Noise Management Plan

Site Details

Site name: Devon Anaerobic Digestion Plant

Site address: Hide Market Road, Willand, Cullompton, EX15 2FP

Operator name: Acorn Bioenergy Operations Limited

Permit number: EPR/WP3533AJ

Who this plan is for

- **Who should be made aware of this plan?**

All operational staff and relevant contractors.

- **How will they be made aware?**

Training and awareness for staff and contractors as part of training on the wider Environmental Management System.

The current version of the NMP will also be provided to the Environment Agency, customers and other interested stakeholders upon request.

Document owner

Document author: Acorn Bioenergy Operations Limited

Version number: V1.0

List of revisions

Revision number	Revision authorised by	Date submitted to Environment Agency	Revision owner
V1.0	First Issue	29/09/2026	Acorn Bioenergy Ltd

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1. Introduction

This Noise Management Plan (NMP) applies to the processes and activities to be undertaken by Acorn Bioenergy Operations Limited (ABL) (the Operator) at the Devon AD Plant, Hide Market Road, Willand, Cullompton, EX15 2FP (the Site) and has been produced by Acorn Bionergy Ltd.

This version of the NMP has been written to support the environmental permit application for the proposed site, which requires a bespoke installation permit (Permit ref: EPR/WP3533AJ). It is a live document that will be updated accordingly throughout the construction, commissioning, operation and closure of the AD plant.

The NMP has been developed utilising the Environment Agency Noise Management Template V 1.2, dated 02/12/2025 and should be read in conjunction with the BS4142:2014 +A1:2019 Noise Impact Assesment, Inacoustic Ltd, 20 July 2026 provided to support the permit application. The movement of vehicles to, from, and between the different areas of the site and the operation of fixed and mobile plant within the site can inevitably lead to the generation of noise. Effective operation and management are therefore required to minimise the noise emissions from routine operations and minimise the risk of abnormal operational conditions resulting in increased risk of noise generation at the site.

Planning permission (reference 19/01986/DCC) for the site granted by Mid Devon District Council stipulates the following in Conditions 9 and 15

9. No vehicle or mobile plant used (other than visiting road lorries) shall be operated within the permission area unless they have been fitted with and use "white noise" alarms.

REASON: In the interest of protecting the local environment and community from adverse impact of noise generated at the site and to comply with policies of the Development plan: in particular Policies W02 of the Devon Waste Local Plan and Policy COR01 of the Mid Devon Local Plan

15. There shall be no deliveries or removal of digestate from this site between the hours 20.00 and 07.00.

REASON: In the interest of protecting the local environment and community from adverse impact of noise generated at the site and to comply with policies of the Development plan: in particular Policies W02 of the Devon Waste Local Plan and Policy COR01 of the Mid Devon Local Plan

This NMP sets out the appropriate measures that the Operator will undertake to control noise emissions from the facility to ensure that noise emissions do not impact off-site receptors. The NMP will enable the Operator to assess and where possible prevent emissions of noise from the site that may result in annoyance and/or adverse environmental impacts.

1.1 Site description

The facility will treat around 100,780 tonnes per annum (TPA) of liquid and solid feedstocks comprising livestock waste (poultry litter, pig and cattle slurry), energy crops and crop residues; as well as dirty water to supplement process water use. The 3.3 ha of site area was previously developed brownfield and farmland. An AD plant has been operated on the Site since 2018.

The site will produce 20.382.803Nm3/y of biogas which will be used on site to generate heat and power and upgraded to biomethane for injection to the National Gas Grid via the Grid Entry Unit and carbon dioxide captured for use or sequestration. In addition, around 39,631 tpa of solid fibre digestate and 54,488 tpa of liquid digestate will be produced to be used as a biofertiliser on local farms.

The site permitted area is 3.3 hectares in extent. Devon AD Plant is an anaerobic digestion facility located at Hide Market Road, Willand, Cullompton, Devon, EX15 2FP. The site lies within a mixed-use area on the edge of Willand, characterised by a combination of established industrial operations and surrounding agricultural land. Immediately to the south is the 2 Sisters Food Group (2SFG) poultry processing facility, with the 2SFG effluent treatment works located directly to the north. To the east, the site is bounded by the main Bristol-Exeter railway line, with residential areas of Willand beyond, and the M5 motorway located further east. Land to the west and parts of the north and south beyond the adjacent operational uses remains in agricultural use.

The AD process involves a biological process that is continuous, therefore the processing plant will be operational 24/7 once it is constructed and commissioned. However, the normal operational hours for the site are 0600 to 1800, Monday to Sunday inclusive, thus avoiding night-time vehicle movements.

The planning permission restricts deliveries or removal of digestate between 20.00 and 07.00 hours with a maximum 35 HGV movements per day averaged over 12 months.

1.2 Maintenance and review of the NMP

The Noise Management Plan **(NMP)** is a live working document which forms part of the wider Environmental Management System (EMS) for the site. All controlled EMS documents are held within a cloud-based system on site. Documentation is controlled through an Integrated Management System document control system. The Operational Site Manager holds responsibility for implementation of the NMP including training of relevant staff.

This NMP is a live document which will be reviewed annually or sooner if any of the following occur:

- if there have been noise complaints;
- if there are relevant changes to the site operations, infrastructure, or management.

Operational staff will be made aware of the NMP as part of their induction training and refresher toolbox talks will be provided by the Site Manager to operatives to ensure that all control measures are understood and implemented. Training will be logged within the Training Matrix **(ACD 005g)**

ABL understands the importance of addressing both internal and external complaints in a prompt and comprehensive manner to resolve any issue as quickly as possible. All complaints are dealt with according to the Complaints Procedure **(ACP 006)**. The Site Manager will be responsible for logging, investigating and following up on any noise complaints. See Section 5 Complaints Reporting.

The Site Manager will be responsible for ensuring that noise monitoring and any required corrective actions are completed. There will be Daily Checks for the presence of abnormal noise within the site boundary which may indicate plant or equipment that needs to be inspected and maintained in

addition to the planned preventative maintenance egime in place (See Section 4.2). In addition, there will be a Weekly Check for noise at off-site monitoring locations as detailed within Section 4.3. This will be recorded in the Noise Monitoring Form. Qualitative operational noise monitoring will be undertaken once the site is operational to inform the noise monitoring frequency required. Off-site noise monitoring may be stopped if no off-site noise impact complaints are received or substantiated. Conversely, off-site monitoring frequency will be increased if off-site noise impacts are substantiated, noise complaints are received or there is ongoing abnormal on-site noise.

1.3 Relevant sector guidance on which this NMP is based

The Noise Impact Assessment[1] which was carried out as part of the permit application for the site was undertaken using the methodology in 'Methods for rating and assessing industrial and commercial sound - BS 4142:2014+A1:2019'.[2]

This NMP has been written with reference to the notes within the template NMP provided and gov.uk guidance on Noise and vibration management: environmental permits.[3]

The noise control and mitigation measures in Section 4 of the NMP are informed by indicative Best Available Techniques as stated in the BREF document 'Best Available Techniques Reference Document for Waste Treatment'[4] to ensure that all relevant areas are included.

[1] Noise Impact Assessment, Inacoustic, version 2, 20th July 2026.
[2] The British Standards Institution (2019). Methods for rating and assessing industrial and commercial sound (BS 4142:2014+A1: 2019)
[3] https://www.gov.uk/government/publications/noise-and-vibration-management-environmental-permits/noise-and-vibration-management-environmental-permits
[4] Best Available Techniques (BAT) Reference Document for Waste Treatment, European IPPC Bureau, 2018

2. Receptors

2.1. Receptor List

Table 2.1. Receptor list

Receptor reference	Description	Land use e.g. house, school, hospital, commercial	Direction from site (north, south, east, west)	Approximate distance to site boundary (m)
R1	Two Sisters Food Group, (Lorry Park E)	Commercial	S	15
R2	Two Sisters Food Group, (Lorry Park W)	Commercial	S	40
R3	Wastewater treatment works	Sewage treatment	N	40
R4	Burn Rew Farm, Willand, Cullompton	Residential	SW	100
R5	Properties off Lloyd Maunder Road (opposite 2 Sisters Entrance)	Residential	SE	100
R6	Two Sisters Food Group, Lloyd Maunder Rd, Willand, Cullompton EX15 2PJ	Commercial (Abattoir)	SW	105
R7	Bagsters Cottages, Willand Cullompton, EX15 2PJ	Residential	SW	130
R8	Dwellings off Park Street (Willand Village)	Residential	E	210
R9	Barnes Close	Residential	E	220
R10	Agricultural Barn	Agriculture	SW	255
R11	Park Farm Estate	Commercial	NE	265
R12	Station Road	Residential	NE	270
R13	South View Estate	Commercial	NE	300

R14	Properties off Willand Road (south)	Residential	N	415
R15	Tamarind Road	Residential	SE	450
R16	Woodhayes Farm	Residential	NW	450
R17	Withy Field (Properties behind Tiverton Substation)	Residential	N	450
R18	Meadow Park	Residential	SE	500
R19	Willand School	School	E	580
R20	Dean Hill Farm	Farm	S	600
R21	Slough Farm	Farm	NW	635
R22	Gerston Farm, Dean Hill Road, Willand, Cullompton, Mid Devon, Devon, EX15 2PG	Residential/farm buildings	S	810
R23	Fisher's Bridge Farm	Residential	NW	845
R24	Braddons Farmhouse	Residential	NE	860
R25	Properties off Willand Road (north)	Residential	NW	950
R26	Yeo Farm	Farm	NE	1205
R27	Five Bridges (Village)	Residential	S	1520

These receptors are shown on the Human Receptors Location Plan (Appendix A- Site Plans).

3. Noise sources and processes

The operation of the AD plant is fully automated from an on-site central control panel located in the Control Room which monitors information transmitted from field instrumentation around the AD plant. This is known as the Supervisory Control and Data Acquisition (SCADA) system. This information can be viewed both on site and remotely to ensure optimisation and safe operation of the anaerobic digestion and associated processes.

3.1 Noise impact assessment (NIA) conclusion

The NIA has been undertaken based on modelled and predicted levels as although remediation construction works were being undertaken when the noise measurements for the NIA were undertaken the site was not operational.

The sound power levels in dB (shown as A-weighted sound power level (LWA) of the various Noise Sources on site are shown in Table 8 of the NIA. The most significant noise sources as predicted in the NIA are:

- Biogas upgrading unit (BUU) and carbon dioxide (CO_2) recovery unit (96 Db)
- Heavy Good Vehicles (HGVs) entering and leaving the site (95dB); these movements will be within planning permission restricted hours only
- Pumps within the pump room and CHP1 within a soundproof container (94 (dB)

Note: the NIA has considered all noise sources to be operating continuously and simultaneously for the proposed day and night-time plant operations, thereby tending toward a worst-case.

The NIA recommended that a 4m high noise barrier be installed at the site boundary facing the closest noise sensitive receptors (NSRs). This is predicted to reduce the noise impact from the Site by 1 dB at the nearest NSR. Inclusive of this noise barrier the conclusions of the NIA are as follows:

“Inacoustic has been commissioned to prepare a Noise Impact Assessment for an Anaerobic Digestion Energy Facility on Land off Hide Market Road, Willand, Cullompton (EX15 2FP), as part of an Environmental Agency Permit Application.

At all receptors, during both the daytime and night-time periods, the site activities are likely to give rise to a “Low Impact”, in BS 4142:2014+A1:2019 terms.

Noise arising from the operation of the site has been modelled and predicted in the context of the typical background sound conditions in the area and assessed under worst-case scenario conditions.

The low impact identified through modelling and assessment demonstrates that no further mitigation is required beyond that already incorporated into the design of the non-operational AD facility on the site; however, a range of basic operational measures has also been recommended which will ensure that the noise impact is kept to a minimum during day-to-day operations.

When operated in the manner considered in this report, the Site is considered to be compliant with the requirements of the Noise and Vibration Management: Environmental Permits, demonstrating BAT where possible, as outlined in Section 7.”

It is proposed that a further operational quantitative noise assessment be undertaken to verify the model findings of installed equipment to confirm whether a 4m noise barrier or alternative sound proofing is required to mitigate noise risk for both onsite and offsite purposes.

3.2 Noise Sources

See Appendix A Site Plans for Noise Emitting Layout which shows the site layout in relation to noise emitting processes including mobile noise emitting sources. Table 3.2 below details the predicted sound power and pressure levels of the noise sources along with the operational conditions.

Table 3.2 Description of noise emitting processes

Noise source reference ID	Noise source	Sound power level (dBA)	Sound pressure level (dBA)	Measurement distance (m)	Operational conditions	Additional comments
N1	HGV	95	67	10 m	Within planning permission restrictions.	NIA assumes- HGV movements in the daytime (between the hours of 07:00 – 17:30) have been modelled based on the maximum number of HGV movements of 8 deliveries an hour, which allows for 84 inbound and 84 outbound (168 total) to and from the site.
N2	CHP1	94	66	10 m	24 hours/day	The sound level is based on the technical specification provided by the supplier.
N3	CHP2	88	60	10 m	24 hours/day	The sound level is based on the technical specification provided by the supplier.
N4	Pumps for Heat System	93	65	10 m	24 hours/day	The predicted sound levels are based on the assumptions made during the assessment. A real-time operational noise assessment will be undertaken once the facility is fully operational.
N5	Pump Room 1	94	66	10 m	24 hours/day	
N6	Pump Room 2	94	66	10 m	24 hours/day	
N7	Pump Room 3	94	66	10 m	24 hours/day	
N8	Pump Room 4	94	66	10 m	24 hours/day	
N9	Chiller unit	93	65	10 m	24 hours/day	

Noise source reference ID	Noise source	Sound power level (dBA)	Sound pressure level (dBA)	Measurement distance (m)	Operational conditions	Additional comments
N10	Biomethane Upgrade and Co2 recovery unit	96	68	10 m	24 hours/day	The noise level considered in the NIA are likely worst case, actual noise emissions from these items may be lower. Operational quantitative noise monitoring will be undertaken once the site is operational.
N11	Emergency Back-up Generator	93	65	10 m	Emergency use only	The noise level from the technical specification provided by the supplier.
N12	Emergency Boiler (Viessmann VITOPLEX 200) Container			10 m	Emergency use only	The noise level from the technical specification provided by the supplier.
	In front of the boiler	<76 / <77	<88 / 89	10 m		
	In the flue pipe	<104 / 111	<116 / 123	10 m		
	Forced draught gas and Biogas burner (Riello UKCA)	83	55	10 m		
N13	Odour Control unit/Fan (EXEON Unit)	78	50	10 m	24 hours/day	From the technical specification.
N14	Primary digester 1- Wall mounted agitators - 4 Nos.	73	45	10 m	24 hours/day	Measures data from one of our operational sites.
N15	Primary digester 2- Wall mounted agitators - 4 Nos.	73	45	10 m	24 hours/day	
N16	Primary digester 3- Wall mounted agitators - 4 Nos.	73	45	10 m	24 hours/day	

Noise source reference ID	Noise source	Sound power level (dBA)	Sound pressure level (dBA)	Measurement distance (m)	Operational conditions	Additional comments
N17	Post Digester 1- Roof mounted agitators - 3 Nos.	73	45	10 m	24 hours/day	In the NIA, the agitators provided for the post digester tanks are assumed 0.5 m above the tank roof height.
N18	Post Digester 2 - Vertical shaft agitator - 1 No.	73	45	10 m	24 hours/day	
N19	Post Digester 3 - Roof mounted agitators - 3 Nos.	73	45	10 m	24 hours/day	
N20	Separated Liquid Tank - Vertical shaft agitator - 1 No.	73	45	10 m	24 hours/day	
N21	Emergency Gas Flare	78	50	10 m	Approx. 2.4 hours/day	Emergency use only.
N22	Mobile Equipment Loader 1	90	62	10 m	Within operational hours	Approximately 10 movements per hour.
N23	Mobile Equipment Loader 2	90	62	10 m		
N24	Primary Digester - Gas Holder Blowers - 6 Nos.	91	63	10 m	24 hours/day	--
N25	I-Grind Straw Processing Unit	83	55	10 m	Within operational hours	Noise level based on the Manual provided by the supplier.

3.3 Overview of noise processes and emissions

See Appendix A Site Plans for Noise Emitting Layout which shows the site layout in relation to noise emitting processes including mobile noise emitting sources.

The process description is summarised below (a detailed description can be found within Section 5 of the EMS Manual **(ACD 014d- DGPL).**

The operation of the AD plant is fully automated from an on-site central control panel located in the Control Room which monitors information transmitted from field instrumentation around the AD plant. This is known as the Supervisory Control and Data Acquisition (SCADA) system. This information can be viewed both on site and remotely to ensure optimisation and safe operation of the anaerobic digestion and associated processes.

The facility will treat around 100,780 tonnes per annum (TPA) of liquid and solid feedstocks comprising livestock waste (poultry litter, pig and cattle slurry), energy crops and crop residues; as well as dirty water to supplement process water use.

During harvest time (7 weeks of the year) tractors and trailers will bring in energy crops into the site for storage in the silage clamps. All year round there will be HGV movements bringing in solid manures to the Manure reception building and slurry to the Liquid Feedstock Tank/s.

The solid manures are stored and loaded into a hopper using mobile plant within the dedicated Manure reception building fitted with bespoke emissions abatement plant. The waste feedstocks are macerated, screened, and mixed with recirculated digestate liquor and process water.

Energy crops are grown under contract with local farms and are either ensiled on site within the Silage Clamp and covered with an impermeable cover or stored at supplier farms and delivered to site as required throughout the year.

Cereal straw is stored temporarily within the silage clamp area before being processed within the I-GRIND Tub grinder equipment and loaded into the external feed hoppers (FS1 and FS2).

The AD process comprises three primary digesters operating in parallel, followed by a series of post digesters utilising Biogest Power Ring technology, comprising an outer and inner tank. Feedstocks are introduced into Primary Digesters 1, 2 and 3 where anaerobic digestion and biogas production commence before being transferred to the post-digestion stage for further retention and biogas generation.

The 2 No. PowerRing tanks (Digesters 4 and 5) comprise of Post Digesters 1, 2 (Outer and inner ring of Digester 4) and 3 (outer ring of Digester 5) and operate predominantly operated in series, Digestate is transferred from one tank to the next via a combination of overflow arrangements and dedicated transfer pumps, with transfer rates and tank levels controlled through the SCADA system.

Following retention within Post Digester 3, digestate is transferred to the digestate separation process. Separated fibre is discharged to the digestate fibre storage bunker, whilst separated digestate liquor is transferred to the inner tank of Digester 5 for storage. It is referred to as the Separated liquid storage tank.

The stored separated liquid is either exported from the site for use as a biofertiliser or recycled as process liquid for the AD feed process.

Separated fibre digestate is periodically removed from the digestate storage bunker and transferred to destination field heaps for agricultural use as a soil improver and biofertiliser.

The biogas will be upgraded into biomethane which will be transported offsite for injection at a central gas to grid injection point. In addition, carbon dioxide (CO_2) from the biogas will be captured and upgraded to 99.9% purity. The treated CO_2 is suitable for almost all industrial and commercial applications in the UK. Upgraded CO_2 would be liquefied and transported by road to end users.

There are 2 No. combined heat and power engines (CHPs); one of which will burn biogas and the other natural gas to produce heat and electricity. Heat from the CHPs is used to maintain the temperature of the digesters and to provide heat to the pasteurisers.

There is an emergency flare in place to burn excess biogas during abnormal operations.

The site layout is such that the nearest sensitive receptors are located further away from potentially noisy equipment such as the CHPs and flare than other parts of the site.

4. Control measures and process monitoring

4.1 Appropriate measures / Best available techniques (BAT)

Table 4.1 Actions and procedures which will be in place to achieve appropriate measures / best available techniques (BAT)

Activity which produces noise	Operational Hours / days	Control measures (Appropriate Measure / BAT)	Contribution to overall impact	Action taken if outside optimum process parameters
HGV movements	There will be no deliveries or removal of digestate from this site between the hours 20.00 and 7.00.	Vehicles are restricted to 10 miles per hour on site as a health and safety measure; this also reduces potential noise emissions.	High	Operational hours can be controlled but the noise emissions from third party vehicles are not under the operator's direct control.
2 No CHPs	24 hours	The CHPs are fully enclosed within a sound proofed container. Stack silencer will be fitted to both CHP stacks as per assumed mitigation in NIA. The CHPs are away from the nearest noise sensitive receptors as part of the site design layout. Emergency stop will be activated, if any occurrence of sudden unknown conditions, e.g., abnormal noises (rumbling, knocking) or movements of machine parts.	Medium	Further mitigation measures will be considered in accordance with BAT if the operational CHPs are found to contribute to off-site noise impacts at noise sensitive receptors.
Pumps for heat system	24 hours	Planned preventative inspection and maintenance and daily checks.	Medium	No further control measures proposed.

Activity which produces noise	Operational Hours / days	Control measures (Appropriate Measure / BAT)	Contribution to overall impact	Action taken if outside optimum process parameters
Pump rooms	24 hours	Pumps within containers which attenuate noise. Planned preventative inspection and maintenance and daily checks.	Medium	No further control measures proposed.
Chiller unit	24 hours	Planned preventative inspection and maintenance and daily checks.	Medium	No further control measures proposed.
Biomethane upgrade unit (BUU) and CO_2 recovery unit	24 hours	The BUU will have an acoustic enclosure. The BUU and CO2 capture unit are supplied as containerised systems. It provides the acoustic screening for the associated noise generating equipment, including compressors, fans, etc. Access doors to the equipment containers will be kept closed during normal operation, except where access is required for inspection, maintenance or other operational activities. Planned preventative inspection and maintenance and daily checks.	High	Further mitigation measures will be considered in accordance with BAT if the operational BUU and / or the CO_2 recovery unit are found to contribute to off-site noise impacts at noise sensitive receptors.
Emergency Back-up Generator	Emergency use only	Will be provided with Acoustic canopies.	Low	No further control measures proposed.
Emergency Boiler	Emergency use only	Will be provided with Acoustic canopies.	Low	No further control measures proposed.

Activity which produces noise	Operational Hours / days	Control measures (Appropriate Measure / BAT)	Contribution to overall impact	Action taken if outside optimum process parameters
Odour abatement scrubber	24 hours	Planned preventative inspection and maintenance and daily checks.	Medium	No further control measures proposed.
Primary digester 1- Wall mounted agitators - 4 Nos.	Continuous	Planned preventative inspection and maintenance and daily checks	Low	No further control measures proposed.
Primary digester 2- Wall mounted agitators - 4 Nos.	Continuous	Planned preventative inspection and maintenance and daily checks	Low	No further control measures proposed.
Primary digester 3- Wall mounted agitators - 3 Nos.	Continuous	Planned preventative inspection and maintenance and daily checks	Low	No further control measures proposed.
Post Digester 1- Roof mounted agitators - 3 Nos.	Continuous	Planned preventative inspection and maintenance and daily checks	Low	No further control measures proposed.
Post Digester 2 - Vertical shaft agitator - 1 No.	Continuous	Planned preventative inspection and maintenance and daily checks	Low	No further control measures proposed.
Post Digester 3 - Roof mounted agitators - 3 Nos.	Continuous	Planned preventative inspection and maintenance and daily checks	Low	No further control measures proposed.
Separated Liquid Tank - Vertical	Continuous	Planned preventative inspection and maintenance and daily checks	Low	No further control measures proposed.

Activity which produces noise	Operational Hours / days	Control measures (Appropriate Measure / BAT)	Contribution to overall impact	Action taken if outside optimum process parameters
shaft agitator - 1 No.				
Emergency Gas Flare	Emergency use only	Planned preventative inspection and maintenance and daily checks	Low	No further control measures proposed.
Mobile plant – front loaders moving feedstocks around site	Operational hours restricted in accordance with planning permission	Vehicles are restricted to 10 miles per hour on site as a health and safety measure; this also reduces potential noise emissions. Use of less intrusive alarms, such as broadband vehicle reversing warnings. Planned preventative inspection and maintenance and daily checks. Plant will be switched off when not in use.	Medium	No further control measures proposed
Digester tank air support blowers	24 hours a day	Planned preventative inspection and maintenance and daily checks	Low	No further control measures proposed.
I- GRIND Tub grinder for Straw processing	Day time operations only.	The I-Grind will be operated and maintained in accordance with the manufacturer's instructions. The equipment will be routinely inspected and maintained to prevent abnormal noise arising from worn, damaged or poorly maintained components. The grinder will only operate when required for feedstock processing, and unnecessary operation will be avoided.	Medium	Further mitigation measures will be considered in accordance with BAT if the operational fixed plant is found to contribute to off-site noise impacts at noise sensitive receptors.

The noise levels used in the NIA are primarily based on supplier technical specifications and assumed source noise levels. Once the facility is operational, quantitative noise monitoring will be undertaken to verify the actual operational noise levels against those assumed in the NIA. Based on the results of this verification and the recommendations of the NIA, the suitability of installing the suggested 4 m high noise barrier or alternative noise abatement, will be assessed and installed if required.

4.2 Onsite monitoring procedures

Table 4.2 Description of onsite processes which will ensure impacts do not increase on site.

Description of procedure	Procedure	When will this be carried out?	Corrective action
Staff training	Training of site personnel to raise awareness of noise at nearby sensitive receptors and the control measures within the current NMP	Periodic training for all staff and induction training for new starters	Training provision will be reviewed if it is identified that it can be improved to maximise control of noise emissions.
Good practice on site	All vehicles and plant will be switched off when not in use. Use of less intrusive alarms, such as broadband vehicle reversing warnings. Plant items that comply with the relevant UK noise limits applicable to that equipment will be used.	Continuously as part of the NMP	Periodic training
Safety checks	Site Operatives are required to undertake checks as part of operating procedures e.g., checking that feeding systems and pumps are operating correctly.	Before the start of each shift	Should a noticeable increase in noise occur during a shift, the Site Operative is required to report it to the Site Manager.
Visual checks	Site Operatives are required to undertake checks as part of operating procedures	Before the start of each shift	Should a noticeable increase in noise occur during a shift, the Site

Description of procedure	Procedure	When will this be carried out?	Corrective action
			Operative is required to report it to the Site Manager.
Maintenance, servicing and repair	Plant will be operated and maintained appropriately, having regard to the manufacturer's written recommendations or using other appropriate operation and maintenance programmes which reduce noise emissions	As prescribed by the manufacturer and in accordance with planned preventative maintenance schedules	Should a noticeable increase in noise occur during a shift, the Site Operative is required to report it to the Site Manager. Following the report of increased noise, further investigation of the plant item will be undertaken to establish the cause of the increased noise emission and identify a suitable solution.
Process monitoring / plant efficiency	Mixers and pumps to be operated under controlled and steady state conditions	Continuously	Supervisory Control and Data Acquisitioning (SCADA) is programmed to perform certain control decisions based on data collected – control functions could include turning mixers on/off, adjusting temperature and regulating a variety of processes including feed rate.

4.3 Monitoring off site sound levels

Quantitative off-site monitoring is not currently proposed. A robust NIA was provided with the permitting applications which concluded:

"At all receptors, during both the daytime and night-time periods, the site activities are likely to give rise to a "Low Impact", in BS 4142:2014+A1:2019 terms.

Noise arising from the operation of the site has been modelled and predicted in the context of the typical background sound conditions in the area and assessed under worst-case scenario conditions.

The low impact identified through modelling and assessment demonstrates that no further mitigation is required beyond that already incorporated into the design of the non-operational AD facility on the site; however, a range of basic operational measures has also been recommended which will ensure that the noise impact is kept to a minimum during day-to-day operations.

When operated in the manner considered in this report, the Site is considered to be compliant with the requirements of the Noise and Vibration Management: Environmental Permits, demonstrating BAT where possible."

The applicability of BAT 17[4] 'In order to prevent or, where that is not practicable, to reduce noise and vibration emissions, BAT is to set up, implement and regularly review a noise and vibration management plan, as part of the environmental management system' is restricted to cases where a noise or vibration nuisance at sensitive receptors is expected and/or has been substantiated.

Quantitative off-site noise monitoring will be carried out, in addition to qualitative weekly checks. The three off-site monitoring locations used for the development of the NIA representative of the nearest noise-sensitive receptors will be used in addition to one flexible downwind location to be determined at the time of the survey.

The results of this monitoring will be recorded in the Noise Monitoring Form**.** The ongoing frequency of off-site noise monitoring may be reduced/stopped if off-site noise impacts are unsubstantiated and no complaints are received. Conversely, the off-site monitoring frequency will be increased if off-site noise impacts are substantiated, noise complaints are received or there is ongoing abnormal on-site noise.

Figure 4.1 – plan showing locations of sound level measurement positions used to monitor sound from the site (Figure 3 of the Noise Impact Assessment, Inacoustic[1])



If off-site monitoring detects noise emissions that are attributable to on-site activity:

- If the source of off-site noise can be ascertained, then any reasonable short term mitigation measures will be undertaken, and then on-site and off-site noise levels reassessed.

- If there is still detectable off-site noise attributable to the site operations, then a quantitative noise survey proposal scope will be agreed with the EA.

- The survey will be carried out within agreed parameters by a competent person who is either a full member of the Institute of Acoustics (IOA) or has successfully completed the IOA certificate of competence in environmental noise course.

- Further mitigation measures in line with Best Available Techniques will be considered and implemented as appropriate. The NMP will be revised and the updated version shared with the EA.

5. Complaints Reporting

The site will benefit from a sign at the site entrance which will provide the following information to members of the public:

- Site name and permit number
- Environment Agency contact details (including the 24-hour Incident Hotline Number)
- Duty Site Manager contact details

All complaints are handled in accordance with the Complaints Procedure (**ACP 006)**. In accordance with the Complaints Procedure:

All staff are responsible for reporting all complaints to the Site Manager as soon as possible.

In the case of all complaints from any source, the Site Manager is responsible for:

- Contacting the complainant to find out the circumstances of the complaint.
- Carrying out an assessment of site activities and weather (if applicable).
- Implementing actions to rectify or prevent recurrence. In the case of odour complaints, the site-specific Odour Management Plan must be followed. In the case of noise complaints, the site-specific Noise Management Plan must be followed.
- Recording the complaint and investigation on the Complaint Form **(ACD 006a)**
- Ensuring that feedback is provided to the complainant and that all relevant members of staff are made aware of the complaint and the action/changes taken to address it.
- If there is a substantiated complaint of pollution including dust, odour or noise then the EA must be informed as soon as practicably possible and within 24 hours.
- Notifying the Operations Director and the Health, Safety, Environment & Quality Manager.

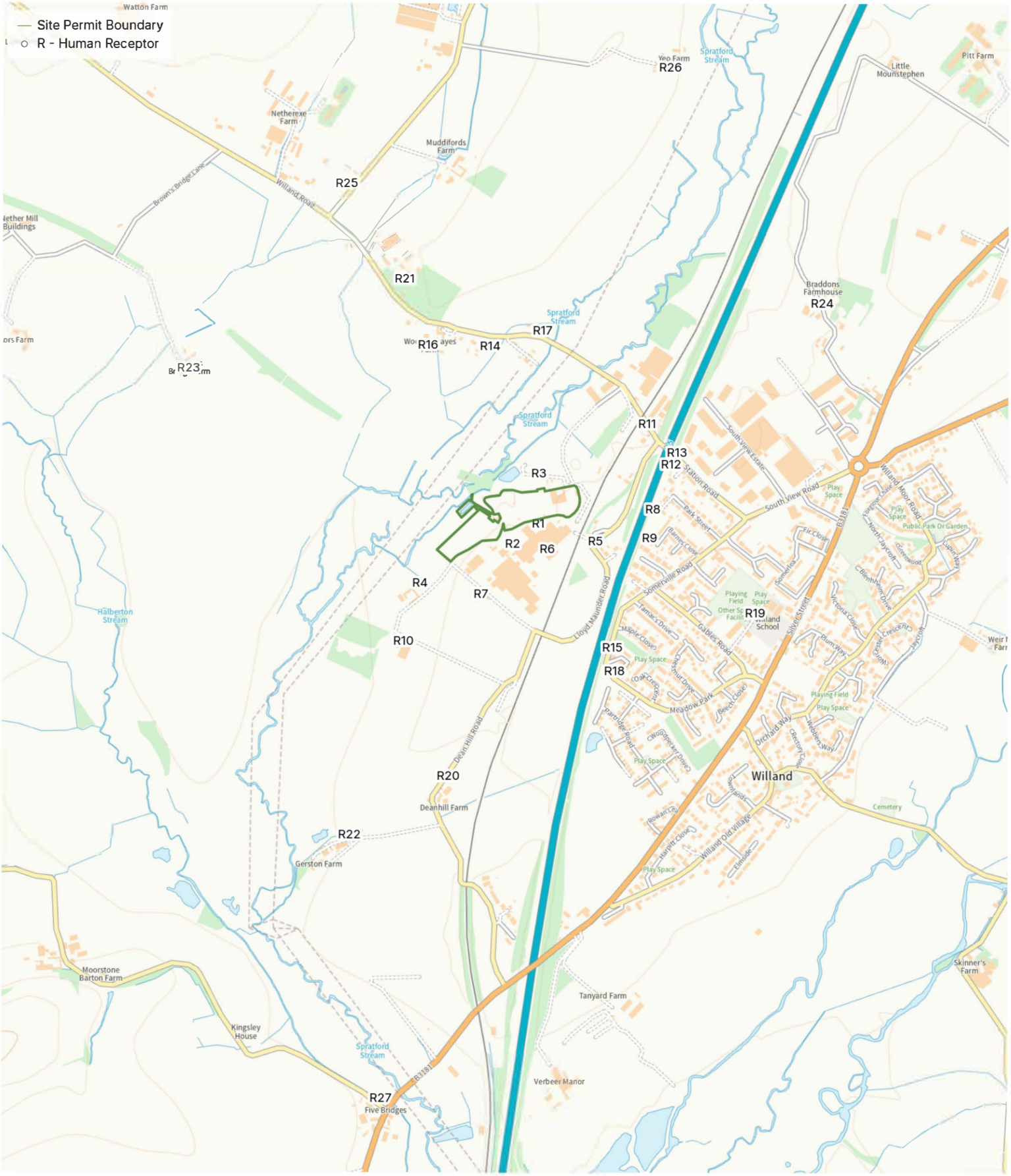
Appendix A – Site Plans

Human Receptors Location Plan, Earthcare Technical Limited (Drawing number: ETL724/THRM/HumanReceptors/EPR02)

Noise Emitting Layout, GGP Consult Limited (Drawing number 29348/204)

Earthcare TECHNICAL

Human Receptor Plan
ETL981_DGPL_HumanReceptors_EPR02

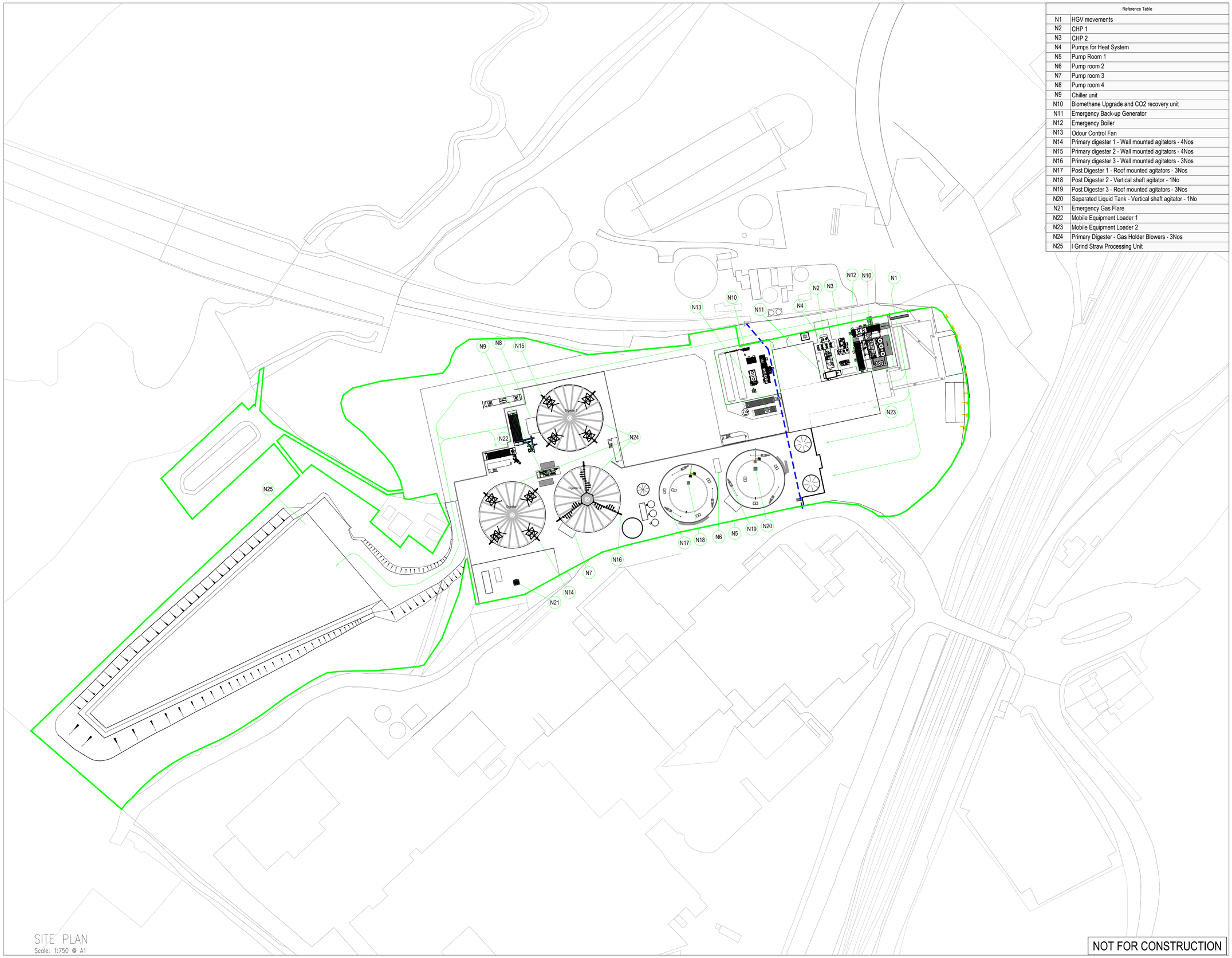


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500 m
Scale 1:14000 (at A4)

N

AS NOTED ON A1 FRAME



Reference Table	
N1	HGV movements
N2	CHP 1
N3	CHP 2
N4	Pumps for Heat System
N5	Pump Room 1
N6	Pump room 2
N7	Pump room 3
N8	Pump room 4
N9	Chiller unit
N10	Biomethane Upgrade and CO2 recovery unit
N11	Emergency Back-up Generator
N12	Emergency Boiler
N13	Odour Control Fan
N14	Primary digester 1 - Wall mounted agitators - 4Nos
N15	Primary digester 2 - Wall mounted agitators - 4Nos
N16	Primary digester 3 - Wall mounted agitators - 3Nos
N17	Post Digester 1 - Roof mounted agitators - 3Nos
N18	Post Digester 2 - Vertical shaft agitator - 1No
N19	Post Digester 3 - Roof mounted agitators - 3Nos
N20	Separated Liquid Tank - Vertical shaft agitator - 1No
N21	Emergency Gas Flare
N22	Mobile Equipment Loader 1
N23	Mobile Equipment Loader 2
N24	Primary Digester - Gas Holder Blowers - 3Nos
N25	I Grind Straw Processing Unit

SITE PLAN
Scale: 1:750 @ A1

NOT FOR CONSTRUCTION

NOTES:-

Permitted Area Boundary (3.34ha)

Two Sisters Food Group effluent discharge pipe

N

Rev	Date	Description	DR	CH
E	09/07/26	Issue for Permit	SJC	
D	26/06/26	Issue for Permit	SJC	
C	03/06/26	Revised Layout	SJC	–
B	01/05/26	Revised Layout	HG	SJC
A	11/03/26	Preliminary Issue	SJC	–

acorn BIOENERGY

Job Title
AD Plant.
Devon AD Plant

Drawing Title
Devon AD Plant
Noise Emitting Layout

Status Approval

Scale As Shown | Date Mar '26

Drawn By HG | Checked SJC | Approved –

Drg. No. DGP–ABE–LAY–113 | Rev E