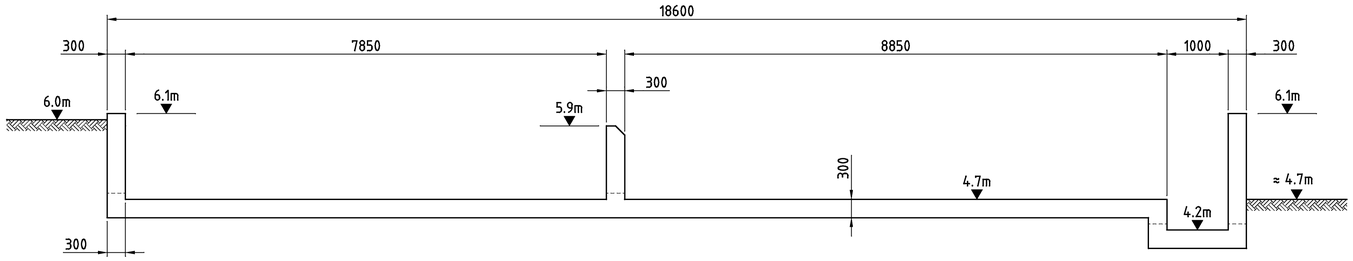
Drawing No.
4548-03-20A



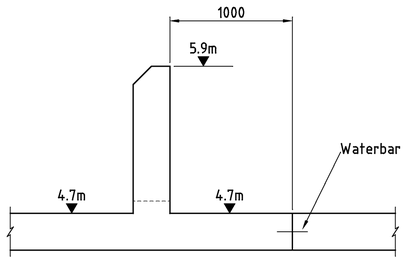
PLAN



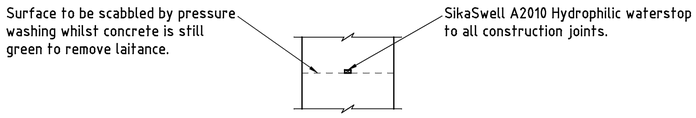
CROSS SECTION



LONG SECTION



SECTION A-A
1:25



WATERSTOP DETAIL AT
KICKERS/CONSTRUCTION JOINTS
(REINFORCEMENT NOT SHOWN FOR CLARITY)
1:10

NOTE

1. For notes refer to Drawing No. 4548-03-21.

Ref.	Amendment	Ch'kd	Date
A	DIMENSIONS REVISED. SUMP SIZE REDUCED. SECTION A-A ADDED.	HDW	20.07.20

STIRLINGMAYNARD
Construction Consultants

Stirling House Rightwell Bretton Peterborough PE3 8DJ
Tel 01733 262319 Fax 01733 331527
Email enquiries@stirlingmaynard.com www.stirlingmaynard.com

Client
J H WILLIS & SON

Scheme Title
HOLME FARM - INCE
WASTE TREATMENT PLAN

Drawing Title
HOLDING/RECEPTION TANK
GENERAL ARRANGEMENT AND DETAILS

Drawings are not to be scaled. Work to stated dimensions only.

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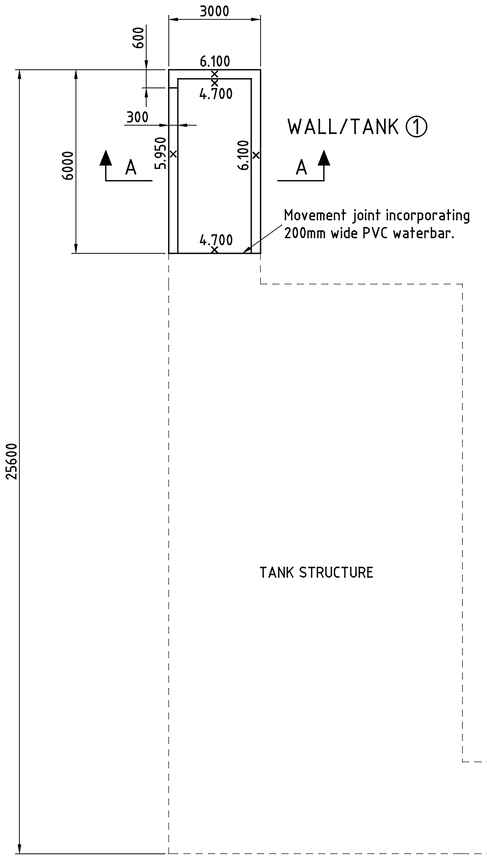
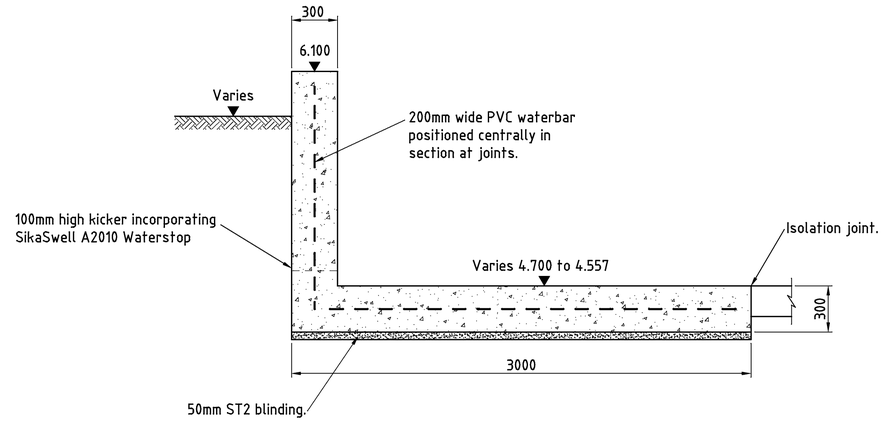
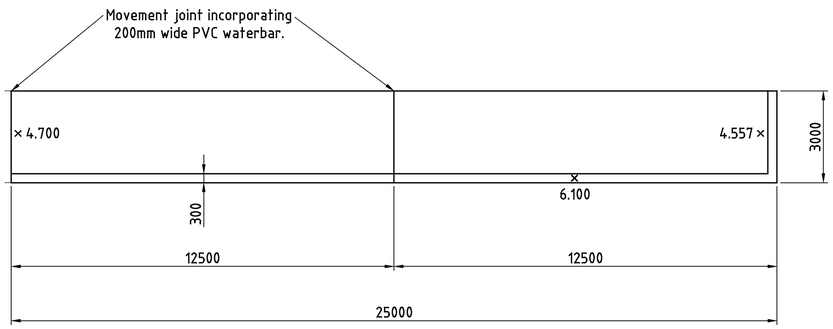
Project Manager	H D WEST	Drawing Status	PRELIMINARY
Drawn SA	Scale	Drawing No.	
Checked HDW	As Shown @ A1	4548-03-20A	
Date 24/06/20			

Drawing No.
4548-03-21A



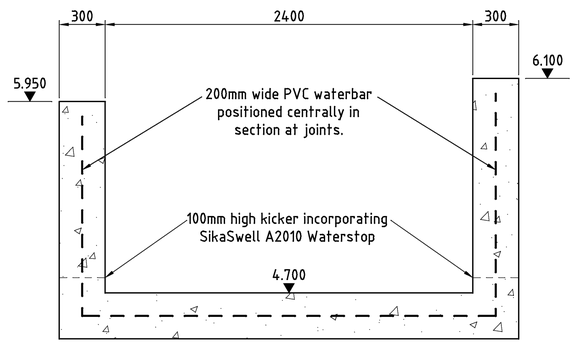


TYPICAL SECTION THROUGH
WALL ②
1:20



WALL ②

PLAN ON WALLS ① & ②
1:100



SECTION A-A
THROUGH WALL/TANK ①
1:50

NOTES

1. Concrete to be grade C32/40, designed mix to BS 8500-1:2015. Concrete to be produced in accordance with BS8500-2.
2. Key specification requirements for concrete:
   a. Compressive strength class: C32/40
   b. Maximum water/cement ratio: 0.4
   c. Minimum cement/combination content: 380kg/m^3
   d. Allowable cement / combination types: CEM I CEM I-SR0 CEM I-SR3 IIA IIB-S IIB-V IIB+SR IIIA IIIA+SR IIIB IIIB+SR (DC-3z)
   e. Air entrainment required: 4.5%
   f. Maximum aggregate size: 20mm
   g. Aggregates: Freeze thaw resisting
   h. Chloride content class: Cl 0.4
   i. Consistence class: S3 / Contractor choice
3. Concrete works to comply generally with BS EN 13670, execution class 2, or where appropriate other requirements as set out on the drawings or within the specification.
4. Reinforcement to be grade B500B to BS 4449
5. Nominal Cover to reinforcement: 35mm
6. Minimum lap length between reinforcing bars to be 40x smaller bar diameter unless otherwise noted
7. Blinding concrete to be grade ST2 to BS8500-1:2015.
8. Formed finishes and unformed finishes to be a Plain finish to table F.4 of BS EN 13670:2009
9. Buried formed finishes to be waterproofed with two coats of proprietary waterproofing as Specification for Highway Works 2000 series.
10. Reinforcement to be continuous across any construction joints. Stop-ends to construction joints to be struck whilst concrete is still green and scabbled immediately using a jet-washer to remove surface laitance and create a rough joint for next pour.
11. Kickers to base / wall construction to be 100mm high. Top surface of kicker to be scabbled whilst concrete is still green by jet washing or similar technique.
12. Construction joints / kickers to be sealed against water ingress using hydrophilic waterstop, Sikaswell A2010 or equivalent.
13. Designed joints to be sealed against water ingress with Sika PVC waterbar or equivalent as per details
14. All exposed arisses to have a minimum 25mm by 25mm chamfer.

Ref.	Amendment	Ch'kd	Date
A	WALL 1 DIMENSIONS REVISED. SECTION A-A ADDED.	HDW	20.07.20

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Client
J H WILLIS & SON

Scheme Title
HOLME FARM - INCE
WASTE TREATMENT PLANT

Drawing Title
WALLS 1 & 2 - GENERAL ARRANGEMENT AND DETAILS

Drawings are not to be scaled. Work to stated dimensions only.

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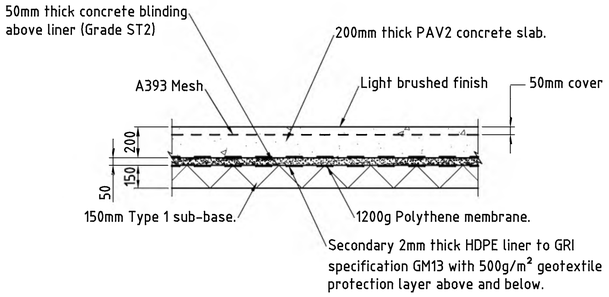
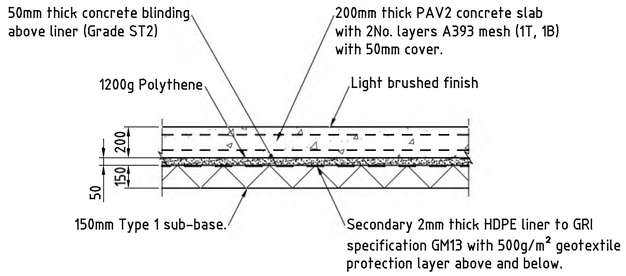
Project Manager	H D WEST	Drawing Status	PRELIMINARY
Drawn SA	Scale	Drawing No.	
Checked HDW	As Shown @ A1	4548-03-21A	
Date 29/06/20			

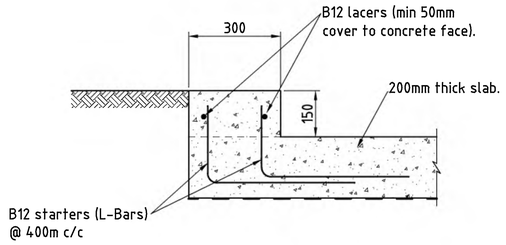
Drawing No.
4548-03-22A



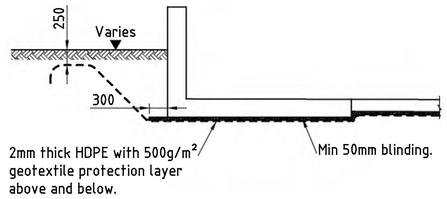
PAVEMENT CONSTRUCTION
CONCRETE YARD AREA
1:20



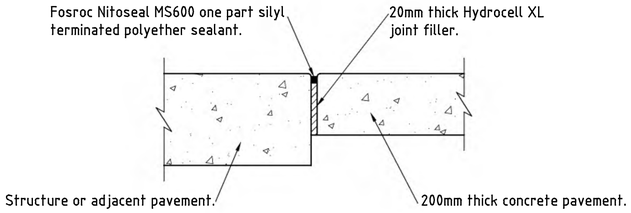
PAVEMENT CONSTRUCTION
TANK AREA
1:20



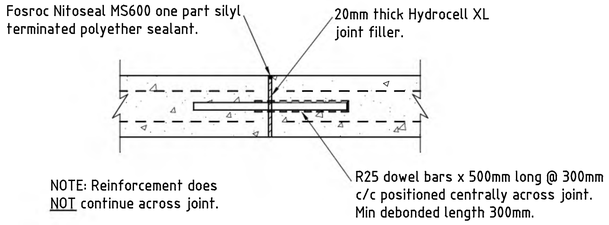
KERB DETAIL
1:10



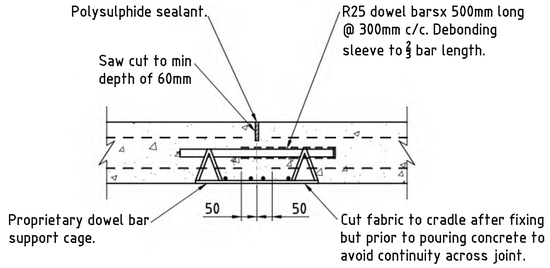
DETAIL OF SECONDARY
PROTECTION LAYER UNDERNEATH
SLAB, WALL & TANK STRUCTURES
1:50



ISOLATION JOINT (IJ)
1:10

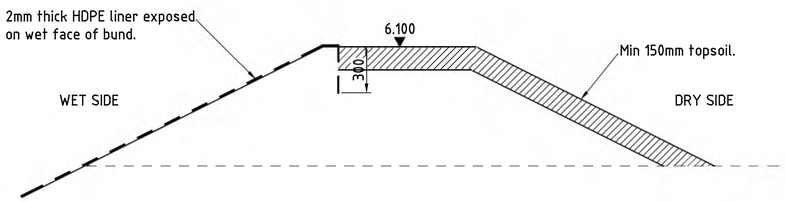


OPTION A - FORMED JOINT

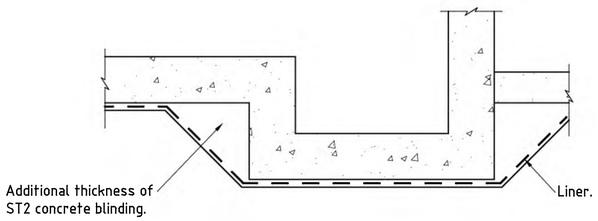


OPTION B - SAWN JOINT

FREE MOVEMENT JOINT - CONTRACTION (FMJ(C))
1:10



LINER DETAIL TO BUND
1:20



LINER DETAIL UNDER
SUMPS/OTHER STRUCTURES
1:20

Ref.	Amendment	Ch'kd	Date
A	PAVEMENT CONSTRUCTION & KERB DETAIL REVISED. SECONDARY PROTECTION LAYER DETAIL ADDED.	HDW	20.07.20

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Client
J H WILLIS & SON

Scheme Title
HOLME FARM - INCE
WASTE TREATMENT PLANT

Drawing Title
CONSTRUCTION DETAILS

Drawings are not to be scaled. Work to stated dimensions only.

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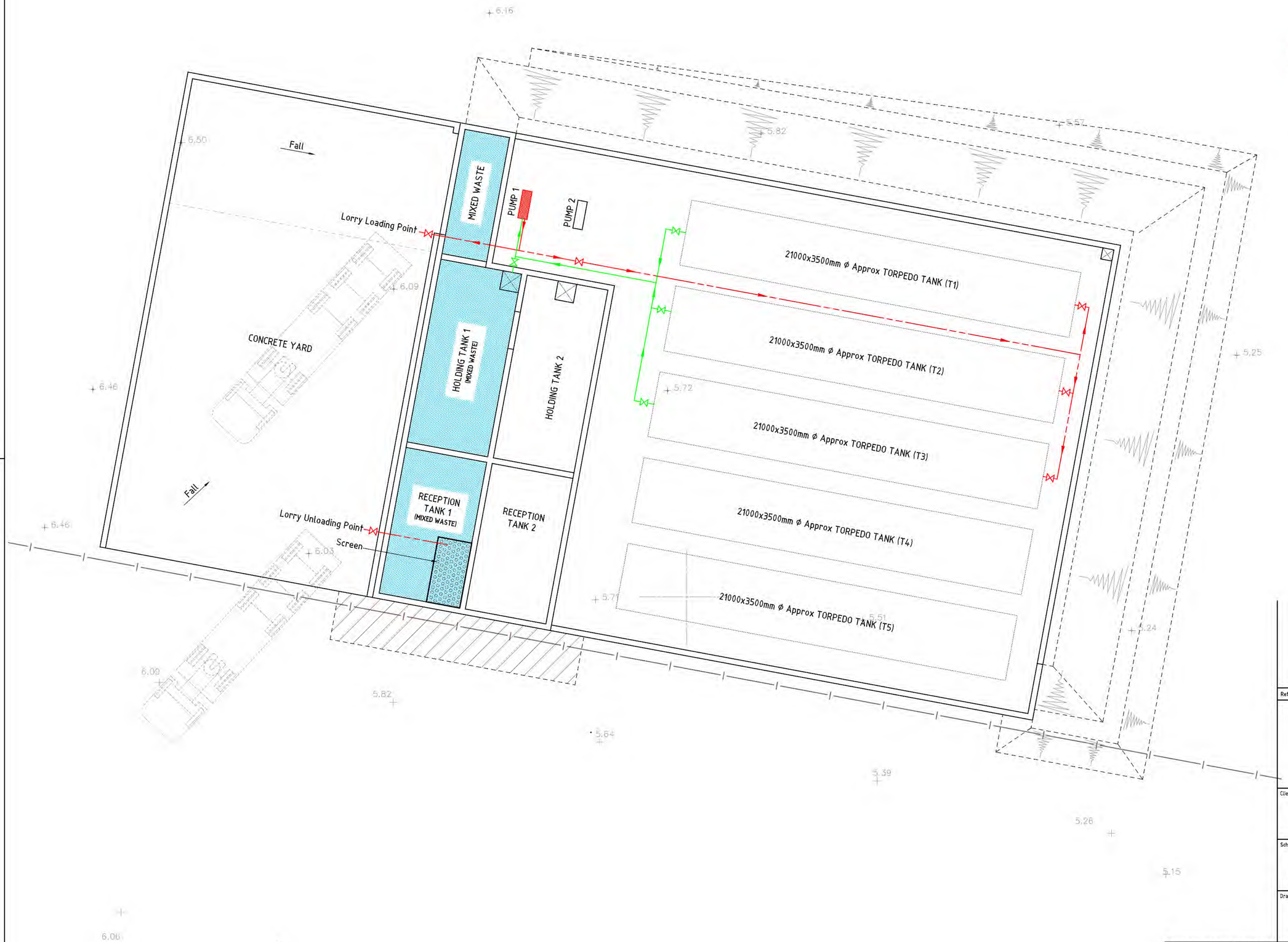
Project Manager	H D WEST	Drawing Status	PRELIMINARY
Drawn SA	Scale	Drawing No.	
Checked HDW	As Shown @ A1	4548-03-22A	
Date 29/06/20			

Drawing No.
4548-03-50



Ref.	Amendment	Ch'kd	Date

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Client
J H WILLIS & SON

Scheme Title
HOLME FARM - INCE
WASTE TREATMENT PLANT

Drawing Title
TANKS T1, T2 & T3
MIXED WASTE
PROCESS PIPEWORK

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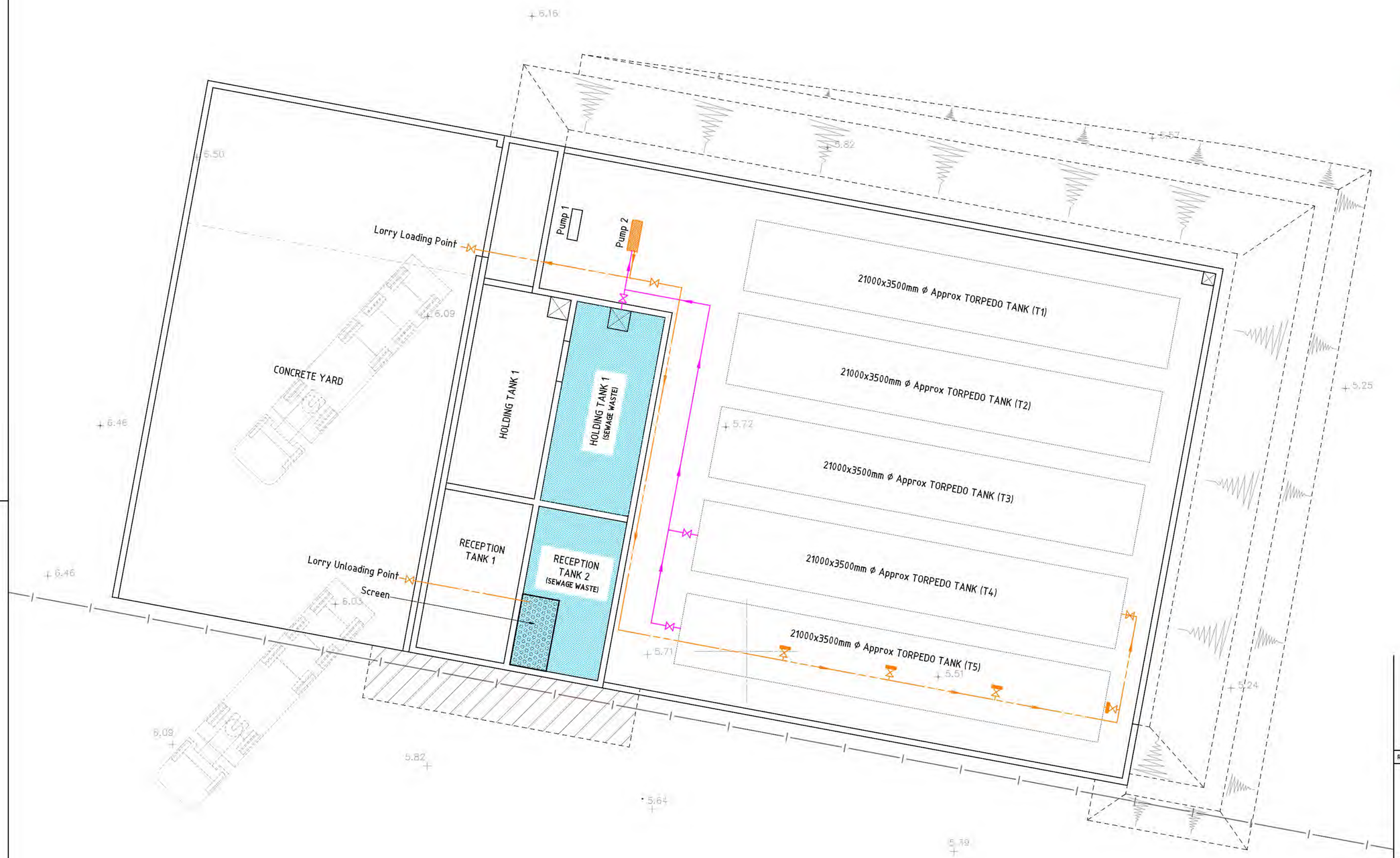
Project Manager	H D WEST	Drawing Status	PRELIMINARY
Drawn SA	Scale	Drawing No.	
Checked HDW	1:100 @ A1	4548-03-50	
Date 16/07/20			

Drawing No.
4548-03-51



KEY

- Pressure Pipe
- Suction Pipe
- Valves
- PUMP 2 — Sewage and Lime Treatment
- Mixing Nozzles

Ref.	Amendment	Ch'kd	Date

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Client
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Scheme Title
HOLME FARM - INCE
WASTE TREATMENT PLANT

Drawing Title
TANKS T4 & T5
SEWAGE AND LIME TREATMENT
PROCESS PIPEWORK

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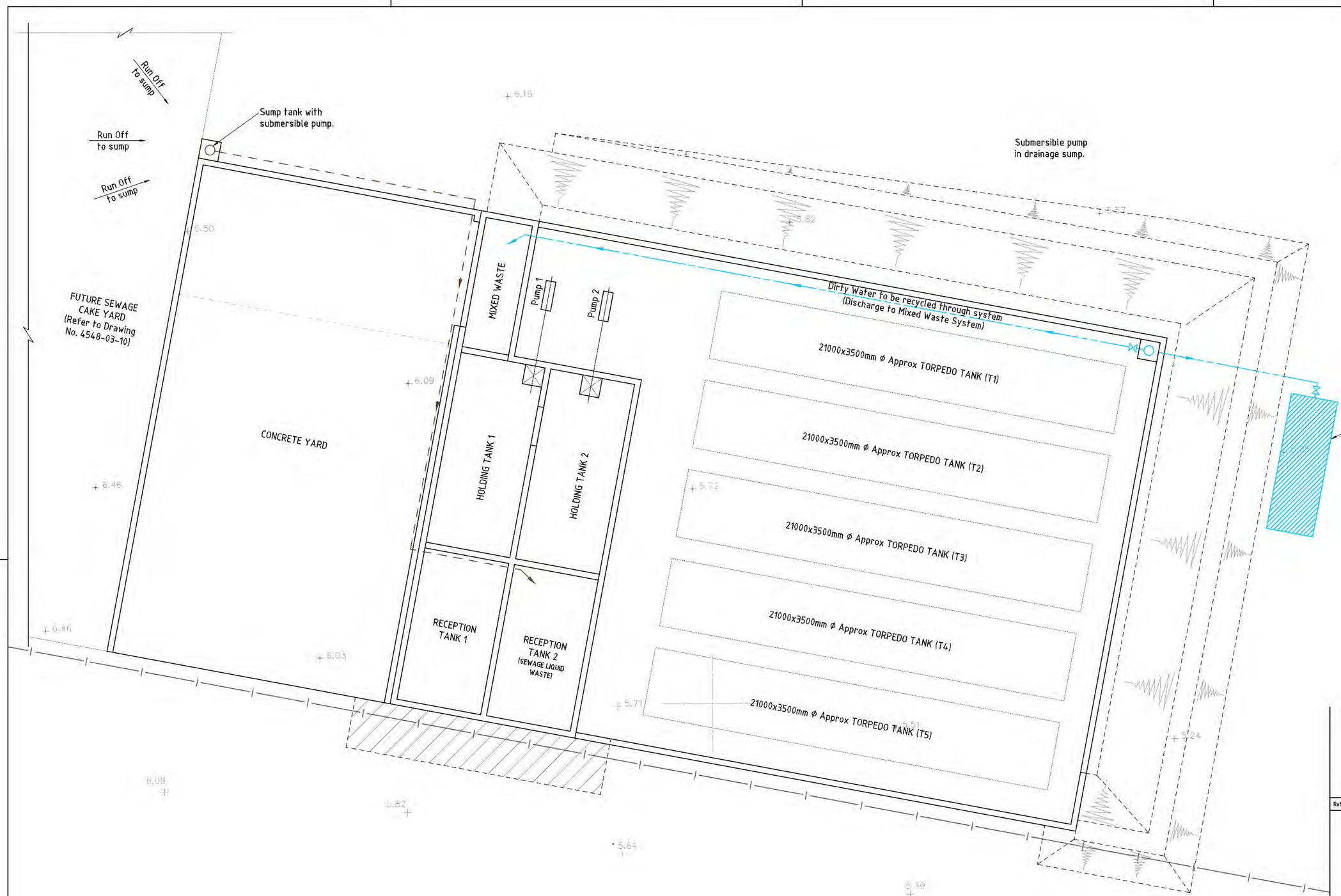
Project Manager	H D WEST	Drawing Status	PRELIMINARY
Drawn SA	Scale	Drawing No.	
Checked HDW	1:100 @ A1	4548-03-51	
Date 16/07/20			

Drawing No.
4548-03-52



KEY

Clean Surface Water

Spillage/Sewage Cake Yard Run-Off

Valve

Ref.	Amendment	Ch'kd	Date

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Client
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Scheme Title
HOLME FARM - INCE
WASTE TREATMENT PLANT

Drawing Title
SEWAGE CAKE YARD AND
WATER RECYCLING
PROCESS PIPEWORK

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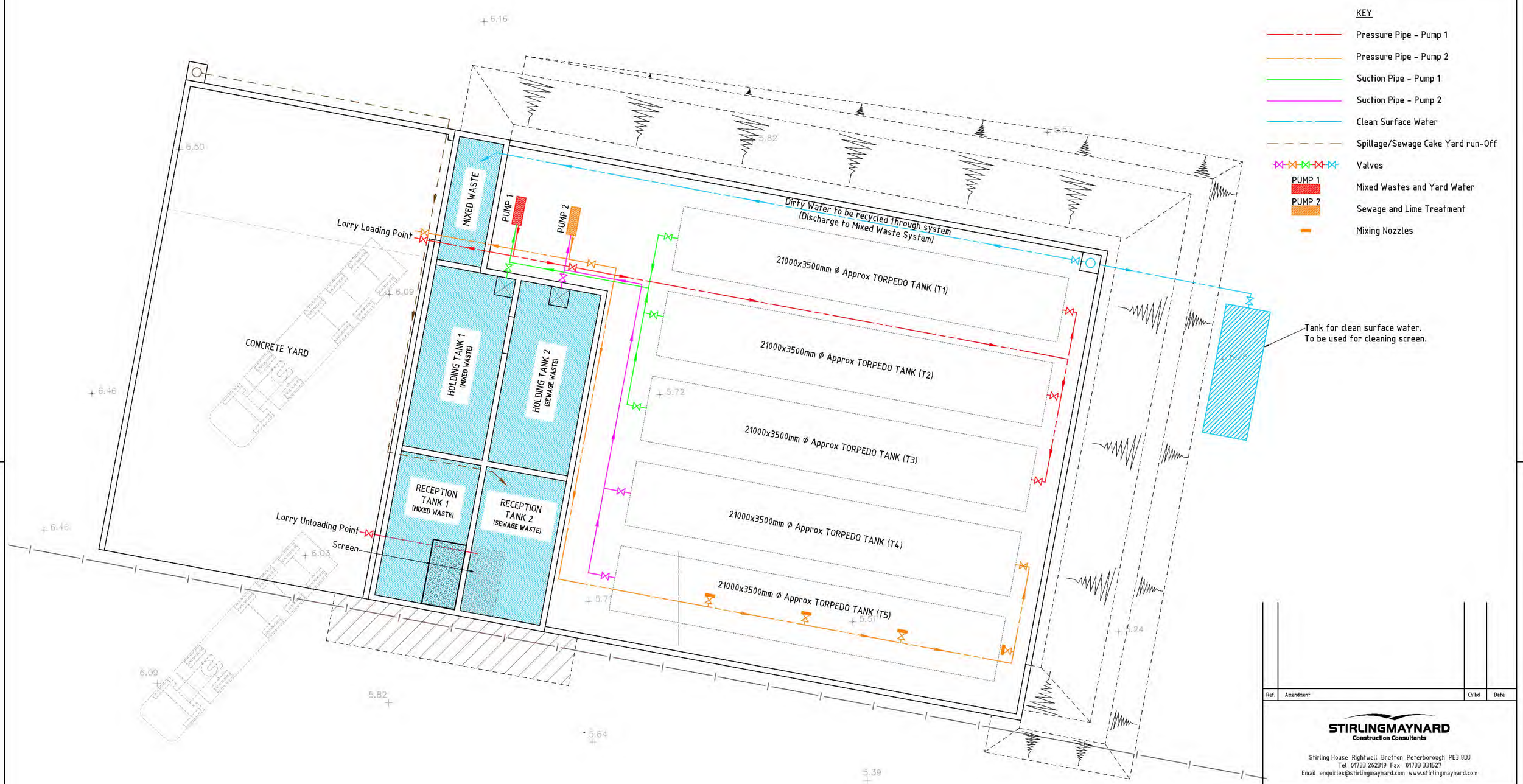
Project Manager	H D WEST	Drawing Status	PRELIMINARY
Drawn SA	Scale 1:100 @ A1	Drawing No.	4548-03-52
Checked HDW			
Date 16/07/20			

Drawing No.
4548-03-53



Ref.	Amendment	Ch'kd	Date

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Client
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Scheme Title
HOLME FARM - INCE
WASTE TREATMENT PLANT

Drawing Title
PROCESS PIPEWORK OVERALL PLAN

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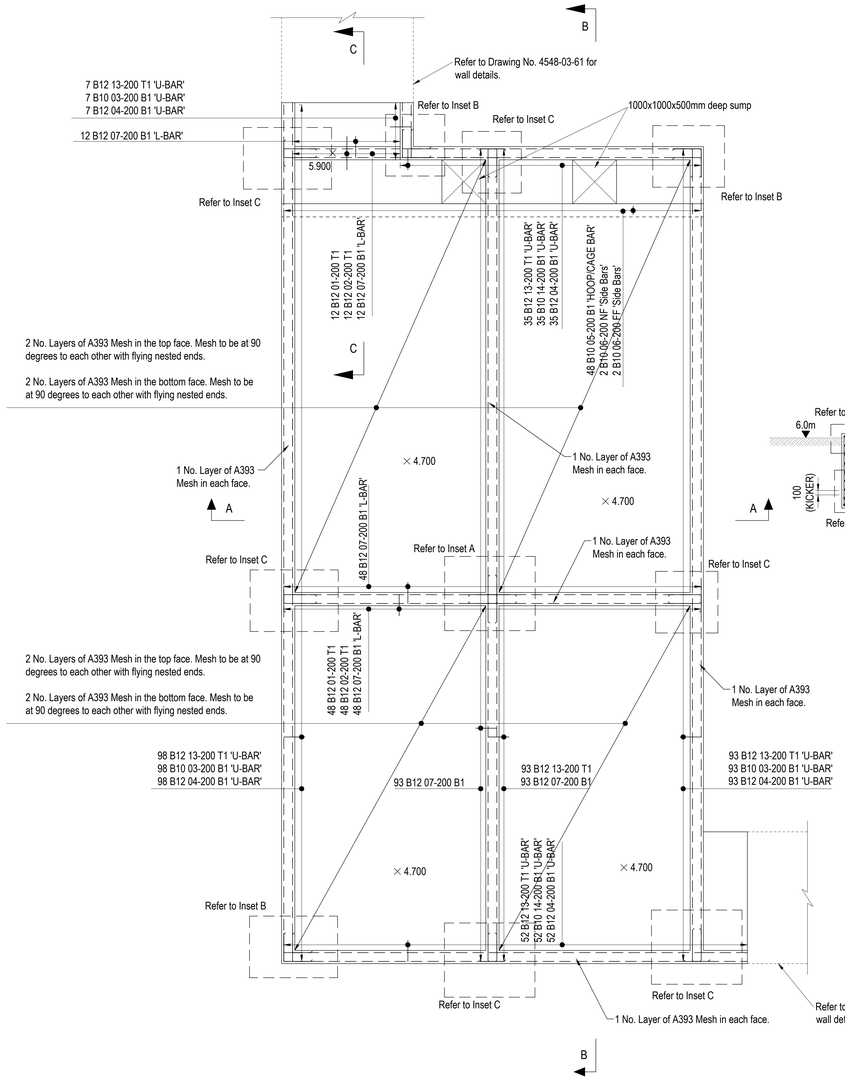
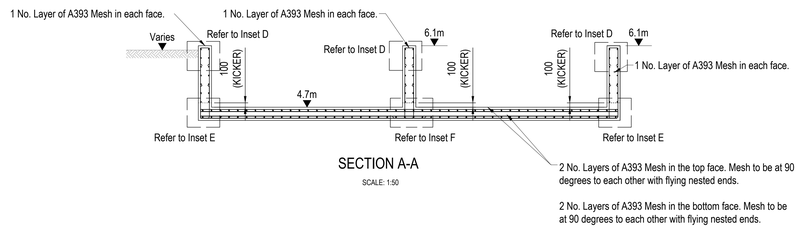
Project Manager	H D WEST	Drawing Status	PRELIMINARY
Drawn SA	Scale 1:100 @ A1	Drawing No.	4548-03-53
Checked HDW			
Date 20/07/20			



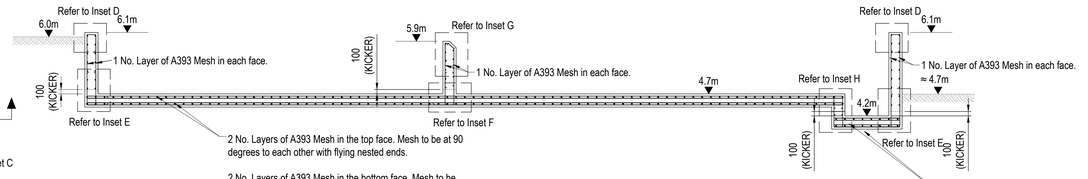
REINFORCEMENT PLAN VIEW ON FOUNDATION SLAB AND BUND WALLS

SCALE: 1:50



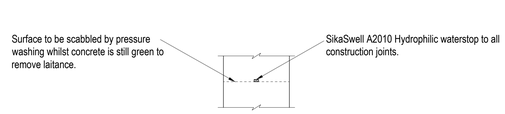
SECTION A-A

SCALE: 1:50



SECTION B-B

SCALE: 1:50



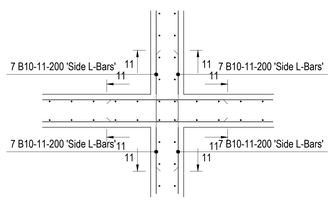
WATERSTOP DETAIL AT KICKERS/CONSTRUCTION JOINTS

(REINFORCEMENT NOT SHOWN FOR CLARITY)

1:10

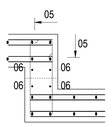
General Note:

For full concrete notes and grades refer to Drawing Number 4548-03-21B



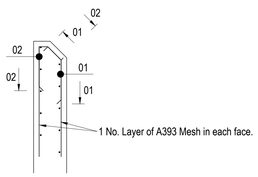
INSET A - Total No. 1

SCALE: 1:25



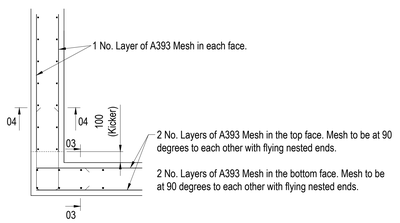
INSET H

SCALE: 1:25



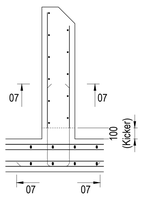
INSET G

SCALE: 1:25



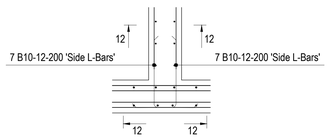
INSET E

SCALE: 1:25



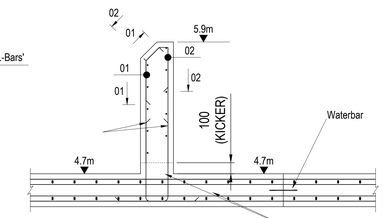
INSET F

SCALE: 1:25



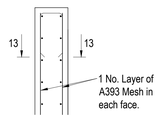
INSET C - Total No. 6

SCALE: 1:25



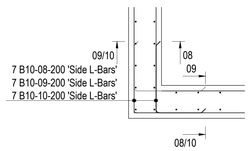
SECTION C-C

SCALE 1:25



INSET D

SCALE: 1:25



INSET B - Total No. 3

SCALE: 1:25

Drawing No.

4548-03-60

NOTES

1. This drawing to be read in conjunction with the Architects drawings and all relevant drawings, Specification and M&E drawings.
2. Any discrepancies are to be reported to the Structural Engineer immediately.
3. All dimensions are in millimetres.

CONCRETE NOTES

1. Concrete to be in accordance with the Specification for Structural Concrete.
2. Structural Concrete to be in accordance with BS 8500, with the following grades:
   Concrete Grade to be -
   For designed mix for internal reinforced concrete to loading dock refer to the Structural Specification Section E10, Clause 105.
   Designed mix for replacement structural base slab and ramp refer to the Structural Specification Section E10, Clause 115.
3. Surface regularity to be in accordance with the Specification.
4. Minimum cover to reinforcement to be 50mm
5. All concrete is to be compacted by means of suitable mechanical plant such as a vibrating poker or a vibrating tamping board as appropriate.
6. A suitable method of curing the fresh concrete shall be used. A sprayed curing membrane will not be permitted when a subsequent surface treatment of the concrete has been specified.

REINFORCEMENT NOTES

1. Reinforcement is to be grade B500B or B500C high yield steel to BS 4449:2005, unless noted otherwise. Welded wire fabric to BS4483.
2. Cutting of bars is not permitted.
3. Where reinforcement ends are left exposed these should be capped with appropriate safety caps to prevent injury.
4. The supply of blocks and chairs to achieve the specified covers is the Contractors responsibility.

REFERENCE DRAWINGS

1. Refer to drawing number 4548-03-21B for the General Arrangement

Ref.	Amendment	Ch'kd	Date
C01	First Issue.	MNS	31.07.2020

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Client

J H WILLIS & SON

Scheme Title

HOLME FARM - INCE
WASTE TREATMENT PLANT

Drawing Title

REINFORCEMENT LAYOUT FOR THE HOLDING/RECEPTION TANK

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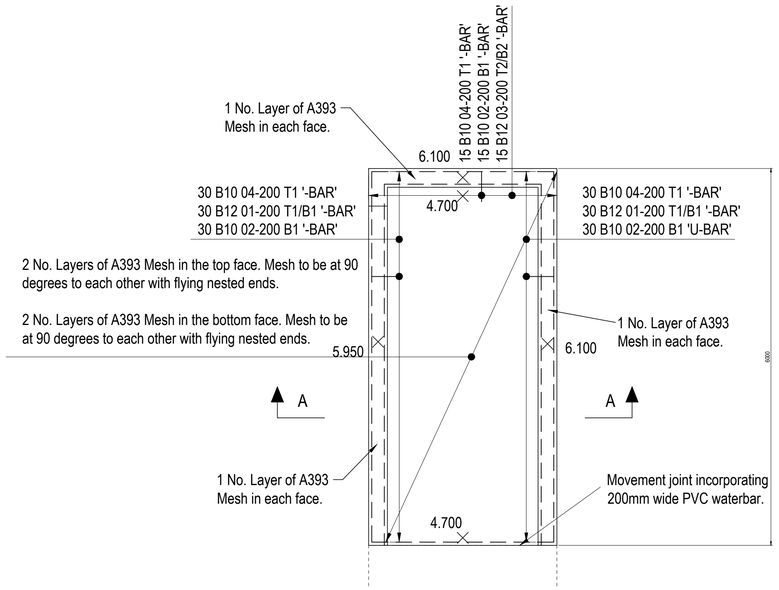
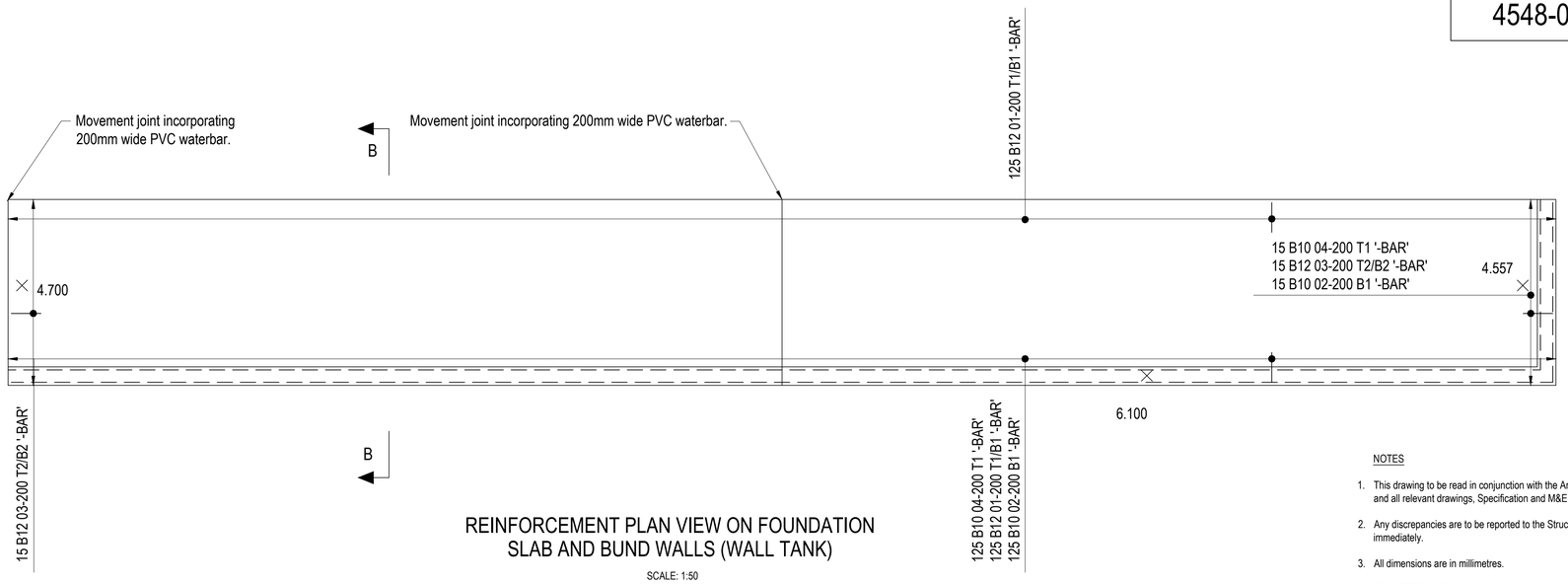
Project Manager	H D WEST	Drawing Status	CONSTRUCTION
Drawn	JP	Scale	As Shown @ A0
Checked	MNS	Drawing No.	4548-03-60
Date	31.07.2020		

Drawing No.
4548-03-61



REINFORCEMENT PLAN VIEW ON FOUNDATION SLAB AND BUND WALLS (WALL TANK)

SCALE: 1:50



REINFORCEMENT PLAN VIEW ON FOUNDATION SLAB AND BUND WALLS (WALL TANK)

SCALE: 1:50

General Note:

For full concrete notes and grades refer to Drawing Number 4548-03-21B

NOTES

1. This drawing to be read in conjunction with the Architects drawings and all relevant drawings, Specification and M&E drawings.
2. Any discrepancies are to be reported to the Structural Engineer immediately.
3. All dimensions are in millimetres.

CONCRETE NOTES

1. Concrete to be in accordance with the Specification for Structural Concrete.
2. Structural Concrete to be in accordance with BS 8500, with the following grades:
   Concrete Grade to be -
   For designed mix for internal reinforced concrete to loading dock refer to the Structural Specification Section E10, Clause 105.
   Designed mix for replacement structural base slab and ramp refer to the Structural Specification Section E10, Clause 115.
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REINFORCEMENT NOTES

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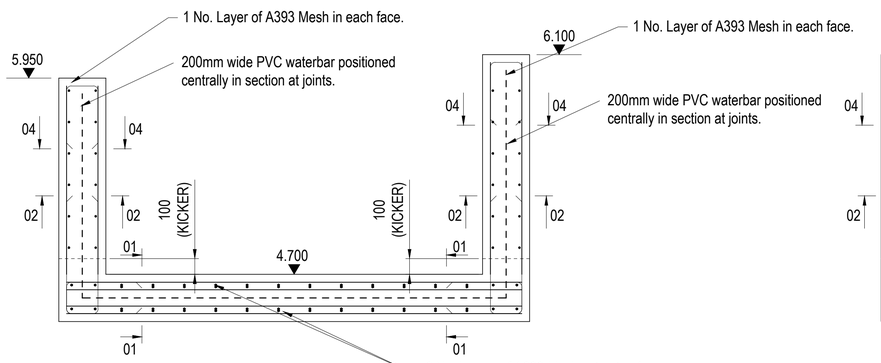
2. Cutting of bars is not permitted.
3. Where reinforcement ends are left exposed these should be capped with appropriate safety caps to prevent injury.
4. The supply of blocks and chairs to achieve the specified covers is the Contractors responsibility.

REFERENCE DRAWINGS

1. Refer to drawing number 4548-03-21B for the General Arrangement

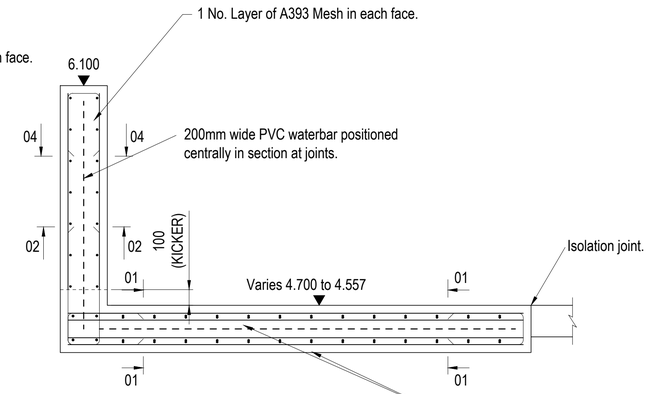


SECTION A-A

SCALE: 1:20

2 No. Layers of A393 Mesh in the top face. Mesh to be at 90 degrees to each other with flying nested ends.

2 No. Layers of A393 Mesh in the bottom face. Mesh to be at 90 degrees to each other with flying nested ends.

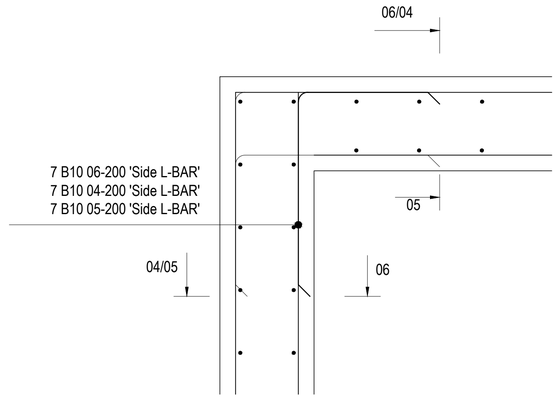


SECTION B-B

SCALE: 1:20

2 No. Layers of A393 Mesh in the top face. Mesh to be at 90 degrees to each other with flying nested ends.

2 No. Layers of A393 Mesh in the bottom face. Mesh to be at 90 degrees to each other with flying nested ends.



INSET A - Total No. = 3

SCALE: 1:10

Ref.	Amendment	Ch'kd	Date
C01	First Issue.	MNS	31.07.2020

STIRLINGMAYNARD
Construction Consultants

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Tel 01733 262319 Fax 01733 331527
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Client

J H WILLIS & SON

Scheme Title

HOLME FARM - INCE
WASTE TREATMENT PLANT

Drawing Title

REINFORCEMENT LAYOUT FOR THE WATER TANK WALLS 1 AND 2 SLAB

Drawings are not to be scaled. Work to stated dimensions only.

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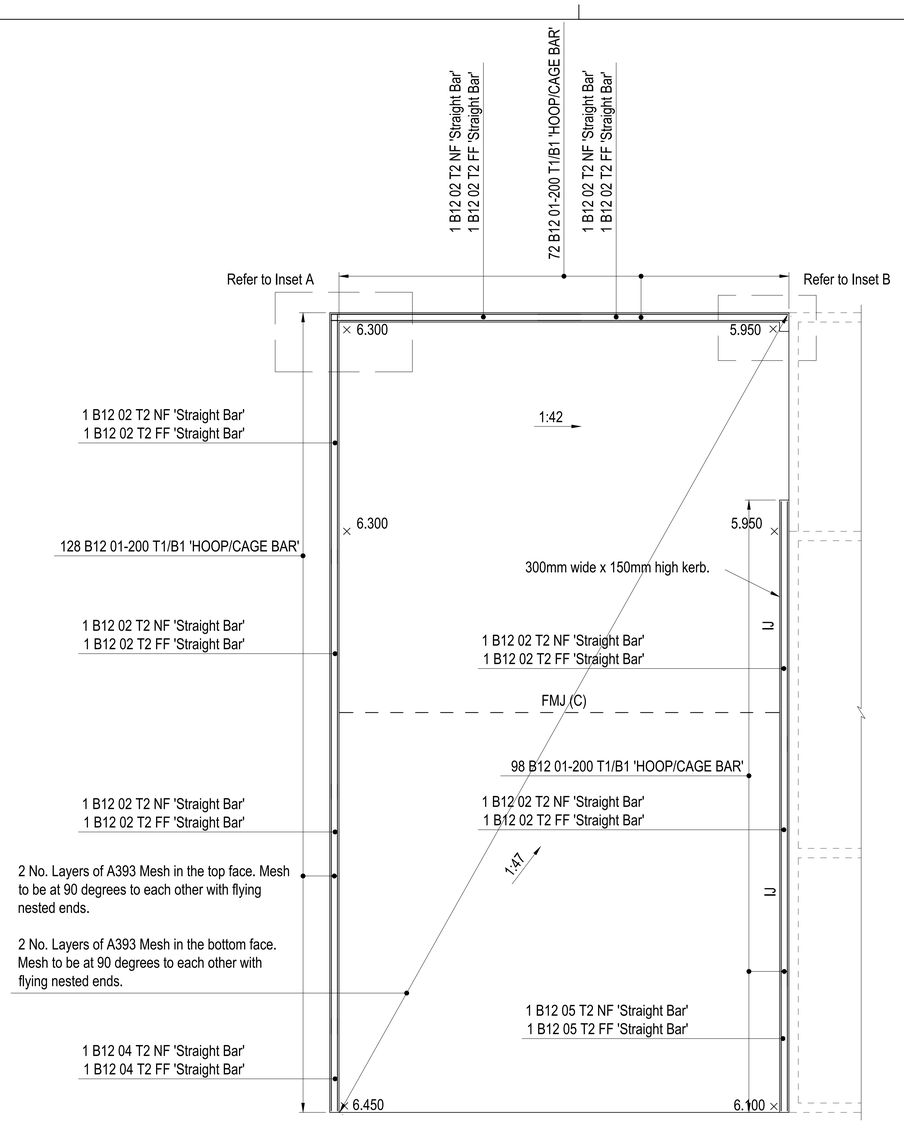
Project Manager	H D WEST	Drawing Status	CONSTRUCTION
Drawn	JP	Scale	As Shown @ A1
Checked	MNS	Drawing No.	4548-03-61
Date	31.07.2020		

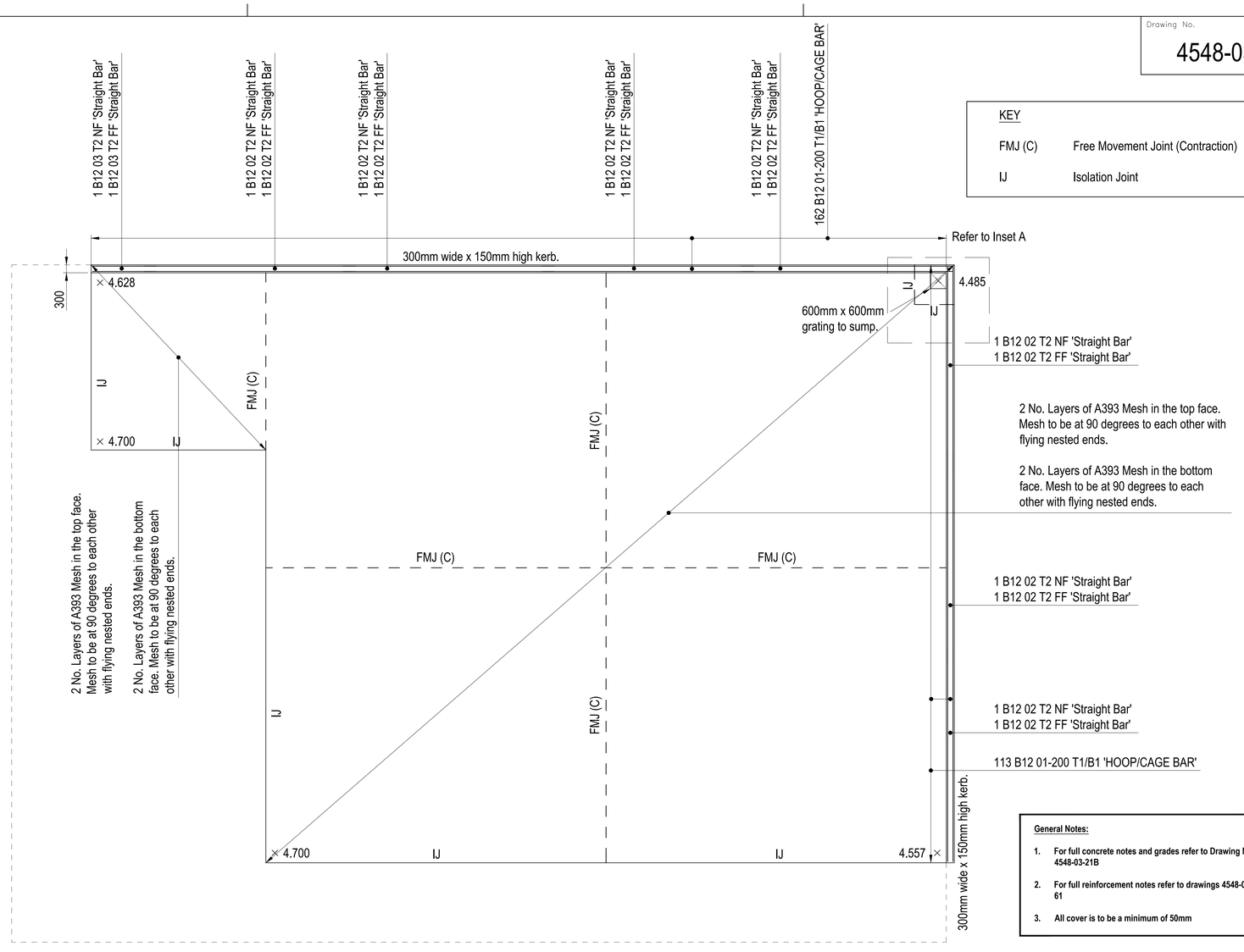
Drawing No.
4548-03-62

KEY	
FMJ (C)	Free Movement Joint (Contraction)
IJ	Isolation Joint



REINFORCEMENT PLAN VIEW ON CONCRETE YARD AREA SLAB

SCALE: 1:100

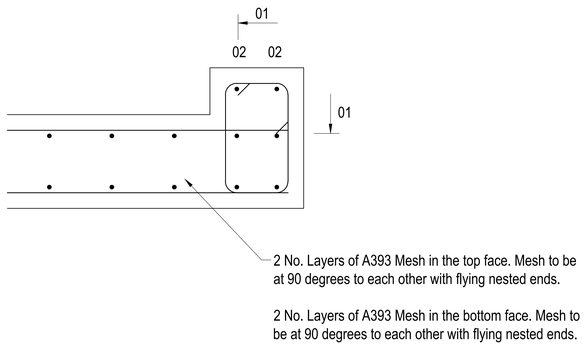


REINFORCEMENT PLAN VIEW ON TORPEDO TANK AREA SLAB

SCALE: 1:100

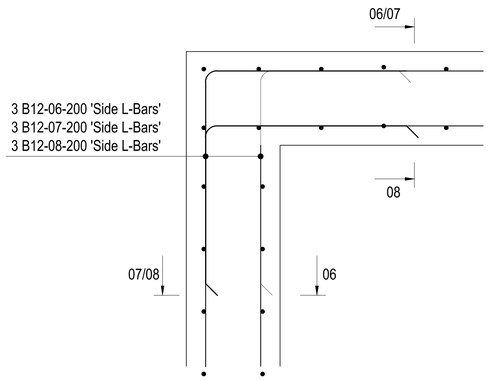
General Notes:

1. **For full concrete notes and grades refer to Drawing Number 4548-03-21B**
2. **For full reinforcement notes refer to drawings 4548-03-60 and 61**
3. **All cover is to be a minimum of 50mm**



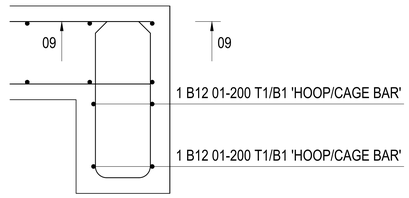
SECTION A-A (Typical Reinforcement for Kerb Upstand)

SCALE: 1:10



INSET A
(TYPICAL JUNCTION DETAIL) - TOTAL No. = 2

SCALE: 1:10



INSET B
(TYPICAL JUNCTION DETAIL) - TOTAL No. = 1

SCALE: 1:10

Ref.	Amendment	Ch'kd	Date
C01	First Issue. For Construction.	MNS	31.07.2020

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Client
J H WILLIS & SON

Scheme Title
HOLME FARM - INCE
WASTE TREATMENT PLANT

Drawing Title
REINFORCEMENT LAYOUT FOR CONCRETE YARD + TORPEDO TANK

Drawings are not to be scaled. Work to stated dimensions only.

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Project Manager	H D WEST	Drawing Status	CONSTRUCTION
Drawn	JP	Scale	As Shown @ A1
Checked	MNS	Drawing No.	4548-03-62
Date	31.07.2020		

BESPOKE ENVIRONMENTAL PERMIT APPLICATION

Appendix 4 Site Condition Report

Prepared for: JH Willis & Son

September 2020

SITE CONDITION REPORT

COMPLETED SECTIONS 1-3 SUBMITTED WITH APPLICATION

DURING THE LIFE OF THE PERMIT SECTIONS 4-7 WILL BE MAINTAINED

AT SURRENDER A NEW DOCUMENT REFERENCE IN 1.0 WILL BE ADDED AND SECTIONS 8-10 COMPLETED AND SUBMITTED WITH THE SURRENDER APPLICATION.

1 Site details	
Name of the applicant	JH WILLIS & SON
Activity address	HOLME FARM MARSH LANE INCE CHESHIRE CH2 4NR
National grid reference	SJ 45689 77181

Document reference and dates for Site Condition Report at permit application and surrender	Appendix 4 7th August 2020

Document references for site plans (including location and boundaries)	Appendix 3

2 Condition of the land at permit issue	
Environmental setting including: • geology • hydrogeology • surface waters	The site lies on an area of an agricultural field that has seen historical use as an area for grazing livestock. The soil is shallow and under 300 mm deep and classed as Soilscapes 15 'naturally very wet acid sandy and loamy soils'. The site is not located on a Groundwater Protection Zone but lies above a secondary, 'undifferentiated' aquifer and the bedrock designated as a principal aquifer. The aquifer is classed as having a high vulnerability. The Manchester Ship Canal is located 120 m to the north of the site and the River Mersey a further 1 200m north. The river Mersey SSSI is 260 m north of the site which is also a designated RAMSAR site and a Special Protection Area (SPA). The site is underlain directly by a spur of the solid geology of the Bunter Pebble Beds. A superficial deposit of glacial Till covers the solid geology along the eastern edge of the site, with Alluvium further east associated with Ince Marshes. The total thickness of the Chester Pebble Beds Formation in this

	region is in the order of 90 to 200m. There are various surface water drains within 50 m of the site that are tributaries of the Hoolpool Gutter.
Pollution history including: • pollution incidents that may have affected land • historical land-uses and associated contaminants • any visual/olfactory evidence of existing contamination • evidence of damage to pollution prevention measures	As the area has only seen use as an area for livestock grazing there is no historical pollution incidents that have affected the land. As the area will be excavated so that the base can be laid, any contamination will be identified and removed from site to a permitted facility.
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)	None
Baseline soil and groundwater reference data	Not applicable

3 Permitted activities	
Permitted activities	Lime treatment of sludges (R3) pending recovery to land (R10). Storage of sludges prior to recovery (R13)
Non-permitted activities undertaken	None
Document references for: • plan showing activity layout; and • environmental risk assessment.	Appendix 3 – Site plans Appendix 7 – Environmental risk assessment

4 Changes to the activity	
Have there been any changes to the activity boundary?	*If yes, provide a plan showing the changes to the activity boundary.*
Have there been any changes to the permitted activities?	*If yes, provide a description of the changes to the permitted activities*
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	*If yes, list of them*
Checklist of supporting information	• *Plan showing any changes to the boundary (where relevant)* • *Description of the changes to the permitted activities (where relevant)* • *List of 'dangerous substances' used/produced by the permitted activities that were not identified in the Application Site Condition Report (where relevant)*

5 Measures taken to protect land	
Use records that you collected during the life of the permit to summarise whether pollution prevention measures worked. If you can't, you need to collect land and/or groundwater data to assess whether the land has deteriorated.	
Checklist of supporting information	• *Inspection records and summary of findings of inspections for all pollution prevention measures* • *Records of maintenance, repair and replacement of pollution prevention measures*

6 Pollution incidents that may have had an impact on land, and their remediation	
Summarise any pollution incidents that may have damaged the land. Describe how you investigated and remedied each one. If you can't, you need to collect land and /or groundwater reference data to assess whether the land has deteriorated while you've been there.	
Checklist of supporting information	• *Records of pollution incidents that may have impacted on land* • *Records of their investigation and remediation*

7 Soil gas and water quality monitoring (where undertaken)	
Provide details of any soil gas and/or water monitoring you did. Include a summary of the findings. Say whether it shows that the land deteriorated as a result of the permitted activities. If it did, outline how you investigated and remedied this.	
Checklist of supporting information	• *Description of soil gas and/or water monitoring undertaken* • *Monitoring results (including graphs)*

8 Decommissioning and removal of pollution risk	
Describe how the site was decommissioned. Demonstrate that all sources of pollution risk have been removed. Describe whether the decommissioning had any impact on the land. Outline how you investigated and remedied this.	
Checklist of supporting information	• *Site closure plan* • *List of potential sources of pollution risk* • *Investigation and remediation reports (where relevant)*

9 Reference data and remediation (where relevant)	
Say whether you had to collect land and/or groundwater data. Or say that you didn't need to because the information from sections 3, 4, 5 and 6 of the Surrender Site Condition Report shows that the land has not deteriorated. *If you did collect land and/or groundwater reference data, summarise what this entailed, and what your data found. Say whether the data shows that the condition of the land has deteriorated, or whether the land at the site is in a "satisfactory state". If it isn't, summarise what you did to remedy this. Confirm that the land is now in a "satisfactory state" at surrender.*	
Checklist of supporting information	• *Land and/or groundwater data collected at application (if collected)* • *Land and/or groundwater data collected at surrender (where needed)* • *Assessment of satisfactory state* • *Remediation and verification reports (where undertaken)*

10 Statement of site condition
Using the information from sections 3 to 7, give a statement about the condition of the land at the site. This should confirm that: • *the permitted activities have stopped* • *decommissioning is complete, and the pollution risk has been removed* • *the land is in a satisfactory condition.*

BESPOKE ENVIRONMENTAL PERMIT APPLICATION

HOLME FARM

Appendix 5 Non-Technical Summary

Prepared for: JH Willis & Son

Version 1

August 2020

1 Introduction

JH WILLIS & SON, has instructed 360 Environmental Ltd to prepare a permit application for the proposed liquid waste transfer and treatment site at Holme Farm under the Environmental Permitting (England and Wales) Regulations 2016 (as amended).

The Environment Agency (EA) application forms require a non-technical summary to be submitted in support of any variation to an environmental permit, and includes the following:

- an explanation of exactly what is being applied for;
- a summary of the regulated facility; and
- a summary of the key technical standards and control measures arising from the risk assessment.

This Non-Technical Summary should be read in conjunction with the rest of this application which contains:

- Application Forms A, B2, B4, F1
- Supporting Information
- Operating Techniques Document
- Environmental Risk Assessment.

JH WILLIS & SON are not making a claim for commercial or industrial confidentiality for any part of this variation application, although it is requested that Appendix 1 – Business Information is not placed upon the public register due to potential security of identity issues.

The operation will effectively comprise of two Standard Rules (the former SR2008_No19 and current SR2010_No17) permits taking place at the same site, but are not able to comply with the requirements for the following reasons;

- Proximity to a SSSI (Mersey Estuary)
- Wastes, other than treated sludges, will be stored together as a mixed waste
- Proximity to a workplace or dwelling

2 The proposed site

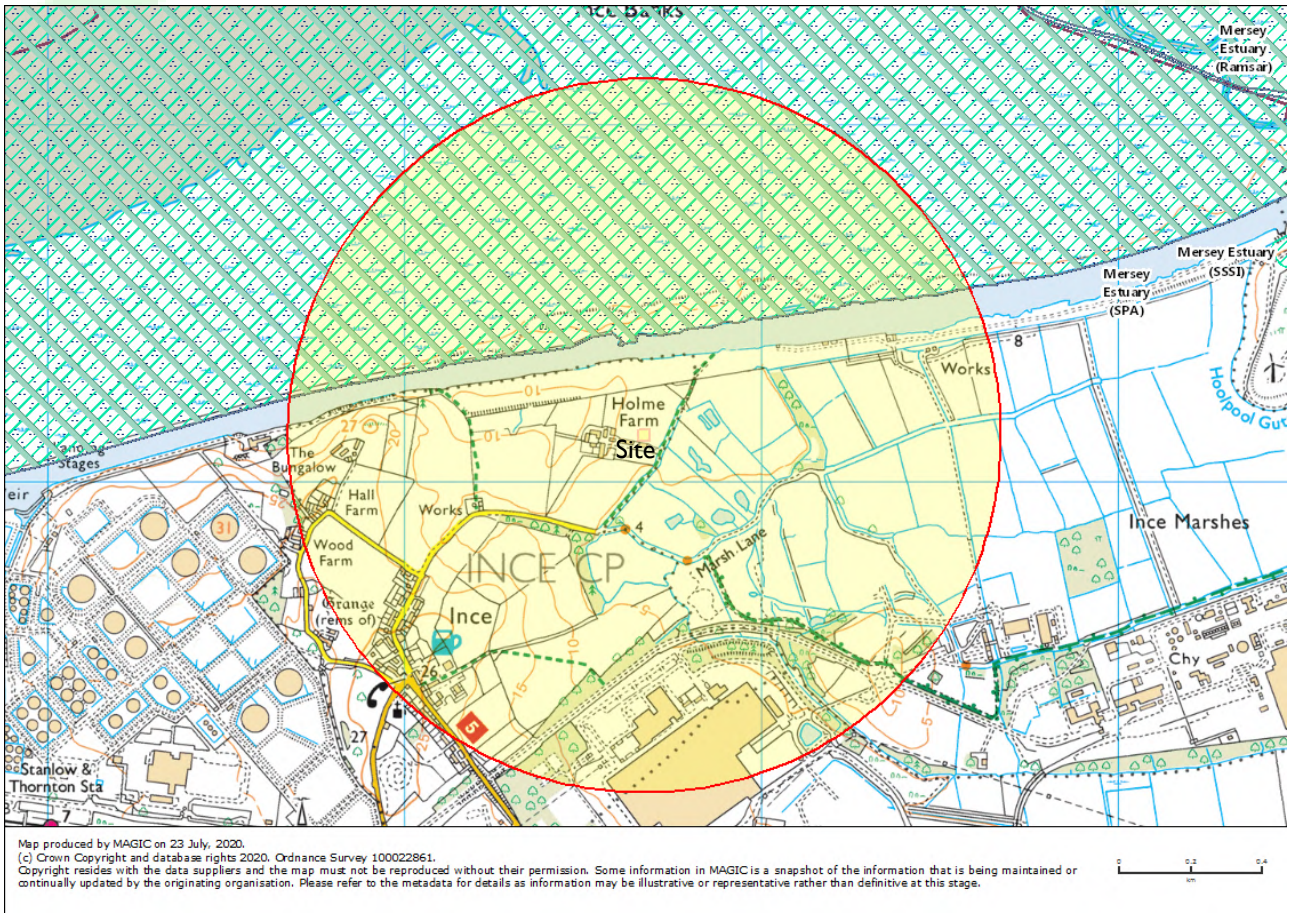
The site is to be located at Holme Farm (SJ 45700 77129) and is to replace the two liquid waste storage lagoons adjacent. The liquid waste storage lagoons are being decommissioned as part of the port facility expansion with the area to be designated as 'mitigation land'.

The site is in a rural location and surrounded by land farmed by the Willis'. It is accessed via a private lane, via a security gate, from the public highway from Ince. It is located within the main agricultural holding and surrounded by large farm buildings and a large above ground slurry store.

The site lies approximately 275 m to the south of the Mersey Estuary (SSSI/SPA/RAMSAR).

The centre of the village of Ince is situated approximately [redacted] south west of the site.

The location of the site is shown in the following map with a 1 000 m radius circle applied.



The site does not lie within a groundwater source protection area and there are no surface waters across the site. The site is bunded to prevent any liquids entering the nearby surface water system.

3 Summary of permitted waste types and proposed activities

The proposed site will store liquid wastes for temporary storage prior to application to deployed land, it is intended that the wastes will be stored individually or mixed for operational purposes only.

Wastes will only be mixed to ease handling and spreading of the waste under the same deployment. Where the wastes are mixed and stored before use this will not be for treatment purposes. There should be no change in composition to the waste, for example significant changes in pH and metals availability. Any mixing will not cause wastes to react and will not pose a risk to human health or the environment. The stored wastes will remain appropriately mixed for the duration of the storage operation to ensure even application to the receiving land, for example: the avoidance of striping across crops.

The actual application rates for mixtures of waste will be based on the ratio of each individual waste stream, or the waste stream with the highest nutrient, Potentially Toxic Element (PTE) or other limiting parameter will be used as the maximum application rate allowed to be spread, i.e. the waste will be spread at the lowest application rate.

These wastes streams will not be subjected to any treatment operation and will be listed in Appendix 8 and reflect those contained in the Standard Rules SR2008_No19 permit and the current Environment Agency Regulatory Position Statement RPS231.

A large part of the business is the collection of sludges from private treatment such as package treatment plants or septic tanks. These sludges are collected and then taken to waste water treatment works, however due to restricted operating hours at WWTW these makes collections difficult, especially in flooding situations. This waste operation will be subjected to a treatment operation and the waste streams will be listed in Appendix 8 and reflect those contained in the former Standard Rules SR2010_No17 permit.

The proposal is that the sludge collections would be able to either be;

- Temporarily stored at the site prior to despatch to WWTW for treatment, or
- Treated at the site, by the lime stabilisation of liquid sludge, i.e., addition of lime to raise pH to above 12 for at least 2 hours. The sludge would then be applied to land under the Sludge (Use in Agriculture) (SUiAR) Regulations 1989*.

**Where these Regulations are replaced, the sludge will be applied to land under deployment, or whatever future mechanism is put in place to control this method of application.*

The activities that will be carried out at the site as defined under Annex II of the Waste Framework Directive can be summarised as follows:

- R3: Recycling or reclamation of organic substances which are not used as solvents;
- R13: Storage of wastes pending recovery by land treatment
- D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced).

4 Operating Techniques

The site will be operated in accordance with the Operating Techniques document which has been drafted to satisfy the requirements of Environment Agency Guidance, 'and details the following:

- management;
- site operations;
- emissions and monitoring; and
- Information.

Operational management procedures will ensure 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 and operating techniques document;
- performance against the management system is audited at regular intervals; and
- compliance with the environmental permit.

The risk management and mitigation measures employed at the site and identified in the environmental risk assessment are detailed in the sites operating techniques document.

In summary, the rules and operating procedures employed at the site will ensure the following with respect to the specified waste management activities:

- All waste treatment and storage will take place on concrete impermeable pavement provided with sealed drainage;
- Concrete impermeable surfacing throughout the site and falls towards the drainage channels means that no potentially contaminated runoff from the site can enter the nearby watercourse or soak in to the ground;
- All potentially polluting liquid wastes will be stored in above ground tanks on an impervious base and surrounded by impervious bund walls;
- Clean surface runoff from roofs, or areas not used in connection with storing and treating waste will be separately managed;
- Strict waste acceptance procedures will be adhe[redacted]ure only permitted wastes are accepted on site;
- The site manager will ensure that regular inspections are made of the site. If necessary, remedial measures will be arranged as soon as possible.

5 Assessments

Environmental risk assessment

An environmental risk assessment (ERA) has been carried out to assess the environmental risk posed by the proposed variation to the activity. There are no point source emissions to land, air, surface or groundwater from the proposed facility.

The proposed facility will have drainage infrastructure in place at the site so that all potentially contaminated site drainage is captured and directed via a sealed system, consisting of concrete impermeable pavement across the site with falls towards the main drain channel that captures all liquids and directs it to a sealed tank.

Operational procedures at the site will monitor and manage amenity and accident risks from the proposed activities and includes provision for the monitoring of odour, noise, and fugitive emissions. The impact of the proposed development on surrounding human and environmental receptors has been assessed in the ERA.

As the management measures detailed in the risk assessment are currently in place the conclusion has been reached that the proposed waste materials and treatment activities, are unlikely to result in a

significant accident risk or risk to the local environment, including from odour and noise, or pollution of surface or ground waters.

6 Site Condition Report

A Site Condition Report (SCR) has been prepared as part of this application as the proposed site will be undertaken on a new site.

The proposed facility will operate with due regard to the conditions of the environmental permit and all relevant environmental legislation to ensure that land and groundwater is protected during the lifetime of the site and that the land is in a satisfactory state when the permit is eventually surrendered.

The possibility of any significant releases to the ground [redacted]ng the lifetime of the permit is therefore limited. All waste will be stored and treated o[redacted]ermeable concrete to eliminate direct potential pathways to soil and groundwater. Minor spillages, if they occur, are dealt with immediately by trained staff using appropriate spill response procedure and spill kits located around the site. The impermeable concrete site surfacing will locally break any potential pathway for contaminants that could be emitted from the permitted activities to land or groundwater.

Odour and ammonia issues will not impact upon the nearby SSSI (Mersey Estuary) as the liquid wastes will be treated in an enclosed process.

7 Operating Techniques Document

The site will be operated in accordance with the management system and the operating procedures for the site. These documents are drafted to satisfy the requirements of the permit and ensure environmental protection at all times and detail the following:

- management;
- site operations;
- emissions and monitoring; and
- information.

Operational management procedures will ensure 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 and operating techniques document;
- performance against the management system is audited at regular intervals; and
- compliance with the environmental permit.

The risk management and mitigation measures employed at the site and identified in the environmental risk assessment are detailed in the sites operating procedures document.

In summary, the rules and operating procedures employed at the site will ensure the following with respect to the waste management activities:

- All waste management operations will only take pla[redacted]ermit boundary that is provided with impermeable pavement with drainage to a se[redacted];
- Concrete impermeable surfacing covers all areas of the site and falls towards the tank so that no potentially contaminated runoff from the site can enter groundwater;
- Strict waste acceptance procedures will be adhered to, to ensure only permitted wastes are accepted on site;
- There will be no storage of potentially combustible waste;
- The site manager will ensure that regular inspections are made of the site. If necessary, remedial measures will be arranged as soon as possible.

8 Conclusion

The overall conclusion of the studies undertaken in support of this bespoke environmental permit application for a liquid waste storage and treatment facility at Holme Farm, Ince is that there is unlikely to be a significant environmental impact.

JH WILLIS & SON are fully committed to ensuring the highest standards are met and will undertake their activities in a manner consistent with best industrial practices and in accordance with the company's environmental management system.

This document has been prepared by 360 Environmental Limited with reasonable skill, care and diligence, and taking account of the manpower, timescales and resources devoted to it by agreement with JH WILLIS & SON (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

BESPOKE ENVIRONMENTAL PERMIT APPLICATION

HOLME FARM

Appendix 6 Environmental Risk Assessment

Prepared for: JH Willis & Son

Version 1

August 2020

1. Introduction

The following qualitative risk assessment has been prepared to support the variation application to the bespoke waste installation.

2. Summary of key parameters

Facility	Holme Farm Liquid Treatment Facility
Operator	JH Willis & Son
Location	Holme Farm Marsh Lane Ince Cheshire CH2 4NR
Location of key environmental sites	The Mersey Estuary (RAMSAR/SSSI/SPA) is located in the vicinity (1 000 m) of the site. The locations of these sensitive sites are shown in the appended map.
Risk assessment carried out by	360 Environmental Ltd
Date	9th October 2018
Risk Criteria Summary	
Parameter 1	The site will operate a liquid waste transfer station to store wastes suitable for further application to land (R13) under a 'bespoke' SR2010_No4 permit. The site will operate a treatment facility to produce a treated sewage sludge for application to land (R3). Waste is stored (R13) prior to transfer off site, or for treatment in the dedicated lime treatment tanks.
Parameter 2	Permitted waste types – those suitable for application to land under a 'bespoke' SR2010_No4 permit, a SR2010_No5 or SR2010_No6 permit. Sewage sludge arising from domestic properties.
Parameter 3	Quantity of waste accepted at the facility – 75 000 tonnes per annum.

Parameter 4	All waste will be stored and treated on an impermeable surface with a sealed drainage system.
Parameter 5	There are no point source discharges to controlled waters.
Parameter 6	The activities are not carried out within a groundwater source protection zone 2, or within 250 m of any well, spring, borehole used for the supply of water for human consumption, including private water supplies.
Parameter 7	The liming activity is not carried out within 250 m of the nearest sensitive receptor.
Parameter 8	The liming activity is carried out within 500 m of a European Site or a Site of Special Scientific Interest (SSSI)
Parameter 9	The liming activity is carried out within 500 m of a RAMSAR site

3. Summary list of site receptors

Site name/description	Distance from site	Details
Designated and non-designated habitats and wildlife sites		
Mersey Estuary (RAMSAR)	275 m	Located to the north of the site.
Mersey Estuary (SSSI)	275 m	Located to the north of the site.
Mersey Estuary (SPA)	275 m	Located to the north of the site.
Groundwater and abstractors		
		The site is located above bedrock classed as 'Principal' The aquifer is designated as Secondary (undifferentiated).
Groundwater vulnerability		
		The site lies within an area classed as 'medium - high for groundwater vulnerability.
Source Protection Zones		
		The site is not situated in a source protection zone.

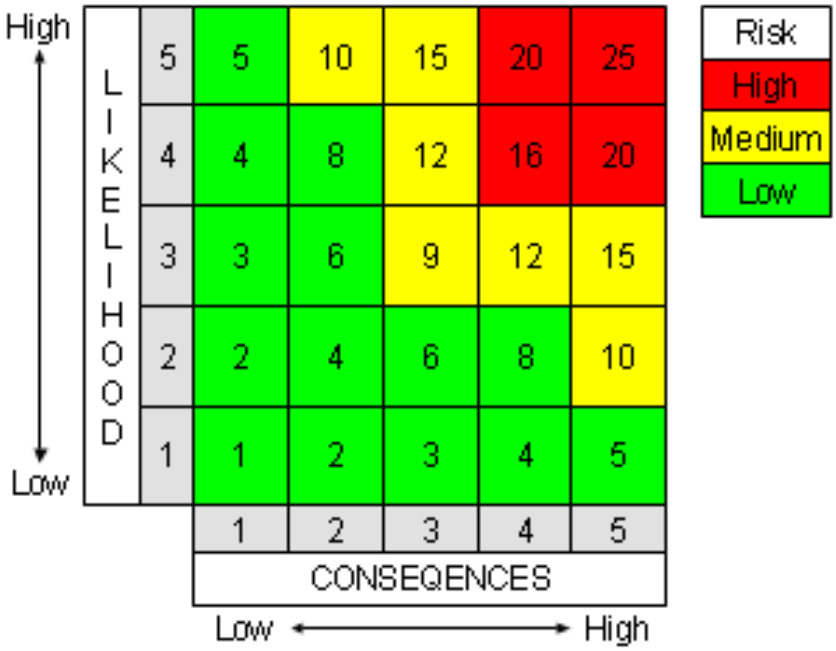
Surface water and abstractors		
		No surface water abstraction licences found
Water protection zone and status		
		Area lies outside an NVZ 2017
Soil classification		
		Soilscape 10 *freely draining slightly acid sandy soils* Main Surface Texture Class - *sandy* Natural Drainage Type - *freely draining* Natural Fertility - *low* Characteristic Semi-natural Habitats - *acid dry pastures; acid deciduous and coniferous woodland*
Surface water		
		The site does not lie within a drinking water safeguard zone for ground or surface water. There is a small drain adjacent to the site that feeds in to the local surface water drainage system that eventually enter Manchester Ship Canal via the Hoolpool Gutter.
Flood risk		
		The site lies in an area benefitting from flood defences.
Air Quality Management Area		
		The site does not lie in an air quality management area

4. Risk criteria rating

Risk ratings are based on the likelihood of an event occurring multiplied by the severity of potential impact. Ratings are made of residual risk following implementation of preventative measures on site. The following scale is applied to rate these parameters:

Severity		Likelihood	
1	No environmental harm arising	**1**	Very unlikely to happen
2	Fleeting localised impacts	**2**	Low probability/occasional
3	Localised impacts medium term	**3**	Likely to occur
4	Wider scale impacts of a fleeting nature, or localised impacts of a more persistent nature	**4**	Highly likely to occur
5	Widespread/persistent impacts on high amenity/sensitive sites	**5**	Inevitable

Final calculated risk levels rating bands are as follows



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 want 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 contact (1-5)*	*What is the harm that can be caused? (1-5)*	*What is the risk that still remains? (Likelihood x Severity)*
Release of micro-organisms (bioaerosols)	Local human population	Air – wind blown dispersion in the atmosphere	Liming activities are not carried out within 250 metres of the nearest sensitive receptor. Waste types have a low propensity to generate bioaerosols.	Very unlikely to happen 1	Nuisance – dust on cars, clothing and inhalation of dusts 1	**Very low** **1**
Dust from the movement of vehicles to and from the site	Local human population	Air – wind blown dispersion in the atmosphere	Site Manager is responsible for checking wind strength and direction and taking corrective action if necessary. Road surfaces are concrete, so low likelihood of generation of materials that would become airborne.	Very unlikely to happen 1	Nuisance – dust on cars, clothing and inhalation of dusts 1	**Very Low** **1**

Release of particulate matter and micro-organisms from wastes deliveries to, stored and despatched from site.	Local human population	Air – wind blown dispersion in the atmosphere	All liquid wastes are delivered by tankers directly to the site. Loose powders and dusts are not permitted. Lime is delivered in sealed packages and mixed in a purpose designed pre-mixing chamber. Waste materials have a moisture content of at least 95%, so unlikely to generate dust.	Very unlikely to happen 1	Nuisance – dust on cars, clothing and inhalation of dusts 2	**Low** **2**
Input material may contain litter.	Local human population Adjacent farm land	Air – wind blown dispersion in the atmosphere	All liquid wastes are delivered by tankers directly to the site. Any waste generated on site will be stored in sealed bins and removed from site on a regular basis to ensure that large volumes of all types of waste do not accumulate on site. Any litter is cleared from any affected areas outside the site as soon as possible.	Very unlikely to happen 1	Nuisance – dust on cars, clothing and inhalation of dusts 2	**Low** **2**

Mud on roads from the movement of vehicles to and from the site	Local human population	Deposited on the ground by vehicles entering and exiting the site	Road surfaces on the site are either concrete or asphalt so an insignificant risk of mud being generated on site. Road surface will be inspected regularly and kept clean should any mud be brought on to the site. Incoming vehicles will be inspected and any issues with mud being trafficked on to the site will be addressed with the haulier/supplier.	Very unlikely to happen 1	No environmental harm arising 1	**Low** **1**
Odour from delivered waste	Local human population	Air – wind blown dispersion in the atmosphere	Delivered waste is placed in the appropriate tanks without delay. There is potential for exposure for anyone living or working downwind of the site (excluding operator and employees). Local residents not within 500 m of the site. Odour Management Plan in place.	Odours are unlikely to impact on local receptors as liming procedures and adherence to the OMP will reduce odours as far as possible.	Localised impacts medium term 2	**Low** **4**

				2		
Odour from the liming and storage of sewage wastes in the treatment process	Local human population	Air – wind blown dispersion in the atmosphere	Liming produces and is likely to release odour. Liming carried out within sealed vessels. There is potential for exposure for anyone living or working downwind of the site (excluding operator and employees). Local residents can be sensitive to odour. Odour Management Plan in place.	Odours are unlikely to impact on local receptors as liming procedures and adherence to the OMP will reduce odours as far as possible. 2	Localised impacts medium term 3	**Low** **6**
Odour from storage of wastes in the process	Local human population	Air – wind blown dispersion in the atmosphere	Once treated to the requirements of SUiAR the treated sludge is removed from site to on-field operations.	Odours are unlikely to impact on local receptors as	Localised impacts medium term 3	**Low** **6**

			Sludge is transported off site to WWTW or land application. Sewage wastes awaiting liming are dealt with as soon as possible and on an ongoing basis to prevent further organic degradation that generates odours. Sealed tanks and pipes are used throughout the process to ensure that odours are not generated that may cause nuisance.	liming procedures and adherence to the OMP will reduce odours as far as possible. 2		
Flies in waste	Local human population	Air	The wastes may be susceptible to limited fly infestation. All wastes will be delivered in a liquid form in sealed tankers. Wastes received may have been stored for long periods of time so this increases the odour potential. Anaerobic conditions on site will be avoided, sewage feedstocks mixed	Flies are unlikely to impact on local receptors as waste is not susceptible to fly infestation. 2	Nuisance – Flies may be more prevalent in periods of warm, damp weather 2	Low 4

			and processed within 5 days of reception.			
Rodent infestation	Local human and wildlife population	Over land	The waste is in a liquid form and is not susceptible to rodent infestation. All wastes will be delivered in sealed tankers.	Infrequently due to waste types and containment arrangements. Signs of infestation to be monitored on an ongoing basis 2	Nuisance – from rodents and rodent damage. Hygiene and disease risk issues 2	Low 4
Scavenging birds and animals	Local human and wildlife population	Over land and through the air	The waste is in a liquid form and is not susceptible to scavenging birds and animals All wastes will be delivered in sealed tankers.	Very unlikely to happen 1	Nuisance and harm to human health from waste carried off site and faeces 2	Low 2

			Material will undergo sanitisation as part of the liming process.			
Noise from vehicle movements/ deliveries	Users of highway, local workplaces, and local dwellings.	Air	Vehicle movements for waste delivery are scheduled to occur Monday to Friday during normal working hours. Emergency loads may be brought in outside normal hours. Liquid removals may operate at weekends, but will not operate out of normal working hours. Site already has well established traffic movements. The Site Manager is responsible for ensuring vehicles are turned around efficiently, with least impact on the neighbouring properties and that vehicles are removed from the surrounding roads quickly.	Site located in a remote location with good access from the highway. Infrequent impact to neighbours to cause nuisance 2	Nuisance from noise. Duration should be short as vehicle movements reduced 2	**Low** **4**

			Loading/unloading can create some noise, but this is localised, and receptors distant enough to mitigate impact.			
Noise/vibration from pumps/screen	Local human and wildlife population	Air	All pumps and the screen are electrically operated.	Very unlikely to happen 1	Nuisance – from noise vibration 1	**Low** **1**
Delivery of wastes	Ground/groundwater/ surface water	Spillage through ground	All deliveries will be supervised and will take place during normal working hours. Deliveries will take place in a sealed, impermeable concrete area that drains to a sealed tank. State of repair of concrete is monitored on a regular basis, and proactive maintenance carried out if necessary.	Low as supervised delivery procedure in place, and delivery area has impermeable surfacing and drains to tank. 1	Pollution of watercourse/ groundwater/land 4	**Low** **4**

Chemical/oil Delivery	Ground/groundwater/ surface water	Spillage during delivery to drain/ground	No bulk diesel or liquid chemicals are stored on site	Very unlikely to happen 1	Pollution of watercourse/ groundwater/land 4	**Low 4**
Storage of small volumes of chemicals	Local environment	Spillage during use or transferring	All cleaning chemicals are stored with lids or caps secured. All cleaning chemicals are stored to ensure substances are not exposed to conditions that could cause a reaction and spillages are contained. Chemicals are segregated as appropriate and stored in secondary containers to catch any small spillages.	Very low volumes are kept on site Storage is contained and indoors 1	Harm to local environment and animal health 2	**Low 2**
Flooding of site	Local human population and local environment	Contaminated flood waters	Permitted waste types are non-hazardous so any waste washed off site will add to the volume of the local post-flood clean-up workload, rather than the hazard.	No history of flooding in the area. Site is in an area protected by flood defences. 1	Contamination of buildings / natural habitats 2	**Low 2**

Spillage of liquids with high organic content.	All surface waters close to and downstream of site.	Direct run-off from site across ground surface, via surface water drains, ditches etc.	All operations carried out more than 10 metres from a water course on an impermeable surface with a sealed drainage system. All liquids kept in containers and provided with secondary containment.	Very unlikely to happen 1	Pollution of watercourse/ land 4	**Low** **4**
Spillage of liquids with high organic content.	Groundwater	Transport through soil/groundwater then extraction at borehole.	All operations carried out on an impermeable surface with a sealed drainage system. Any liquids kept in containers and provided with secondary containment.	Very unlikely to happen 1	Pollution of groundwater/land 4	**Low** **4**
Accidental fire causing the release of polluting materials to air (smoke or fumes), water or land.	Local human population and local environment	Air transport of smoke. Firewater runoff from site.	Waste will be maintained with adequate moisture correction as per industry standard so that is not readily combustible. Permitted waste types are liquid and non-hazardous therefore only a low magnitude risk is estimated.	Very unlikely to happen 1	Respiratory irritation, illness and nuisance to local population. Injury to staff, firefighters. Pollution of water or land.	**Low** **3**

			Permitted activities do not include the burning of waste.		3	
Unauthorised access to site	Bodily injury to person or animal entering site	Direct physical contact	The site is surrounded by a perimeter fence and has a lockable gate to the entrance. This gate is closed and locked always when staff are not present on site. The site is fitted with remote CCTV system so staff are alerted to the presence of intruders. All vehicles/people entering the site will be received by the weighbridge operator who will be present in this area while the site is open for deliveries.	Low as site is locked and fenced when not manned Access to the site is controlled during operating hours. 1	Bodily injury/damage to plant 3	**Low** **3**

Arson and / or vandalism causing the release of polluting material to air (smoke or fumes), water or land.	Local human population, staff, firefighters, vandals or local environment.	Air transport of smoke. Firewater runoff from site.	Permitted waste types are non-hazardous liquids so only a low magnitude risk is estimated. A series of procedures are in place to manage this eventuality: Accident and Emergency Management Plan.	Site is secure 2	Respiratory irritation, illness and nuisance to local population. Injury to staff, firefighters or vandals. Pollution of water or land. 3	**Low** **6**
Harm to protected site through nutrient enrichment, leachate, contaminated surface water run-off, smothering, disturbance or predation.	Protected sites - European sites and SSSIs protected species/habitats and other nature conservation sites (LWS)(LNR).	Any	Adjacent Local Wildlife Site is protected as the lime treatment only takes place on an impermeable surface with sealed drainage in sealed vessels.	Very unlikely to happen 1	No environmental harm arising 1	**Low** **1**

BESPOKE ENVIRONMENTAL PERMIT APPLICATION

Appendix 7 Technical standards

Prepared for: JH Willis & Son

September 2020

TECHNICAL STANDARDS

1 Introduction

JH WILLIS & SON, has instructed 360 Environmental Ltd to prepare a permit application for the proposed liquid waste transfer and sewage sludge treatment site at Holme Farm under the Environmental Permitting (England and Wales) Regulations 2016 (as amended).

2 The proposed site

The site is to be located at Holme Farm (SJ 45700 77129) and is to partly replace the two liquid waste storage lagoons adjacent operated by JH WILLIS & SON. The liquid waste storage lagoons are being decommissioned as part of the port facility expansion with the area to be designated as 'mitigation land'.

The operation will be comprised of two separate functions;

1. Storage of suitable wastes for application to land under the landspreading permit held by the operator. This permit allows for a range of suitable wastes to be spread to land, including a mixed waste. Tanks 1 – 3 ONLY.
2. Storage and treatment of septic tank sludges. Tanks 4 – 5 ONLY.

3 Storage tanks

The wastes will be held in tanks 1 – 3 for the purposes of storage only, not including sewage sludges either treated or untreated. This allows for a limited buffer storage, as the range, and volumes, of liquid wastes have been in decline for a period of time as more wastes are either accepted by Anaerobic Digestion (AD) facilities or are no longer being produced as manufacturing sites are in decline.

It may be that the wastes are mixed in the tanks, however, at present it is more likely that the wastes will be kept separately in the three tanks. Where wastes are mixed in tanks 1 – 3, the resultant mix will be at the lowest of the wastes within the mix. Records will be kept of the wastes in each tank during the fill procedure, this will then inform the application rate.

4 Treatment tanks

The wastes held in tanks 4 – 5 are for the purposes of septic tank sludge storage and treatment only.

Due to restricted operating hours at the major WWTW it is becoming increasingly difficult to be able to supply a service to rural properties that are not able to be connected to the mains sewerage system but instead rely on Onsite Wastewater Treatment Systems (OWTS) such as septic tanks or Effluent

Treatment Plants (ETP). The North West of England has the highest number of septic tanks in the UK and WWTW operational hours make it impossible to discharge loads after 15:00 hours, which restricts the profitability of the operator's business and carries the risk that domestic septic/package treatment tanks fail and either overflow or back up in to domestic properties and cause pollution of the environment and harm to human health. With the full implementation of the Septic Tank General Binding Rules now being fully brought to bear, there is an increasing demand, and a statutory requirement, that OWTS are regularly serviced and emptied. The ability to keep prices affordable also encourages more property owners to keep the OWTS at their property functioning correctly which in turn has benefits for the environment.

The intention is that the sewage sludge would then be bro[redacted]e facility and stored for bulking up on to larger vehicles that aren't able to access many properties. Alternatively, the sludge would be lime treated to reduce pathogen count and applied to agricultural land under the control of JH Willis and the Sludge (Use in Agriculture) Regulations (SUiAR) 1989.

The Code of Practice for the agricultural use of sewage sludge applies to the use of sewage sludge on agricultural land in the United Kingdom and how the sludge is treated.

The Code has been prepared to complement the Sludge (Use in Agriculture) Regulations 1989 (SI 1989, No. 1263) covering Great Britain, and the Sludge (Use in Agriculture) Regulations (Northern Ireland) 1990 (SR 1990, No. 245), which enforce the provisions of the EC Directive 86/278/EEC, on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture. Its recommendations are based upon the best available scientific evidence and are in conformity, where relevant, with the requirements of the Regulations.

For the purpose of the Code of Practice sewage sludge is defined as residual sludge from sewage plants treating domestic or urban waste waters.

Sludge must be subjected to biological, chemical or heat treatment, long-term storage or any other appropriate process so as significantly to reduce its fermentability and the health hazards resulting from its use before being used in agriculture.

Examples of treatment processes which satisfy these requirements are listed below;

Process	Description
Lime stabilisation of liquid sludge	Addition of lime to raise pH to greater than 12.0 and sufficient to ensure that the pH is not less than 12 for a minimum period of 2 hours. The sludge can then be used directly.

The site layout plans illustrate the piping arrangements to ensure that the two operations remain separate to prevent cross contamination. The piping arrangement allows the pipes to be fully cleared where liquids are changed from OWTS sludges to other sludges. This is achieved by a valve on the pumps that allow air to be drawn in to the system that ensures that the pipes are cleared. There is the option to add rainwater to the system for pipe flushing, the cleaning water will be directed to the appropriate tank.

The liming operation will commence when a tank is filled, lime will be added and added to the tanks that are kept circulating

Lime treatment controls the environment needed for the growth of pathogens in biosolids and converts the sludge into a usable product. Treatment of biological wastes with lime is based on several chemical reactions. Calcium hydroxide is an alkaline compound that can create pH levels as high as 12.4. At pH levels greater than 12 and increased temperatures, cell membranes of harmful pathogens are destroyed. The high pH also provides a vector attraction barrier, preventing flies and other insects from infecting treated biological waste. Because lime has low solubility in water, lime molecules persist in biosolids to prevent regrowth of pathogens.

When quicklime (CaO) is used with water, an exothermic reaction occurs. As heat is released, the temperature of the biological waste can increase to 70°C, which provides effective pasteurization. The high pH also will precipitate most metals present in the waste and reduce their solubility and mobility. The lime will also react with phosphorus compounds to prevent eutrophication whilst the solubility of calcium hydroxide provides free calcium ions, which react and form complexes with odorous sulfur species such as hydrogen sulfide and organic mercaptans. As a result of this reaction, the biological waste odours are actually destroyed, not just masked.

Lime benefits the treatment of sewage sludge as it:

- Is a registered biocide
- Achieves up to 6 log reduction of pathogens
- Stabilises sludge with no risk of pathogen regrowth
- Eliminates odour, reduces vector attraction
- Converts sewage sludge into a biosolid product
- Increases the dry solids content, improves structure, handling properties and spreadability
- Adds calcium hydroxide and organic matter to improve the soil structure, enhancing growth environment in the soil
- Maintains nutrients bio-availability

Biosolids can be sanitised by adding a controlled dose of hydrated lime (calcium hydroxide) as a liquid or quicklime (calcium oxide) as a dry powder to sewage sludge. Hydrated lime as liquid lime can be added simply to raise the pH. Calcium oxide addition will give a rise in pH, temperature and reduction in moisture content.

Lime is considered the best method of treatment to produce a valuable product suitable to be recycled to land, as a fertiliser and/or soil conditioner with enhanced calcium content, a major crop nutrient. The sludge will also contain high levels of phosphate, from washing powders and detergents, meaning less phosphate has to be mined and transported.

Calcining to make calcium oxide emits carbon dioxide This is partly negated when the oxide reacts in sewage sludge to form hydrate, which then absorbs atmospheric carbon dioxide to return back to carbonate. Taking a wider view shows further CO_2 reduction. By generating a useful fertiliser, the crop yield is increased, meaning a greater CO_2 uptake by the crops per hectare and greater crop yield per hectare reduces the operational carbon footprint. Having an amount of phosphate in the sludge means less virgin phosphate has to be mined and transported, further reducing the amount of CO_2 that would be emitted.

Lime stabilisation is noted as an example of effective sludge treatment processes in the *Sewage sludge in agriculture: Code of Practice for England, Wales and Northern Ireland* and as a common treatment method, which can have the benefit of neutralising soil acidity, in the Scottish Environmental Protection Agency (SEPA) Guidance on the suitable organic material applications for land restoration and improvement.

The mechanisms of pathogen reduction are;

1. Raise temperature (quicklime addition only)

Once quicklime is mixed with the moisture bearing sludge an exothermic (heat producing) reaction takes place.

CaO	+	H2O	=	Ca(OH)2	+	heat
quicklime		water		hydrated lime		1 140 kJ/kg CaO

In a homogeneous mixture, the quicklime reacts with the m[redacted]t in the sludge. This exothermic reaction generates significant amounts of heat energy whi[redacted] sludge (temperatures can reach in excess of 100°C) as well as chemically binding 32% of its own weight of water as hydroxide. As the sludge derived from OWTS has a very high moisture content, it is unlikely that any drying will take place, however the reaction will still occur. Personal experience of treating slurries with lime during the Foot & Mouth outbreak in 2001 demonstrated how much heat is generated by the addition of lime to the slurry, in that mixing tanks became very hot to the touch. All pipework, joints, pumps etc., have been selected with this in mind.

Where the correct quicklime dose is applied, the temperature will be easily maintained at over 55°C for 75 minutes, which pasteurises the sludge and removes some moisture. This temperature regime will produce an advanced treated sludge as recognised by the draft (86/278/EEC) EU Regulations.

Additions of between 50% and 90% CaO per unit of dry solids (DS) gives an advanced treated sludge at >55°C and pH >12 for 75 minutes. The required addition level to achieve advanced treatment depends on dry solids content.

2. Raise pH (quicklime, hydrated lime or liquid lime addition)

If the correct quicklime, hydrated lime or liquid lime dose is applied, the treated sludge will be elevated to pH 12 for at least 72 hours.

Depending on the sludge buffering capacity, between 20 and 40% CaO per unit of dry solids (DS) - or equivalent quantity of $Ca(OH)_2$ or liquid lime - is capable of producing a treated sludge.

Hydrated lime or liquid lime addition

Hydrated lime, or liquid lime, is typically dosed as a liquid lime suspension prior to dewatering.

Safe handling

The Safe Handling of Lime document gives some general guidelines on the handling requirements for lime products.

Producer sewage sludge test

The sludge will be tested at least every 6 months or when there's a change in the quality of the sewage treated and it will be tested for: [redacted]

- dry matter (%)
- organic matter (% dry solids)
- pH
- nitrogen - total and ammoniacal (% dry solids)
- phosphorus total (% dry solids)

Levels of Potentially Toxic Elements (PTE) will also be tested and include:

- chromium (mg/kg dry solids)
- zinc (mg/kg dry solids)
- copper (mg/kg dry solids)
- nickel (mg/kg dry solids)
- cadmium (mg/kg dry solids)
- lead (mg/kg dry solids)
- mercury (mg/kg dry solids)

Lime stabilisation begins to occur when the pH is higher than 11. When the pH reaches 12, maximum pathogen reduction can be achieved. US Environmental Protection Agency (EPA) research indicates that about 10 - 20 kilograms of hydrated lime is typically enough to process 4 000 litres of sewage sludge, depending upon the four factors presented below.

The four determining factors for stabilising sewage sludge with hydrated lime are:

- Amount of lime used per volume of septage (concentration);
- Strength and purity of the hydrated lime;
- Mixing; and
- Strength of the waste.

Effective mixing is key to the operation and the process will see the lime neutralising value all be used in the treatment process and that the process will also see a thickening of the sludge.

The first treated batch would need to be analysed for *bacti*-kill to validate the process. This means that it would be treated and then stored until the results are back from the lab.

3 Application of treated material to land

All wastes suitable for application to land under the operators landspreading will be carried out under deployment.

Treated sludge will be applied to land under the Sludge (Use in Agriculture) (SUiAR) Regulations 1989*.

Other regulatory requirements/Codes of practice include;

- Farming Rules for Water[1]
- Nitrate Pollution Prevention Regulations (The NVZ Regulations)[2]
- Cross Compliance Regulations 2020[3]
- Code of Good Agricultural Practice (COGAP) for Reducing Ammonia Emissions
- Code of Practice for Agriculture Use of Sewage Sludge

Applications to land of the treated material will follow guidance within;

- The Nutrient Management Guide (RB209)
- The Biosolids Safe Sludge Matrix
- The Biosolids Nutrient Management Matrix
- Biosolids Assurance Scheme

[1] https://www.gov.uk/guidance/rules-for-farmers-and-land-managers-to-prevent-water-pollution
[2] https://www.gov.uk/government/publications/nitrate-vulnerable-zones-consolidation-of-regulations
[3] https://www.gov.uk/guidance/guide-to-cross-compliance-in-england-2020/smr-1-nitrate-vulnerable-zones-nvzs

**Where these Regulations are replaced, the sludge will be applied to land under deployment, or whatever mechanism is put in place to control this method of application.*

4 Operating Techniques

The site will be operated in accordance with the Operating Techniques document which has been drafted to satisfy the requirements of Environment Agency Guidance, and details the following:

- management;
- site operations;
- emissions and monitoring; and
- Information.

Operational management procedures will ensure 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 and operating techniques document;
- performance against the management system is audited at regular intervals; and
- compliance with the environmental permit.

The risk management and mitigation measures employed at the site and identified in the environmental risk assessment are detailed in the sites operating techniques document.

In summary, the rules and operating procedures employed at the site will ensure the following with respect to the specified waste management activities:

- All waste treatment and storage will take place on concrete impermeable pavement provided with sealed drainage;
- Concrete impermeable surfacing throughout the site and falls towards the drainage channels means that no potentially contaminated runoff from the site can enter the nearby watercourse or soak in to the ground;
- All potentially polluting liquid wastes will be stored in above ground tanks on an impervious base and surrounded by impervious bund walls;

- Clean surface runoff from roofs, or areas not used in connection with storing and treating waste will be separately managed;
- Strict waste acceptance procedures will be adhered to, to ensure only permitted wastes are accepted on site;
- The site manager will ensure that regular inspections are made of the site. If necessary, remedial action will be taken and recorded.

BESPOKE ENVIRONMENTAL PERMIT APPLICATION

Appendix 8 Odour Management Plan (OMP)

Prepared for: JH Willis & Son

September 2020

JH Willis & Son

Holme Farm

Marsh Lane

Ince

Cheshire

CH2 4NR

REVISIONS

This is a version-controlled document. All changes to be detailed below and a new version issued after changes are made.

Version Control			
Version no.	**Date**	**Author**	**Comments on amendments**
01	August 2020	G Kennett	Initial version

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1. Introduction
2. Site location and description
   2.1 Description of site and surroundings
3. LWTS facility overview
   3.1 Potential odour sources and activities
      3.1.1 Receipt of waste and storage
      3.1.2 Lime treatment
      3.1.3 Loading and dispatch of liquids
   3.2 Potential odour sensitive receptors
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7. Compliance levels
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7.5 Corrective actions

7.6 Reporting

8. Review requirement and timescale

Annex A: Daily inspection form

Annex B: Sniff testing protocol

Annex C: Odour complaint report form

Annex D: Odour dairy

1 Introduction

This Odour Management Plan (OMP) has been produced in accordance with the following Guidance documents:

- *'H4 Odour Management: How to comply with your environment permit' Environment Agency (2011).*
- *An industry guide for the prevention and control of Odours at Biowaste processing facilities. Composting Association (2007).*
- *Code of Practice on Odour Nuisance from Sewage Treatment Works*
- *Odour Management Plans for Waste Handling Facilities. Environment Agency (2010).*

It considers the following:

- Activities that have the potential to produce odour and sources of release.
- Process/control failures or abnormal events that could lead to an increased level of emission or exposure.
- Potential outcomes of each failure scenario in respect to odour impact.
- Actions to mitigate the effect of odour release (during normal and abnormal operations) and details of responsible persons at the facility.

This is a live document, and as such the monitoring procedures, responsibilities and compliance actions should be updated as and when required.

Waste transfer and treatment of sewage sludge has the potential to generate odorous compounds as a result of various chemical and biological processes. The nature of the odour varies throughout the cycle. Minimisation of odours is dependent on the control of interlinked factors at each stage of treatment. Effective adoption of appropriate odour minimisation and management techniques minimizes the magnitude and unpleasantness of such odours.

Generation of odours from wastewater treatment processes

Odours in the wastewater treatment plant are caused by a variety of compounds, mainly:

1. reduced sulphur compounds, e.g. hydrogen sulphide, mercaptans, organic sulphides;
2. nitrogen compounds, e.g. ammonia, amines;
3. volatile fatty acids, e.g. formic acid, butyric acid;

4 aldehydes and ketones.

The production of most odour-causing compounds is associated with anaerobic (septic) environments and hydrogen sulphide is a classic example. Under septic conditions where there is no dissolved oxygen available, sulphate-reducing bacteria will use sulphates commonly found in municipal wastewater as a source of oxygen for respiration, resulting in the production of hydrogen sulphide. This noxious gas is well known for its "rotten egg" odour and represents a real hazard to plant workers as well as causing significant corrosion of metal surfaces.

Biosolids stabilised with lime may generate offensive odours, which mainly contain ammonia, amines and sulfides. There are two reasons for the odours;

1 anaerobic conditions are present during the upstream solids process and
2 lime is poorly incorporated into the biosolids (Murthy et al., 2001). Odours that result from organic amines and sulfides can be difficult to control and treat.

There will be no treatment of sludges other than that of sewage sludges, these will be transferred from road tankers to the site, kept circulating, to prevent sediment drop out, and then tankered off site.

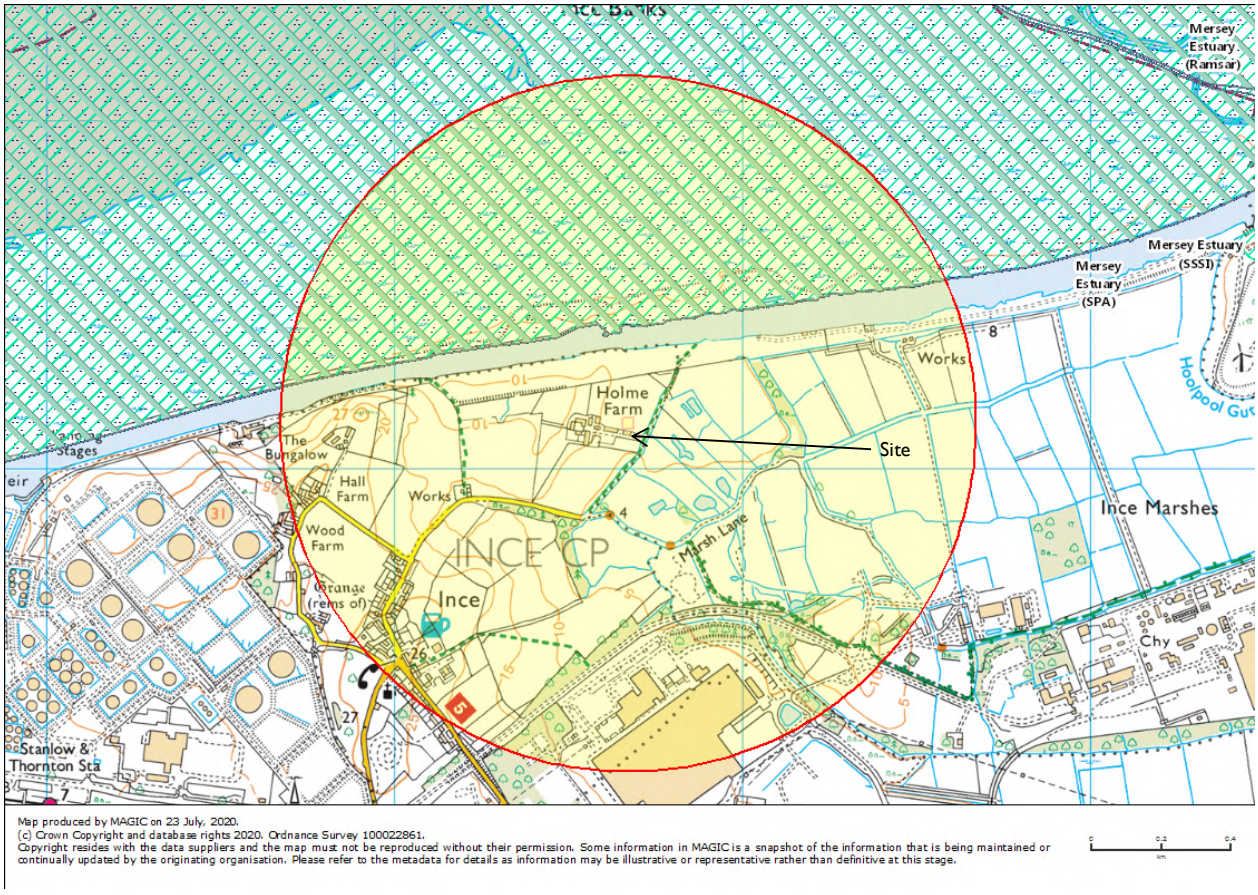
2 Site location and description

2.1 Description of the site and its surroundings

The site at Holme Farm contains a pig and livestock unit and a large arable farm enterprise. It is also the site of an open lagoon liquid waste transfer station that is to be decommissioned. The new liquid waste transfer station (LWTS) will manage two distinct waste streams;

- domestic septic tank sludges
- wastes listed as being suitable to apply to land without treatment

It is entirely concreted and is situated within a bunded area that drain to the sealed tank on the site. The site is surrounded by agricultural land and the nearest receptors are shown below and the table in section 3.2.



3 LWTS facility overview

The permit for the facility provides details of permitted activities, waste types and quantities. The site is regulated by the Environment Agency under the Environmental Permitting regulations and is subject to stringent environmental protection management controls to comply with the relevant environmental standards.

At present the facility has a nominal designed storage capacity of around 1 500 tonnes of liquid waste, although this is planned to increase over time.

Tank	Purpose	Diameter (m)	Length (m)	Max volume (m^3)
T1	Storage only	3.5	21	202
T2	Storage only	3.5	21	202
T3	Storage only	3.5	21	202
T4	Storage/treatment*	3.5	21	202
T5	Storage/treatment*	3.5	21	202
			Total	1 010

**Septic tank sludges only*

Liquid waste stored in tanks T1 – T3 are listed in Appendix 8 It may be that suitable solid waste materials are stored on the pad should field access not be possible due to poor weather or soil conditions.

Liquid wastes are derived from a variety of industrial processes all of which are capable of generating odours. All liquid wastes are stored within tanks which reduces the potential for odour to escape. Liquids within the tanks are kept circulating to reduce the potential for sedimentation to occur, this circulation has the additional benefit of keeping the liquids aerated which reduces the potential for anaerobic conditions to arise and, therefore, increase the odour potential.

Liquid waste, septic tank sludges only, will be stored and lime treated in T4 – T5. It will only be released when suitably treated to the required standard, or when it is to be transferred to WWTW for further treatment.

Septic tank sludges have a greater potential to generate odours. All septic sludges are only stored within the treatment tanks which reduces the potential for odour to escape. Liquids within the tanks are kept circulating to reduce the potential for sedimentation to occur, this circulation has the additional benefit of keeping the liquids aerated which reduces the potential for further anaerobic conditions to arise and, therefore, increase the odour potential.

The facility comprises a number of built elements including:

- Access road, weighbridge, control cabin.
- Treatment tanks
- Screen
- Bunded and impermeable (concrete) pad for reception, storage, lime treatment and loading.
- An office/staff welfare facility.

3.1 Potential odour sources and activities

Measures to control odour have been considered in the context of the setting and the operations that are undertaken. Identified operations have the potential to produce and release odour at the site are described below. This OMP has been developed to ensure that potential odour from each part of the process is minimized through effective management to an acceptable level.

The table is an inventory of the waste material, descriptions and quantities that are potential odour sources.

Potential off-site odour sources include agricultural activities on adjacent land.

Description	Sources include	Quantities	Comments
Inputs including biodegradable waste from food processing, industrial processes etc	Liquid waste producers	Up to 100m^3 per day in peak periods	Only tankers accepted
Sewage sludge	Domestic OWTS	Up to 100m^3 per day in peak periods	Treated or stored and despatched from site for recovery at WWTW

Contaminants	Sealed skip	Up to 10t	Removed when full to permitted sites

Odours emitted from the sources identified above are emitted to air and have the potential to be conveyed to the nearby receptors via transfer through the atmosphere.

The extent to which odour is detectable downwind and the intensity and character of such odours is dependent upon the following factors:

- The nature and magnitude of odourous emissions released from the source.
- Wind direction and wind speed.
- Atmospheric turbulence (vertical and horizontal) and the level of dilution and dispersion odours undergo as they travel downwind.

All of these factors can exhibit substantial variation over time.

3.1.1 Receipt of waste and storage

The potential for odour generation during receipt, offloading and treating of sewage sludge is directly influenced by the nature of the incoming wastes, the time of year and the extent of any degradation. The extent of degradation of raw materials will effectively be determined by the age of the waste and ambient temperatures, i.e. during hot periods of extended retention materials with higher odour potential will be delivered to site.

There is a reduced potential for odour from the liquids stored in tanks 1 – 3 as the tanks are sealed and the liquids introduced in to, and removed from them, them via pipes from the reception pit. Other than pressure vents there are no external emission points that will allow odours to escape.

Low odourous wastes can be held in the reception pits, it is sized as such to reduce the amount of time a vehicle is on site, with particularly odourous wastes moved directly to storage tanks.

Sewage sludges are off loaded in to the reception pit and moved directly to tanks T4 – T5 for treatment or onward transfer to WWTW.

To prevent odours generated by detritus on the screen, clean water collected from the yard area is collected and used to reverse flush the screen. The resultant material is removed to a sealed skip for removal off site.

3.1.2 Lime treatment

The nature and magnitude of odours generated during the liming process depends on the stage of the process that the sludge is at. An initial ammonia release may occur when the lime is first added to the sludge, however this can be reduced by rapid mixing. H_2S can also be generated by the material and by the liming process.

As with all of the tanks, the treatment tanks (4 and 5) are sealed excepting the pressure vents on each tank to prevent vapour lock. As the tanks are, in effect, sealed, this will contain the odours generated to a large degree.

Keeping the liquids circulating in the tanks prevents settling out of any solids and maintains aerobic conditions within the tanks as much as possible.

3.1.3 Loading and dispatch of liquids

Loading is typically not a significant odour source as it is moved through sealed pipes. There may be some odour from pump exhausts but this is limited and the foul air can be captured/treated if required.

3.2 Potential odour sensitive receptors

The site is situated in a rural location with very few, other than the operator's property on the periphery of the farm yard. There are no receptors downwind of the site for a considerable distance.

4 Control Measures

The facility will operate to the recognised standards with the Code of Practice for the Agricultural Use of Sewage Sludge.

The following sections detail management techniques, procedures and odour control measures to minimize the potential for odour generation for each aspect of the operations.

4.1 Receipt of waste and off-loading

Operational techniques to minimise odour during receipt and off-loading;

- Site management shall work with suppliers to manage inputs during busy periods
- All waste inputs arrive on site by tanker. Loads will be discharged in to the reception pit and screened to remove contaminants.
- The screen will be reverse flushed regularly to remove contaminants. This wash water will be directed to the relevant tanks.
- Any rejected loads will be removed from site within 24hrs.
- Storage duration for input materials prior to storage in tanks will not exceed 8 hours except in the event of mechanical failure or adverse weather conditions. Feedstock will typically be stored and/or lime treated on the day of receipt.
- Operational areas shall be maintained in a clean condition and checked regularly by the site operatives.

4.2 Lime stabilisation

To minimise the potential odour emissions the following operational measures shall be used:-

- Lime treatment will only be undertaken in tanks T4 and T5.
- No lime treatment will be undertaken in tanks T1 – T3 or the reception pit or holding tank.

4.3 Loading and dispatch of the final product

To minimise the potential odour emissions, treated sewage sludge and stored materials will be piped directly to the despatch vehicles via an enclosed system.

Pump exhausts can be connected to an odour suppression system of required.

4.4 Pad run-off

The nature of the drainage system ensures that odour emissions from storm water run-off are minimal. Clean surface water is captured and directed to a sealed tank which is designed to receive

run off from the pad during exceptional rainfall events. Any spillages on the yard will be contained and directed to the relevant holding tank. The tank will then be emptied.

5 Failure or abnormal event scenarios

In accordance with the requirements of the Environment Agency's Technical Guidance H4, types of failure or abnormal events which will have the potential to result in an odour impact have been considered. These have been identified as abnormal meteorological conditions and failure of aspects of the lime treatment process during any of the process stages previously described. Failure and abnormal event scenarios are summarised below.

5.1 Abnormal meteorological conditions

Meteorological conditions that promote the generation of odour and inhibit its effective dispersion (high temperatures and stable conditions) may result in increased risk of impact at receptor locations. Applying control measures such as using meteorological forecasts and preventing further anaerobic degradation within the reception and holding tanks reduces the potential for impact. However, should extreme circumstances occur potential odour impact is more likely.

5.2 Failure in process control measures

Failures in the process control measures employed have the potential to result in a release of odorous air that could impact at receptor locations. Potential failures in the process may include:-

- Breakdown of pumping equipment, which may result in a delay in transfer of the material received or despatched. Magnitude of impacts will depend on the length of the breakdown, the type and volume of waste received and the prevailing meteorological conditions but could potentially result in elevated odour concentrations.

5.3 Failure of outlets or hauliers for liquid

Failure of outlets for the liquids may result in the system becoming 'log jammed'. Liquids will only be accepted where sufficient capacity exists to store liquids without causing the generation of excess odours.

Responses to failure and abnormal events are addressed in Section 7.0.

6 Monitoring measures

JH WILLIS & SON will employ the monitoring techniques outlined below to ensure that control measures (Section 4.0) are effective, and that operational procedures are followed and that good practices are being implemented:-

- Site inspections by the site manager or competent person.
- Site audits conducted by the company.
- Site audits and inspections by the Environment Agency.
- Management Reviews are carried out annually or when there is a change in operations/identified issues.

6.1 Responsible Persons

All site personnel are responsible for immediately reporting odour problems to the site manager. The site manager or competent person will carry out any odour monitoring that may be required.

6.2 Meteorological Conditions

Meteorological forecasts and conditions shall be monitored to enable potential odour problems to be predicted and if necessary, remedial actions such as modifications to the method of working or the use of abatement techniques are to be implemented. Meteorological data will be recorded as below.

Monitoring requirements	**Frequency**
Observed description of conditions: precipitation, drizzle, rain, sleet, snow,	Daily
Wind speed and direction, temperature and rainfall	Daily

6.3 Olfactory monitoring

Odour shall be monitored daily at a point downwind of the operation at the site boundary and observations shall be noted in the site diary. This will be done by a site operative before

commencement of his normal duties, to combat adaptation to odours. Staff from other roles will be called in to carry out monitoring if necessary.

Surveys shall be carried out in accordance with the monitoring protocol contained within the Environment Agency's Technical Guidance Note 4. These surveys shall be undertaken when the site manager deems appropriate but will automatically be undertaken after a complaint has been received. The odour assessor should not be subject to significant odour in the 30 minutes prior to the assessment and shall be compliant with the requirements laid down in the Olfactory Survey procedure/report form. This is to ensure that monitors are not suffering from odour fatigue and will be sensitive to odours. If odour is detected off-site, then the facility manager (or competent person) will be notified immediately and the olfactory survey procedure will be carried out to determine the scope and extent of the odour plume, 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.
- The survey will continue toward the facility until odour is perceived.
- Assessment points perpendicular to the plume axis and equidistant from the site will then be monitored, subject to access requirements.
- The survey is to continue at the site so that the source of the odour can be identified i.e. reception area, pump exhausts etc; once the source has been located corrective actions can be taken.

6.4 Complaint monitoring

Complaints shall be recorded on the complaints register and will include:

- date and time,
- nature of complaint,
- name of complainant (if given),
- a summary of investigation and actions taken and their results.

In the event of a complaint the olfactory survey will be undertaken as detailed in Section 6. The monitoring protocol below is adapted for the site from the Environment Agency guidance document for the regulation of odour at waste management facilities.

Complaints are to be notified to the Environment Agency. The odour assessor shall undertake odour observation at the location of the complaint and at potentially sensitive receptor locations downwind from the site. At each location observations shall be made concerning odour intensity, persistence and character.

Details will be logged following the instruction provided in the pro forma. Monitoring shall additionally endeavour to identify the scope and extent of the odour plume described in Section 6.3.

6.5 Records

Daily records shall be maintained and include the following details:

- Results of inspections and any olfactory monitoring carried out by site personnel.
- Weather conditions including wind speed and wind direction.
- Operational problems including date, time, duration, and cause of problem.
- Complaints received including address of complainant (if available).
- Details of corrective actions taken, and any subsequent changes to operational procedures.
- An evaluation of the effectiveness of control and abatement techniques used.

7 Compliance action plans

7.1 Control levels

Control levels are shown below

Parameter	Monitoring technique	Control level
Odour	Olfactory on-site monitoring	Odour intensity of 4 out of 6 recorded either during waste reception or loading.
Odour	Olfactory off-site monitoring	Odour Intensity 3 out of 6 recorded at sensitive receptor. (Persistent/transient nature noted and considered).

7.2 Compliance actions

Exceedance of the control level will necessitate further investigation into the causes and indicate whether further monitoring is required. Actions to be taken in the event of an exceedance will be dictated by the nature and extent of the exceedance(s) (e.g. by considering the magnitude of exceedance and whether it was event driven or on-going). Consideration will be given to other factors such as weather conditions.

7.3 Response to complaints

Receipt of an odour complaint during normal operations is treated as an exceedance of control levels. The primary response will be as detailed in accordance with the sites complaint procedure.

An investigation shall be initiated into the cause of the complaint, this will involve as necessary:-

- An olfactory survey following the procedure detailed in Section 6.3.
- An examination of the site activities at the time of the complaint.
- An examination of the meteorological conditions at the time of the complaint.
- A review of the effectiveness of operational and odour control procedures.

The outcome of the investigation will determine the corrective actions to be implemented (see Section 7.5 below).

7.4 Detection of moderate odour during olfactory survey

Detection of a moderate odour (i.e. 3 out of 6 on the odour intensity scale) will initiate a more extensive olfactory survey to determine the extent of the odour plume (as described in Section 6.3). An investigation will be initiated into the cause of the odour.

This shall involve as necessary: -

- A review of site activities at the time of the olfactory survey.
- A review of the meteorological conditions at the time of the olfactory survey.
- A review of the effectiveness of process operations and odour control procedures.
- A review of batch monitoring data.

7.5 Corrective Actions

The outcome of an investigation will determine the corrective actions to be implemented, they will consider but not be limited to:

- Alteration to waste reception procedures which will include controlling the inputs and odour control measures employed.
- Measures to sweep/scrape holding tanks to ensure waste material does not collect and decompose in an uncontrolled manner at the site.
- Review of pad run-off system.
- Corrective actions will be implemented as soon as practicable.

7.6 Reporting

Exceedance of a control level will be investigated (as described above) and recorded in accordance with JH WILLIS & SONS' current procedures. This includes recording the following:-

- Nature of the incident.
- Date of occurrence/s.
- Results of investigations.
- Details of responses/action plans implemented.
- The event will be marked within the site's incident log.

The report will be made available to the Environment Agency on request.

8 Review requirement and timescale

This Odour Management Plan will be formally reviewed by JH WILLIS & SON., initially six months after commencement of operation, and from then on, on an annual basis as a minimum to ensure that the controls described are effective and reflect best available techniques. In addition, the OMP will be reviewed following any relevant changes in site operations or procedures that are likely to have implications from an odour generation/impact perspective.

1.0 PREVENTATIVE ACTION

1.1 Definition

The Odour Management Plan (OMP), as defined, requires that an assessment of odourous substance emissions is undertaken so that the effectiveness of control measures employed can be evaluated.

This is carried out in addition to any odour compliant received by the operator, such that complaints are not relied upon as a method for determining the effectiveness of the control measures used on site.

This assessment is defined as taking preventative action.

1.2 Scope

The scope of this procedure applies to all sites operated by JH Willis & Son, both site based and mobile.

1.3 Sniff testing protocol

The following methodology will be used to follow up complaints.

Where the test is carried out will depend on:

- Location of complaint;
- When trying to establish the source of an odour;
- Wind direction.

The assessment will involve walking along a route that has been selected either because of these factors, or in response to the conditions found upon arrival.

A note will be made of any external activities (such as agricultural practices) that could be either be the source of the odour, contribute to the odour, or be a confounding factor. Odour will become diluted and may change character as this happens.

Please note:

- Staff normally exposed to the odours may not be able to detect or reasonably judge the intensity of odours off-site. It might be better to use office staff or people who have not recently been working on the site to do this.

- Anyone who has a cold, sinusitis or a sore throat, is likely to underestimate the odours.
- To improve (or to check) data quality, get two people to do the test independently at the same time.
- Those doing the assessment should avoid strong food or drinks, including coffee, for at least half an hour beforehand. They should also avoid strongly scented toiletries and deodorisers in the vehicle used during the assessment.

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) Use Beaufort scale if known					
Wind direction (e.g. from NE)					
Intensity (see below)					
Duration (of test)					
Constant or intermittent in this period or persistence					
What does it smell like?					
Receptor sensitivity (see below)					
Is the source evident?					
Any other comments or observations					

Sketch a plan of where the tests were taken, the potential source(s).

Intensity	**Receptor sensitivity where odour detected**
0 No odour	Low (e.g footpath, road)
1 Very faint odour	Medium (e.g. industrial or commercial workplaces)
2 Faint odour	High (e.g. housing, pub/hotel etc)
3 Distinct odour	
4 Strong odour	
5 Very strong odour	
6 Extremely strong odour	
Ref: German Standard VDI 3882, Part 14	

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: o What does it smell like?	
o Intensity (see below):	
o Duration (time):	
o Constant or intermittent in this period:	
o 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 (eg flow rate, pressure at inlet and pressure at outlet):	
Actions taken:	

Form completed by:	Date	Signed

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

ODOUR DIARY

Sheet No	

Name:	Address:
Telephone Number:	

Date of odour						
Time of odour						
Location of odour, if not at above address (including whether indoor or outside)						
Weather conditions (dry, rain, fog, snow etc)						
Temperature (hot, very warm, warm, mild, cold or degrees if known)						
Wind strength (calm, light, steady, strong, gusting)						
Wind direction (e.g. from NE)						
What does it smell like? How unpleasant is it? Do you consider this smell offensive?						
Intensity – How strong was it? (see below 0-6)						
How long did the smell last?						
Was it constant or intermittent?						
What do you believe the source or cause to be?						
Any actions taken or any 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

ODOUR COMPLAINTS PROCEEDURE

On receipt of an odour complaint at the site, the TCM will be notified immediately; and
- The TCM will visit the location of perceived off-site odour without delay to determine odour presence/absence, odour characteristics and intensity; and
- Review the meteorological conditions prior to and at the time of the complaint.

Is the complaint likely to be due to site operations?

Yes

Have there been multiple odour complaints due to an offsite or unidentified source?

Yes

If the cause of the complaint is due to site operations, further advice should be developed regarding odour control measures and such measures instigated without delay.
If odour generation cannot be prevented with additional mitigation in place, consideration will be given to the suspension of the operation, where safety and operational constraints allow, until appropriate techniques can be implemented.

No

No

Review site operations prior to and at the time of the complaint:
- review the environmental control systems operating prior to and at the time of the complaint; and
- review the previous history of complaints at the location identified.

Have there been multiple odour complaints due to an offsite or unidentified source?

No

Yes

If the cause of the odour complaint is considered to be due to an off-site or unidentified source, the following actions will be taken:
- Conduct an on-site odour survey to identify any likely sources and potential causes for the odour;
- If the odour source that led to the complaint cannot be established, the TCM will arrange for a monitoring point in proximity to the complainant's property to be incorporated into the routine daily inspections, the exact location of which is to be agreed by the EA.

- Update the Site Diary;
- All details of the results and actions taken will be reported on the Odour Complaint Report Form;
- Prepare a brief, factual summary report; and
- Update complainant

BESPOKE ENVIRONMENTAL PERMIT APPLICATION

HOLME FARM

Appendix 9 EMS Summary

Prepared for: JH Willis & Son

Version 1

August 2020

The purpose of this Environment Management System (EMS) is to describe how the operator will manage the day to day operation of any plant and processes that have a potential to produce odours or other emissions and provides an overview of the processes and procedures that are in place at each deployed site.

It is a structured system which, when implemented, will help the business to identify the environmental impacts resulting from its business activities. It will also help manage and reduce those impacts, so that the environmental performance of the organisation is improved. The EMS provides a methodical approach to planning, implementing and reviewing a businesses' environmental management.

The role of the EMS is to identify and control the risks that the operations may pose to the environment and human health and by:

- identifying where efficiency savings can be made;
- ensuring compliance with environmental legislation;

- identifying and managing significant environmental impacts;
- providing benchmarks for improvement;
- helping to manage resources.

It will also provide a way for the business to plan for and demonstrate that steps have been taken to reduce or prevent environmental harm occurring as a result of operations.

As this is a working document it will also be updated to reflect changing circumstances at the facility. Updates will be undertaken to reflect any changes in the facilities and practices at the facility and, in any case, will be reviewed on an annual basis.

INTRODUCTION

This EMS has been prepared in accordance with the Environmental Permitting Regulations in that;

1.1.1 The operator shall manage and operate the activities:

(a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and

(b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

It sets out the considerations and operational details that are relevant to the operation of the operation operated by JH Willis & Son at Holme Farm. It details the methods of operation and environmental controls.

The Standard Operating Procedures (SOP), Odour Management Plan (OMP) and Accident Management Plan (AMP) all form part of the EMS for the landspreading operation.

As an effective EMS it will;

- Minimise or prevent the risk of pollution to the environment by the activities which are being undertaken.
- Be implemented so that all staff know their environmental responsibilities.
- Assess the environmental impacts of the operation and identify opportunities to reduce pollution to air, land and water.
- Reduce waste.
- Ensure compliance with environmental legislation and take action to prevent and correct cases of non-compliance.
- Deliver good resource management and encourage sustainable development and financial benefits.

If an accident, or incident of non-compliance, happens on site an audit of the management system will provide a means of detecting the root cause of the problem.

Scope

ISO 14001 defines criteria for an Environmental Management System (EMS). It does not state requirements for environmental performance but maps out a framework that a company or organisation can follow to set up an effective EMS. As such it has been used as a base for this EMS.

It will be used by the business to improve resource efficiency, reduce waste, and reduce costs. It will aim to provide assurance to company management and employees as well as external stakeholders that environmental impact is being measured and improved.

As ISO 14001 is an internationally recognised standard for management systems it provides a useful template for this EMS and involves the following aspects.

- Developing an environmental policy which will have to be made public.
- An environmental policy provides direction for management of the environment by providing a framework for setting and reviewing environmental objectives and targets.
- The policy must make three commitments:
    1. Compliance with all applicable legal requirements, and with other requirements to which the organisation subscribes relating to its environmental aspects;
    2. Prevention of pollution;
    3. Continual improvement.

Environmental Aspects.

An environmental aspect is an element of the business activities, products or services that can interact with the environment. Environmental aspects include those that currently interact with the environment, and those that have potential to interact with the environment, for example, accidents and incidents like fires. These aspects have been listed in the risk assessment and evaluated as to their potential effect on the environment. The potential impacts on the environment are covered by the site specific risk assessment provided in the application that takes in to account location specific issues.

Environmental action plans

These documents are all contained within this EMS;

- Accident and emergency plans and contacts **EMS014**.
- Staff competence training and awareness plans (**EMS020** & **EMS021**).
- A listing of staff roles, responsibilities and authority **EMS014**.
- Plans outlining the lines of communication for EMS related issues **EMS017**.
- Odour management plans
- Accident management plans **AMP01**.
- Operational controls – i.e. documented procedures to control processes and operations which do or could have significant environmental impact **SOP01** & **AMP01**.

Checking

Monitoring and measurement of the businesses activities that can have an environmental impact. This allows the business to evaluate their compliance with any requirements placed upon them by relevant legislation, permits and any other schemes they have subscribed to.

Any non-conformances discovered will be corrected and action will be taken to reduce or where possible eliminate the possibility of further non-conformances **EMS017**.

Checking will also involve the results of any internal audits, carried out under the internal audit program, and any actions taken as a result.

Management review.

An opportunity for management to take a comprehensive look at the continuing suitability, adequacy and effectiveness of the environmental management system. A review will also approve actions to improve the system, to reduce exposure to environmental risk and to improve the environmental performance of the organisation. This will occur at intervals stated in each document, all changes will be recorded. Where no changes are required, a record will be made of the date of review and state that no action is required.

What is included

As a part of the required written management system the EMS will include;

- An analysis of the significant environmental effects of the activities carried out (risk assessment)
- How to comply with and go beyond legal and other requirements
- Clear environmental objectives and targets
- Environmental action plans.
- Responsibilities for compliance will be clearly linked to a named member of staff
- Plans for training, awareness and competence of staff
- An effective communication strategy to both internal and external parties
- Document management and control procedures
- Operational control procedures
- Emergency preparedness and response plans
- Monitoring and measurement plans and records
- Records of non-conformance and corrective and preventative action that will/has been be taken as a result
- Records management
- Regular internal audits
- Regular management reviews to ensure continual improvement
- Methods to report environmental performance externally

Identifying and minimising risks of pollution

This means that the operator has stated how the landspreading activities carried out by the business can interact with the environment and may cause pollution. All possible routes for the impacts of pollution on to the environment have been identified and controlled with plans in place to minimise the chance of activities causing environmental pollution.

A site location plan is included with the application which also identifies the activities to be carried out on the site. The map section includes environmental considerations such as protection measures, sealed drainage system sensitive receptors and so on.

The site plan represents all the main features of the site and is drawn to scale. Each activity that takes place on the site and the pollution which may arise from it has been assessed. The pollution risks under normal operations as well as under abnormal operations, that is when something goes wrong, have been considered. Accidents are capable of causing significant pollution over a short period of time and will be minimised.

The following have been considered;

- Plant and machinery
- Waste disposal
- Solid waste management
- Emissions/discharges for example, noise and odour
- Storage of materials on site

Operations and maintenance

Permit condition 2.1 sets out the operations which are permitted to be carried out at the site. The EMS specifies exactly what activities the permit allows to be carried out on site. This will ensure that staff know what they are and aren't allowed to do. Written operating instructions are provided to staff who are required to use any plant and equipment present onsite.

The instructions provide direction on how equipment is to be used to achieve the work objective and address any precautions which are to be taken as part of that work to ensure any risks to the environment posed by the use of the equipment are minimised or eliminated. These instructions include details of what to do when things go wrong, that is, when the plant or equipment malfunction and how to stop a malfunction causing an adverse environmental impact.

At a minimum the maintenance advice provided by the manufacturer/supplier is followed. As many pollution incidents can be traced back to a maintenance failure, the EMS includes a plan for proactive and preventative, as opposed to reactive maintenance, of the plant and equipment used on the site.

A record that the maintenance checks were actually carried out when they were scheduled is also kept in **EMS022**.

The following information relating to the maintenance checks is entered into the form:

- The check or maintenance job done (for example, Checked hoses)
- Who did it (for example, Mr A Person)
- The result (for example, a section of worn hose was replaced)

Accidents

As required by the permit an Accident Management Plan (**AMP**) has been put in to place which can be put into action as and when required. It will be clearly communicated to all employees, managers and contractors who work at the site and is found in appendix 1.

The AMP forms part of this EMS and the following steps have been taken;

- risks have been identified from the activities carried out that could damage the environment;
- the risks have been assessed as to how likely they are to happen and the potential environmental consequences of them happening;
- action has been taken to minimise the potential causes and consequences of accidents;
- how to minimise the consequences identified should such accidents occur.

If an accident does happen and it may cause an adverse environmental impact, the permit holder will:

- immediately do what it says in the accident management plan;
- do whatever else is necessary to minimise the environmental consequences;
- take all precautions to ensure the health and safety of both employees and external people is not compromised;
- find out why the accident happened and take action to stop it happening again;

- inform the EA via the **0800 80 70 60** hotline
- review the accident management plan.

The AMP will be reviewed at least every 4 years, if management or named responsible people change or as soon as possible after an accident. Any updates or changes needed will then be put into an updated accident management plan. If no changes are needed the date of the review will be recorded and the fact that no changes were needed.

The accident management plan includes;

- A list of key contacts and contact numbers.
- Information on preventing accidents which could occur on the site and what to do if an accident happens.

Incidents and non-conformances.

All incidents and non-conformances will be recorded. This includes those reported by external people as well as those picked up in monitoring, reviews and audits of the site.

Incidents that require investigation include any malfunction, breakdown or failure of plant or equipment or techniques and any near misses which affect or potentially affect the environment. Non-conformances include where the management system is not followed as well as non-compliances with the conditions in the permit.

If an incident or non-conformance occurs the EMS will be reviewed to find the root cause of the problem and steps taken to ensure that there is no re-occurrence. The findings of the review will be communicated to employees to ensure they understand any changes that need to be made to operations or procedures.

EMS006 is used for recording accidents and incidents which occur on site and **EMS017** used for recording permit non-conformances (these are non-conformances that do not result in an accident or incident) which occur on site.

The operator will take reasonable precautions to prevent unauthorised access to the equipment used on site and any resultant pollution that unauthorised access to the equipment and/or damage may cause to the environment or human health. The withdrawn EA guidance *How to Comply with Your Environmental Permit* gives further information on when site security is necessary.

Complaints

All complaints received by the business about their activities will be recorded and acted upon. If the site receives a complaint **EMS007** will be completed and made available to the EA should they require. The forms will be used as evidence that any complaints received have been taken seriously and that actions have been taken to rectify any problems identified, especially if the EA has also received the same complaint.

Staff training and competence

Permit condition 1.1.3 requires that;

Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of the permit.

There will be enough competent staff to manage and operate the sites activities without causing pollution. Staff are competent in the activities they are expected to carry out and are also expected to be competent in normal situations but also be adequately trained so that they are competent in abnormal situations such as plant failures or accidents.

Staff roles and responsibilities are clearly defined with names placed against each role and responsibility. For example, who is the Technically Competent Manager (TCM) for the site. Documentation stating who is in charge of ensuring compliance with each part of the permit and other relevant legislation and guidance is kept. These documents will be updated at regular intervals especially if staff change roles or leave the organisation.

The training checklist and record forms **EMS020** & **EMS019** are to ensure that the recording requirements for training received by staff are met. The training checklist is used to identify the training required for each different role in the organisation.

Odour, noise and emissions management plans

The Environmental Permitting Regulations require the control of pollution including odour, noise and emissions. The potential impacts of these need to be controlled as they can have serious adverse impacts on the environment and human health. An Odour Management Plan is included as part of the EMS and includes information on how to minimise adverse impacts arising from any odour, noise or emissions produced as part of the activities carried out on the site.

Documentation of legislation and other requirements

The operator will keep a record of any applicable environmental obligations, permits, exemptions, codes of practice, legislation and any other requirements they are signed up to.

The legislation which is relevant to the permit holder's activities is kept on a register along with the names of those people in the organisation who are responsible for ensuring it is complied with.

The requirements of any permit or authorisation an organisation may have from the EA is also included in this register, along with who has responsibility for ensuring that it is complied with.

DISCLAIMER

This report has been prepared by 360 Environmental Ltd with all reasonable skill, care and diligence. It has been prepared in accordance with instructions from the client and within the terms and conditions agreed with the client. The report is based on information provided by the Client and our professional judgment at the time this report was prepared.

The report presents the professional opinion of 360 Environmental Ltd and no warranty, expressed or implied, is made.

This report is for the sole use of the permit holder and 360 Environmental Ltd shall not be held responsible for any user of the report or its content for any other purpose other than that which is was prepared and provided to the client. 360 Environmental Ltd accepts no liability to third parties.

BESPOKE ENVIRONMENTAL PERMIT APPLICATION

Appendix 10 Waste types

Prepared for: JH Willis & Son

September 2020

WASTE TYPES

T1 – T3 WASTE STREAMS

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	Soils and sludges from washing and cleaning fruit and vegetables only
02 01 03	plant-tissue waste
02 01 99	milk from agricultural premises only
02 01 99	untreated wash waters from cleaning fruit and vegetables on farm only
02 01 99	slurry and manure and soiled bedding from any premises except abattoirs, soiled biodegradable bedding not made from plant tissue, soiled bedding desiccants only
02 02	**wastes from the preparation and processing of meat, fish and other foods of animal origin**
02 02 01	untreated wash waters and sludges from washing and cleaning from abattoirs, poultry preparation plants, rendering plants or fish preparation plants only
02 02 01	wash waters and sludges from secondary food processing or the cook chill sector
02 02 02	blood and gut contents from abattoirs, poultry preparation plants, rendering plant or fish preparation plants only
02 02 04	Sludges from on-site effluent treatment plant from abattoirs, poultry preparation plants, rendering plants or fish preparation plants only
02 02 99	Slurry and manure and soiled bedding from abattoirs including soiled biodegradable bedding not made from plant tissue and soiled bedding desiccants only
02 02 99	Washwaters from animal by-product handling and processing plants that meet the waste water treatment requirements in the ABPR
02 02 99	Processed animal by-product material from rendering plants
02 02 99	Catering waste
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 and cleaning produced during food preparation and processing only

WASTE TYPES

02 03 01	wash waters and sludges from secondary food processing or the cook chill sector
02 03 01	sludges from washing, cleaning, peeling, centrifuging and separation
02 03 02	wastes from preserving agents
02 03 03	wastes from solvent extraction
02 03 04	biodegradable materials unsuitable for consumption or processing only
02 03 05	effluent from the on-site treatment of wash waters from cleaning fruit and vegetables on farm only
02 03 05	sludges from onsite effluent treatment
02 03 99	soils from cleaning and washing fruit and vegetables only
02 03 99	untreated wash waters from cleaning fruit and vegetables on farm only
02 03 99	biodegradable wastes not otherwise specified from [redacted] of such materials including those from secondary food processing or the cook-chill se[redacted]
02 04	**wastes from sugar processing**
02 04 01	soil from cleaning and washing beet
02 04 02	off-specification calcium carbonate
02 04 03	sludges from on-site effluent treatment
02 04 99	biodegradable wastes not otherwise specified derived from the processing of sugar
02 05	**wastes from the dairy products industry**
02 05 01	biodegradable materials unsuitable for consumption or processing
02 05 02	sludges from on-site effluent treatment
02 05 99	biodegradable wastes not otherwise specified derived from the processing of dairy products
02 06	**wastes from the baking and confectionery industry**
02 06 01	biodegradable materials unsuitable for consumption or processing
02 06 02	wastes from preserving agents
02 06 03	sludges from on-site effluent treatment
02 06 99	biodegradable wastes not otherwise specified from the processing of materials used in baking and confectionary
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

WASTE TYPES

02 07 03	wastes from chemical treatment
02 07 04	materials unsuitable for consumption or processing
02 07 05	sludges from on-site effluent treatment
02 07 99	biodegradable wastes not otherwise specified from the processing of the raw materials used in the production of such beverages only
03	**WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD**
03 01	**wastes from wood processing and the production of panels and furniture**
03 01 01	waste bark and cork
03 01 05	untreated sawdust and wood shavings other than those mentioned in 03 01 04 only
03 03	**wastes from pulp, paper and cardboard production and processing**
03 03 01	waste bark and wood, pulp from virgin timber
03 03 05	de-inked paper sludge and de-inked paper pulp from paper recycling only
03 03 09	lime mud waste
03 03 10	fibre rejects and sludges including mineral based fillers and coatings only
03 03 11	sludges from on-site effluent treatment other than those mentioned in 03 03 10
04	**WASTES FROM THE LEATHER, FUR AND TEXTILE INDUSTRIES**
04 01	**wastes from the leather and fur industry**
04 01 07	sludges from on-site effluent treatment free of chromium
04 02	**wastes from the textile industry**
04 02 10	organic matter from natural products only
04 02 15	biodegradable wastes from finishing other than those containing organic solvents only
04 02 20	sludges from on-site effluent treatment other than those mentioned in 04 02 19
04 02 21	wastes from unprocessed biodegradable textile fibres only
04 20 22	wastes from processed biodegradable textile fibres only
05	**WASTES FROM PETROLEUM REFINING, NATURAL GAS PURIFICATION AND PYROLYTIC TREATMENT OF COAL**
05 01	**wastes from petroleum refining**
05 01 10	activated sludges from on-site oil refinery biological effluent treatment plants other than those mentioned in 05 01 09

WASTE TYPES

07	**WASTES FROM ORGANIC CHEMICAL PROCESSES**
07 07	**wastes from the manufacture, formulation, supply and use of fine chemicals and chemical products not otherwise specified**
07 07 12	sludges from on-site biological effluent treatment plant at chemical manufacturing sites other than those mentioned in 07 07 11 only
16	**WASTES NOT OTHERWISE SPECIFIED IN THE LIST**
16 03	**off-specification batches and unused products**
16 03 06	out of date and out of specification beverages only
16 10	**aqueous liquid wastes destined for off-site treatment**
16 10 02	washwaters from animal by-product intermediate plants that meet the waste water treatment requirements in the ABPR
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**
17 05	**soils (excluding excavated soils from contaminated sites), stones and dredgings**
17 05 04	topsoil, peat, subsoil and stones only other than those mentioned in 17 05 03
17 05 06	dredging spoil other than those mentioned in 17 05 05
19	**WASTE 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 05	**wastes from the aerobic treatment of waste**
19 05 99	liquor and digestate from aerobic treatment of source segregated biodegradable waste only
19 06	**wastes from the anaerobic treatment of waste**
19 06 03	liquor from anaerobic treatment of non-source segregated biodegradable waste
19 06 04	whole digestate and fibre digestate from anaerobic treatment of non-source segregated biodegradable waste
19 06 05	liquor from anaerobic treatment of source segregated biodegradable waste
19 06 06	whole digestate and fibre digestate from anaerobic treatment of source segregated biodegradable waste
19 06 06	whole digestate and fibre digestate from anaerobic treatment of source segregated biodegradable waste and sludges from treatment of urban waste water only

WASTE TYPES

19 09	**wastes from the preparation of water intended for human consumption or water for industrial use**
19 09 02	sludges from water clarification
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**
20 02	**garden and park wastes (including cemetery waste)**
20 02 01	seaweed only
20 02 01	plant tissue waste from parks only
20 02 02	soils and stones [redacted]

WASTE TYPES

MATERIALS FOR LIME TREATMENT ONLY (T4 – T5)

Waste code	Description
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF SITE WASTE WATER TREATMENT PLANTS AND PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION/INDUSTRIAL USE**
19 02	
19 02 06	sludges from physico-chemical treatment other than those mentioned in 19 02 05 (sewage sludge only).
19 05	
19 05 03	sewage sludge composted with biodegradable non-w[redacted]
19 05 03	off-specification compost (sewage sludge only).
19 06	
19 06 06	digestate from anaerobic treatment of animal and vegetable waste (sewage sludge only).
19 08	**wastes from waste water treatment plants not otherwise specified**
19 08 01	screenings
19 08 02	waste from desanding
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 09	**wastes from the preparation of water intended for consumption or water for industrial use**
19 09 02	sludges from water clarification
19 09 03	sludges from decarbonation
19 09 06	solutions and sludges from regeneration of ion exchangers
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**
20 03	**Other municipal wastes**
20 03 04	Septic tank sludge
20 03 06	from sewage cleaning
20 03 99	municipal wastes not otherwise specified (cesspool waste and other sewage sludge only)

[redacted]