

Phase 1 Contaminated Land Assessment

New Salts Farm

NSF Barns Ltd

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1. Introduction

1.1. Background

Hilson Moran has been commissioned by NSF Barns Ltd (the 'Client') to undertake a Phase 1 Contaminated Land Assessment for a proposed residential development at the land at New Salts Farm, New Salts Farm Road, Lancing, West Sussex, BN43 5FE, located at National Grid Reference TQ 20346 04704 (the 'Site').

The red line boundary for the Site is shown as **Figure 1-1** below.

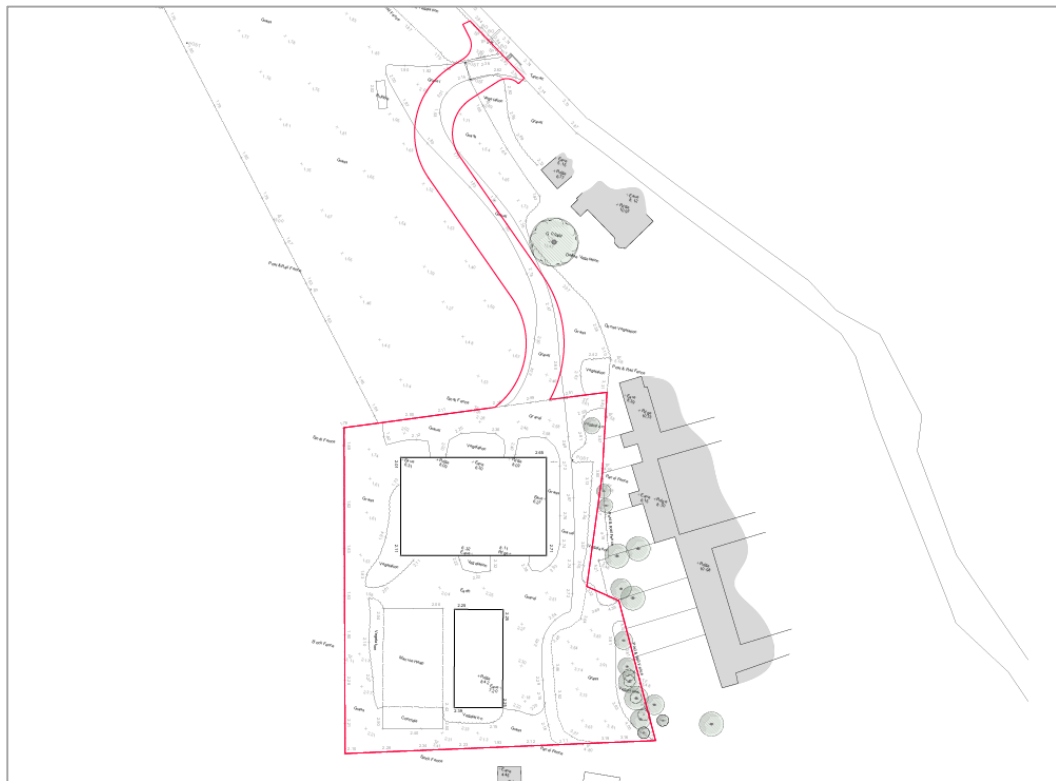


Figure 1-1. Site Boundary (Source: Meynell + Gunton, dated May 2026).

1.2. Purpose

The purpose of this assessment was to determine the likely ground conditions at the Site and assess the potential for significant soil contamination, groundwater contamination, and/or ground gas generation, both at and in the immediate vicinity of the Site, and the anticipated implications with regards to the proposed development scenario.

1.3. Proposed Development

The proposed development comprises the demolition of the existing agricultural barns and construction of 10 two-storey residential dwellings with associated gardens, garages and on-site parking (Full Planning Application).

A natural play space is located in the north-eastern corner of the Site, with a sustainable drainage system (SuDS) feature in the south-eastern corner.

A Proposed Site Plan has been produced and is included as **Figure 1-2**.



Figure 1-2. Proposed Site Plan (Source: Meynell + Gunton, dated May 2026).

1.4. Scope of Works

The scope of the Phase 1 Contaminated Land Assessment has included the following:

- Procurement of a third-party, geo-environmental database, including information on environmental permits, records and incidents at the Site and surrounding area to identify potential sources of contamination.
- Review of historical maps for the Site and the surrounds to identify activities which may have resulted in contamination of soil and/or groundwater.
- Review of published records and maps on the geology, hydrology and hydrogeology of the Site to assess the vulnerability and sensitivity of water resources to contamination (if present).
- Review of the Local Authority planning portal to determine the development history of the Site and identify available previous reports and ground investigation information.

- Consultation with the Health Department of the Local Authority to obtain records relating to ground contamination at the Site.
- Where relevant, consultation with the Local Petroleum Enforcement Authority to determine if records exist of above ground or below ground licensed (petrol) storage facilities.
- Undertake a Preliminary Unexploded Ordnance (UXO) Risk Assessment.
- A Site Walkover undertaken by a Geo-Environmental Consultant from Hilson Moran to assess the current Site uses, surrounding land uses and the environmental setting.
- Produce a preliminary Conceptual Site Model (CSM) including potential source-pathway-receptor linkages (also known as 'contaminant linkages') to develop a Preliminary Risk Assessment.

The assessment has been undertaken assuming the Site will be developed for residential end-use (refer to Section 1.3).

1.5. Limitations

This report has been prepared on behalf of and for the exclusive use of NSF Barns Ltd, the Client, for whom the services were undertaken and is subject to and issued in connection with the provisions of the agreement set out by Hilson Moran. Hilson Moran accepts no liability or responsibility whatsoever for or in respect of any use of or reliance upon this report by any third party. Furthermore, this report is subject to the following limitations:

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2. Legislation and Guidance

2.1. Contaminated Land Risk Assessment

2.1.1. Environmental Protection Act

The contaminated land regime, as set out in Part 2A of the Environmental Protection Act (EPA) 1990 (as amended)ⁱ, was introduced to identify and remediate land where contamination poses unacceptable risks to human health or the environment. Part 2A and its accompanying regulations and statutory guidance came into force on 1st April 2000, as The Contaminated Land (England) Regulations 2000 (SI 2000/227). These regulations were subsequently revoked with the provision of The Contaminated Land (England) Regulations 2006 (SI 2006/1380) (as amended), which came into force in August 2006, and consolidated the previous regulations and amendments.

Revised statutory guidance (“the Guidance”) for local authorities on how to implement the regime, including the decision-making process on whether land is contaminated land in the legal sense, has been published by Defra and entered into force in April 2012.

The main objective of Part 2A is to *“provide an improved system for the identification and remediation of land where contamination is causing unacceptable risks to human health, or the wider environment given the current use and circumstances of the land”*.

Part 2A of the EPA (Section 78A(2)) defines contaminated land as *“any land which appears to the Local Authority in whose area it is situated to be in such a condition, by reason of substances in, or under the land that:*

- a. Significant harm is being caused or there is a significant possibility of such harm being causedⁱⁱ; or,*
- b. Significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution being caused”.*

The pollution of controlled waters is defined in Section 78A(9) of the EPA as *“the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter”*.

Contaminated land is a material planning consideration and implications of contamination for development should be considered throughout the planning process to the extent that it is not addressed by other regimes, including Part 2A but also under Building Regulations and the Environmental Permitting Regulations. The role of planning when dealing with land that may be contaminated is to ensure a site is suitable for its proposed new use and to prevent unacceptable risk from pollution, for instance to controlled water

resources such as groundwater and surface water. As a minimum, following any development and remediation, land should not be capable of being determined as contaminated land under Part 2A of the EPA.

2.1.2. Land Contamination Risk Management

The Environment Agency have prepared the Land Contamination Risk Management (LCRM)ⁱⁱⁱ guidance to assist in the assessment and management of risks from land contamination. The LCRM guidance was published in October 2020 and last updated in July 2023, replacing CLR 11 'The Model Procedures for the Management of Land Contamination' (2004). The LCRM is intended to:

- Identify and assess if there is an unacceptable risk from land contamination;
- Assess what remediation options are suitable to manage the risk;
- Plan and carry out remediation; and
- Verify that remediation has been successful.

LCRM is applicable across a range of regulatory and management contexts, including the planning process, liabilities assessments, and under the Part 2A contaminated land regime. The Environment Agency expects LCRM to be followed when managing the risks from land contamination.

Stage 1 (or 'Tier 1') of LCRM comprises risk assessment using the source-pathway-receptor (S-P-R) approach. Risk assessment is an iterative process which starts with a Preliminary Risk Assessment (PRA) and progresses through generic and detailed tiers as more information is collected, including intrusive ground investigation data, and the level of uncertainty in the risk assessment is reduced.

This report presents the findings of a PRA undertaken for the proposed development comprising a desk-based study and site walkover to inform the development of an initial conceptual site model (CSM) of potential S-P-R (contaminant) linkages and a qualitative evaluation of risk.

2.2. Planning Policy

2.2.1. National

2.2.1.1. National Planning Policy Framework

This report has been prepared in accordance with the National Planning Policy Framework (NPPF)^{iv}, which sets out the Government's planning policies which apply to the preparation of local plans and to development management decisions. The framework sets out the Government's economic, environmental and social planning policies for England. Combined, these policies articulate the Government's vision of sustainable development, which should be interpreted and applied locally to meet local aspirations.

Chapter 15 of the NPPF sets out planning policies with regards to contaminated land. The requirement for the consideration of contaminated land is established in Paragraph 196, which states *“planning policies and decisions should ensure that:*

- a) a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation);*
- b) after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and*
- c) adequate site investigation information, prepared by a competent person, is available to inform these assessments”.*

Paragraph 197 clarifies that responsibility for securing a safe development on land affected by contamination or land stability issues rests with the developer and/or landowner, whilst Paragraph 196 establishes the requirement for planning policies and decisions to contribute to and enhance the natural and local environment by *“remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate”.*

The NPPF is supported by Planning Practice Guidance (PPG) provided by the Department for Levelling Up, Housing and Communities (DLUHC). Guidance relevant to this assessment is included within the ‘Land affected by contamination’ section (last updated 22nd July 2019), with Paragraph 002 identifying the role of planning when dealing with land which may be contaminated, Paragraph 005 outlining how contaminated land can be determined, and Paragraph 012 identifying how sites presenting an unacceptable risk should be dealt with.

2.2.2. Local

Local planning policy for the site is currently outlined in the Adur Local Plan (adopted December 2017) which sets out the strategic development and land-use priorities for Adur up to 2032.

With regard to contaminated land, the Council aims to:

- encourage the re-use of previously developed land (brownfield sites) to
- reduce the demand for developing green-field sites;
- help regenerate areas;
- reduce risks posed to human health and the environment.

Policy 34: Pollution and Contamination states that the “development will be permitted provided that:

- *It does not have an unacceptable impact on the quality and potential yield of local water resources and the water environment; also*
- *It protects and enhances groundwater, surface water features and controls aquatic pollution to help achieve the objectives of the Water Framework Directive; and*
- *It has an adequate means of water supply (even in a drought), sufficient foul and surface water drainage and adequate sewage treatment capacity.*
- *Development must be phased to take into account the timing of any water and/or wastewater infrastructure required which must be in place prior to the occupation of development.*
- *A preliminary risk assessment will be required for any development where there is potential risk of contamination of controlled waters.*
- *New development within Groundwater Source Protection Zones will only be permitted provided that it has no adverse impact on the quality of the groundwater source or a risk to its ability to maintain a public water supply.”*

In addition, Adur District Council’s Contaminated Land Inspection Strategy forms the local planning policy framework for managing land contamination within the district. The strategy aligns with Part 2A of the Environmental Protection Act 1990 and statutory guidance issued by DEFRA in April 2012. It complements the existing local plan by ensuring that contamination risks are identified, assessed, and managed effectively.

3. Site Walkover

The following information was derived from a site visit undertaken on 4th September 2025 by a Geo-Environmental Consultant from Hilson Moran. The purpose of the visit was to assess whether there is potential for contamination at the site from current and recent activities. Access was granted to the whole Site.

Photographs taken during the Site visit are provided in **Appendix A**.

3.1. Site Setting

The Site covers an area of approximately 0.68 hectares (ha), and is located to the east of Lancing village and west of Shoreham-by-Sea, approximately 1.13 km west of Shoreham town centre, at National Grid Reference 520346, 104720. The Site is accessed via New Salts Farm Road to the north-east.

The Site is located at an elevation of approximately 0-2 m above Ordnance Datum (AOD). The majority of the Site was observed to be relatively flat. A raised area of land is present in the south-east of the Site, which sits approximately 0.75 m above the remainder of the Site. Uneven ground and small stockpiles were noted adjacent to the access track (possibly just off-site) and to the north of the adjoining barns. Land in the vicinity of Site was observed to be generally flat.

The Site is located within a semi-rural area of mixed land use, with commercial and residential properties. Adjacent and surrounding land uses are detailed in **Table 3-1** below.

Table 3-1. Adjacent and Surrounding Land Uses.

Direction	Occupant	Activities	Notes
North	New Salts Farm Road (adjacent)	Roadway	N/A
	Fields (10 m)	Grassed fields	Two surface water channels approx. 60 and 100 m north-east of Site, which confluence 110 m north-east and flow into the River Adur approx. 1.25 km east
	Residential properties (150 m)	Housing accessed from New Salts Farm Road	N/A
	West Coastway Line (250 m)	Railway line	N/A
	Brighton City Airport (240 m)	Airfield, restaurant, cafes, building supplier/manufacturers, laundrette	Source of potential contaminants including poly- and perfluoroalkyl substances (PFAS)
South	Fields (adjacent)	Grassed fields, possibly used for cattle grazing	Drainage feature located approx. 50 m south of Site

Direction	Occupant	Activities	Notes
	Residential properties (15 m)	Housing accessed from New Salts Farm Road	N/A
	Residential properties (150 m)	Housing accessed from Brighton Road	N/A
	Widewater Lagoon (280 m)	Lagoon	N/A
	English Channel (490 m)	Part of Atlantic Ocean	N/A
East	Residential properties (adjacent)	Housing accessed from New Salts Farm Road	N/A
	New Salts Farm Road (80 m)	Roadway	N/A
	Dogs Trust Shoreham (340 m)	Animal Rescue Centre	N/A
	River Adur (950 m)	River	Feeds into English Channel approx. 3 km east
West	Fields (adjacent)	Grassed fields, possibly used for cattle grazing	N/A
	Allotments (300 m)	Flower/vegetable growing	N/A
	Residential properties (390 m)	Housing	N/A

3.2. Site Layout and Activities

The Site forms part of an active farm and is developed with three barns (two of which are adjoining) and a gravel access road/track from New Salts Farm Road, which is gated at either end.

The two adjoining barns are located in the north of the Site and the third singular barn is located in the south. The barns are partially open-sided and stand around 6 m to 7 m in height. The adjoining barns appear to be constructed from concrete blocks for the lower section of the wall, and corrugated cement sheeting for the upper section of the walls and roof, with steal or painted metal beams. The walls and roof of the southern barn appear to be constructed from corrugated cement sheeting/panels, with steal or painted metal beams. All three barns were noted to be damaged and degrading. At the time of the Site visit, cattle were present in the northern adjoining barns, with hay bale storage in the eastern end. The southern barn was being used to store two tractors and hay bales.

A metal structure resembling two former walls with concrete hardstanding is present in the south-west of the Site. This is considered likely to have been a former barn/storage shed, which is visible in Google Earth aerial imagery dated 2001. At the time of the Site visit, this area was being used to store disused a stockpile of manure (uncovered), wooden pallets, two disused trailers and tyres.

The Site predominantly comprises unsurfaced ground (approximately 70%) with limited areas of hardstanding (approximately 30%). Surface water was observed to be collecting in the unsurfaced area between the barns, and the uncovered manure was noted to be leaching into this area.

Areas of uneven ground, small stockpiles and raised ground were noted on-site and adjacent to the Site.

No Environmental Permits are reported to be held by the Site.

3.2.1. Bulk Storage of Chemicals & Hazardous Materials

3.2.1.1. Underground Storage Tanks (USTs)

No visual evidence of USTs, such as fill points, pumps, gauges, or signage, markings or concrete scarring indicative of such potential uses was identified by Hilson Moran during the site visit.

3.2.1.2. Above Ground Storage Tanks (ASTs)

No visual evidence of ASTs, such as fill points, pumps, gauges, or signage, markings or concrete scarring indicative of such potential uses was identified by Hilson Moran during the visit.

3.2.1.3. Other Bulk Chemical Storage

No bulk chemical storage was observed on-site.

3.2.2. Deleterious Materials

3.2.2.1. Asbestos Containing Materials (ACM)

Given the age of the on-site barns (northern barns constructed c.1981-1982 and southern barn constructed c.1987-1990), it is considered possible that ACMs were used during construction. According to the Site representative, no asbestos survey is currently held for the Site.

The barns are constructed from corrugated cement sheets, which may contain asbestos. The sheets were observed to be weathered, with moss/lichen growth, and in poor condition (degrading/damaged). Broken sheeting fragments were observed on the ground surrounding the barns.

Under the Control of Asbestos Regulations (CAR, 2012), the duty holder must manage the risk from asbestos on a premises and to develop and implement an ACM management plan, with review and updating as appropriate. The dutyholder

is the party who has, by virtue of contract or tenancy, the main responsibility for maintenance or repair of the building.

An asbestos survey has not been undertaken by Hilson Moran as it is outside the scope of this assessment.

Hilson Moran strongly recommends that an asbestos survey is undertaken in view of the damaged, potentially asbestos containing barns.

3.2.2.2. Polychlorinated Biphenyls (PCB)

No potential PCB-containing equipment was identified during the site visit.

Under the Polychlorinated Biphenyls Regulations 2000, the holder of equipment that contains PCBs must ensure it is decontaminated to less than 0.05% unless within an electrical transformer, which requires annual registration with the regulatory authorities.

3.2.2.3. Refrigerant gases

The barns are not served by air conditioning or handling units, and do not contain any fridge/freezer units.

Under the Fluorinated Greenhouse Gases (F-gas) Regulations 2015 (SI 2015/310) and Ozone-Depleting Substances (ODS) Regulations 2015 (SI 2015/168), ODS are to be phased out and must be recovered during servicing, maintenance and decommissioning. F-gas systems require leak testing and good record keeping. It is good practice to make sure that all equipment containing refrigerant gases is labelled with the type and amount of gas contained and that gases with lower global warming potential are used.

3.2.3. Waste Storage

Wastes generated on-site predominantly comprise cattle manure and bedding, plastics e.g. hay/silage wrap and tyres. Cattle manure was observed to be stored in a stockpile upon concrete hardstanding in the south-west of the Site. Leaching of the manure in a northerly direction towards unsurfaced ground was noted.

Two disused rusted trailers, tyres and fencing were also observed to be stored in the south-western storage area. Tyres were scattered across the Site. Two plastic bags of old bedding were observed too the north-east of the southern barn, upon unsurfaced ground. No further waste storage was noted during the site visit.

A review of waste documentation was outside the scope of this assessment.

3.2.4. Water, Wastewater and Drainage

Water is reported to be supplied to the barns from the municipal supply and is used for to fill the cattle troughs for livestock consumption.

A drainage drawing for the Site was not available for review by Hilson Moran during the site visit. According to the Site representative, the Site is not provided with mains drainage to the municipal foul sewer system, and no surface/storm water drains were observed by Hilson Moran. Water is reported to drain via infiltration and / or surface run-off. No oil-water interceptors were reported to be present on site or identified on-site by Hilson Moran during the site visit; however, their presence or absence cannot be confirmed without review of comprehensive drainage drawings.

The Site representatives had no knowledge of any legionella management exercise or whether a legionella risk assessment has been carried out. Under the Health and Safety at Work Act 1974 and subsequent regulations, the dutyholder is required to assess the risk of Legionella exposure and put in place any necessary measures. The dutyholder may be the employer, or a person in control of the premises.

No current issues in relation to flooding were reported by the Site representative.

3.2.5. Emissions to Air

No significant emissions to air were noted. No boilers or air conditioning units are present on-site.

3.2.6. Other Factors

According to the Site representative, there is no known history of complaints, enforcements or other regulatory actions regarding the Site or immediate surrounding properties related to environmental conditions. No fire or spill events were reported.

No flooding of the Site is known to have occurred historically, according to Site representatives.

A monitoring borehole was observed by Hilson Moran in the south of the Site during the visit. The headworks (lockable flush cover) appeared to be damaged. According to the Site representative, this borehole was installed in November 2024 (along with another borehole in the north of the Site) for groundwater level monitoring in association with soakaway testing at the Site. The Client provided the associated Soakage Testing Letter Report^v to Hilson Moran for review, which includes borehole logs for WS1 (north of the Site) and WS2 (south of the Site). Four trial pits were excavated for infiltration testing and the associated logs are also included. The ground conditions encountered are summarised in Section 7.1.

Hilson Moran observed an area of raised ground in the south-west of the Site, which sits approximately 0.75 m higher than the rest of the Site.

No invasive plant species were observed during the site visit; however, their presence cannot be fully ruled out.

3.3. Contamination Potential – Current Site Use

The following on-site sources of contamination were noted during the Site visit:

- Possible ACMs present in the on-site barns;
- Manure storage (uncovered); and
- Uneven land, small stockpiles and raised area in the south-west of the Site.

The following off-site sources of contamination were noted during the Site visit:

- West Coastway Railway Line (approximately 250 m north); and
- Brighton City Airport (approximately 240 m north).

4. Site History

Hilson Moran has undertaken a review of historical mapping and aerial imagery of the Site and surrounding area (where available) obtained from a proprietary environmental database (Groundsure Insight Report), the findings of which are summarised below. Selected historical maps are presented in **Appendix B**.

4.1. The Site

The earliest map dated 1873 indicates that the Site was predominantly undeveloped, with trackways present extending east-west across the Site to the buildings associated with New Salts Farm located off-site to the east. An access road with an adjacent drainage ditch was also shown crossing the northern section of the Site from the north-west.

By 1931 a gravel pit was recorded within the southern part of the Site, occupying approximately one-third of the total area, with a trackway extending west. The 1951 mapping depicted a small building encroaching into the Site along the southern boundary, and by 1971-74 further development was recorded to the east of the Site, with a building encroaching along the eastern Site boundary.

No further changes were depicted on-site until 1981-82 which recorded a rectangular building ('barn') located in the north of the Site. The quarry was no longer depicted, likely infilled. By 1987-90 the Site was shown to have been redeveloped into its current configuration with three barns located on-site, two of which are adjoining in the north of the Site and one located in the south of the Site. The small buildings previously shown encroaching onto the southern and eastern boundaries were no longer present. Google Earth aerial imagery dated 2001 indicates an area of hardstanding in the south-west of the Site, adjacent to the southern barn, with walls present on either side. This feature is also visible in subsequent aerial imagery and is considered likely to have been used for storage purposes. No further changes were noted up to and including the 2025 mapping.

4.2. The Surrounding Area

The 1873 mapping indicates that the surrounding area was predominantly agricultural, with several buildings associated with New Salts Farm located approximately 10 m east, 10 m north-east, and 40 m south of the Site. An access track and drainage ditch were shown extending from the north of the Site, intersecting the Site boundary. Further land drainage features were also present, located approximately 50 m south and 70 m north-east of the Site at their nearest points.

A railway line was recorded approximately 250 m north of the Site, extending in an east-west orientation, with drainage channels running adjacent to the tracks

on either side. Brighton Road was present approximately 250 m south-east of the Site at its nearest point and was depicted at elevations ranging from 8.8 ft to 12.6 ft above sea level. This suggests the road was constructed with an embankment / viaduct to facilitate access across both the River Adur Estuary, located approximately 380 m east of the Site at its nearest point, and the lower-lying salt marshes to the south.

No further significant changes were recorded until the 1931 mapping, which depicted the gravel pit adjacent to the south encroaching into the Site, as well as residential development up to 50 m north along New Salts Farm Road and 170 m south of the Site, adjacent to Brighton Road. A tank was recorded adjacent to the residential development to the south.

The 1947-50 mapping depicted buildings adjacent to the north of the railway, along with further residential development 500 m south-west of the Site. By 1951, a building was developed on the southern Site boundary as well as 10 m south, 50 m south and 80m east of the Site. The gravel pit was no longer labelled and the tank 170 m south was not recorded. By 1963 the area north of the railway was labelled as Shoreham Aerodrome.

The 1970 mapping recorded the development of a roundabout 200m south-east of the Site and an access road connecting to New Salts Farm. The 1971-74 mapping recorded further development north of the railway, with the area was depicted as Brighton, Hove and Worthing Municipal Airport. The 1987-90 mapping recorded the further developments at New Salt Farm, adjacent to the east of the Site. By 2001, further development was recorded north of the railway, which was labelled Shoreham Airport and subsequently renamed Brighton City Airport by the 2025 mapping. No further significant changes were identified.

5. Site Information

5.1. Environmental Database Records

The environmental information presented below in **Table 5-1** has been obtained from a review of a proprietary environmental database procured by Hilson Moran relating to the Site and surrounding area.

Table 5-1. Environmental Records.

Data Type	Distance			Relevant records within 250m of the Site
	On Site	<250m	250m-500m	
Contamination, Discharge and Pollution Records/Permits				
Sites Determined as Contaminated Land	0	0	0	None within 250m of the Site.
Historical Industrial Land Use	1	2	4	A gravel pit was located in the south of the Site (records dated 1948 and 1963) and extended off-site to the south-west (records dated 1948 and 1968-1972). In the wider surrounds, an airport/aerodrome is recorded 225m north and an unspecified tank 230m south.
Licensed Discharges to controlled waters	0	0	5	None within 250m of the Site.
Part A(1) Environmental Permits	0	0	0	None within 250m of the Site.
Part A(2) Environmental Permits	0	0	0	None within 250m of the Site.
Part B Environmental Permits	0	0	3	None within 250m of the Site.
EA Pollution Incidents	0	0	1	None within 250m of the Site.
Radioactive Substance Authorisations	0	0	0	None within 250m of the Site.
Landfill and Waste Records				
Active or Recent Landfill	0	0	0	None within 250m of the Site.
Historical Landfill (BGS, Local)	0	0	2	None recorded within 250m of the Site.

Authority and EA records)				<i>The Council holds records indicating a historical controlled refuse tip was located on land 100m south-east of the Site– see Section 6.</i>
Historical Waste Sites	0	0	0	No records within 250m of the Site.
Licensed Waste Sites	0	0	0	No records within 250m of the Site.
Waste Exemptions	0	0	6	No records within 250m of the Site.
Hazardous Substance Records				
Control of Major Accident Hazard (COMAH) sites	0	0	0	None recorded within 250m of the Site.
Hazardous Substance Storage / Usage	0	0	0	None recorded within 250m of the Site.
Historical Petrol Stations	0	0	0	None recorded within 250m of the Site.
Current or Recent Petrol Stations	0	0	1	None recorded within 250m of the Site.

5.2. Radon Gas Risk

According to the environmental database, the majority of the Site lies in a “Radon Affected Area” as defined by Public Health England. The Site is recorded as being located in an area where between 1% and 3% of residential properties are projected to contain radon above the residential action threshold.

Under Health and Safety legislation, employers have a duty to manage workplace risks including the potential for radon exposure. Health and Safety Executive guidance recommends radon monitoring for workplaces located in radon Affected Areas. If the workplace radon threshold is exceeded, the Ionising Radiations Regulations 1999 require employers to take action to reduce risks.

According to BRE Report BR211 (2015) Radon: Protective Measures for New Buildings, radon protection measures are not required under building regulations for new buildings at this location.

5.3. Preliminary Underground Services Search

The LinesearchbeforeUdig database, which lists pipelines distributing crude oil and refined hydrocarbon products owned and/or operated by a number of UK pipeline operators, indicates that there are no records of underground oil or refined hydrocarbon product pipelines on the Site or within 250 m.

The LSBUD database indicates that there are records of assets held by Southern Gas Networks (SGN) (gas) and UK Power Networks (UKPN) (electricity) on/within 250 m of the Site. *It should be noted that while these assets are understood to be located in the vicinity of the Site, no detailed plans have been made available.*

5.4. Unexploded Ordnance

A Preliminary Desktop Study Assessment (PDSA) was procured from Zetica UXO to identify potential sources of unexploded ordnance (UXO) at the Site or in the surrounding area (if present) and determine whether further detailed research is required to assess the UXO risk. A copy of the PDSA is included in **Appendix C**.

No readily available records have been found to indicate that the Site was bombed during World War One (WWI). Potential WWI targets within 5 km of the Site include Shoreham harbour, Transport Infrastructure and public utilities, chemical works, Royal Flying Corps (RFC) Shoreham and military establishments and training areas.

During WWII, an anti-aircraft pillbox was established adjacent to the Site, and RAF Shoreham (c.0.3 km north) operated as a fighter airfield. The South Downs Training Area, which encompassed the Site, was also active during this period, although no training activities have been directly recorded on the Site itself. In 1940, records also indicate that a German fighter aircraft crashed on New Salts Farm, adjacent to the Site.

The Site was located in Worthing Rural District (RD), which officially recorded 124 high explosive bombs, with a density of 4.2 bombs per 405 ha. These statistics typically exclude bombs that fell on military establishments, such as RAF Shoreham.

Overall, the PDSA recommended that a Detailed Desk Study be undertaken to assess, and potentially zone, the UXO hazard level on the Site.

6. Regulatory Information

6.1. Local Authority Planning Department

Hilson Moran has reviewed the planning history provided by the Planning Department of Adur District Council. No planning applications have been submitted for the Site itself. A number of planning applications were identified in the surrounding area; however, none were considered relevant to the current assessment.

6.2. Local Authority Environmental Health Department

The Environmental Health Department of Adur District Council has provided the following information relating to the Site (response dated 30th September 2025):

- The Council confirmed that the Site has been assigned as medium priority under the Councils potentially contaminated land strategy, due to the Site being located on a historical gravel pit which may have been infilled.
- The Council is currently not looking at undertaking any further investigation on the Site outside of the planning process.
- A review conducted by the Council identified two potentially contaminative land uses within 250 metres of the Site. The first is the previously mentioned on-site gravel pit due to possible infilling in the 1930s. The second is an area approximately 80m east of the Site, which was historically used as a controlled refuse tip during the 1950s with the aim of raising the ground level by approximately 1.8 metres. It is understood the tip was capped with clean soil. Potential contaminants associated with these uses are likely to include various hydrocarbons, polychlorinated biphenyls (PCBs), and a range of heavy metals. The Council do not currently hold any previous ground investigation reports relating to these areas.
- The Council holds no records of Private Water Suppliers within 2 km of the Site boundary.
- There are no Part A(2) or Part B Permits licensed to the Site or those adjoining.

A copy of the response from Adur District Council is included in **Appendix D**.

6.3. Petroleum Enforcement Authority

An enquiry has not been submitted to the Petroleum Enforcement Authority, given that there is no evidence to suggest that bulk storage of fuels has taken place at the Site.

7. Environmental Setting

Desk-based research of the local geology, hydrogeology and hydrology was carried out in order to establish the potential for migration of contamination onto or away from the site, and to assess the sensitivity and vulnerability of the Site's setting with respect to surface water, groundwater and ecological resources.

Information was obtained from several sources, including:

- Published geological maps produced by the British Geological Survey (BGS);
- Publicly available BGS borehole logs for the site or near vicinity;
- Proprietary environmental database procured by Hilson Moran; and
- Regulatory Authority websites including the Environment Agency (EA).

7.1. Geology and Hydrogeology

According to BGS 1:50,000 mapping of the area and the environmental database, the Site is directly underlain by superficial deposits. In the south-east of the Site, these comprise Raised Beach Deposits (sand and gravel, a Secondary A Aquifer), while in the north-west of the Site they comprise Alluvium (clay, silt, sand and peat, a Secondary Undifferentiated Aquifer). The underlying bedrock geology comprises the Newhaven Chalk Formation (chalk, a Principal Aquifer).

The superficial and bedrock deposits are shown as **Figure 7-1** and **Figure 7-2**, respectively.



Figure 7-1. Superficial Deposits Underlying the Site (Source: Groundsure Report Ref. GS-HVU-SJR-4WS-EBN).



Figure 7-2. Bedrock Deposits Underlying the Site (Source: Groundsure Report Ref. GS-HVU-SJR-4WS-EBN).

The nearest publicly available borehole logs are located approximately 30 m east of the Site (Ref: TQ20SW89/A and TQ20SW89/B). These records describe the underlying geology as comprising:

- Alluvium and shingle to a depth of 18.3 m below ground level (bgl);
- A solution cavity to 19.8 m bgl; and
- Upper Chalk (chalks and flints) proven to 25.9 m bgl, where drilling was terminated.

Soakaway testing was undertaken across the Site on 26th November 2024 to establish infiltration characteristics and assess the feasibility of adopting shallow soakaways. In addition, groundwater monitoring standpipes were installed to enable subsequent groundwater level monitoring.

Ground investigation works comprised the excavation of four trial pits (IT1 to IT4) to depths between 1.1 m and 1.5 m bgl, and the drilling of two window sample boreholes (WS1 and WS2) to 5.0 m bgl and 3.5 m bgl respectively.

The Site-specific geology recorded variable deposits of Made Ground across all exploratory holes, with the thickness ranging from 0.35 m (IT4 in the south-west) to 0.90 m (WS2 in the south). The Made Ground typically comprised sandy and gravelly soils with inclusions of brick, concrete, flint, chalk, tarmac and metal fragments. It is noted that WS2 was drilled at the location of the former gravel pit in the south of the Site, where the maximum thickness of Made Ground was recorded (0.90 m).

Alluvial silty clay was observed in WS1 between approximately 0.7 m and 2.0 m bgl, described as soft, wet, dark grey/brown silty clay.

Below this, the natural geological sequence comprised sandy gravels and gravelly sands, dominated by fine to coarse flint gravels. These strata were recorded at all exploratory hole locations, with thicknesses proven to 5.0 m bgl (WS1) and 3.5 m bgl (WS2).

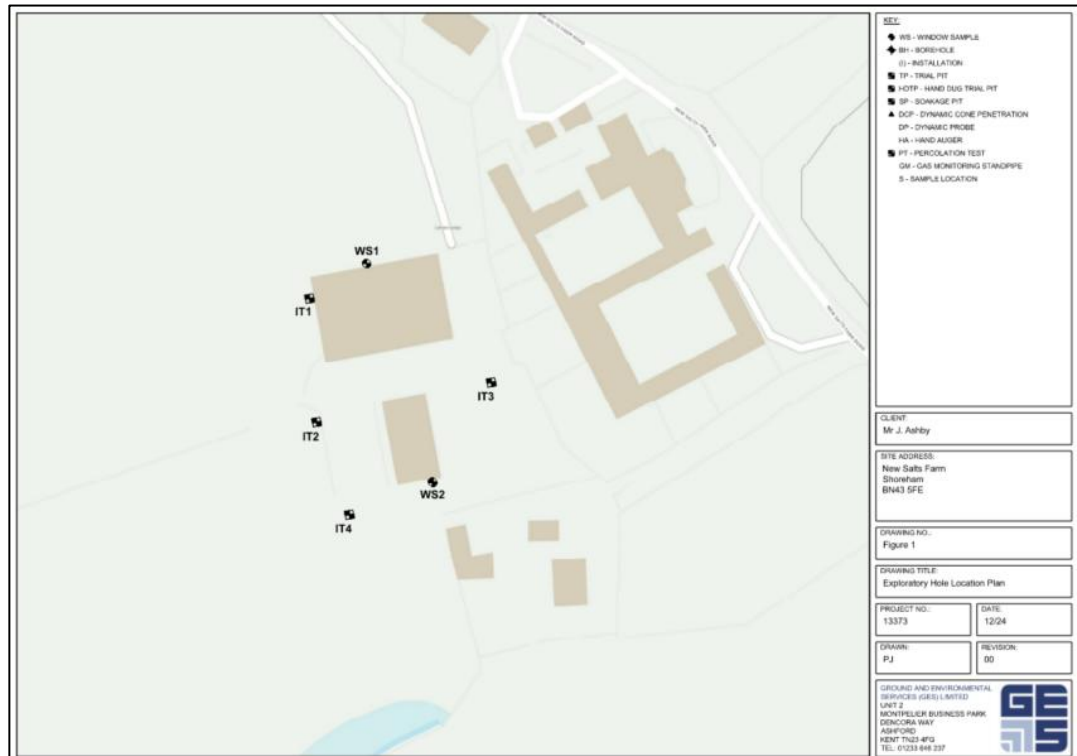


Figure 7-3. Exploratory Hole Location Plan (Source: Ground and Environmental Services Ltd, dated December 2024).

Groundwater level monitoring was undertaken within the two installed standpipes (WS1 and WS2). Readings were collected on two separate occasions.

- At WS1, groundwater was recorded at depths ranging from 1.61 - 1.77 m bgl.
- At WS2, groundwater was recorded slightly shallower, ranging from 1.32 - 1.36 m bgl.

These results indicate a relatively consistent shallow groundwater table across the Site, encountered at approximately 1.3 to 1.8 m bgl.

The EA currently classifies groundwater at the Site (Worthing Chalk Water Body) as being of 'poor' chemical quality and of 'poor' quantitative status under the Water Framework Directive (WFD) classification scheme (dated 2019).

According to EA information provided in the environmental database, there are no active licensed groundwater abstraction within a 2 km radius of the Site.

The Environmental Health Department of Adur District Council confirmed that it holds no records of Private Water Suppliers within 2 km of the Site boundary.

7.1.1. Mining and Ground Workings

According to the Coal Authority, the Site is not located in a Coal Mining Affected Area. The Coal Authority Interactive Map does not show the Site to be in a mine entry zone of influence or Development High Risk Areas. No information on other (non-coal) mining activities is provided by the Coal Authority.

A British Pit is recorded in the south of the Site, relating to New Salts Farm Gravel Pit (sand and gravel). The status of the pit is ceased. Surface ground workings are also recorded in the south of the Site, relating to the gravel pit (mapping records dated from 1948 to 1972).

A non-coal mining record for chalk is recorded 940 m north-east of the Site.

No natural or mining cavities are recorded within 500 m of the Site in the environmental database. However, it is noted that a 1.5 m solution cavity was recorded in BGS borehole logs 30 m east of the Site from 18.3 to 19.8 m bgl.

7.1.2. Geological Hazards

The potential geological hazards for the Site as recorded in the environmental database are detailed in **Table 7-1** below.

Table 7-1. Geological Hazards from Ground Subsidence.

Hazard	Hazard Rating (within 50 m of the Site)
Shrink Swell Clays	Low in north-western half, negligible in south-eastern half
Running Sands	Low in north-western half, Very Low in south-eastern half
Compressible Deposits	High in north-western half, negligible in south-eastern half
Collapsible Deposits	Very low in south-eastern half, Negligible in north-western half
Landslides	Very Low across whole Site
Ground Dissolution of soluble rocks	Negligible across whole Site

It should be noted that a solution cavity (i.e. subsurface void) of 1.5 m was recorded 30 m east of the Site at 18.3 to 19.8 m bgl, as detailed in Section 7.1. This indicates a potential for ground stability risks in the area, which should be further investigated as part of a future ground investigation.

In addition, potential risks associated with former surface abstraction in the south of the Site include high walls, uncontrolled Made Ground, collapse compression and differential settlement.

A geotechnical assessment for the Site has not been undertaken as part of this Phase 1 Contaminated Land Assessment.

7.1.3. Source Protection Zones

The Site is not located within an area covered by a Source Protection Zone (SPZ). A Zone III Total Catchment area is located 990 m north-east of the Site at its nearest point. For context, the Total Catchment area (Zone 3) is defined as the area around the supply source within which all the groundwater ends up at the abstraction point.

7.2. Hydrology

According to the environmental database, the nearest identified watercourse is a drainage feature located in the north of the Site, adjacent to New Salts Farm Road. A drainage/flood relief channel is located 70 m north-east of the Site at its nearest point, which feeds into the River Adur located approximately 870 m east of the Site.

The EA currently classifies the River Adur as being of 'Moderate' ecological quality and 'Fail' chemical quality under the WFD classification scheme.

According to an independent, third-party environmental database, there are no active licensed surface water abstractions within a 2 km radius of the Site.

7.3. Flood Risk

Regulatory flood maps have been developed by regulatory agencies to be used in strategic planning and are not intended to provide site-specific information. However, the mapping can provide a useful indication of whether further consideration or assessment of flood risks to a site may be required.

For further details, refer to the Flood Risk Assessment and SuDS Strategy for the Site (Hilson Moran, Ref: 33646-HML-XX-XX-RP-U-870001, dated July 2025).

7.3.1.1. Fluvial and Tidal Flooding

According to the EA's fluvial and tidal flood map for planning^{vi}, the entirety of the Site is located in **Flood Zone 3** (high probability). This zone comprises land assessed as having a 1 in 100 or greater annual probability of river flooding (>1% in any year) or a 1 in 200 or greater annual probability of flooding from the sea (>0.5% in any year).

It should be noted that EA flood zones in England do not take into account the presence of flood defences.

7.3.1.2. Surface Water Flooding

According to the EA Flood Map for Surface Water which presents the theoretical potential for flooding from pluvial sources (i.e. flooding caused by rainwater exceeding capacity of drainage systems), most of the Site is located in an area of **Very Low flooding probability**. This zone comprises land assessed as having a less than 1 in 1,000 annual probability of pluvial flooding (<0.1% in any year).

The only areas of the Site at risk of surface water flooding are the sides of the access road, which have **Medium to Low flooding probability**. These zones comprise land assessed as having between a 1 in 100 and 1 in 30 probability of pluvial flooding (3.3% - 1% in any year), and between a 1 in 100 and 1 in 1000 annual probability of pluvial flooding (1% – 0.1% in any year), respectively.

Surface water drainage networks are typically designed to accommodate only a 1 in 30 (3.3%) annual probability rainfall event. Older drainage networks may have a lower capacity, especially if they have not been maintained adequately. Although not true of every situation, surface water flooding is typically relatively shallow and would be expected to subside following the storm event assuming drainage assets are maintained in an appropriate condition.

7.4. Environmental Designations

There are a number of sites located within 1 km of the Site with statutory designations for their ecological value. The nearest of these is Widewater Lagoon, located approximately 260 m to the south, and Shoreham Beach, situated 480 m to the south-east; both are designated as Local Nature Reserves (LNRs). In addition, the Adur Estuary, designated as a Site of Special Scientific Interest (SSSI), lies around 380 m to the east of the Site.

The Site is not located within a green belt and there are no green belts recorded within 2 km of the Site.

The Site lies within a designated Nitrate Vulnerable Zone (NVZ) due to the underlying Sussex Chalk groundwater body (NVZ ID: 56), which is classified as an existing NVZ.

7.5. Environmental Sensitivity & Vulnerability

The Site is considered to be located in a **moderate** sensitivity setting with respect to groundwater resources. It is directly underlain by Raised Beach Deposits (Secondary A Aquifer) in the south-east and Alluvium (Secondary Undifferentiated Aquifer) in the north-west, overlying the Newhaven Chalk Formation (Principal Aquifer). The Site does not lie within a Source Protection Zone (SPZ), and there are no active licensed groundwater abstractions within 2 km of the Site.

The vulnerability of the groundwater receptor at the Site is considered to be **high**, as shallow groundwater was recorded at 1.3–1.8 m bgl during monitoring, and the Site is predominately unsurfaced, allowing potential for infiltration.

The sensitivity of the hydrological receptor is considered **moderate to low**, as the nearest drainage channel lies adjacent to the northern boundary, while the nearest classified watercourse, the River Adur (870 m east), is designated as having 'Moderate' ecological quality and 'Fail' chemical quality under the WFD. No active surface water abstractions are recorded within 2 km.

The Site is considered to be in an area of **moderate** vulnerability with respect to surface water, due to the proximity of drainage features in the immediate vicinity.

Widewater Lagoon (260 m south) and Shoreham Beach (480 m south-east) are designated as LNRs, and the Adur Estuary (380 m east) is designated as a SSSI.

8. Preliminary Geo-Environmental Risk Assessment

8.1. Risk Assessment Framework

In terms of risk assessment, “significant harm” or “significant pollution of controlled waters” is defined in the Guidance on risk-based criteria and must be the result of one or more relevant ‘contaminant linkages’ relating to the land.

The presence of a contaminant linkage relies on the Source-Pathway-Receptor concept, where all three factors must be present and potentially or actually linked for a potential risk to exist. For a risk of pollution or environmental harm to occur as a result of ground contamination, all of the following elements must be present:

- A **source** - a substance that is capable of causing pollution or harm;
- A **receptor** - something which could be adversely affected by the contaminant; and
- A **pathway** - a route by which the contaminant can reach the receptor.

If one of these elements is absent there can be no significant risk. If all are present then the magnitude of the risk is a function of the magnitude and mobility of the source, the sensitivity of the receptor and the nature of the migration pathway.

The potential severity of the risk and the probability of the risk occurring have been combined in accordance with the matrix included as **Table 8-1** in order to give a level of risk for each potential hazard identified within this report.

Table 8-1. Classification of Risk (after NHBC/EA 2008).

		Consequence			
		Severe	Medium	Mild	Minor
Probability	High Likelihood	Very High	High	Moderate	Moderate/Low
	Likely	High	Moderate	Moderate/Low	Low
	Low Likelihood	Moderate	Moderate/Low	Low	Very Low
	Unlikely	Moderate/Low	Low	Very Low	Very Low

For the purpose of this assessment, it has been assumed that the site will be redeveloped for an end-use comprising residential.

8.1.1. Preliminary Conceptual Site Model

A preliminary conceptual site model (CSM) summarising the potential pollutant linkages identified from the assessment has been developed and qualitative risk assessment undertaken to identify and assess the potential risks associated with environmental conditions at and in the vicinity of the site based on the available information. This is presented in **Table 8-2**.

Table 8-2. Conceptual Site Model for the Site.

Source	Pathway	Receptor	Risk of Contaminant Linkage
Potential for contamination associated with on-site Made Ground, possible infilled quarry and uncovered manure storage (e.g. heavy metals, PAHs, nitrogen and phosphorous)	Direct contact, ingestion, inhalation of dust/vapours	Construction Workers	Moderate. Made Ground of variable thickness (0.35-0.90m based on existing information) is present across the Site. Groundworks create an exposure pathway to potential contamination at the Site. Robust health and safety procedures should be implemented. A ground investigation will provide further information on potential risks.
		Future Site users and neighbours	Moderate/Low. The Proposed Development comprises residential housing with associated gardens and landscaping. Soft landscaping creates an exposure pathway to soil contamination (if present). It is anticipated that potential risks can be managed through appropriate ground investigation and mitigation (such as excavation of hotspots, implementation of a clean cover layer in soft landscaped areas).
	Permeation of organics into water supply pipes	Future Site users	Moderate/Low. Significant widespread organic contamination is not anticipated; however, it may be present in hotspots. It is anticipated that risks can be managed by appropriate ground investigation and mitigation if required (hotspot removal, installation of barrier pipe).
	Leaching to Groundwater & Groundwater Flow	Groundwater as a controlled water	Moderate. Superficial deposits are Secondary A and Secondary Undifferentiated Aquifers, and the underlying bedrock is a Principal Aquifer. Proposed development includes soft landscaped areas. Localised leaching is considered possible.
		Surface water via hydraulic connectivity / leaching	Moderate. A pond/SuDS feature is proposed in the south-eastern corner of the Site at the location of the potentially infilled gravel pit. A drainage channel is present in the north of the Site, and the River Adur is located 870 m east.
	Surface water run-off	Surface water as controlled water	Moderate/Low. The Site is proposed to comprise approximately 60% soft landscaping, which will facilitate infiltration. A drainage channel is present in the north of the Site. The River Adur is located 870 m east.
	Root uptake	Proposed soft landscaped areas	Low. Soft landscaping could be at risk from phototoxic contaminants, however significant/widespread contamination is not anticipated. A ground investigation will assess the potential risks to planting and a clean cover layer may be required.

Source	Pathway	Receptor	Risk of Contaminant Linkage
	Consumption of contaminated home grown produce	Future Site users	Moderate/Low. The development includes private gardens. Contamination may be present in localised hotspots and associated with the infilled quarry. It is anticipated that contamination-related risks to residents could be managed through appropriate ground investigation and mitigation (such as implementation of a clean cover layer in soft landscaped areas).
Asbestos may be present in the on-site barns Potential for asbestos in underlying Made Ground	Direct contact, ingestion, inhalation of fibres	Construction Workers	High. Possible exposure during demolition and earthworks phases. Robust health and safety procedures should be implemented, appropriate risk assessments such as an asbestos survey undertaken, and subsequent management plans provided. A ground investigation will provide further information on possible risks associated with Made Ground.
		Neighbours	Moderate. Possible exposure during the demolition and earthworks phases of redevelopment (asbestos fibre generation and inhalation).
		Future Site users	Moderate. The on-site barns will be removed as part of the proposed development. However, exposure to Made Ground and possible residual asbestos could occur in gardens and soft landscaping. A clean capping layer will likely be required in soft landscaped areas (to be confirmed following the ground investigation).
Ground gases arising from on-site Made Ground and infilled quarry (unknown composition)	Inhalation	Construction workers, future Site users and neighbours	Moderate. The Site-specific geology recorded variable deposits of Made Ground across all exploratory holes, with the thickness ranging from 0.35 m to 0.90 m. Organic/degradable materials may be present, such as in the former quarry in the south. A ground investigation will provide further information on possible risks.
	Explosion / damage	Site buildings	
Potential off-site sources include farm activities, the infilled quarry to the south-east, historical refuse tip 80m south-east, railway 200m north and Brighton City Airport 240m north	Leaching onto Site in Groundwater & Groundwater Flow	Groundwater as a controlled water	Moderate. Potential contamination from off-site activities including PAHs, PCBs, PFAS, hydrocarbons and heavy metals from railway, airport and the historical refuse tip. Surface water drainage and groundwater levels indicate a possible southerly groundwater flow direction.
	Inhalation of vapours/ground gas	Site users	Moderate. The infilled quarry and refuse tip extend off-site and provide an off-site source of vapours/ground gas. A ground investigation will provide further information on possible risks.
		Buildings	

9. Conclusions and Recommendations

9.1. Conclusions

The Site is currently developed with three barns (two adjoining in the north and one in the south) and a gravel access track from New Salts Farm Road. At the time of the Site visit, cattle were present in the northern barns and the southern barn was used for tractor and hay storage. All barns were observed to be damaged and degrading, with potential ACMs present in the corrugated cement sheeting. A further area of concrete hardstanding was present in the south-west of the Site, which was being used for storage of manure (uncovered), pallets, disused trailers and tyres. The Site predominantly comprises unsurfaced ground (approximately 70%) with limited areas of hardstanding (approximately 30%).

Historically, the Site was predominately undeveloped farmland, with trackways and a drainage ditch crossing into the north of the Site. By 1931, a gravel pit was recorded in the south of the Site, occupying approximately 1/3 of the total area. Small buildings were recorded encroaching on the southern Site boundary in 1951 and the eastern Site boundary in 1971-74. In 1981-82, one of the northern barns was depicted and the quarry was infilled. The Site had been redeveloped into its current configuration by 1987-90 (two barns in the north and one in the south).

The surrounding area has historically comprised predominantly agricultural land associated with New Salts Farm since the 1870s. A railway line lies approximately 250 m north of the Site, with drainage ditches running alongside, and Brighton Road is located approximately 250 m to the south-east, constructed on raised ground to cross the River Adur Estuary and adjacent salt marshes. Residential development appeared to the north and south of the Site from the 1930s, with tanks recorded to the south. By the mid-20th century, Shoreham Aerodrome (later Brighton City Airport) was established to the north of the railway.

The Environmental Health Department of Adur District Council confirmed that the Site has been assigned as medium priority under the Council's Potentially Contaminated Land Strategy, due to the Site being located on a historical gravel pit which has been infilled. The Council also identified the presence of a historical refuse tip located approximately 80m south-east of the Site, which is understood to have been operational in the 1950s, with the aim of raising the land levels by 1.8 m. The Council is not looking to undertake any further investigation on these sites outside of the planning process.

The Site is considered to be located in a **moderate** sensitivity setting with regard to groundwater. The Site is underlain by Raised Beach Deposits (Secondary A Aquifer) in the south-east and Alluvium (Secondary Undifferentiated Aquifer) in the north-west, overlying the Newhaven Chalk Formation (Principal Aquifer). The

Site does not lie within a SPZ, and there are no active licensed groundwater abstractions within 2 km. The vulnerability of the groundwater is considered to be **high** as shallow groundwater was recorded at 1.3–1.8 m bgl during monitoring, and the Site is predominately unsurfaced, allowing potential for infiltration.

With respect to surface water, the Site is in a **moderate to low** sensitivity location, as the nearest drainage channel lies adjacent to the northern boundary, while the nearest classified watercourse, the River Adur (870 m east), is designated as having 'Moderate' ecological quality and 'Fail' chemical quality under the WFD. No active surface water abstractions are recorded within 2 km. The Site is considered to be in an area of **moderate** vulnerability with respect to surface water, due to the drainage features in the immediate vicinity.

A solution cavity (i.e. subsurface void) of 1.5 m was recorded 30 m east of the Site at 18.3 to 19.8 m bgl, indicating a potential for ground stability risks in the area. In addition, potential risks associated with former gravel abstraction in the south of the Site include high walls, uncontrolled Made Ground, collapse compression and differential settlement. *A geotechnical assessment has not been undertaken as part of this Phase 1 Contaminated Land Assessment.*

According to the EA's fluvial and tidal flood map for planning, the Site is located in **Flood Zone 3** (high probability). This zone comprises land assessed as having a 1 in 100 or greater annual probability of river flooding (>1% in any year) or a 1 in 200 or greater annual probability of flooding from the sea (>0.5% in any year).

Overall, the current and former use of the Site indicates that there is a **moderate** potential for significant or widespread soil and groundwater contamination to be present. There is a lack of site-specific data relating to the ground conditions at the Site, including the contamination status of soil and groundwater and the ground gas regime. Further action (such as a ground investigation and possible remediation) is recommended below, and it is considered that this can be addressed through appropriately worded planning conditions.

9.2. Recommendations

On the basis of the findings of this Phase 1 Contaminated Land Assessment, the following recommendations are made for the Proposed Redevelopment:

- A Detailed UXO Desk Study should be commissioned to assess the UXO hazard level across the Site. This is a Health & Safety requirement and should be undertaken prior to breaking ground i.e. for a future ground investigation or redevelopment.
- A Ground Investigation will be required to assess the ground conditions at the Site (soil, groundwater and ground gas) and identify if contamination and/or ground gases are present which could pose a significant risk to human health and/or controlled waters.

- Potential land stability issues associated with the underlying geology and former surface abstraction in the south of the Site will need to be further investigated as part of the ground investigation.
- A Remediation Strategy may be required, depending on the findings of the Ground Investigation, which should include a Verification Plan for any proposed remediation.
- Redevelopment should be undertaken in accordance with the Control of Asbestos Regulations 2012 (CAR 2012) and appropriate risk assessments, method statements and control measures should be implemented. A Refurbishment and Demolition Survey should be undertaken for all buildings prior to the proposed refurbishment and/or demolition and any recommendations (including removal and abatement) should be implemented in accordance with CAR 2012 and associated guidance.

Appendix A - Site Walkover Photos



Photo 1. Site entrance via gate from New Salts Farm Road.



Photo 2. View of gravel access road/track leading up to the barns.

Title: Photographic Log	Client: NSF Barns Ltd
Site: New Salts Farm	Date: 4 th September 2025



Photo 3. Uneven ground and stockpiles near Site access.



Photo 4. Stockpiles near site entrance.

Title: Photographic Log	Client: NSF Barns Ltd
Site: New Salts Farm	Date: 4 th September 2025



Photo 5. View of the Site facing southwards.



Photo 6. One of the adjoining barns located in the north of the Site.

Title: Photographic Log	Client: NSF Barns Ltd
Site: New Salts Farm	Date: 4 th September 2025



Photo 7. Corrugated cement/metal sheeting roof, with visible damage.



Photo 8. Cattle and hay bales stored in one of the adjoining barns.

Title: Photographic Log	Client: NSF Barns Ltd
Site: New Salts Farm	Date: 4 th September 2025



Photo 9. Adjoining barns with a stockpile/uneven ground to the north.



Photo 10. View of the northern portion of the Site looking westwards.

Title: Photographic Log	Client: NSF Barns Ltd
Site: New Salts Farm	Date: 4 th September 2025



Photo 11. Western side of adjoining barns.



Photo 12. Storage of manure, trailers and hay.

Title: Photographic Log	Client: NSF Barns Ltd
Site: New Salts Farm	Date: 4 th September 2025



Photo 13. Manure storage on hardstanding in south-west of the Site.



Photo 14. Surface water collecting in the centre of the Site, with leaching from manure stockpile/barns visible.

Title: Photographic Log	Client: NSF Barns Ltd
Site: New Salts Farm	Date: 4 th September 2025



Photo 15. Damage to corrugated cement sheeting in the north-eastern barn.



Photo 16. Barn loacted in the south of the Site, storing hay and tractors.

Title: Photographic Log	Client: NSF Barns Ltd
Site: New Salts Farm	Date: 4 th September 2025



Photo 17. Raised area in south-west of site (approximately 0.75 m above rest of Site).



Photo 18. Hay storage to the east of the southern barn.

Title: Photographic Log	Client: NSF Barns Ltd
Site: New Salts Farm	Date: 4 th September 2025



Photo 19. Damage to the southern barn.



Photo 20. Monitoring borehole observed in the south of the Site.

Title: Photographic Log	Client: NSF Barns Ltd
Site: New Salts Farm	Date: 4 th September 2025



Photo 21. Cement sheeting fragment observed to the south of the southern barn.



Photo 22. Former barn structure in the south-west of the Site (looking northwards).

Title: Photographic Log	Client: NSF Barns Ltd
Site: New Salts Farm	Date: 4 th September 2025

Appendix B - Historical Maps

Site Details:

1, BROOKLANDS, NEW SALTS
FARM ROAD, LANCING, WEST
SUSSEX, BN43 5FE

Client Ref: 0825/24
Report Ref: GS-26U-XM9-SKJ-KPT
Grid Ref: 520346, 104720

Map Name: County Series

Map date: 1873

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1873
Revised 1873
Edition N/A
Copyright N/A
Levelled N/A

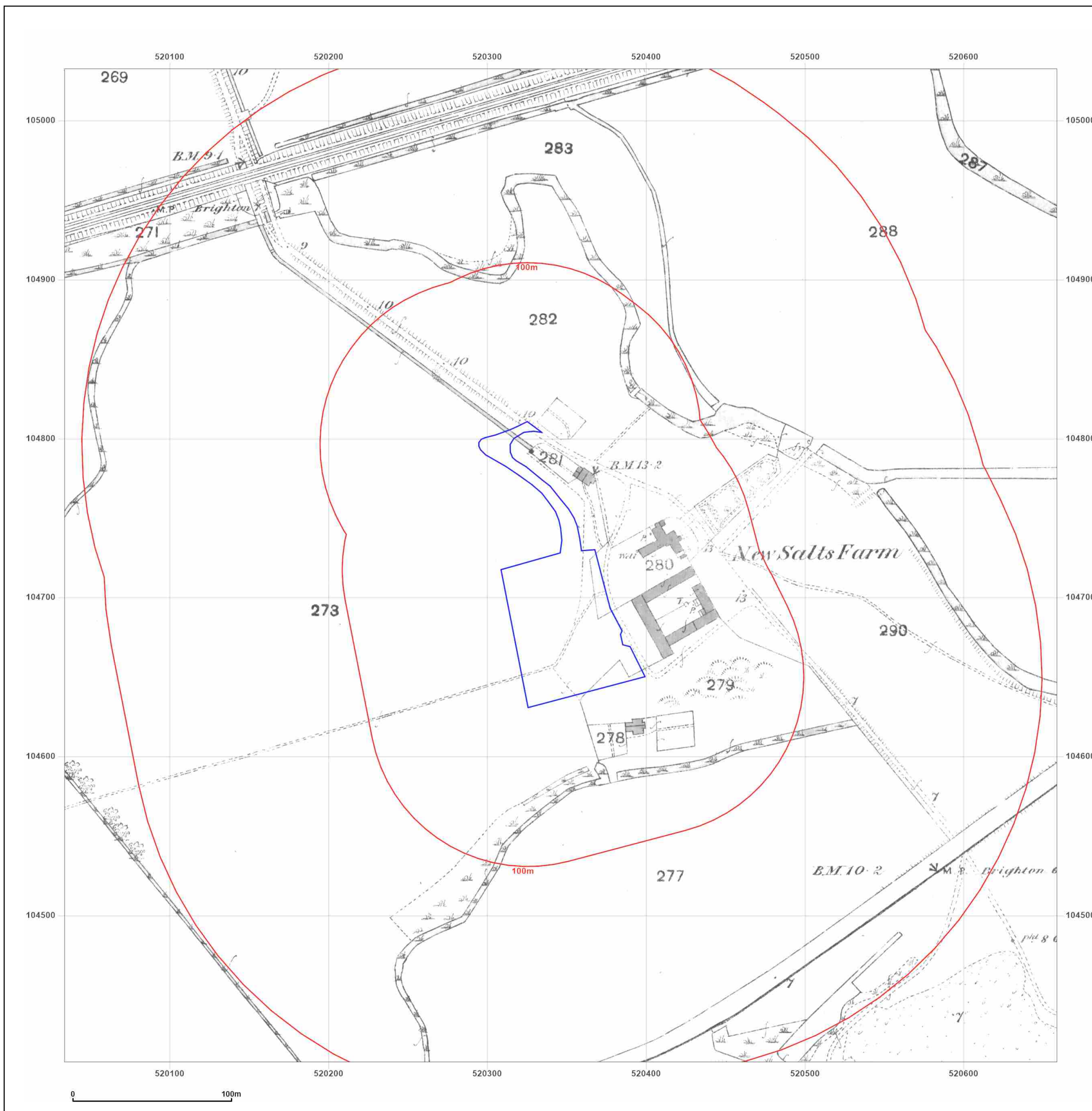


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Site Details:

1, BROOKLANDS, NEW SALTS
FARM ROAD, LANCING, WEST
SUSSEX, BN43 5FE

Client Ref: 0825/24
Report Ref: GS-26U-XM9-SKJ-KPT
Grid Ref: 520346, 104720

Map Name: County Series

Map date: 1898

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1898
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Site Details:

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FARM ROAD, LANCING, WEST
SUSSEX, BN43 5FE

Client Ref: 0825/24
Report Ref: GS-26U-XM9-SKJ-KPT
Grid Ref: 520346, 104720

Map Name: County Series

Map date: 1912

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1912
Revised 1912
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SUSSEX, BN43 5FE

Client Ref: 0825/24
Report Ref: GS-26U-XM9-SKJ-KPT
Grid Ref: 520346, 104720

Map Name: County Series

Map date: 1931

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1931
Revised 1931
Edition N/A
Copyright N/A
Levelled N/A

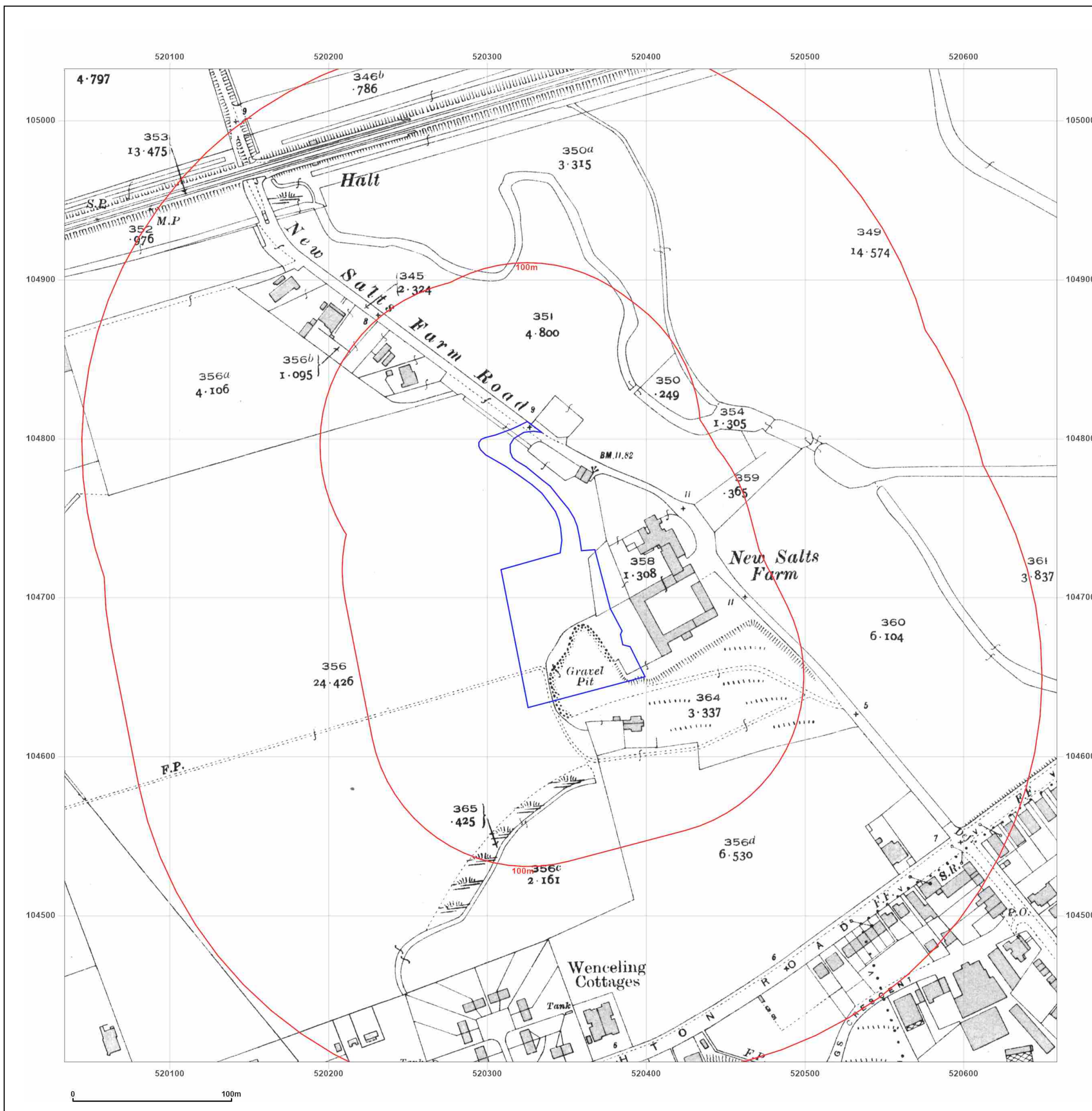


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Site Details:

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FARM ROAD, LANCING, WEST
SUSSEX, BN43 5FE

Client Ref: 0825/24
Report Ref: GS-26U-XM9-SKJ-KPT
Grid Ref: 520346, 104720

Map Name: National Grid

Map date: 1951

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1951
Revised 1951
Edition N/A
Copyright N/A
Levelled 1948

Surveyed 1951
Revised 1951
Edition N/A
Copyright N/A
Levelled 1950



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Site Details:

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FARM ROAD, LANCING, WEST
SUSSEX, BN43 5FE

Client Ref: 0825/24
Report Ref: GS-26U-XM9-SKJ-KPT
Grid Ref: 520346, 104720

Map Name: National Grid

Map date: 1970

Scale: 1:2,500

Printed at: 1:2,500



Surveyed 1968
Revised 1968
Edition N/A
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Levelled 1966



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Site Details:

1, BROOKLANDS, NEW SALTS
FARM ROAD, LANCING, WEST
SUSSEX, BN43 5FE

Client Ref: 0825/24
Report Ref: GS-26U-XM9-SKJ-KPT
Grid Ref: 520346, 104720

Map Name: National Grid

Map date: 1971-1974

Scale: 1:1,250

Printed at: 1:2,000



Surveyed 1951
Revised 1974
Edition N/A
Copyright 1974
Levelled 1966

Surveyed 1951
Revised 1970
Edition N/A
Copyright 1971
Levelled 1966

Surveyed 1951
Revised 1970
Edition N/A
Copyright 1971
Levelled 1959

Surveyed 1951
Revised 1972
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Levelled 1966



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Site Details:

1, BROOKLANDS, NEW SALTS
FARM ROAD, LANCING, WEST
SUSSEX, BN43 5FE

Client Ref: 0825/24
Report Ref: GS-26U-XM9-SKJ-KPT
Grid Ref: 520346, 104720

Map Name: National Grid

Map date: 1994

Scale: 1:1,250

Printed at: 1:2,000

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Surveyed N/A Revised N/A Edition N/A Copyright 1994 Levelled N/A	Surveyed N/A Revised N/A Edition N/A Copyright 1994 Levelled N/A
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Site Details:

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SUSSEX, BN43 5FE

Client Ref: 0825/24
Report Ref: GS-26U-XM9-SKJ-KPT
Grid Ref: 520346, 104720

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250



2003



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Appendix C - UXO Preliminary Assessment

PA024511 — NEW SALTS FARM ROAD

DOCUMENT DETAILS

Site name:	New Salts Farm Road		
Reference:	PA024511	Client:	Hilson Moran
Date:	25 th September 2025	Contact:	Lucy Cooper

RECOMMENDATION

A detailed desk study is recommended to assess, and potentially zone, the Unexploded Ordnance (UXO) hazard level on the Site.

SUMMARY OF FINDINGS

Military Activity	In 1940, 1No. German fighter aircraft crashed on New Salts Farm, adjacent to the Site. During WWII, 1No. pillbox was established adjacent to the Site. This pillbox was equipped with Anti-Aircraft (AA) defences. Following WWII, it was removed. The South Downs Training Area (SDTA) was established on land encompassing the Site. No training activities associated with the SDTA have been found on the Site. Royal Air Force (RAF) Shoreham was established 0.3km north of the Site. RAF Shoreham was a fighter airfield used to undertake coastal patrols. The airfield was decommissioned in 1946 and redeveloped for commercial aviation.
WWI Bombing	Potential targets within approximately 5km of the Site: - Shoreham Harbour. - Transport infrastructure and public utilities. - Chemical works. - Royal Flying Corps (RFC) Shoreham. - Military establishments and training areas. No readily available records have been found indicating that the Site was bombed.
WWII Bombing	The Site was located in Worthing Rural District (RD), which officially recorded 124No. High Explosive (HE) bombs, with a density of 4.2 bombs per 405 hectares (ha). These statistics typically exclude bombs that fell on military establishments, such as RAF Shoreham. Potential targets within approximately 5km of the Site: - Shoreham Harbour. - Transport infrastructure and public utilities. - Chemical works. - RAF Shoreham. - Military establishments and training areas. - AA and anti-invasion defences. No readily available records have been found indicating that the Site was bombed.
Bombing Decoys	None identified within 5km of the Site.

FURTHER INFORMATION

These findings are based on a cursory review of readily available records; caution is advised if you plan to action work based on this PDSA.

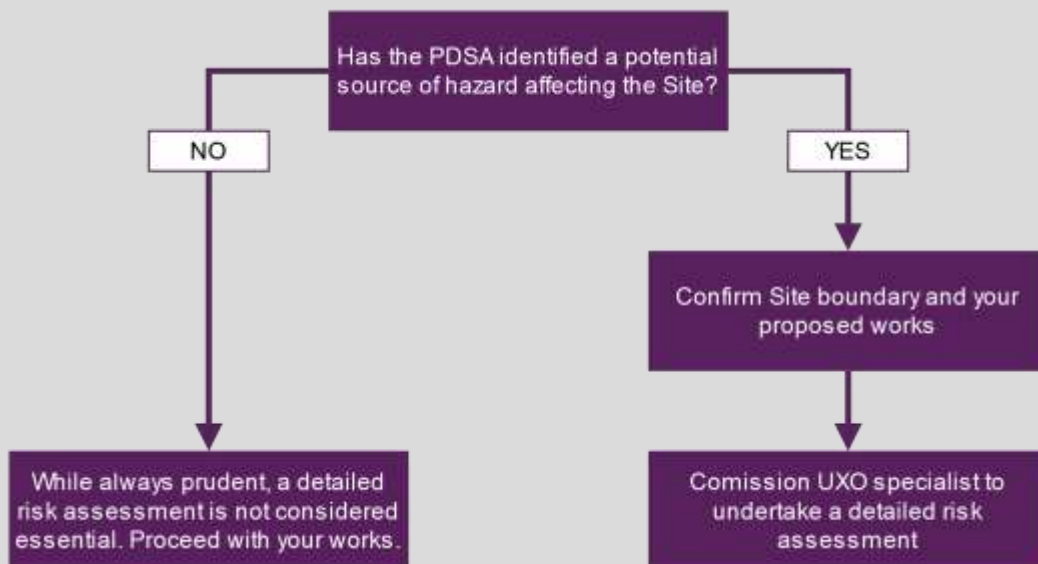
Where a potentially significant UXO hazard source has been identified on the Site, no further research has been undertaken. A detailed UXO desk study and risk assessment may identify other potential UXO hazard sources on the Site.

Visit www.zeticauxo.com to learn more about Zetica's detailed UXO desk studies and other UXO services. Click [here](#) for more information about the most common UXO hazard sources in the UK.

If you have any further queries, please don't hesitate to contact us at uxo@zetica.com or 01993 886 682.

NEXT STEPS

Follow the steps below to determine the appropriate course of action:



Potential UXO hazard identified? If the PDSA has identified a potential source of UXO hazard affecting your site, then a detailed UXO risk assessment is recommended.

No obvious source of UXO hazard? If the PDSA has not identified any obvious source of potential UXO, works can proceed.

It is good practice to raise awareness of the background UXO risk in the UK as part of a standard site induction. This will ensure that appropriate action is taken in the unlikely event that UXO is discovered.

Don't skip a stage: If you skip the detailed risk assessment stage, you could end up undertaking unnecessary work (e.g. trying to detect a UXO hazard that has already been removed).

Similarly, a detailed risk assessment might find that the UXO hazard is worse than expected and has a greater potential to cause harm, requiring a different mitigation approach than would otherwise be undertaken.

Appendix D – EHO Response



ADUR & WORTHING
COUNCILS

Adur & Worthing Councils
Worthing Town Hall
Chapel Road
Worthing
West Sussex, BN11 1HA
www.adur-worthing.gov.uk

Ms Lucy Cooper
lcooper@hilsonmoran.com

Date: 30-09-2025

Service: Public Health & Regulation
Tel: 01903 221064
Email: publichealth.regulation@adur-worthing.gov.uk

Our Reference: 305596

Dear Ms Cooper,

Environmental Information Regulations 2004
Part IIA Environmental Protection Act, 1990
Re.: The Farm House, New Salts Farm, Lancing, West Sussex, BN43 5FE.

Further to your inquiry regarding contaminated land and associated issues at the above site, I am writing on behalf of this Department to advise you of the results of a search of our records and to inform you of the Council's position with regard to Part IIA.

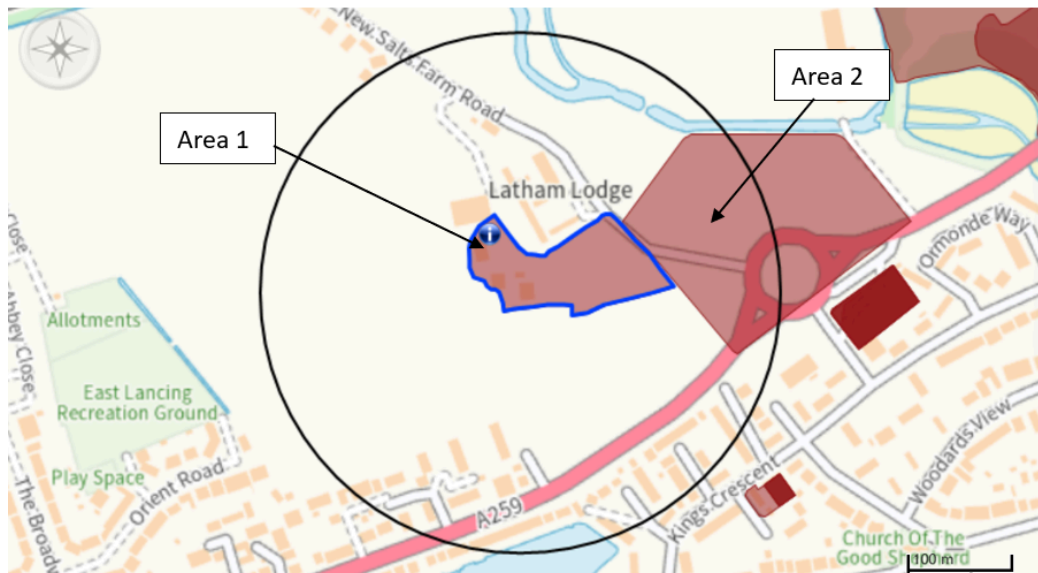
Adur and Worthing Councils are in the process of implementing the contaminated land strategy to identify land within the district that is potentially contaminated. At the current time, this Department has identified and prioritised sites within the area that have been or are currently occupied by a potentially contaminative use. Initial investigations in the form of desktop studies and/or site inspections are in the process of being undertaken, with the intention of reprioritising sites for more detailed inspection at a later date. At present, Adur and Worthing Councils have no entries into the Registers of Contaminated Land and are currently not considering taking formal or informal action under Part IIA of the Environmental Protection Act 1990.

1. Has the site been identified for inspection or further review under the Council's Contaminated Land Strategy (or other Part IIA undertaking)? If so, please describe the priority status/risk ranking of the site and the likely timescale for any further scrutiny of the site.

The area has been assigned as a medium priority under the Council's potentially contaminated land strategy due to the site being located on a historic gravel pit. The council is not currently looking at undertaking any further investigation on the site outside of the planning process.

2. Are there any known contamination issues associated with the site or in the near vicinity e.g. in terms of former or current contaminative site uses, leaks or spills of any oil/chemical substances etc.? If there have been any intrusive investigations at the site or near vicinity, please provide dates and titles of any reports and confirm whether the reports are publicly available.

The search revealed a number of land uses known to be potentially contaminative within a 250 metre radius of the site. These are illustrated on the map and discussed below.



Area 1 - New Salts Farm, Lancing: The area has been assigned as a medium priority under the Council's potentially contaminated land strategy due to possible infilling from the historic gravel pit in the 1930s. We do not currently hold any previous ground investigation reports of the site. Consequently, any planning application for this site which involves breaking the ground surface is likely to have appropriate planning conditions added.

Area 2 - Land Adjoining New Salts Farm, Lancing: This area has been highlighted as a historic controlled refuse tip in the 1950s to raise the land by 1.8m. The potential contaminants are likely to include a variety of hydrocarbons, PCB's and a range of heavy metals. An in-depth search of my department's records does not show any investigations regarding the above site. Consequently, any planning application for this site which involves breaking the ground surface is likely to have appropriate planning conditions added.

3. Please provide the following details of any current or former landfills located within a 250m radius of the site:

- a. **The location of all landfills, both closed and operational (i.e. National Grid Reference and location plan if available).**
- b. **Dates when the landfill was operational.**
- c. **Types of waste deposited.**
- d. **Any information on volume of waste deposited, depth of infilling and landfill structure.**
- e. **Details of any landfill gas monitoring, site investigation or gas spiking undertaken at the landfill or in the immediate vicinity of the site.**

Land Adjoining New Salts Farm, Lancing

- a. Please see Area 2 on the above map
- b. 1950's
- c. Controlled Refuse Tip
- d. The area was infilled to raise the level by 1.8m and then capped with clean soil.
- e. No recorded monitoring has taken place on the site

4. Have elevated indoor radon gas concentrations been identified within buildings on or within 100 m of the site? Have radon protection measures been required in buildings on-site or within 100 m? If so, please provide details.

My department has no reports detailing that indoor radon gas concentrations have been taken.

5. Are there any known current or former nuisance issues, prosecutions or enforcements associated with the site or adjoining properties, such as noise, odour or dust issues / complaints? If yes, what was the nature of the issue and what was the outcome?

Date	Type of Complaint	Outcome
February 2025	Noise	Not Substantiated
March 2024	Bird Noise/Nesting	Resolved

6. Are there any known private water supplies recorded on your Local Authority Private Water Supply Register, within 2 km radius of the site? If yes what is the location (i.e. NGR), the source of abstraction and its purpose?

There are no Private Water Supplies within 2km of the site boundaries.

7. Please provide details of any Part A(2) or Part B Environmental Permits (formerly LAAPC / LAPPC authorisations) licensed to the site or to adjoining properties.

There are no Part A(2) or Part B Permits licensed to the site or those adjoining.

This Department makes no claim to have comprehensive records, and takes no responsibility for any omissions that may occur. Further relevant information regarding the above site may be held by other Council Departments or external agencies, who should be consulted independently. Any information provided should not be substituted for your own thorough site investigation, which may include intrusive soil sampling.

I trust this letter is satisfactory; if you would like to discuss this, or have any further questions, please feel free to contact me on the details provided below.

Yours sincerely



Oliver Rochford
Environmental Health Technician
E-mail: oliver.rochford@adur-worthing.gov.uk

References

- i HMSO (1990) Environmental Protection Act 1990 (as amended).
- ii Water Act 2003 (Commencement No. 11) Order 2012.
- iii Environment Agency (2023) Land Contamination Risk Management (LCRM). Accessed through www.gov.uk/government/publications/land-contamination-risk-management-lcrm.
- iv Department for Levelling Up, Housing & Communities (2023) National Planning Policy Framework.
- v Ground and Environmental Services Limited. (2024). Soakage Testing – New Salts Farm, New Salts Farm Road, Shoreham BN43 5FE. Ref. 13373.
- vi <https://flood-map-for-planning.service.gov.uk/>



People. Places. Planet.