

2. SITE SETTINGS

2.1 Site Description

The subject site was situated in Stevenage approximately 350m to the north of the Stevenage Train Station, and may be located by National Grid Reference (NGR) TL 23349 24527.

A Site Location Plan, is shown in Figure 1 below:

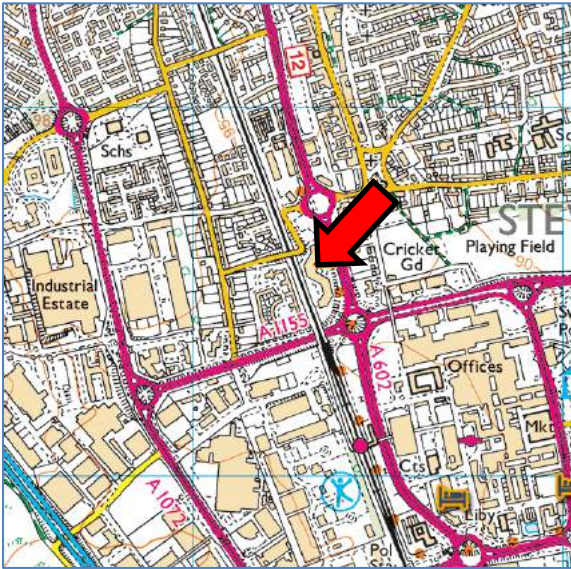


Figure 1 – Site Location Plan

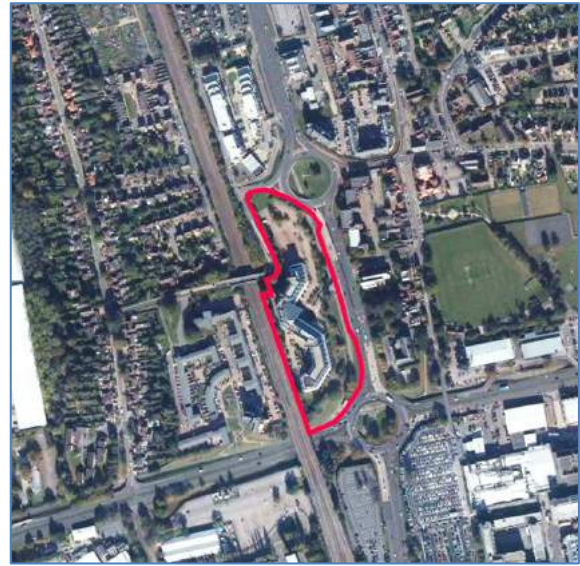


Figure 2 – Site Plan (Taken from <https://www.google.co.uk/maps>)

The site was roughly rectangular, approximately 1.84 hectares (ha) in size and comprised of a large multi-storey office/commercial structure, together with associated landscaping and external/under-croft parking. The topography of the site was largely level, with ground levels falling towards the south and south eastern site boundaries, increasing in slope height towards the south. Access to the site existed via a bridge across a cycle path that lay at ground level, several metres below the site.

The site was largely bounded by roads and roundabouts associated with Lytton Way, Trinity Road and Fairlands Way. A railway was noted bordering the site to the west. The surrounding areas to the site were both commercial and residential, including a petrol station to the north and commercial car parks to the south. Residential properties were largely noted, beyond the railway and Lytton Way to the west and east respectively.

At the time of the walkover, all structures were noted to be derelict and were surrounded to the east and south by heavily landscaped, well-maintained gardens. A hard-standing car park area was present to the north of the site with interspersed kerbed green space. A strip of concrete lattice was noted surrounding the structure to the south east, extending to the south and formed a working area for emergency vehicles.

A Site Plan, Drawing ref. 3523,CO,001/Rev 0, is included in Appendix 7 to the rear of this report, and in Figure 2 above.

2.2 Site Walkover

A walkover survey of the site was carried out on 22 March 2016 and on 1 November 2018. The site walkover was conducted in accordance with CLR 2, (ref. **R.6**). Selected photographs taken during the site walkover are included in Appendix 8.

Relevant information from the site walkover has been described in subsection 2.1 above, and in addition to the information already detailed, the following observations are considered relevant to this study:

- Drainage interceptors;
- Large generator or similar to east of site.

The walkover undertaken on the most recent date did not indicate any significant changes of note.

2.3 Invasive Species

The walkovers were also undertaken for the purposes of identifying any of invasive species, although none were positively identified. Nevertheless, the site is still considered to be of moderate risk of invasive species, in particular, Japanese knotweed.

The lack of visual confirmation could be due to the heavy landscape maintenance regime at the site.

2.4 Geological Setting

Details of the geology underlying the site have been obtained from digital mapping at a scale of 1:50,000, which is provided within the Envirocheck Report.

The geological map indicated the site to be underlain by superficial deposits of Glaciofluvial Deposits - Sand and Gravel. Superficial Deposits formed up to 2 million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions.

The superficial deposits were underlain by bedrock deposits of the White Chalk Subgroup - Chalk. Sedimentary Bedrock formed approximately 89 to 100 million years ago in the Cretaceous Period. Local environment previously dominated by warm chalk seas.

The site was within an urban area and, although not indicated as present upon the site, the possibility that Made Ground is present, cannot be discounted.

Table 1 below, summarises the factors that may have a potential impact upon the engineering of the proposed development:

Table 1 – Geohazards and Ground Workings				
Potential Hazard	Recorded Risk [m] / [Direction]			Comments
	On-site	Within 250m	Within 500m	
Shrink Swell Clay	No hazard	172m/W Low	-	
Ground Workings	-	-	-	None identified
Chalk Workings	-	-	-	None identified
Other Workings	-	-	-	None identified
Collapsible Deposits	Very low	-	-	
Landslides	Very low	-	-	
Running Sands	Very low	-	-	
Shallow Mining	-	-	-	None identified

2.5 Hydrogeological Setting

The hydrogeological data provided within the Envirocheck Report indicate Secondary Aquifer type A overlying a bedrock Principal Aquifer.

The Environment Agency defines a Principal Aquifer as:

‘...these layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale’.

A Secondary Aquifer type A is described as:

‘...permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers’.

The groundwater vulnerability map, indicates the soil to be of high leaching potential.

Soils of high leaching potential are soils that readily transmit liquid discharges, because they are either shallow or susceptible to rapid by-pass flow directly to rock, gravel or groundwater.

The site was located within a ‘Zone I’ (Inner Zone) groundwater source protection zone, i.e. it was within the 50-day travel time of groundwater reaching the point of abstraction.

There were three groundwater abstraction wells within 500m of the site. The closest well was situated approximately 465m to the south west of the site, and was used for a potable water supply.

2.6 Hydrological Setting

The nearest surface watercourse was located approximately 79m to the south of the site.

The site was not located within a river or tidal flood area and was not likely to be subject to flood warnings.

There was no available river quality classification data for the nearest watercourse.

There were no surface water abstractions located within 500m of the site.

2.7 Radon

The HPA 'Indicative Atlas of Radon' 2007, indicates the site to lie within an area where there is a probability of <1% of present or future homes being above the action level of 200Bq/m³. As such, the site is not classified as a Radon Affected Area. This is confirmed by the Building Research Establishment, Report 211, (ref. **R.14**).

3. ENVIRONMENTAL SEARCHES

3.1 Environmental Searches Summary

The environmental searches are detailed fully within the Envirocheck Report presented within Appendix 4. Table 2 shown below, summarises the most relevant findings:

Table 2 - Environmental Searches Summary				
Activity	Distance From The Site			Comments [m]/[direction]
	On-site	Within 250m	250m to 500m	
1. Incidents and Registers				
Red List Discharge Consents	-	-	-	None recorded
Dangerous Substances Inventory Sites – List 1	-	-	-	None recorded
Dangerous Substances Inventory Sites – List 2	-	-	-	None recorded
Radioactive Substances	-	-	-	None recorded
COMAH and NIHHS sites	-	-	-	None recorded
Environment Agency Recorded Pollution Incidents	-	-	-	None recorded
IPPC	-	-	-	None recorded
Discharge Consents	-	2	-	48m/SE – Sewage discharge, revoked August 2014. 48m/SE – Sewage discharge, revoked September 2010
Sites Determined as Contaminated Land under Part IIA EPA1990	-	-	-	None recorded
2. Landfills and Waste Treatment / Disposal Sites				
Registered Landfill Site	-	-	-	None recorded
Historical Landfills	-	-	-	None recorded
Non-operational Landfills	-	-	-	None recorded
BGS - Landfill	-	-	-	None recorded
3. Contemporary Trade Entries of Concern				
Industrial Sites	1	12	40	On site –Telecommunications Equipment & Systems 23m/NE – Dry Cleaners 43m/S – Pest & Vermin Control 91m/E – Medical Equipment Manufacturers 98m/N – Domestic Cleaning Service 126m/NE – Commercial Cleaning Service 127m/NE – Polythene & Plastic Sheeting Supplies 165m/N – Printers

Table 2 - Environmental Searches Summary				
Activity	Distance From The Site			Comments [m]/[direction]
	On-site	Within 250m	250m to 500m	
				185m/N – Carpet, Curtain & Upholstery Cleaners 189m/N – Electronic Component Manufacturers 196m/N – Petrol Filling Station 207m/NE – Tyre Dealers 211m/N – Garage
Fuel Sites	-	3	-	30m/N – Petrol Station 136m/N – Petrol Station 198m/SE – Hypermarket
Electrical Substations	-	-	-	None recorded
Other	-	-	-	None recorded
4. Designed Environmentally Sensitive Sites				
Sites of Special Scientific Interest (SSSI)	-	-	-	None recorded
National Nature Reserves (NNR)	-	-	-	None recorded
Local Nature Reserves (LNR)	-	-	-	None recorded
Areas of Outstanding Natural Beauty and Scenic Areas	-	-	-	None recorded
Green Belt Areas	-	-	-	None recorded
Special Areas of Conservation	-	-	-	None recorded
Special Protection Areas	-	-	-	None recorded
Environmentally Sensitive Areas (DEFRA)	-	-	-	None recorded

3.2 Nitrate Vulnerable Zone

The site was located within an area designated as a nitrate vulnerable zone for surface water.

The Nitrates Directive defines a nitrate vulnerable zone as:

- Surface freshwater which contains or could contain, if preventative action is not taken, nitrate concentrations greater than 50mg/l;
- Groundwater which contains or could contain, if preventative action is not taken, nitrate concentrations greater than 50mg/l;
- Natural freshwater lakes or other freshwater bodies, estuaries, coastal waters and marine waters, which are eutrophic or may become so in the near future if protective action is not taken.

4. SITE HISTORY

4.1 Historical Maps

A review of the history of the site has been conducted based on readily available large scale (1:1056 / 1:2500) historical maps provided by Landmark Information Group. The most significant changes are detailed in Table 3 below, and the historical ordnance survey maps are included in Appendix 5:

Table 3 - Historical Summary		
Date	Potentially Contaminative Land Uses / Significant Changes	
	On-site [Direction]	Off-site [Distance/Direction]
1881	<ul style="list-style-type: none"> ○ Majority of site shown as open land spanning multiple parcel boundaries ○ Area of trees associated with a residential property in the south ○ Some small building and scattered trees in the north 	<ul style="list-style-type: none"> ○ 0m/NW – Corn windmill shown bordering the site ○ 0m/W – Great northern railway borders western boundary of site ○ 50m/NW – Brick field and associated sand and clay pits ○ 270m/NE – Gas works ○ 285m/NE – Gravel pit ○ 440m/E – Gravel pit ○ Surrounding land to the south, west and northwest primarily open land with residential development to the east and northeast
1884 - 1899	<ul style="list-style-type: none"> ○ No significant changes of note 	<ul style="list-style-type: none"> ○ No significant changes of note
1923-1924	<ul style="list-style-type: none"> ○ A road is shown passing through the site from west to east and over the railway ○ An area in the north of the site is shown as being part of a timber yard 	<ul style="list-style-type: none"> ○ No significant changes
1925	<ul style="list-style-type: none"> ○ No significant changes 	<ul style="list-style-type: none"> ○ No significant changes
1946	<ul style="list-style-type: none"> ○ No significant changes 	<ul style="list-style-type: none"> ○ 200m/E - Hospital ○ 350m/SW – Water works ○ Increasing residential development to the west, north west and north east
1950	<ul style="list-style-type: none"> ○ No significant changes 	<ul style="list-style-type: none"> ○ No significant changes
1960	<ul style="list-style-type: none"> ○ No significant changes 	<ul style="list-style-type: none"> ○ 330m/S - Works ○
1962-1982	<ul style="list-style-type: none"> ○ Area of trees in the south now shown as allotment gardens 	<ul style="list-style-type: none"> ○ 185m/SW - Depot ○ 330m/S, 350m/SW – Works/water works now shown as factories ○ 330m/W – Factory ○ 350m/SE – Increasing commercial development
1965-1974	<ul style="list-style-type: none"> ○ South of site now appears empty 	<ul style="list-style-type: none"> ○ 15m/S – B1037 now shown heading east to west