



Gladman Developments Limited

Land west of Arundel Road, Angmering

Preliminary risk assessment

Project no. 301954 R01 (00)

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RSK GENERAL NOTES

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Client: Gladman Developments Limited

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Office: RSK, 12 Royal Scot Road, Pride Park, Derby, DE24 8AJ, tel: +44(0)132542740

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Author	<u>Kirsty Summers/ Hannah Warrener</u>	Technical reviewer	<u>Tim Cawood</u>
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Signature

Date:

19 August 2017

Signature

Date:

19 August 2017

Project manager	<u>Patrick Norwood</u>	Quality Reviewer	<u>Tim Cawood</u>
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Signature

Date:

30 August 2017

19 August 2017

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1 INTRODUCTION

1.1 Background

RSK Environment Limited (RSK) has been commissioned by Gladman Developments Ltd to carry out a preliminary risk assessment of the land west of Arundel Road, Angmering, West Sussex. The report was undertaken in support of a future planning application to redevelop the land for residential purposes. This report is subject to the RSK service constraints given in Appendix A.

1.2 Aim

The aim of the work is to complete a preliminary risk assessment of the proposed site, to support an outline planning application for a change in land use. The preliminary risk assessment will obtain information regarding ground conditions, from which risks to end-users, the environment and structures can be assessed, with mitigation measures outlined if necessary.

1.3 Scope

The project was carried out to an agreed brief as set out in RSK's proposal (tender ref. 301954T01(00)/GS, dated 29 August 2017). The scope of works for the assessment includes a review of geological, hydrogeological and hydrological information, a commercially available environmental database, historical plans; and a site walkover – this information is used to develop an initial conceptual site model (CSM) to consider any potentially complete pollutant linkages. This report has been produced in accordance with contaminated land legislation and policies, a summary of which is provided in Appendix B.

1.4 Existing reports

RSK is not aware of any previous reports pertaining to the site in relation to a previous planning application.

1.5 Limitations

The comments given in this report and the opinions expressed are based on information gathered during the site walkover and through relevant searches. However, there may be conditions pertaining to the site that have not been disclosed and therefore could not be taken into account.

The identification of ecology including invasive species is out with the scope of this investigation therefore comments with regards to ecology have been emitted from this report.

2 THE SITE

2.1 Site location and description

The site is located to the west of Arundel Road in Angmering, West Sussex at approximate National Grid reference 506542, 105327 as shown in Figure 1. The red line boundary and current site setting are shown in Figure 2.

The area around the site is a mixture of recreational, agricultural, industrial, residential and wooded land as detailed in Table 1.

Table 1: Site setting

To the north:	Non-coniferous wooded area containing a surface watercourse flowing south-west with overgrown scrubland and New Place Farm beyond.
To the north-east	A few residential properties are located along Arundel Road.
To the east:	An area of overgrown scrubland is present directly to the east with Arundel Rd present beyond running in a north-south direction. Agricultural and wooded land lie beyond Arundel Rd with Acorns Campsite within the wooded area.
To the south:	Recreational ground associated with Angmering Sports and Social Club is present directly to the south. Residential properties are present beyond the sites southern boundary.
To the south-east	Residential properties fronting Arundel Road.
To the west:	Agricultural land with a public footpath running adjacent to the site boundary.

The site covers an area of approximately 9 Ha. It slopes gradually down towards the west with an elevation of approximately 22 m above Ordnance Datum (AOD) in the north-east and 12 m AOD in the north-west.

Hedgerows and mature trees are present along the southern, western and northern boundaries of the site.

2.2 Proposed development

At the time of reporting, RSK are aware that the site is being considered for residential redevelopment (in the region of 205 houses), with associated infrastructure and landscaping.

3 ENVIRONMENTAL SETTING

3.1 Site walkover

The site was visited on 14 September 2017 to undertake a site walkover. Photographs, the site walkover checklist and the site feature plan are provided in Appendix C.

The south-east of the site comprises a mixture of land uses, including a caravan, coach and minibus storage area (see photograph 2 in Appendix C), printing facilities (Va Signs and The Design Studio), auto repair garages (VW Spares, Angmering Auto Services and Parris Repairs Service) and a door, window and conservatory manufacturing and installation business (Horizon Windows). Some of the buildings are in a state of disrepair with the majority of the buildings having roofs which are considered likely to comprise asbestos containing materials (ACM), illustrated in photograph 7 in Appendix C.

Oil and fuel storage tanks are present associated with the auto repair garages. The tanks appear to be unbunded and evidence of some oil spillage is present within their immediate vicinity. Containers with unknown contents are situated near the stored caravans (see photograph 8 in Appendix C). To the immediate north of this area there is a residential property called New Place Bungalow (see photographs 11 and 12 in Appendix C) with a small grassland area to the south-west which appears to be used for camping.

The north of the site comprises grassland and with scrubland and some evidence of past industrial land use in the north-east including, a disused building, loose asphalt surfacing, plastic containers containing red diesel and old machinery (see photograph 15 in Appendix C). The remaining area of the site in the south-west comprises an agricultural field. There was no obvious evidence encountered during the reconnaissance of an infilled pit / quarry as possibly shown by the 1974 Historical Map (see section 3.2).

Vehicular access can be gained from Arundel Road located along the eastern boundary directly to the scrubland and the industrial area in the west of the site.

Potentially significant ground contamination and geotechnical issues were identified during our site walkover survey, which are as follows:

- potential presence of ACM in the construction of on-site buildings;
- loose asphalt surface in the north-east;
- red diesel in plastic containers in the north-east;
- fuel storage tanks with no bund wall in the south-east;
- unknown storage tanks / gas cylinders in the south-east;

- fuel and oil storage and spillage in the south-east;
- discoloured, hardstanding cracked ground outside a car garage in the east with a fuel smell;
- containers with unknown contents; and
- a large waste skip in the east and other smaller areas of uncontained waste.

3.2 History of site and surrounding area

The history of the land-use and development of the site and surrounding area has been assessed using on the following sources:

- Historical maps within the environmental database (Envirocheck report, September 2017) from 1876 to 2017;
- An internet search; and
- Aerial photography.

Copies of OS and County Series maps are included in the environmental database report in Appendix E. Reference to historical maps provides invaluable information regarding the land use history of the site, but historical evidence may be incomplete for the period pre-dating the first edition and between successive maps.

The development history of the site and surrounding area from the above sources is detailed in Table 2 and summarised below.

Table 2: Summary of historical development

Date	Land use / features on site	Land use / features in vicinity of site (of relevance to the assessment)
1876	• The site boundary comprises the majority of three adjacent fields with no areas of development. • Trees existed along field boundaries.	• Open fields exist to the west and to the south. • Trees are located along most field boundaries and roads surrounding the site. • A road runs adjacent to the eastern boundary (Arundel Road). • Wooded areas and rough grasslands are to the north with Newplace Farm beyond. • Wooded area to the east with an open field below to the south. • A public footpath to adjacent to the western site boundary. • A surface watercourse is located roughly parallel to the northern boundary. • A pond is located to the north-west of the site boundary.

Date	Land use / features on site	Land use / features in vicinity of site (of relevance to the assessment)
1879	No significant change.	No significant change.
1897	No trees recorded along field boundaries	- The southern section of the wooded area to the east appears to consist more of rough grassland. - The surface watercourse and the pond connect. - Some development along Arundel Road to the north of the site.
1912	The site consists of two fields.	- The area to the east appears to return to wooded conditions. - The rough grassland in the north now appears to be an open field - Several sluices exist along the surface watercourse.
1937	No significant change.	- The open field to the north is now shown as rough grassland. - Residential development has occurred south of the site off Arundel Road.
1971	- Two commercial plant nurseries are present on site. These are Wilmington Nursery (at the north-east corner of the site) and the much larger New Place Nursery (at the south-east of the site, covering the area which currently comprises the commercial and light industrial area). - The Bungalow is present in the north-east. - An area of coniferous trees exists in the north-west of the site.	- New Place Farm becomes further developed. - Significant residential development has occurred to the south and south-east of site. - A small development has occurred in the wooded area to the east of site. - A large glazed roof building as part of Wilmington Nursery is present immediately adjacent to the north-east of the site.
1974-1975	- Wilmington Nursery is now labelled as Seven Acres Nursery, and the glazed roofed buildings present on site are no longer shown (although buildings remain in this area). - A circular feature is present in the north east of the site to the east of Seven Acres Nursery, with the letters SC written within it. It is	Development of the road (A27) in the north.

Date	Land use / features on site	Land use / features in vicinity of site (of relevance to the assessment)
	considered likely that this feature relates to an area of scrubland although the map is unclear and may relate to another feature such as a quarry or pit. The northern field no longer contains trees.	
1979	The circular feature in the north east of the site (scrubland or quarry / pit) is no longer present	No significant change.
1988-1989	Some redevelopment (i.e. demolition and construction of buildings) has occurred at The Bungalow in the north-east of the site.	Further development in the residential area to the south of the site.
1994	- The glazed roof buildings comprising New Place Nursery are no longer shown to be present. Several buildings remain in this area which are still labelled as New Place Nursery, although it is now assumed to be inactive. - The buildings which formerly comprised Seven Acres Nursery are now labelled as Seven Acres, it is presumed the nursery is now inactive.	- Wooded areas to the north and the east no longer are present. - The remaining glazed roof building as part of Seven Acres Nursery adjacent to the north-east corner of the site is no longer shown.
1999	- There is no physical boundary between the two fields. - The buildings which were associated with Seven Acres Nursery no longer appear to exist. - Fewer buildings in the area labelled as New Place Nursery appear to exist. Aerial photography shows multiple cars in this area.	Wooded areas to the north and the east are present.
2017	No significant change.	No significant change.
Note: Locations of features are approximate		

From the first available historic map (1876), the site has comprised three open fields, presumably for agricultural use. Over time it has evolved into one open field through loss of hedgerows and appears to only partially be used for agricultural purposes. The site has formerly been occupied by Wilmington Nursery at the north-east of the site from the 1971 map, which was renamed Seven Acres Nursery by the 1974-1975 map. This map also indicated that glazed roof buildings on-site were removed, with the buildings remaining. The largest glazed roof building associated with this nursery was present off-site immediately adjacent to the north-east corner. This was removed by the 1994 map, at which point the remaining buildings on-site became labelled as Seven Acres and the nursery is presumed to have become inactive. These remaining buildings on-site were shown to be demolished by 1999.

To the south of this development along the eastern site boundary, several buildings labelled as The Bungalow were constructed between 1937 and 1971 consisting of one main building and another smaller building on-site (additional small buildings lie beyond the eastern boundary, possibly associated with Wilmington Nursery). By 1988, the development of a further building has occurred in close proximity to the north of the main building. Between 1999 and 2017, extension of the main building has occurred.

New Place Nursery has also occupied the site at the south-east (in the area currently occupied by the commercial and light industrial area). This nursery was first shown in 1971, with glazed roof buildings being removed by the 1994 map with the buildings remaining. By the 1999 map, fewer buildings are shown to be present in this area with the remaining buildings used as part of the small commercial and light industrial area by 2017. As determined by the site reconnaissance, the nursery is no longer present, however, the date it became inactive is unknown but is presumed to be during the mid to late 1990s.

In the 1974 map edition, a circular feature is present in the north east of the site to the east of Seven Acres Nursery, with the letters SC written within it. Considering the lettering (SC often relates to scrub on OS maps) and the current setting of this area of the site (which comprises scrubland) it is considered likely that this feature relates to an area of scrubland. Although, the map is unclear and the circular feature shown on the 1974 map may relate to another feature such as a quarry or pit. The circular feature is not shown on the 1979 mapping publication.

3.3 Ground conditions

3.3.1 Geology

Published records (British Geological Survey Onshore Geoindex, available online at <http://mapapps2.bgs.ac.uk/geoindex/home.html>) for the area indicate the geology of the site to be characterised by superficial Head Deposits. This excludes a small area in the north of the site where superficial deposits are not shown. Alluvium deposits are located approximately 50 m from the north-west corner of the site, although are not shown to underlie the site. River Terrace Deposits are also shown to be located to the south and the west of the site from approximately 250 m away. The bedrock geology across the site consists of the London Clay Formation. The bedrock is shown to change to the

Lambeth Group to the immediate north, 230 m to the south and 350 m to the west of the site.

British Geological Survey borehole data shows there are no boreholes on site. The closest borehole (TQ00SE6) lies 280 m to the south-east of the site boundary and shows drift deposits to a depth of approximately 7 m, overlying London Clay with a thickness of 11 m.

The geology of the site is described in Table 3, and is shown within maps contained within the environmental database report (Envirocheck, September 2017; Appendix E).

The history of the site suggests that made ground may be present in the east of the site where the present day industrial area, the residential property and wasteland is located.

Table 3: Geology at the site

Geological unit	Description	Estimated thickness (m)
Head Deposits	Polymict deposit: comprises gravel, sand and clay depending on upslope source and distance from source. Poorly sorted and poorly stratified deposits formed mostly by solifluction and / or hillwash and soil creep. Essentially comprises sand and gravel, locally with lenses of silt, clay or peat and organic material.	Not recorded
London Clay Formation	Bioturbated or poorly laminated, blue-grey or grey-brown, slightly calcareous, silty to very silty clay, clayey silt and sometimes silt, with some layers of sandy clay.	Up to 150m in the eastern part of the London Basin (Essex)
Off-site strata in close proximity to the site		
Lambeth Group	Vertically and laterally variable sequences mainly of clay, some silty or sandy, with some sands and gravels, minor limestones and lignites and occasional sandstone and conglomerate.	Up to 39m in the west of the London Basin.
Alluvium Deposits	Normally soft to firm consolidated, compressible silty clay, but can contain layers of silt, sand, peat and basal gravel. A stronger, desiccated surface zone may be present.	Not recorded
River Terrace Deposits (Undifferentiated)	Sand and gravel, locally with lenses of silt, clay or peat.	Not recorded

3.3.2 Ground Stability Hazards

The environment database report lists potential ground stability hazards at the site as follows:

- Collapsible ground – very low;

- Compressible ground – no hazard;
- Ground dissolution – no hazard;
- Landslides – very low;
- Running sands – very low; and
- Shrinking or swelling clay – low.

Based on the site reconnaissance survey, which revealed the site slopes very gently towards the north north west, it is presumed there are no slopes which are greater than 1 in 12 on the site.

3.3.3 Radon

The environmental database report presented in Appendix E (Envirocheck report, September 2017) indicates that the site is located within a 'Lower probability radon area (less than 1% of homes are estimated to be at or above the Action Level)', as defined by the Documents of the National Radiological Protection Board (Radon Atlas of England and Wales, NRPB-W26-2002). Therefore, the risk of significant ingress of radon into structures on-site is considered low and no radon protective measures are required within new dwellings at the site.

3.3.4 Mining and quarrying

Evidence has been sought to identify any mining and quarrying operations, past and present, which have taken place in the vicinity of the site. The sources of information referenced in this element of the desk study include:

- An environmental database report (Envirocheck Report, September 2017);
- Old Ordnance Survey maps and plans;
- Current maps and aerial imagery;
- BGS Onshore Geoindex, including geological maps (available online at <http://mapapps2.bgs.ac.uk/geoindex/home.html>); and
- Coal Authority interactive map viewer (available online at <http://mapapps2.bgs.ac.uk/coalauthority/home.html>).

No mines or quarries are recorded on or within 500 m of the site. There are four records for historic opencast quarries mining sand and gravel from the Head Deposits, Spetisbury Chalk Member and Lambeth Group between 500 m and 1 km from the site, with the nearest being located 747 m north-east of the site.

The site is indicated by the Coal Authority interactive map viewer to be in an area that is not to be affected by coal mining.

3.3.5 Landfilling and land reclamation

Evidence has been sought to identify any landfilling or land reclamation operations, past and present, which have taken place near the site. The sources of information referenced in this element of the desk study include:

- An environmental database report (Envirocheck Report, September 2017);
- Old Ordnance Survey maps and plans;
- BGS Onshore Geoindex, including geological maps (available online at <http://mapapps2.bgs.ac.uk/geoindex/home.html>); and
- EA interactive map viewer (available online at <http://maps.environment-agency.gov.uk/wiyby>).

With reference to the above data, no active or historic landfill sites are recorded on site. The closest historic landfill is located 928 m north-east from site and a registered landfill site is recorded 750 m north-east from the site on Dappers Lane, Angmering, with a 'surrendered' license status. The Envirocheck report identifies some records for areas of potentially infilled land, comprising potentially opencast pits / quarries (as identified in Section 3.3.4) and infilled ponds. The nearest infilled pond is located 41 m west of the site.

An area on-site in the north-east (not included in the above records for areas of potentially infilled land) is identified in historic mapping as an area of probable scrubland however due to the clarity of the map may represent a quarry/pit. Should this feature be a quarry or pit landfilling will have occurred in this area of the site, intrusive site investigation works should be undertaken to confirm the presence of landfill/made ground in this area of the site.

3.4 Hydrogeology

3.4.1 Aquifer characteristics

Based on the published geological records referred to above, the hydrogeology of the site is likely to be characterised by the presence of a shallow unconfined aquifer. The Head Deposits are classified by the Environment Agency as a secondary undifferentiated aquifer, and the London Clay is classified as unproductive strata. Shallow groundwater in the site area is anticipated to flow in a north-westerly direction towards the surface water course.

3.4.2 Vulnerability of groundwater resources

The site has been classified by the Environment Agency to overlie a secondary undifferentiated aquifer, which are aquifers which include a wide range of rock layers or drift deposits with an equally wide range of water permeability and storage where it has not been possible to attribute either a category A or B to a rock type. In most cases this means that it was previously designated as both minor and non-aquifer in different locations, owing to the variable characteristics.

The soils beneath the site are classified as having a groundwater vulnerability reflective of a minor-aquifer region. The majority of the site is classed as soils with a high leaching potential (H1) which are soils which readily transmit liquid discharges because they are either shallow, or susceptible to rapid by-pass flow directly to rock, gravel or groundwater. A small area in the north-east of the site is classed as spoils with low leaching potential defined as soils in which pollutants are unlikely to penetrate the soil

layer because water movement is largely horizontal or they have large ability to attenuate diffuse pollutants. Lateral flow from these soils contribute to groundwater recharge elsewhere in the catchment.

3.4.3 Licensed groundwater abstractions

The environmental database report (Envirocheck report, September 2017) indicates that there are no current licensed groundwater abstractions on-site. The nearest groundwater abstraction is located 25 m to the south-west of the site in the form of a spring and is operated by Richard J Pierce at Paris Farm for spray irrigation. Beyond this, a further groundwater abstraction has been identified 480 m west of the site and 20 groundwater abstractions between 501 m and 2000 m of the site.

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Information provided by the Environment Agency indicates that the site does not lie within a currently designated groundwater Source Protection Zone.

3.5 Hydrology

3.5.1 Surface watercourses and water bodies

There are no surface watercourses or water bodies on the site. The nearest identified surface water feature to the site is an unnamed inland river approximately 60 m to the north which passes through ponds and marsh land within 800 m of site, before flowing into the River Arun 5.4 km west of the site. There is also a discontinuous inland river approximately 150 m from the south of the site.

3.5.2 Surface water abstractions

The environmental database report (Envirocheck report, September 2017) indicates that there are no current licensed surface water abstractions on-site. Seven surface water abstractions are identified from 1 km to 2 km away from the site. The nearest surface water abstraction is 1225 m south-west of the site.

Approximately 51 m from the east of the site there is discharge consent of treated sewage into a freshwater course.

3.5.3 Site drainage

Based on the anticipated underlying geology at the site (i.e. Head Deposits which are likely to be variable in their composition and therefore their permeability), it is considered that the adoption of soakaways for future site drainage is potentially feasible but will require confirmation through infiltration testing.

3.5.4 Preliminary flood risk assessment

The indicative floodplain map for the area, published by the EA, shows that the site does not lie within an area at risk of flooding from rivers or the sea (i.e. the site lies within flood zone 1, having less than 1 in 1000 annual probability of river or sea flooding). It is understood there is no flood risk from surface water over the majority of the site, however, localised areas along the western site boundary show an area at low risk

(1000 year return) of flooding from surface water and another is at high risk (30 year return). The area surrounding the inland river to the north also is at high risk from surface water flooding and at risk of flooding from rivers or the sea without defences (zone 3).

In southern and western areas of the site there is potential for groundwater flooding to occur at the surface. In the central region and northern and eastern areas of the site there is potential for groundwater flooding of properties situated below ground level.

This report is not intended to replace a full hydrological study and it is recommended that additional specialist studies be conducted to confirm flood risks at the site.

3.6 Sensitive land uses

There are no national or internationally designated sensitive land uses such as sites of special scientific interest (SSSI), Special Areas of Conservation or Ramsar sites are identified on the site. The nearest environmentally sensitive land areas to the site are the South Downs National Park, 200 m to the north of the site, and an English Heritage Scheduled Ancient Monument, 1.2 km to the south-west of the site. There are also nine registered ancient woodlands within a 1 km radius of the site. The site is also located 5 m from a nitrate vulnerable zone to the north-west (Lambeth Group), but does not lie within a nitrate vulnerable zone itself. A comprehensive evaluation of ecological receptors is outside the scope of this report.

3.7 Industrial land uses

There are two records for a licensed waste management facility on-site for end of life vehicles, of which, one license has been surrendered and the other has expired. Both licenses are registered at the same location at the western edge of the commercial and light industrial area, therefore, are likely to be the same facility.

Within the commercial and light industrial area in the south-east of the site, the following trade directories are currently active:

- vehicle repair, testing and servicing garages (Parris Repair Service, Angmering Auto Services and VWSpares);
- printing services (The Design Studio and Va Signs);
- caravan, coach and minibuss storage; and
- a door, window and conservatory manufacturing and installation business (Horizon Windows).

This commercial and light industrial area is understood to have historically been used as New Place Nursery (shown from the 1971 map, see Section 3.2), and subsequently as car breakers and dismantlers, several vehicle repair garages, salvage dealers and commercial vehicle dealers. New Place Nursery is thought to have ceased production by 1994 when the glazed roofed buildings, present in historic maps, no longer exist or have changed roofing.

An additional smaller commercial plant nursery (Wilmington Nursery, later renamed Seven Acres Nursery) was present at the north-east of the site, shown to be present from the 1971 map and presumed to be inactive in 1994 with the buildings having been demolished by 1999.

3.8 Initial conceptual model

The information presented in Sections 2 and 3.1 to 3.7, has been used to compile an initial conceptual model. The identified potential sources of contamination, associated contaminants and receptors have been considered with plausible pathways that may link them. The resulting potential pollutant linkages are considered in Section 3.8.4. The risk classification has been estimated in accordance with information in Appendix D.

3.8.1 Summary of potential contaminant sources

Potential sources and contaminants of concern are summarised in **Error! Reference source not found.4**.

Table 4: Potential sources and types of contamination

Potential sources	Contaminants of concern
On-site (current and historic)	
Historic nurseries (Seven Acres and New Place)	Pesticides and herbicides
Areas of made ground in the vicinity of former buildings which have been demolished (Seven Acres / New Place Nursery / The Bungalow) in the east of the site. Materials are presumed to be demolition-type rubble.	Unknown fill material (but potentially including heavy metals, ash, clinker, sulphates, petroleum hydrocarbons, polycyclic aromatic hydrocarbons (PAHs), asbestos containing materials etc.)
Made ground associated with the infilling of a pit / quarry possibly present in the north-east of the site	Unknown fill material (but potentially including heavy metals, ash, clinker, sulphates, petroleum hydrocarbons, polycyclic aromatic hydrocarbons (PAHs), asbestos containing materials etc.)
Chemical and fuel storage and the use associated with current and historic vehicle repair garages / used car dealers.	Hydrocarbons, volatile organic compounds (VOCs), lubricants, oils and elevated metal concentrations.
Chemicals, fuels and asbestos containing materials (ACM) associated with historic end of life vehicle waste management facilities / car breakers and dismantlers in the commercial area.	Asbestos containing materials, hydrocarbons, volatile organic compounds (VOCs), lubricants, oils and elevated metal concentrations.
Chemicals / inks associated with the printing facilities.	Metals and metalloids, inorganic compounds, acids / bases, asbestos, organic compounds (e.g. aliphatic /

Potential sources	Contaminants of concern
	aromatic hydrocarbons, halogenated solvents), fuels, polychlorinated biphenyls (PCBs), effluent treatment chemicals
Adhesives / oils associated with the door, window and conservatory manufacturing and installation business (Horizon Windows)	Adhesives and oils.
Off-site	
Made ground associated with the infilled pond 41 m to the north-west of the site.	Unknown fill material (but potentially including heavy metals, ash, clinker, sulphates, petroleum hydrocarbons, polycyclic aromatic hydrocarbons (PAHs), asbestos containing materials etc.)
Gas sources and gas generation potential in line with BS8576	
On-site	
Peat within Head Deposits	Carbon dioxide, methane – very low ground gas generation potential
Infilled pit / quarry in the north-east of the site	Carbon dioxide, methane – low ground gas generation potential
Made ground from the demolition of buildings	Carbon dioxide, methane – very low ground gas generation potential
Off-site	
Infilled pond (41 m to the north-west)	Carbon dioxide, methane – low ground gas potential

3.8.2 Sensitive receptors

Sensitive receptors at this site include:

- future site occupants;
- adjacent site users;
- future vegetation;
- proposed buildings and potable water supply pipes; and
- groundwater beneath the site (within secondary aquifers).

Please note that construction workers have not been identified in the conceptual model as receptors because risks are considered to be managed through health and safety procedures including CDM regulations.

3.8.3 Summary of plausible pathways

The plausible pathways are summarised below:

- direct contact (soil, dust and vegetable ingestion, dermal contact, dust and fibre inhalation);
- vertical and lateral migration including leaching;

- root uptake;
- chemical attack of infrastructure (including permeation of water supply pipes); and
- gas migration and build-up in confined spaces.

3.8.4 Potentially complete pollutant linkages

The outline conceptual model is shown in Table 5, with an estimate of the risk associated with each linkage. The risk classification has been undertaken in accordance with CIRIA C552 (Rudland et al., 2001), a summary of which is included in Appendix D.

Table 5: Risk estimation for potentially complete pollutant linkages

Pollutant linkage	Potential Contaminant	Potential receptor	Possible pathway	Likelihood	Severity	Risk and justification
Human Health						
1	Usage and potential storage of herbicides and pesticides at New Place and Seven Acres Nurseries	Future site users	Direct contact including soil and dust ingestion and inhalation	Low	Medium	Moderate / low: As areas of the site have historically been used as nurseries, it is likely herbicides and pesticides have been used. There is no information to suggest pesticides and herbicides have been manufactured on site. It is considered that recent and current use of pesticides and herbicides will have been subject to statutory control regarding the products used, their active chemical constituents and their application to land or vegetation. As such highly persistent forms are now relatively rare. Historic usage of pesticides and herbicides, which was not subject to statutory control, has potentially occurred at the site within Seven Acres and New Place Nurseries. Direct contact in areas formerly occupied by nurseries could lead to chronic damage to human health.
2	Localised areas of made ground in the vicinity of former buildings on-site and made ground associated with the possible presence of a backfilled pit / quarry in the north-east of the site.	Future site users	Direct contact including soil and dust ingestion and inhalation	Low	Medium	Moderate / low: Due to historic development and demolition of buildings on-site and infilling of the pit/quarry in the north-east of the site it is likely that localised areas of made ground will be present on the site. At present, it is unknown what the constituents of the made ground are. However, direct contact with contaminants in the made ground could cause chronic damage to human health.

Pollutant linkage	Potential Contaminant	Potential receptor	Possible pathway	Likelihood	Severity	Risk and justification
3	Chemicals, fuel and asbestos containing materials associated with current and historic vehicle repair garages / used car dealers and historic end of life vehicle waste management facilities / car breakers and dismantlers	Future site users	Direct contact including soil and dust ingestion and inhalation	Low	Medium	Moderate / low: A small area of the site (which now comprises the commercial / light industrial area at the east of the site) has historically and is currently occupied by vehicle repair garages / used car dealers and historic end of life vehicle waste management facilities / car breakers and dismantlers. It is considered that chemical and fuel storage and use is associated with these trades. If present within soils at the commercial / light industrial area then direct contact could cause chronic damage to human health.
4	Chemicals and inks from the printing facilities and adhesives and oils from the door, window and conservatory manufacturing and installation business	Future site users	Direct contact including soil and dust ingestion and inhalation	Low	Medium	Moderate / low: Within the small area of the site (which now comprises the commercial / light industrial area at the east of the site) a printing facility is present. It is understood that chemicals and inks are used at this printing facilities and adhesives and oils are used in the door, window and conservatory manufacturing and installation business, which if present within soils at the commercial / light industrial area then direct contact could cause chronic damage to human health.
5	On-site gas generation	Future site users	Gas migration and build-up in confined spaces	Low	Severe	Moderate: On-site sources of ground gas are peat within the Head Deposits and made ground from the demolition of buildings (which have been determined with a very low gas generation potential according to Figure 6 of BS8576 (BSI, 2013)). The made ground associated with the infill of the pit / quarry in the north-east of the site is also a source of ground gas and has been determined with a low gas generation potential. Considering the ground conditions of the site are anticipated to comprise predominantly cohesive bedrock strata and clay-rich superficial deposits, ground gas migration is considered to be of low likelihood. Risk associated with ground gas are acute. Therefore a severity rating of severe has been applied.

Pollutant linkage	Potential Contaminant	Potential receptor	Possible pathway	Likelihood	Severity	Risk and justification
6	Off-site gas generation	Future site users	Gas migration and build-up in confined spaces	Unlikely	Severe	Moderate / low: Off-site sources of ground gas are limited to the made ground associated with the infilled pond 41 m to the north-east of the site. This is considered to have a low gas generation potential according to Figure 6 of BS8576 (BSI, 2013). Considering the ground conditions of the site are anticipated to comprise predominantly cohesive bedrock strata and clay-rich superficial deposits, ground gas migration is considered to be of low likelihood. Risk associated with ground gas are acute. Therefore a severity rating of severe has been applied.
7	On-site sources of contamination (Seven Acres and New Place Nurseries, vehicle repair garages, printing facility)	Adjacent site users	Direct contact via dust inhalation	Unlikely	Medium	Low: Considering the only plausible pathway linking adjacent site users to on-site sources of contamination is via dust inhalation it is unlikely that adjacent site users will be impacted. However, direct contact via dust inhalation may cause chronic damage to human health.
Controlled Waters						
Considering the ground conditions at the site are anticipated to comprise predominantly cohesive bedrock strata and clay-rich superficial deposits, leaching and migration of contaminants is considered unlikely.						
Buildings and Infrastructure						
8	On-site sources of contamination (Seven Acres and New Place Nurseries, vehicle repair garages, printing facility, localised areas of made ground)	Future on-site buildings	Chemical attack of foundations and damage to structures	Low	Mild	Low: Potential contaminants associated with current and historic trades at the site and potential localised areas of made ground may result in aggressive conditions for foundations causing damage to structures. There is a potential for differential settlement of foundations spanning both made ground and natural strata.

Pollutant linkage	Potential Contaminant	Potential receptor	Possible pathway	Likelihood	Severity	Risk and justification
9	On-site sources of contamination (Seven Acres and New Place Nurseries, vehicle repair garages, printing facility, door, window and conservatory manufacturing and installation business and made ground)	Future on-site buildings	Permeation of potable water supply pipes	Low	Medium	Moderate / low: Potential organic contaminants associated with current and historic trades at the site and potential localised areas of made ground may permeate potable water supply pipes with the potential to cause chronic damage to human health.
10	On-site gas generation	Future on-site buildings	Gas migration and build-up in confined spaces	Low	Severe	Moderate: As discussed in pollutant linkage 6, peat within Head Deposits, made ground from demolition of buildings and made ground associated with the infill of the pit / quarry represent potential very low and low gas generation sources. It is considered of low likelihood that gas migration through the anticipated clay-rich bedrock strata and superficial deposits will occur. Risk associated with ground gas are acute. Therefore, a severity rating of severe has been applied.
11	Off-site gas generation	Future on-site buildings	Gas migration and build-up in confined spaces	Unlikely	Severe	Moderate / low: As discussed in pollutant linkage 7, made ground associated with the infilled pond represents a potential low gas generation source. It is considered of low likelihood that gas migration through the anticipated clay-rich bedrock strata and superficial deposits will occur. Risk associated with ground gas are acute. Therefore a severity rating of severe has been applied.
Phytotoxic effects						
Contaminants within potential isolated areas of made ground associated with former / current buildings on-site, and presumed infilled ponds present on-site may have the potential to locally inhibit vegetation growth.						

There are potential contaminants on-site that are identified in Table 5 to have complete pollutant linkages with a risk ranking of moderate / low, which RSK consider, as a precautionary approach, should be further investigated. These are:

- Direct contact of future site users with herbicides and pesticides associated with the former nurseries (New Place and Seven Acres nurseries);
- Direct contact of future site users with made ground in the vicinity of former buildings on-site and made ground associated with the possible infilling of a pit / quarry in the north-east of the site;
- Direct contact of future site users with chemicals, fuel and asbestos containing materials associated with current and historic vehicle repair garages / used car dealers and historic end of life vehicle waste management facilities / car breakers and dismantlers;
- Direct contact of the future site users with chemicals and inks from the printing facilities; and
- The permeation of on-site contaminants (associated with Seven Acres and New Place Nurseries, vehicle repair garages, printing facility, made ground) through potable water supply pipes with the potential to cause risk to future on-site buildings and cause chronic damage to human health.

On-site gas generation, migration and build up in confined spaces effecting future on-site users and buildings is identified in Table 5 to be a complete linkage with a risk ranking of moderate which RSK consider should be further investigated. Off-site gas generation migration and build up in confined spaces effecting future on-site users and buildings is also identified in Table 5 to have a complete linkage with a risk ranking of moderate/low which RSK consider as a precautionary approach should be further investigated.

As a conservative approach, we suggest pollutant linkages 7 and 8 in Table 5 are also investigated which both have complete pollutant linkages with a risk ranking of low. These are:

- Direct contact via dust inhalation of adjacent site users with on-site sources of contamination (Seven Acres and New Place Nurseries, vehicle repair garages, printing facility and localised areas of made ground).
- Chemical attack on foundations of future on-site buildings by on-site sources of contamination (Seven Acres and New Place Nurseries, vehicle repair garages, printing facility and localised areas of made ground).

4 PHASE 1 GEOTECHNICAL ASSESSMENT

4.1 Foundations

Based on the review of available BGS data, the site is indicated to be predominantly underlain by Head Deposits (which are typically variable in nature), with the London Clay Formation present at depth. Localised areas of made ground are considered likely to be present, particularly in the east.

Where Natural Strata is encountered near surface, traditional strip or trench fill foundations may be appropriate for low rise residential units although this will be dependant on the composition of the superficial head deposits which are typically variable in nature.

Alternative foundations, such as piles, may be required if areas of loose / soft Head Deposits are present, or if deep made ground is encountered (i.e. in the north-east where a backfilled pit / quarry is possibly present), necessitate the advancement of deep excavations.

Owing to the likely presence of shrinkable clay soils, foundations should be designed taking into account all the normal precautions, including minimum founding depths, to minimise the risk of future foundation movements in accordance with NHBC Standards, Chapter 4.2 'Building Near Trees', or similar.

It is likely that formations soils will comprise both cohesive and granular soils. On this basis, foundations may need to incorporate nominal mesh reinforcement throughout to overcome the potential for any differential settlement.

It is recommended that Phase II exploratory works are undertaken and soils assessed to confirm geotechnical conditions on site, prior to final geotechnical design.

4.2 Groundwater / Excavation Stability

There is a potential for locally loose sands and localised perched water within the Head Deposits underlying the site.

Pumping from open sumps in granular soils (i.e. within the Head Deposits) should be avoided as this can result in instability and general loosening of the soils at the base of the excavation. Although unlikely, dewatering in non-cohesive soils will require the use of well-pointing systems. In cohesive soils, pumping from open sumps should be sufficient to keep excavations reasonably dry.

Due to the potential presence of granular Head Deposits, there is the potential for instability of foundation excavations, especially if associated with any groundwater seepages. Closely boarded side support may therefore be required in granular soils, especially if associated with groundwater seepages.

4.3 Drainage

Based on the anticipated underlying geology at the site (i.e. Head Deposits which are likely to be variable in their composition and therefore their permeability), it is considered

that the adoption of soakaways for future site drainage is potentially feasible but will require confirmation through infiltration testing.

4.4 Slopes

Based on the site reconnaissance survey, which revealed the site slopes very gently towards the north-west, it is presumed there are no slopes which are greater than 1 in 12 on the site.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The site comprises a small commercial and light industrial area in the east of the site, which includes a caravan, minibus and small coach park, vehicle repair garages (Angmering Auto Services, VW Spares and Parris Repair Service), a residential property (New Place Bungalow), a small camping area, printing facilities (Va Signs and The Design Studio) and a door, window and conservatory manufacturing and installation business (Horizon Windows). A scrubland is located in the north-east of the site, with the remainder of the site comprising agricultural land and grassland. Historically, two nurseries (Seven Acres and New Place) were active in the east of site. The surrounding area around site comprises a mixture of recreational, agricultural, agricultural, industrial, residential and wooded land.

Based on the site reconnaissance survey, which revealed the site slopes very gently towards the north north west, it is presumed there are no slopes which are greater than 1 in 12 on the site.

Potential on-site sources of contamination include unknown fill material associated with the infilled pit / quarry that existed in the north-east of site and any made ground linked to the demolition of former buildings in the east of site. Pesticides and herbicides used in the former nurseries (Seven Acres and New Place) and contamination connected to the commercial and light industrial area (inc. Repair garages, used car dealers, end of life vehicle waste management facilities, car breakers and dismantlers, and printing facilities) are also potential sources of on-site contamination.

Potential off-site sources of contamination is limited to the unknown fill material in the former pond to the north-west of the site boundary. Potential gas sources on- and off-site are linked to made ground associated with fill materials, demolition of former buildings and peat found within superficial Head Deposits.

The PRA has identified several potentially complete contaminant linkages that RSK consider to require further assessment. These are detailed in Section 3.8.4 above.

5.2 Recommendations

To reduce any uncertainty associated with the conceptual model (such as the possible presence of backfilled a backfilled pit/quarry), to quantify the risk associated with the contaminant linkages above, and to support the application for change of use to residential, RSK recommends a programme of intrusive investigation, chemical and geotechnical testing and subsequent generic quantitative risk assessment including:

- trial pitting to ascertain near-surface ground conditions;
- window sampling to investigate deeper ground conditions and to enable the installation of ground gas monitoring wells;
- in-situ field tests to obtain soil parameters for pavement design; and

- soakaway testing to ascertain infiltration characteristics of the Head Deposits to inform drainage design

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FIGURES

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12 Royal Scot Road Tel: +44 (0)1332 542740
Pride Park Fax: +44 (0)1332 542760
Derby Web: www.rsk.co.uk
DE24 8AJ

Client

GLADMAN DEVELOPMENTS LTD

Project Title

LAND WEST OF ARUNDEL ROAD, ANGMERING

Drawing Title

SITE LOCATION PLAN

Drawn Date
AP 14.09.17

Checked Date
MB 14.09.17

Approved Date
MB 14.09.17

Project No.
301954

Drawing File
301954-R01(00)D001A

Scale
1:50000

Orig Size
A4

Dimensions
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Drawing No.
FIGURE 1

Rev.
A

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LEGEND:

Site boundary

N

Notes

Base plan from Gladman Developments, Drawings No. 2017-084/101, Dated 23.08.2017

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REV.	DATE	DESCRIPTION	BY	CHD.	APR.
Dimensions		Projection	Scale		Orig Size
m			1:2000		A3

12 Royal Scot Road
Fife FK9 1JH
Tel: +44 (0)1332 542749
Fax: +44 (0)1332 542760
Email: info@rsk.co.uk
Web: www.rsk.co.uk

CLIENT

GLADMAN DEVELOPMENTS LIMITED

PROJECT

LAND WEST OF
ARUNDEL ROAD, ANGMERING

TITLE

SITE LAYOUT PLAN

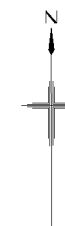
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301954			301954-R01(00)D002A		
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LEGEND:

-  Site boundary
 Internal boundary
 Commercial and light industrial area
 Former pit/quarry



Notes

Base plan from Gladman Developments, Drawings No. 2017-084/101, Dated 23.08.2017

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REV.	DATE	DESCRIPTION	BY	CHD.	APR
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12 Royal Scot Road Tel: +44 (0)1332 542744
Fude Park Fax: +44 (0)1332 542769
Guthy Web: www.rsk.co.uk
DE24 8AJ

CLIENT

GLADMAN DEVELOPMENTS LIMITED

PROJECT

LAND WEST OF
ARUNDEL ROAD, ANGMERING

TITLE

SITE LAYOUT PLAN

JOB No.:

301954

DRAWING FILE:

301954-R01(00)D003A

BY:

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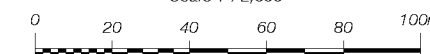
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FIGURE 2

A

Scale 1 : 2,000



APPENDIX A

SERVICE CONSTRAINTS

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APPENDIX A

SERVICE CONSTRAINTS

1. This report and the site investigation carried out in connection with the report (together the "Services") were compiled and carried out by RSK Environment Limited (RSK) for Gladman Developments Limited (the "client") in accordance with the terms of a contract between RSK and the "client", dated 28 July 2017. The Services were performed by RSK with the skill and care ordinarily exercised by a reasonable environmental consultant at the time the Services were performed. Further, and in particular, the Services were performed by RSK taking into account the limits of the scope of works required by the client, the time scale involved and the resources, including financial and manpower resources, agreed between RSK and the client.
2. Other than that expressly contained in paragraph 1 above, RSK provides no other representation or warranty whether express or implied, in relation to the Services.
3. Unless otherwise agreed in writing the Services were performed by RSK exclusively for the purposes of the client. RSK is not aware of any interest of or reliance by any party other than the client in or on the Services. Unless expressly provided in writing, RSK does not authorise, consent or condone any party other than the client relying upon the Services. Should this report or any part of this report, or otherwise details of the Services or any part of the Services be made known to any such party, and such party relies thereon that party does so wholly at its own and sole risk and RSK disclaims any liability to such parties. **Any such party would be well advised to seek independent advice from a competent environmental consultant and/or lawyer.**
4. It is RSK's understanding that this report is to be used for the purpose described in the introduction to the report. That purpose was a significant factor in determining the scope and level of the Services. Should the purpose for which the report is used, or the proposed use of the site change, this report may no longer be valid and any further use of or reliance upon the report in those circumstances by the client without RSK's review and advice shall be at the client's sole and own risk. Should RSK be requested to review the report after the date of this report, RSK shall be entitled to additional payment at the then existing rates or such other terms as agreed between RSK and the client.
5. The passage of time may result in changes in site conditions, regulatory or other legal provisions, technology or economic conditions which could render the report inaccurate or unreliable. The information and conclusions contained in this report should not be relied upon in the future without the written advice of RSK. In the absence of such written advice of RSK, reliance on the report in the future shall be at the client's own and sole risk. Should RSK be requested to review the report in the future, RSK shall be entitled to additional payment at the then existing rate or such other terms as may be agreed between RSK and the client.
6. The observations and conclusions described in this report are based solely upon the Services which were provided pursuant to the agreement between the client and RSK. RSK has not performed any observations, investigations, studies or testing not specifically set out or required by the contract between the client and RSK. RSK is not liable for the existence of any condition, the discovery of which would require performance of services not otherwise contained in the Services. For the avoidance of doubt, unless otherwise expressly referred to in the introduction to this report, RSK did not seek to evaluate the presence on or off the site of asbestos, electromagnetic fields, lead paint, heavy metals, radon gas or other radioactive or hazardous materials.
7. The Services are based upon RSK's observations of existing physical conditions at the Site gained from a walk-over survey of the site together with RSK's interpretation of information including documentation, obtained from third parties and from the client on the history and usage of the site. The Services are also based on information and/or analysis provided by independent testing and information services or laboratories upon which RSK was reasonably entitled to rely. The Services clearly are limited by the accuracy of the information, including documentation, reviewed by RSK and the observations possible at the time of the walk-over survey. Further RSK was not authorised and did not attempt to independently verify the accuracy or completeness of information, documentation or materials received from the client or third parties, including laboratories and information services, during the performance of the Services. RSK is not liable for any inaccurate information or conclusions, the discovery of which inaccuracies required the doing of any act including the gathering of any information which was not reasonably available to RSK and including the doing of any independent investigation of the information provided to RSK save as otherwise provided in the terms of the contract between the client and RSK.
8. The intrusive environmental site investigation aspects of the Services is a limited sampling of the site at pre-determined borehole and soil vapour locations based on the operational configuration of the site. The conclusions given in this report are based on information gathered at the specific test locations and can only be extrapolated to an undefined limited area around those locations. The extent of the limited area depends on the soil and groundwater conditions, together with the position of any current structures and underground facilities and natural and other activities on site. In addition chemical analysis was carried out for a limited number of parameters [as stipulated in the contract between the client and RSK] [based on an understanding of the available operational and historical information,] and it should not be inferred that other chemical species are not present.
9. Any site drawing(s) provided in this report is (are) not meant to be an accurate base plan, but is (are) used to present the general relative locations of features on, and surrounding, the site. Features (boreholes, trial pits etc) annotated on site plans are not drawn to scale but are centred over the approximate location. Such features should not be used for setting out and should be considered indicative only.

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APPENDIX B

SUMMARY OF LEGISLATION AND POLICY RELATING TO CONTAMINATED LAND

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APPENDIX B

SUMMARY OF LEGISLATION AND POLICY RELATING TO CONTAMINATED LAND

Part IIA of the Environmental Protection Act 1990 (EPA) and its associated Contaminated Land Regulations 2000 (SI 2000/227), which came into force in England on 1 April 2000, formed the basis for the current regulatory framework and the statutory regime for the identification and remediation of contaminated land. Part IIA of the EPA 1990 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, on or under the land, that significant harm is being caused, or that there is significant possibility of significant harm being caused, or that pollution of controlled waters is being or is likely to be caused’. Controlled waters are considered to include all groundwater, inland waters and estuaries.

In August 2006, the Contaminated Land (England) Regulations 2006 (SI 2006/1380) were implemented, which extended the statutory regime to include Part IIA of the EPA as originally introduced on 1 April 2000, together with changes intended chiefly to address land that is contaminated by virtue of radioactivity. These have been replaced subsequently by the Contaminated Land (England) (Amendment) Regulations 2012, which now exclude land that is contaminated by virtue of radioactivity.

The intention of Part IIA of the EPA is to deal with contaminated land issues that are considered to cause significant harm on land that is not undergoing development (see Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance, April 2012). This document replaces Annex III of Defra Circular 01/2006, published in September 2006 (the remainder of this document is now obsolete).

Water Framework Directive (WFD)

The Water Framework Directive 2000/60/EC is designed to:

- enhance the status and prevent further deterioration of aquatic ecosystems and associated wetlands that depend on the aquatic ecosystems
- promote the sustainable use of water
- reduce pollution of water, especially by ‘priority’ and ‘priority hazardous’ substances
- ensure progressive reduction of groundwater pollution.

The WFD requires a management plan for each river basin be developed every six years.

Groundwater Directive (GWD)

The 1980 Groundwater Directive 80/68/EEC and the 2006 Groundwater Daughter Directive 2006/118/EC of the WFD are the main European legislation in place to protect groundwater. The 1980 Directive is due to be repealed in December 2013. The European legislation has been transposed into national legislation by regulations and directions to the Environment Agency.

Environmental Permitting Regulations (EPR)

The Environmental Permitting (England and Wales) Regulations 2010 provide a single regulatory framework that streamlines and integrates waste management licensing, pollution prevention and control, water discharge consenting, groundwater authorisations, and radioactive substances regulation. Schedule 22, paragraph 6 of EPR 2010 states: 'the regulator must, in exercising its relevant functions, take all necessary measures - (a) to prevent the input of any hazardous substance to groundwater; and (b) to limit the input of non-hazardous pollutants to groundwater so as to ensure that such inputs do not cause pollution of groundwater.'

Water Resources Act (WRA)

The Water Resources Act 1991 (Amendment) (England and Wales) Regulations 2009 updated the Water Resources Act 1991, which introduced the offence of causing or knowingly permitting pollution of controlled waters. The Act provides the Environment Agency with powers to implement remediation necessary to protect controlled waters and recover all reasonable costs of doing so.

Priority Substances Directive (PSD)

The Priority Substances Directive 2008/105/EC is a 'Daughter' Directive of the WFD, which sets out a priority list of substances posing a threat to or via the aquatic environment. The PSD establishes environmental quality standards for priority substances, which have been set at concentrations that are safe for the aquatic environment and for human health. In addition, there is a further aim of reducing (or eliminating) pollution of surface water (rivers, lakes, estuaries and coastal waters) by pollutants on the list. The WFD requires that countries establish a list of dangerous substances that are being discharged and EQS for them. In England and Wales, this list is provided in the River Basin Districts Typology, Standards and Groundwater threshold values (Water Framework Directive) (England and Wales) Directions 2010. In order to achieve the objectives of the WFD, classification schemes are used to describe where the water environment is of good quality and where it may require improvement.

Planning Policy

Contaminated land is often dealt with through planning because of land redevelopment. This approach was documented in Planning Policy Statement: Planning and Pollution Control PPS23, which states that it remains the responsibility of the landowner and developer to identify land affected by contamination and carry out sufficient remediation to render the land suitable for use. PPS23 was withdrawn early in 2012 and has been replaced by much reduced guidance within the National Planning Policy Framework (NPPF).

The new framework has only limited guidance on contaminated land, as follows:

"planning policies and decisions should also ensure that:

the site is suitable for its new use taking account of ground conditions and land instability, including from natural hazards or former activities such as mining, pollution arising from previous uses and any proposals for mitigation including land remediation or impacts on the natural environment arising from that remediation; 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 adequate site investigation information, prepared by a competent person, is presented”.

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APPENDIX C SITE PHOTOGRAPHS AND WALKOVER CHECKLIST

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APPENDIX C

SITE PHOTOGRAPHS AND WALKOVER CHECKLIST

PHOTOGRAPHIC LOG		
Photo no. 1	Date: 14/09/2017	
Direction photo taken: West		
Description: An entry to a section of the small commercial and light industrial area off the road accessed via Arundel Road.		

Photo No. 2	Date: 14/09/2017	
Direction photo taken: Unknown		
Description: Caravan storage park in the small commercial and light industrial area.		

Photo No. 3	Date: 14/09/2017	
Direction Photo Taken: Unknown		
Description: A & B Autos service, repair and MOT garage.		

Photo No. 4	Date: 14/09/2017	
Direction Photo Taken: Unknown		
Description: Va Signs at the end of a road.		

Photo No. 5	Date: 14/09/2017	
Direction Photo Taken: Unknown		
Description: Small above ground storage tanks.		

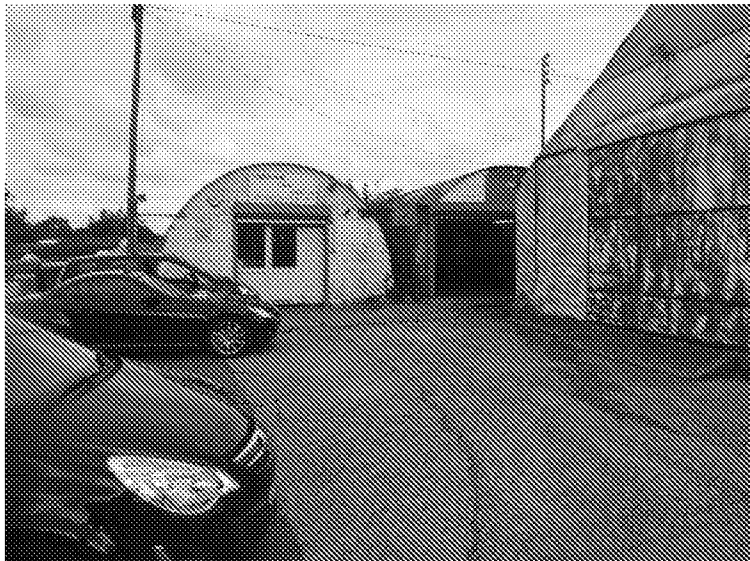
Photo No. 6	Date: 14/092017	
Direction Photo Taken: Unknown		
Description: Angmering Auto Services		

Photo No. 7	Date: 14/09/2017	
Direction Photo Taken: Unknown		
Description: The roofs of on-site buildings with the potential presence of ACM.		

Photo No. 8	Date: 14/09/2017	
Direction Photo Taken: Unknown		
Description: Storage containers adjacent to the coach and minibuses parking area.		

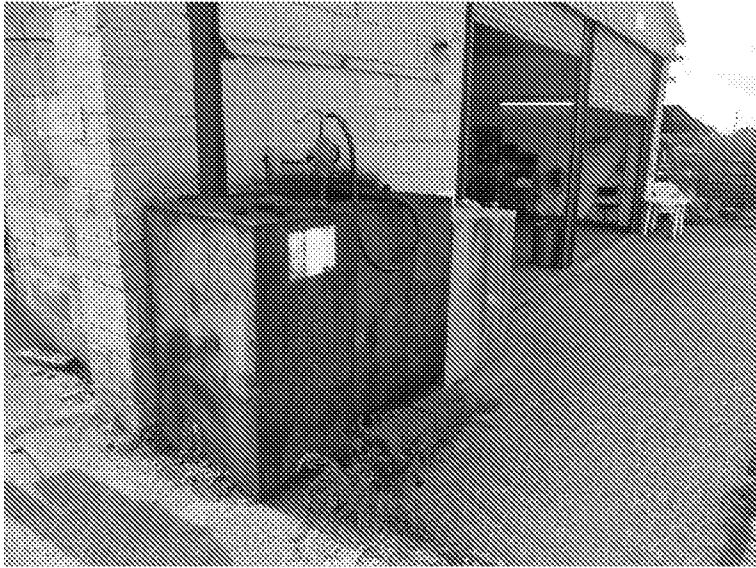
Photo No. 9	Date: 14/09/2017	
Direction Photo Taken: Unknown		
Description: Small above ground storage tanks.		

Photo No. 10	Date: 14/09/2017	
Direction Photo Taken: North-west		
Description: Camping area to the north of the small commercial and light industrial area.		

Photo No. 11	Date: 14/09/2017	
Direction Photo Taken: North		
Description: New Place Bungalow to the north of the small commercial and light industrial area.		

Photo No. 12	Date: 14/09/2017	
Direction Photo Taken: South-west		
Description: The rear of New Place Bungalow with evidence of a bonfire in the adjacent field.		

Photo No. 13	Date: 14/09/2017
Direction Photo Taken: West	
Description: General overview of the agricultural field to the west of the small commercial and light industrial area.	

A black and white photograph showing a wide, flat agricultural field under a cloudy sky. A line of trees is visible on the horizon. The field appears to be a large, open area of land, possibly a farm or a rural landscape. The sky is filled with soft, white clouds, and the horizon line is marked by a dense row of dark trees. The overall scene is a general overview of the agricultural field to the west of the small commercial and light industrial area.

Photo No. 14	Date: 14/09/2017	
Direction Photo Taken: Unknown		
Description: An area of scrubland in the north-east of the site.		

Photo No. 15	Date: 14/09/2017	
Direction Photo Taken: Unknown		
Description: Disused building in the scrubland in the north-east of the site.		

Photo No. 16	Date: 14/09/2017	
Direction Photo Taken: West		
Description: Grassland in the north of the site, showing the wooded area beyond		