SITE CONDITION REPORT

For full details, see H5 *SCR guide for applicants* v2.0 4 August 2008

COMPLETE SECTIONS 1-3 AND SUBMIT WITH APPLICATION

DURING THE LIFE OF THE PERMIT: MAINTAIN SECTIONS 4-7

AT SURRENDER: ADD NEW DOC REFERENCE IN 1.0; COMPLETE SECTIONS 8-10; & SUBMIT WITH YOUR SURRENDER APPLICATION.

1.0 SITE DETAILS	
Name of the applicant	G.S.T. Limited
Activity address	EPR/JP3228LQ Hubbard's Farm Poultry Unit, Shalford Green, Braintree, CM7 5AZ
National grid reference	Study area for SCR centred on TL 71738 27786
Document reference and dates for Site Condition Report at permit application and surrender.	1. Application Bespoke Site Condition Report - to support an application for an environmental permit for rearing poultry under Schedule 1; Part 2; Section 6.9; Part A(1)(a) Rearing poultry or pigs intensively in an installation with more than - (i) 40,0000 places for poultry. 2. Used desk top study to research, identify and examine in broad terms readily available information without intrusive investigation and a site walkover on 14th April 2025.
Document references for site plans (including location and boundaries)	3. Powell & Co; W Grove Smith, Hubbard's, Date 02/09/25, Revision 05/11/25; 1:500 scale 4. Area of study approx.1.09ha.

Note:

In Part A of the application form, you must give us details of the site's location and provide us with a site plan. We need a detailed site plan (or plans) showing:

- Site location, the area covered by the site condition report, and the location and nature of the activities and/or waste facilities on the site.
- Locations of receptors, sources of emissions/releases, and monitoring points.
- Site drainage.
- Site surfacing.

If this information is not shown on the site plan required by Part A of the application form, then you should submit the additional plan or plans with this site condition report.

2.0 Condition of the land at permit issue	
Environmental setting including: • geology • hydrogeology • surface waters	**Landscape setting** 1. Study area located in National Character Area Profile: 86 South Suffolk and North Essex Clayland[5]. Area characterised as an undulating chalky boulder clay plateau dissected by numerous river valleys, giving a topography of gentle slopes in the lower, wider valleys and steeper slopes in the narrower upper parts. Fragments of chalk give many of the soils a calcareous character, which also influences the character of the semi-natural vegetation cover. The agricultural landscape is predominantly arable with a wooded appearance. There is some pasture on the valley floors. Field patterns are irregular despite rationalisation, with much ancient countryside surviving. **Topography** 2. The study area is located on higher ground at an altitude of 85m and is flat. The surrounding land falls into river valleys – the River Pant to the north and east and Pods Brook to the west, with the steeper slopes in upper parts of valleys as expected in the South Norfolk and North Essex Clayland. 3. There are 2no. existing poultry houses with associated drainage infrastructure and concrete apron proposed in the study area. There are fields to the north and west and farm buildings to the east and south - associated with arable agriculture and a factory at Hubbard's Farm and residential dwelling houses. **Geology** 4. Artificially modified landscaped ground is to be expected result of earthworks for construction of 2no. existing poultry houses in the 1990s including removed a limited amount of topsoil and granular subsoil. Artificial ground can be associated with potentially contaminated material, unpredictable engineering conditions, and instability. 5. Natural superficial deposit onsite is Lowestoft Formation – Diamicton (chalky boulder clay). Sedimentary superficial deposit formed between 480 and 423 thousand years ago during the Quaternary period[1]. 6. Bedrock geology onsite is London Clay Formation – Clay, silt, and sand. Sedimentary bedrock formed between 56 and 47.8 million years ago during the Palaeogene period[1]. 7. Local geology has been logged below ground level (bgl) at 0.79km to the northeast at Shalford Sand & Gravel works

west of Braintree Road BGS borehole reference TL72NW59 and at 0.35km to the southwest of the study area at Dynes Farm, Shalford BGS borehole reference TL72NW8[2]: -

BGS borehole reference TL72NW59	Depth bgl
Glacial sand and gravel	13.10m
London Clay	46.63m
Woolwich, Reading and Thanet Beds	66.54m
Upper Chalk	97.32m

BGS borehole reference TL72NW8	Depth bgl
Soil	1.2m
Chalky boulder clay	4.0m
Glacial sand and gravel	6.1m
London Clay	9.8m

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Hydrogeology

8. Secondary (undifferentiated) superficial aquifer in the study area. In general, these layers have been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type[8].

9. Secondary superficial drift aquifer has medium groundwater vulnerability[8]. An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one-kilometre square grid. Groundwater vulnerability is described as High, Medium, or Low as follows:

High	Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits.
Medium	Intermediate, between high & low vulnerability
Low	Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

10. Unproductive bedrock aquifer in the study area. These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow[8].

11. Study area located inside a Source Protection Zone 3 Total Catchment[4]. SPZs define the sensitivity of an area around a potable abstraction site to contamination. Environment Agency has defined SPZ around large and public potable groundwater abstraction sites to provide additional protection to safeguard drinking water quality. Zones show risk of

contamination from activities that might cause pollution in the zone. Zone 1 is an inner protection zone, 2 is an outer protection zone and zone 3 is the total catchment. Closer the activity, greater the risk.

12. Study area located inside a Drinking Water Safeguard Zone for surface water[4]. Catchment areas that influence the water quality for their respective Drinking Water Protected Area (Surface Water). Environment Agency has established zones around public water supplies where additional pollution control measures are needed. Water Framework Directive requires that Drinking Water Protected Areas be identified and given necessary protection with the aim of avoiding deterioration in quality to reduce the level of purification treatment required in the production of drinking water.

13. Study area located inside a nitrate vulnerable zone[4]. Areas designated as being at risk from agricultural nitrate pollution. Farmers operating within these areas must follow mandatory rules to tackle nitrate loss from agriculture including when land spreading manure and slurry from pig houses.

Soil vulnerability classification - leaching potential

14. Soilscape 6 in most of the study area, characterised as freely draining slightly acid loamy soils. Main risks are associated with groundwater contamination with nitrate, siltation, and nutrient enrichment of streams from soil erosion on certain of these soils[10].

15. Soilscape 9 in southernmost part of study area characterised as lime-rich loamy and clayey soils with impeded drainage. Regards water protection - land is drained and nitrate vulnerable, potential for rapid pollution transport, surface capping can trigger sheet erosion of fine sediment[10].

Surface waters, hydrology & catchment

16. Study area located inside both the River Pant and River Brain waterbody catchments, tributary rivers of the river Blackwater operational catchment and Essex Combined management catchment[3]. The Water Framework Directive (WFD) is an EU led framework for the protection of inland surface waters, estuaries, coastal waters, and groundwater through river basin-level management planning. In terms of surface water these basins are broken down into small units known as management, operational and water body catchments.

17. Ecological ratings for Pant and Brain waterbody catchments and the Blackwater (Combined Essex) operational waterbody catchment were Moderate as recently as 2022. Chemical ratings were failed as recently as 2019 in each. To achieve purpose of the WFD, environmental objectives have been set

	and reported on by the Environment Agency at the end of each six-year cycle. 18. No surface water features or networks in the study area. **Sources of flooding** 19. Study area located in Flood Zone 1[6]. Present day chance of flooding from rivers and the sea is very low staying at very low between 2036 and 2069 with climate change. Less than 0.1% chance of a flood each year[7]. Low lying areas that are close to rivers or sea are more likely to flood when water levels rise. 20. Yearly chance of surface water flooding is Very Low staying at Very Low between 2040 and 2060 with climate change. Less than 0.1% chance of a flood each year[7]. Present day potential for surface water flooding on land in the north of the study area and adjacent land[7]. Surface water flooding is sometimes known as flash flooding happens when rainwater cannot drain away through normal drainage systems. 21. Study area outside of a groundwater flood alert area[7]. Groundwater flooding is caused by unusually high groundwater levels when the water table rises above the ground surface or within underground structures such as basements or cellars. Groundwater flooding tends to exhibit a longer duration than surface water flooding, lasting weeks, or months.
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	**Pollution incidents that may have affected land.** 22. Potential sources of ground contamination in the study area associated with 2no. existing poultry houses - solid feedstuffs storage silos, storing poultry carcases in secure containers, storing dirty water in belowground storage tanks and historical waste treatment activities at Hubbard's Farm. 23. These sources may have resulted in contamination migrating into soil, surface water runoff, and seepage into groundwater. Potential contaminants associated with these sources include nutrient nitrogen, phosphorous, ammoniacal nitrogen, biological and chemical oxygen demand. 24. Propose to demolish the 2no. existing poultry houses used for rearing turkeys for redevelopment – erect 2no. modern poultry houses for rearing broiler chickens. Demolition and construction work have potential to mobilise existing sources of contamination via disturbance of contaminated ground causing sediment runoff to surface water and facilitate contamination discharge to the ground. However, feed spillages would have been promptly cleared up and storing carcasses in secure containers and dirty water in below

ground storage tanks have low probability of causing pollution and minor consequences as regards the superficial drift aquifer, source Protection Zone 3 and the Drinking Water Safeguard Zone for surface water in the study area.

25. Potential release of hazardous materials during demolition is not expected on account 2no. poultry houses have steel roofs.

Historical land-uses and associated contaminants

26. Established historical land-uses in study area from OS maps at the 1:2,500 and 1:1,250 scale[9] and aerial photographs[8]: -

1875	Greenfields for arable agriculture or pasture for grazing, pond and field boundaries with trees and a track crossing west to east into Hubbard's Farm
1897	Greenfields for arable agriculture or pasture for grazing, pond, and field boundaries, all the trees have been removed, and a track crossing west to east into Hubbard's Farm
1921	Unchanged
1953	Greenfields for arable agriculture or pasture for grazing, pond and field boundaries, and a track crossing west to east and created two more tracks crossing north to south into Hubbard's Farm
1969	Greenfields for arable agriculture or pasture for grazing and a pond, most field boundaries have been removed, a track crossing west to east and another crossing north to south from the pond into Hubbard's Farm, and one track has been removed. Erected two buildings at Hubbard's Farm slightly extend into study area including a poultry house.
1981	Unchanged
1994	Unchanged
1999	Greenfields for arable agriculture, a pond, the residual field boundary next the pond has been removed, a track crossing west to east into Hubbard's Farm only - another crossing north to south from the pond has been removed. Two buildings at Hubbard's Farm slightly extend into the study area including a poultry house and erected 2no poultry houses and feed silos over half the study area.
2003	Unchanged
2009	Unchanged
2013	Unchanged
2019	Unchanged
2022	Unchanged

27. No records of past land use for any historical industrial land uses, tanks, energy features, petrol stations, garages, military land, railway, waste sites historical or active landfill in the study area[8].

	28. Historical waste treatment activities at Hubbard's Farm have potential to have occurred on land in the study area owing to proximity. Treating waste exemptions at Hubbard's Farm 391m SW[8] - Screening and blending of waste. Recovery of scrap metal. Sorting mixed waste. Treatment of waste food. Crushing and emptying waste vehicle oil filters. Treatment of waste in a bio bed or biofilter. Disposal by incineration. Burning waste in the open. Treatment of non-hazardous pesticide washings by carbon filtration for disposal. Spreading waste on agricultural land to confer benefit. Use of mulch. Deposit of waste from dredging of inland waters. Deposit of waste from a portable sanitary convenience. Storage of waste in secure containers. Storage of waste in a secure place. Cleaning, washing, spraying, or coating relevant waste. Preparatory treatments (baling, sorting, shredding, etc). Treatment of waste wood and waste plant matter by chipping, shredding, cutting, or pulverising. Use of waste in construction. Spreading waste on non-agricultural land to confer benefit. Spreading of plant matter to confer benefit. Incorporation of ash into soil. Use of waste for a specified purpose. **<u>Visual/olfactory evidence of existing contamination</u>** 29. No visual/olfactory evidence for existing contamination inside the study area on the site walkover. **<u>Evidence of damage to pollution control measures</u>** 30. No evidence for damage to any pollution control measures inside the study area on the site walkover including the solid feedstuffs storage silos, storing poultry carcases in secure containers, storing dirty water in belowground storage tanks.
Evidence of historic contamination, for example, historical site investigation, assessment, remediation, and verification reports (where available)	31. No records of any historical site investigation, assessment, remediation, or verification reports to evidence any historic contamination of land in the study area.
Baseline soil and groundwater reference data	32. Based on the information available intrusive investigation to establish baseline soil and groundwater reference data in the study areas was not considered warranted.
References & supporting information	1. British Geological Survey; *Geology Viewer*. Available at https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/ 2. British Geological Survey; *Onshore borehole records.* Available at https://www.bgs.ac.uk/information-hub/borehole-records/ 3. Defra website; Catchment Data Explorer. Available at https://environment.data.gov.uk/catchment-planning

	4. Government website: *Source Protection Zones merged England*; *Drinking Water Safeguard Zones (Surface Water) (England), Nitrate Vulnerable Zones 2017 Designations (England).* Available at https://magic.defra.gov.uk/ 5. Government website *National Character Area Profiles: information for local decision making.* Available at https://www.gov.uk/guidance/national-character-area-profiles-information-for-local-decision-making 6. Government website; at https://flood-map-for-planning.service.gov.uk/ 7. Government website; at https://www.gov.uk/check-long-term-flood-risk 8. Groundsure Enviro Insight*; Hubbard's Farm, Shalford Green, Shalford, Essex, CM7 5AZ, Date 20/11/2025;* Available at https://insights.groundsure.io/ 9. Groundsure Map Insight*; Hubbard's Farm, Shalford Green, Shalford, Essex, CM7 5AZ, Date 20/11/2025;* Available at https://insights.groundsure.io/ 10. Landis; *Soilscapes Viewer*. Available at https://www.landis.org.uk/soilscapes/

3.0 Permitted activities.	
Permitted activities.	1. No permitted activities in the study area.
Non-permitted activities undertaken	2. Rearing of poultry with less than 40,0000 places for turkeys 3. Exempt waste treatment activities at Hubbard's Farm.
Document references for: • plan showing activity layout; and • environmental risk assessment.	Powell & Co; *W Grove Smith, Hubbard's, Date 02/09/25, Revision 05/11/25;* 1:500 scale Application Bespoke Environmental risk assessment

Note:

In Part B of the application form, you must tell us about the activities that you will undertake at the site. You must also give us an environmental risk assessment. This risk assessment must be based on our guidance (*Environmental Risk Assessment - EPR H1*) or use an equivalent approach.

It is essential that you identify in your environmental risk assessment all the substances used and produced that could pollute the soil or groundwater if there were an accident, or if measures to protect land fail.

These include substances that would be classified as 'dangerous' under the Control of Major Accident Hazards (COMAH) regulations and raw materials, fuels, intermediates, products, wastes, and effluents.

If your submitted environmental risk assessment does not adequately address the risks to soil and groundwater, we may need to request further information from you or even refuse your permit application.

Sections 4.0-10.0 not required for the permit application.

4.0 Changes to the activity	
Have there been any changes to the activity boundary?	
Have there been any 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?	
Checklist of supporting information	

5.0 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

6.0 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

7.0 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)

8.0 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)

9.0 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)

10.0 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.