113 REGENT'S PARK ROAD
LONDON NW1 8UR

SITE ENVIRONMENTAL RISK ASSESSMENT (SERA)

FOR

BIBENDUM WINE LTD

PRIVATE & CONFIDENTIAL

November 2014

Our Ref: HLEC31922/003R

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Project Reference:	**HLEC31922**	
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Date	19th November 2014	

This report has been prepared in the RPS Group Quality Management System to British Standard EN ISO 9001:2008

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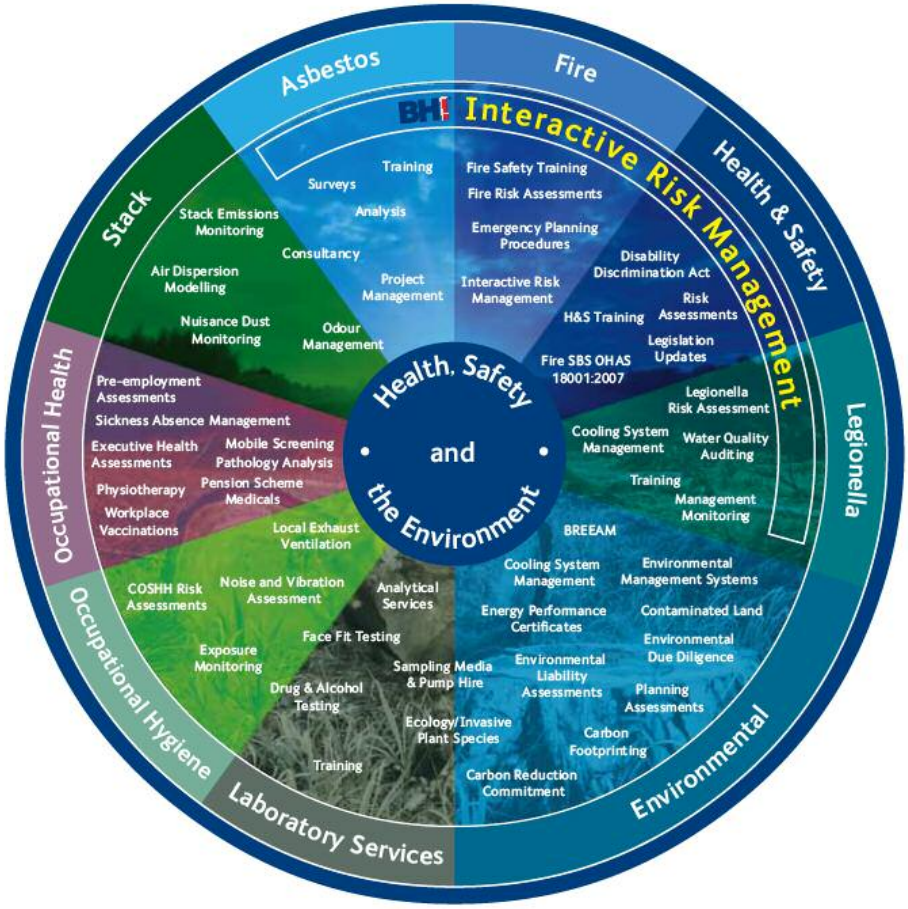

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1 INTRODUCTION

This Site Environmental Risk Assessment (SERA) report has been prepared by RPS Health, Safety & Environment (RPS) for the benefit of ***Bibendum Wine Ltd*** and their professional advisors.

Aim
The aim of the report is to provide an initial environmental risk assessment of the site. The report structure has been designed to enable RPS to determine whether the site constitutes a low, moderate or high risk from an environmental perspective. If further work is required to determine the level of environmental risk, a recommendation is made detailing the nature of the work.

Scope
The scope is composed of the following three parts:

- Part A - a review of the current and historical uses of the site;
- Part B - a review of the environmental setting of the site; and
- Part C - an environmental risk assessment of the information presented in Parts A and B.

The SERA is essentially a desk study, with information obtained from published maps, reports and any previous work undertaken by RPS. No attempt has been made to obtain information from trade directories or the environmental regulators (the Environment Agency and the Local Authority) unless specified. No site visit has been undertaken and no soil sampling or other analyses have been carried out.

Terms of Reference
The report provides available factual data for the site obtained only from the sources described in the text and related to the information provided by the client. The desk study information is not necessarily exhaustive and further information relevant to the site may be available from other sources. No responsibility can be accepted by RPS for inaccuracies in the data supplied by any other party.

This report is written in the context of an agreed scope of work and should not be used in a different context. Furthermore, new information, improved practices and changes in legislation may necessitate a re-interpretation of the report in whole or in part after its original submission.

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Methodology
Environmental regulators use the ‘contaminant-pathway-receptor contaminant linkage’ concept when assessing the risk posed by a contaminated site, and for a liability to arise each stage of the contaminant linkage must be present.

Part A of the SERA provides information relating to the ‘contaminant’ through a study of current and historical land use, and the environmental setting information in Part B relates to the ‘receptor’ and ‘pathway’ stages. Information is obtained from a number of sources as described below. Details of the site location, the current and proposed site uses and the nature of the transaction have been provided by the client.

Part A - Land Use:
This establishes the likelihood for former and current uses of the site, to have caused significant ground contamination. Information about the history of the site has been obtained through an inspection of historical maps at 1:10,000, 1:2,500 and 1:1,250 scales and occasionally Historical Building (Goad) Plans (where available). The accuracy of maps cannot be guaranteed and it should be recognised that different conditions on site may have existed between the various map surveys.

Part B - Environmental Setting:
This describes the environmental setting of the site since, irrespective of the level of contamination on the site, if its location is not 'sensitive' to this contamination there is a reduced risk of an environmental liability arising.

The geological sequence underlying the site and the approximate depths of strata are provided by maps published by the British Geological Survey (BGS) 1:50,000 scale. The hydrogeological classification is obtained from Aquifer Designation mapping from the Environment Agency (EA). The vulnerability of groundwater is determined from this mapping and geological information.

The location of surface watercourses is obtained from an inspection of current OS maps. Surface water quality information is taken from the relevant River Basin Management Plan for the district published by the EA. The vulnerability of surface watercourses to any contamination that may be migrating from the site is classed depending on the proximity to the site.

The level of flood risk is obtained from readily available EA records, normally from the EA website.

Radon is a radioactive gas produced naturally from certain types of geology. This report uses the Indicative Atlas of Radon in England and Wales (2007) produced by the Health Protection Agency (HPA) and the BGS to determine whether the site is located in an area at risk from radon gas. Where potential issues are identified, a site-specific radon report is obtained from the HPA and BGS to provide an estimate of the probability of the site being affected by radon gas ingress. Where further recommendations are made, these are in accordance with the Building Research Establishment's guidance (BR211: Protective Measures for New Buildings, 2007) and the Management of Health and Safety Regulations at Work 1999.

Sites located within areas potentially subject to past Coal Mining activities are identified through reference to The Law Society's Guidance Notes and Directory.

Areas of residential housing and schools are considered to be more 'sensitive' to contamination than industrial or business areas. For this reason, the presence of a residential area or school is recorded from OS maps if located within 50m of the site.

Part C - Risk Ranking:
The risk ranking uses the information in Parts A and B of the assessment to place the site within one of three broad categories - high, moderate or low environmental risk. The environmental risk classification for the site takes into account the potential for regulatory or third party liability, the potential for impacts on value and saleability and the potential for extra-ordinary environment-related development costs.

2 EXECUTIVE SUMMARY & RECOMMENDATIONS

SITE DETAILS

Site Name & Address	113 Regent's Park Road, London NW1 8UR				
Grid Reference	TQ 280 842		***Size***	Approx. 0.06 hectares	
Current Status	DISUSED		***Proposed Use***	UNCHANGED	
	OPERATIONAL	✓		REDEVELOP	✓
	OTHER			OTHER	
Comments	Basement storage, ground and 1st /2nd floor offices.			Conversion to residential use.	
Reason for Report	BUYING		***Site Details***	FREEHOLD	✓
	SELLING			LEASEHOLD	
	REVALUATION			OWNER/OCCUPIER	
	CHANGE OF USE	✓		INVESTMENT	

EXECUTIVE SUMMARY

Part A: Land Use

Significance:	**Moderate**
Site:	Former potentially contaminative land uses identified at the site include a Garage from at least 1927 until c. 1983, a Precision Engineers (1946), a Labelling Manufacturers and Spectacle Frame Makers, both in 1952, a Dial Factory (c.1963 to 1966) and Sunk Petrol Tanks (c.1927 to 1963).
Surrounds:	Surrounding potentially contaminative land uses have included a Sunk Petrol Tank (adjacent to the east, c.1927 to 1930), an Electric Signs Factory (adjacent west, 1927), Glass Works then Works (adjacent west, 1954 to c. 1963 and 1963 to c. Present), a Furniture Works (5m north, 1954 to c. 1963) and Factory (5m north, 1963 to c. 1983).

Part B: Environmental Setting

Sensitivity:	**Low to Moderate**
Comments:	Potentially sensitive receptors to contamination (if present) include both current nearby residential properties and future users of on-site residential units. However, the sensitivity of the proposed use is reduced by the absence of any current or proposed soft landscaping. The sensitivity of the setting is also reduced by the underlying London Clay which is of a low permeability and would limit the vertical / lateral migration of contamination (if present). The site is not located within an indicative floodplain.

Part C:
Overall Risk

Risk:	**Low**
Comments:	Following the change of use, the site is proposed to remain entirely as building and hardstanding cover, which will significantly restrict future site users from coming into contact with any historical contamination (if present). The basement level will be excavated a further 600mm, and RPS understands that it is proposed to install a hydrocarbon-vapour resistant membrane in the basement to protect future site users from any volatile contaminants (if present). The Environmental Health Officer has advised that given the proposed change of use at the site with no external alteration or changes to landscaping, no further details would be required to be submitted in relation to contaminated land as part of the planning process. Overall, it is considered that the site is suitable for its proposed use from a ground contamination perspective.

Recommendations

No further work is considered necessary in relation to ground contamination for the proposed use.

Other General Environmental Considerations:

The building was constructed at a time when building materials containing asbestos may have been used. Given the proposed conversion of the site, a formal Demolition / Refurbishment Asbestos Survey should be conducted prior to any demolition work commencing.

3 SITE ENVIRONMENTAL RISK ASSESSMENT

PART A: LAND USE

Current Site Use	The site is currently predominantly occupied by a commercial building in the centre of the site, comprising office accommodation arranged over ground and two upper floors, with basement storage vaults. Associated external car parking areas are located along the northern and southern boundaries of the building.
Proposed Use	It is proposed to convert the existing office accommodation to residential flats, including a 600mm excavation beneath the current basement level. No ground break outside the building footprint or external works are proposed.
Historical Use	The site formed part of the Boys' Home Industrial School from at least 1895 until c. 1927 when the site was part of Chalk Farm Garage and a Sunk Petrol Tank was recorded. A Garage building had appeared by c. 1954 and a Dial Factory was recorded on the 2nd floor in 1963 and 1966. The site was redeveloped to its current use and form by 1983.

On-site Land Use Features	*Dates*
The site was occupied by the driveway area for a property to the northwest. Areas of soft landscaping were present.	1873 – c. 1895
The site formed part of the land associated with Boys' Home Industrial School. The site was an external area associated with Chalk Farm Garage and Motor Repairs. A Sunk Petrol Tank was recorded near the centre of the site.*	1895 – c. 1954 1927, 1930
The majority of the site was occupied by a building associated with Chalk Farm Garage. The building was labelled as Chesterfield Motors Garage (1st floor) and had concrete floors. A Sunk Petrol Tank was recorded in the southeast of the site. Asbestos was present in the building.* The building was labelled as Chesterfield Motors Garage (1st floor) and Dial Factory (2nd floor) and had concrete floors. A Sunk Petrol Tank was recorded in the southeast of the site. Asbestos was present in the building.*	1954 – c. 1983 1957 1963, 1966
The majority of the site was occupied by a large building (likely commercial in use).	1983 – c. Present

Note: 1st floor relates to the ground floor level.

Historical Trade Directories

- 1946 – 111 to 115 Regent's Park Road: Morris & Morgan Service Depot, Motor Engineers; 113 to 119 Regent's Park Road: Parsons A.R. & Co., Precision Engineers
- 1952 – 113 Regent's Park Road: Chesterfield Motors (Motor Engineers); Trapow D. & Co. Ltd (Labelling Manufacturers); Jackson D. (Spectacles Frame Makers)
- 1964/5 and 1965/6 – London Dial Co., Precision Dials; Chalk Farm Garage

Surrounding Features (100m radius)	*Orientation*	*Distance*	*Dates*
Sunk Petrol Tank*	East	Adjacent	1927, 1930
Electric Signs (2nd floor)* *Then* Shop Display Factory (2nd floor)* *Then* Glass Works Glass Store (1st floor) and Glazier (2nd floor)* *Then* Works Glass Store (1st floor) and Glazier (2nd floor)*	West	Adjacent	1927 1930 1954 – c. 1963 1957 1963 – c. Present 1963, 1966
Ball Bearings Factory (1st floor)* *Then* Motor Accessories*	East	5m	1927 1930

Surrounding Features (100m radius)	Orientation	Distance	Dates
Then Motor Showrooms*			1957, 1963, 1966
Small Garage* *Then* Metal Store* *Then* Workshop*	East	5m	1927, 1930 1957 1963, 1966
Garage (1st floor) and Electric Fires Warehouse over* *Then* Art Furnishings Warehouse over* *Then* Furniture Works *Then* Garage and Store (Basement), Engineers (1st floor) and Shirt Factory (2nd and 3rd floors)* *Then* Factory Garage and Store (Basement), 1st floor Vacant and Shirt Factory over* Garage and Store (Basement), Shirt Store (1st floor) and Shirt Factory over*	North	5m	1927 1930 1954 – c.1963 1957 1963 – c. 1983 1963 1966
Warehouse	Southwest	10m	1954 – c. 1972
Railway	North	30m	1873 – c. Present
Radio Works *Then* Works	Southwest	35m	1954 – c. 1963 1963 – c. Present
Timber Yard	Southwest	40m	1873 – c. 1895
Factory	Southeast	45m	1954 – c. Present
Engineering Works *Then* Works	Southeast	80m	1954 – c. 1966 1966 – c. Present
Pianoforte Works *Then* Works	Southeast	85m	1954 – c. 1966 1966 – c. 1987

* Land use identified on Historical Building (Goad) Plans.

London Borough of Camden Environmental Health Officer

The Environmental Health Officer at the London Borough of Camden advised that as long as the proposed change of use does not include any external alterations, changes to the landscaping or excavations, then no further information would be required to be submitted in relation to contaminated land.

PART B: ENVIRONMENTAL SETTING

GEOLOGY AND HYDROGEOLOGY

Geological Sequence:	British Geological Survey mapping indicates the following stratigraphic sequence in the site vicinity: ▪ **London Clay Formation** *(Paleogene)* – clay, silt and sand. Likely to be of approximately 20 - 40m in thickness beneath the site. ▪ **Lambeth Group** *(Paleogene)* – comprising slightly-sandy clay with occasional silt and pebble lenses. Likely to be of approximately 10 - 20m in thickness beneath the site. ▪ **Thanet Sand Formation** *(Paleogene)* – fine grained sand and silt. Likely to be several metres in thickness beneath the site. ▪ **Chalk Group** *(Cretaceous)* – generally comprising highly fissured, fine grained, pure limestone with occasional flint nodules. Interbedded marls and calcareous mudstones exist in lower parts. Total thickness is likely to exceed 150m. Made Ground is likely to be present across the site as a result of past construction and demolition activities. No site investigation reports have been reviewed to verify this.
Hydrogeological Classification:	Environment Agency mapping indicates that the site overlies an Unproductive Stratum relating to the London Clay Formation. These formations have a low permeability and have negligible significance for water supply or base flow. The site is not located within a groundwater Source Protection Zone.

SURFACE WATER

Surface Watercourses:	Two watercourses within 1km of the site have been classified for water quality under the River Basin Management Plans (required under the Water Framework Directive). The Grand Union Canal, located 480m to the west, has been classified as of 'good' current ecological quality. The Regents Canal which is located 680m to the southeast and has been classified as of 'moderate potential' current ecological quality. Neither requires assessment for chemical quality.
Fluvial / Tidal Flood Risk:	According to the Environment Agency (EA) flood map, the site is not located within an indicative floodplain. Flood risk issues are addressed in detail in a separate RPS report (ref. HLEC31922/004R).

NATURAL IMPACTS

Radon:	The site is not located in an area at risk from radon gas.
Coal Mining:	The site is not in an area of past coal mining activity.

RESIDENTIAL AREAS AND SCHOOLS

Residential areas / schools within 50m:	Residential flats are proposed at the site following the change of use. Residential dwellings with gardens are located 15m southeast of the site.

PART C: ENVIRONMENTAL RISK ASSESSMENT

Land Use Significance:	***Moderate***

Comments:

The site is currently predominantly occupied by an office building in the centre of site, arranged over basement, ground and two upper floors. Associated external car parking areas are located along the northern and southern boundaries of the building. RPS is not aware of any potentially contaminative activities currently occurring at the site.

According to historical maps and building plans, the site was part of the driveway to a property from at least 1873 until c. 1895. It then formed part of the Boys' Home Industrial School until c. 1927, when the site was shown to be part of Chalk Farm Garage. A building associated with the Garage was present on-site by 1954. Historical Trade Directories additionally record the presence of a Precision Engineers at the site in 1946 and subsequently a Labelling Manufacturers and Spectacle Frame Makers, both in 1952. Historical Building Plans detail the existence of a Dial Factory on the 2nd floor from c. 1963 to 1966, the presence of which is confirmed by the Trade Directories. Sunk Petrol Tanks associated with the Garage were recorded from c.1927 to c. 1966 (in the southeast of the site). Asbestos was also recorded in the building. The Garage was no longer recorded by 1983 and the building was unlabelled (likely commercial in use). There is the potential for contamination to have occurred associated with historical site uses.

Numerous potentially contaminative land uses were recorded in the vicinity of the site, including the Sunk Petrol Tank adjacent to the east from c.1927 to 1930, the Electric Signs Factory (1927), Glass Works (from 1954 to c. 1963) and Works (1963 to c. Present) adjacent to the west. A Furniture Works (1954 to c. 1963) and Factory (1963 to c. 1983) were recorded 5m to the north with several light industrial uses recorded 5m to the east between 1927 and 1966.

Overall, given the former Garage, Sunk Petrol Tanks and other light industrial land uses recorded both on-site and in the immediate vicinity, the likelihood of significant contamination existing beneath the site is considered to be moderate.

Environmental Setting Sensitivity:	***Low to Moderate***

Comments:

The ground, first and second floors of the site are proposed to be converted into residential units, with associated storage units created at basement level. An excavation of 60cm will take place beneath the current basement layer and a hydrocarbon vapour-proof membrane will be installed at basement level to restrict the ingress of any volatile contaminants. Surface cover will remain entirely building and hard standing, which will restrict the physical exposure of site users to any ground contamination (if present). The site is situated within a mixed commercial and residential area, with residential dwellings located 15m southeast of the site.

The site overlies an Unproductive Stratum relating to the London Clay Formation. It is not located within a groundwater Source Protection Zone.

The Grand Union Canal is located 480m to the west and is classified as of 'good' ecological quality. Regents Canal is located 680m southwest of the site and is classified as of 'moderate potential' ecological quality. The site is not located within an indicative floodplain.

Overall, the sensitivity of the environmental setting is considered to be low to moderate.

Overall Environmental Risk:	Low

Comments:

There is the potential for a degree of contamination to exist due to former potentially contaminative light industrial land uses on-site and in the immediate vicinity. However the underlying low permeability London Clay Formation will inhibit the spread of contaminants in the ground. Any contamination identified in the area is unlikely to be considered solely attributable to the subject site.

Additionally, following the proposed change of use, the site is proposed to remain entirely covered by building footprint and hardstanding, which will afford significant protection to future site users from any contamination (if present) beneath the site. No ground break is proposed outside the building footprint and no garden areas will be created. RPS understands that a hydrocarbon vapour resistant membrane will be installed in the basement. This will limit the build-up of vapours within the building associated with any volatile contaminants (if present).

Furthermore, the Environmental Health Officer has advised that given the proposed change of use at the site with no external alterations or changes to landscaping, no further details would be required to be submitted in relation to contaminated land as part of the planning process.

Overall, the site is considered to be suitable for its proposed use from a ground contamination perspective.

APPENDIX A: SITE LOCATION AND BOUNDARY PLANS

Appendix A **-** 2 Pages

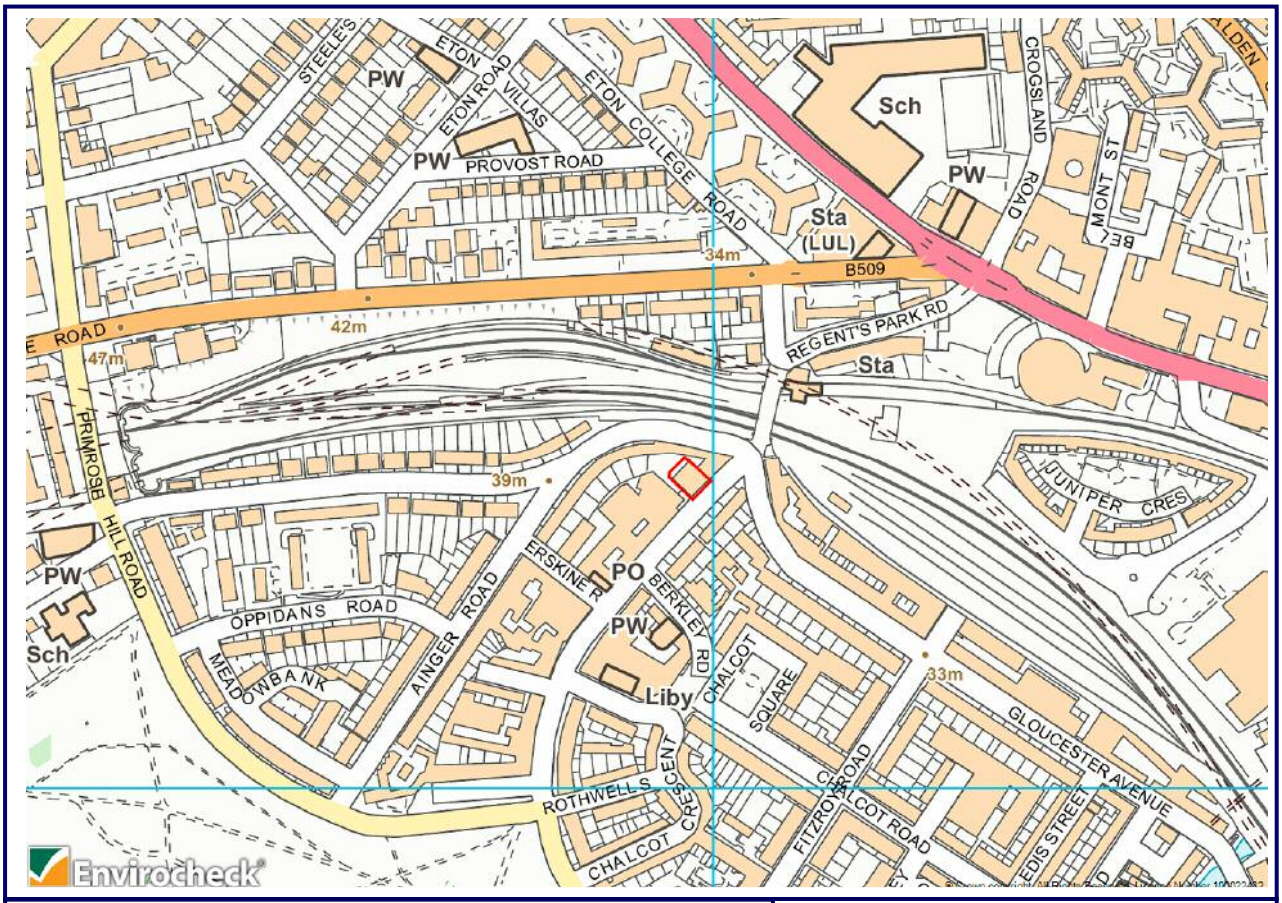

Figure 1: Site Location Plan

Map Date: Current

Scale: Not to scale

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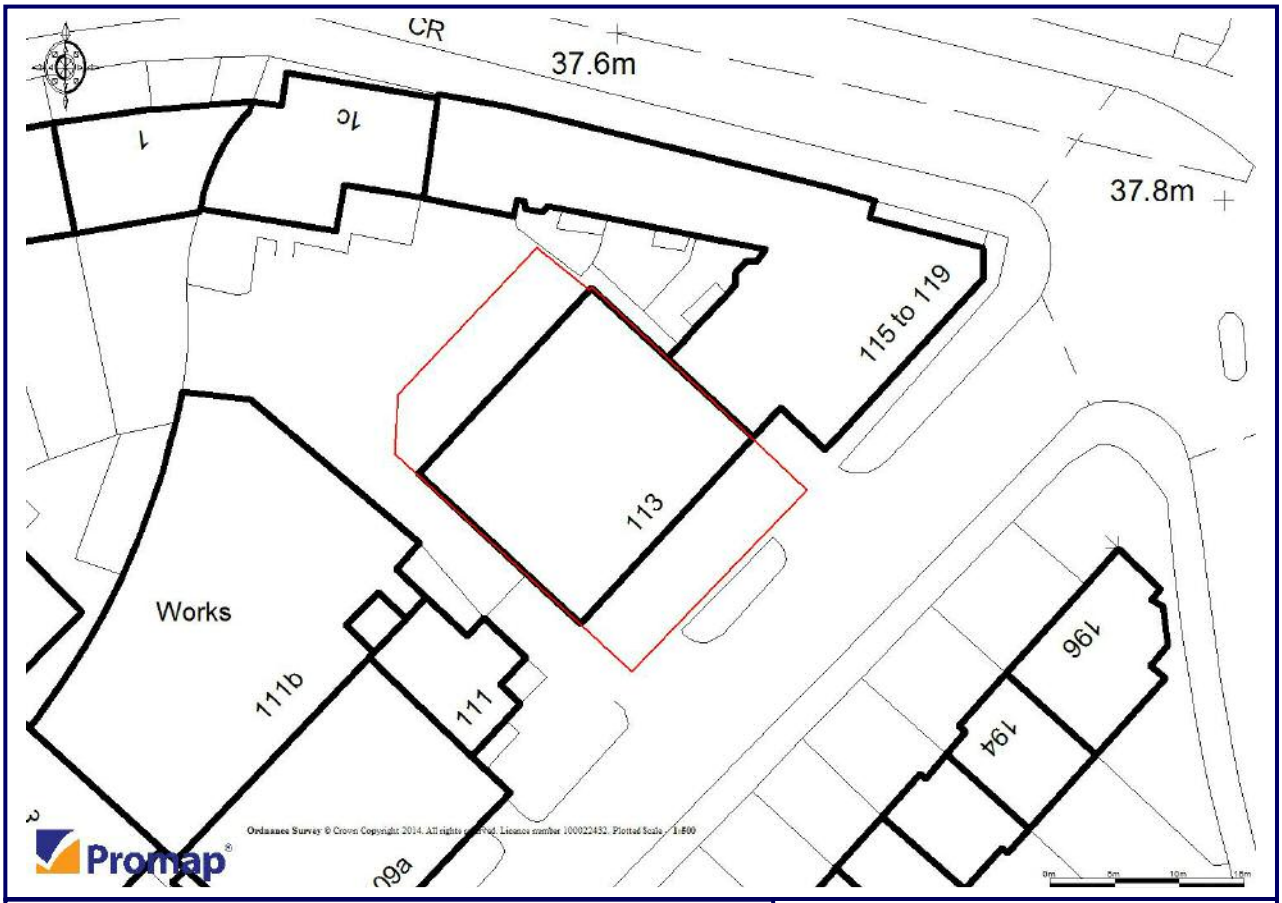

Figure 2: Site Boundary Plan

Map Date: Current

Scale: Not to scale

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APPENDIX B: HISTORICAL ORDNANCE SURVEY MAPS

Appendix B - 5 Pages

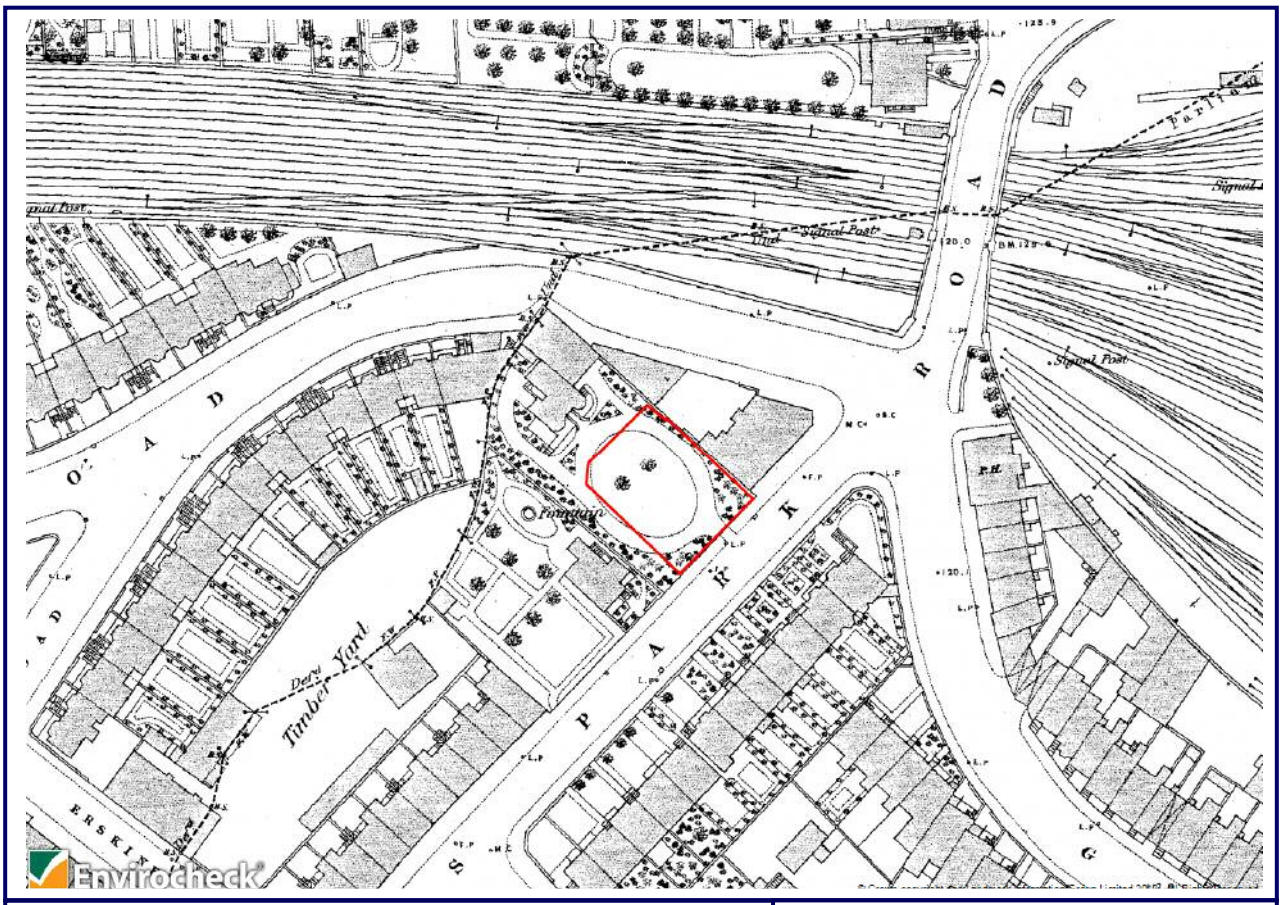

Figure 3: Historical Map Extract

Map Date: 1873

Scale: Not to scale

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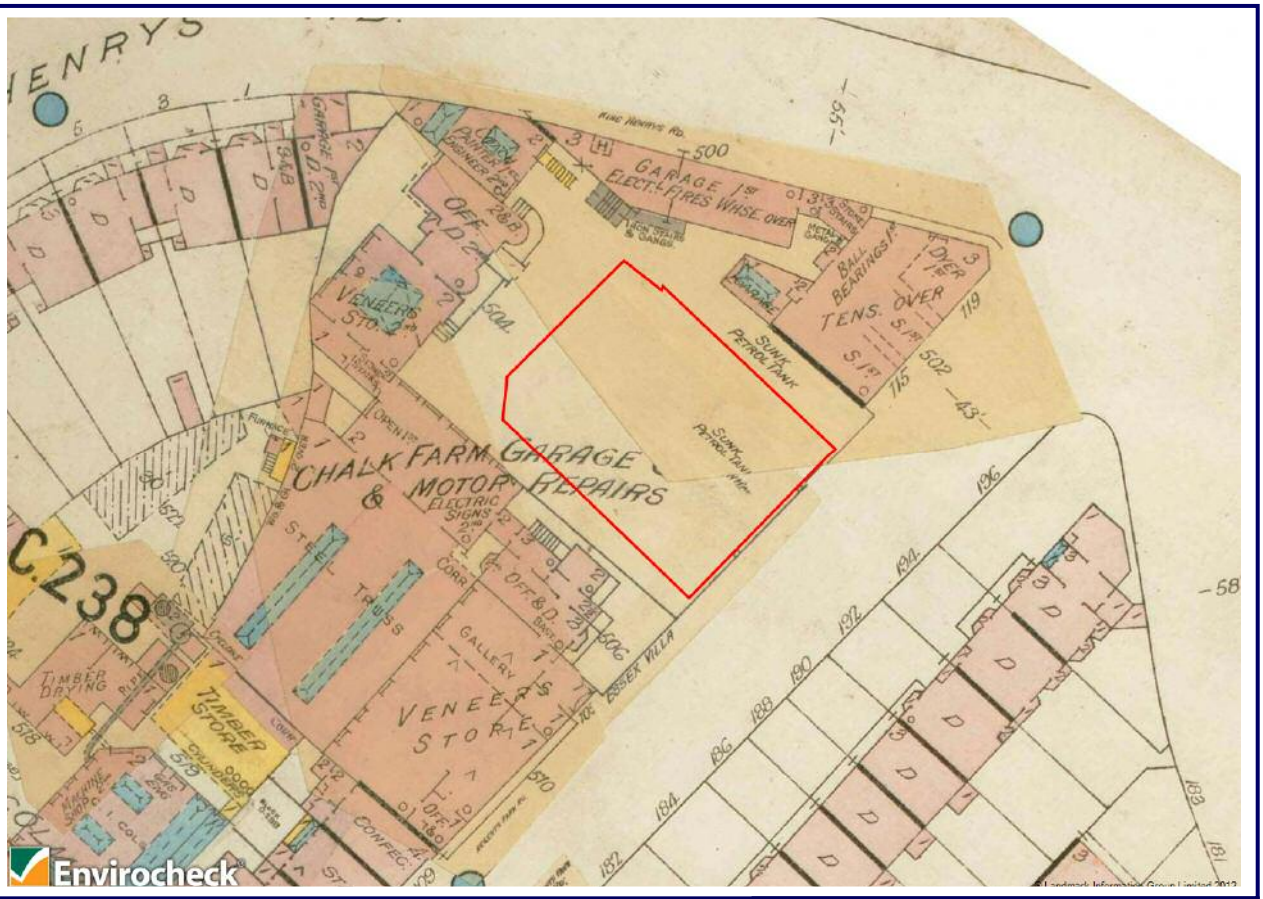

Figure 4: Historical Building Plan Extract

Map Date: 1927

Scale: Not to scale

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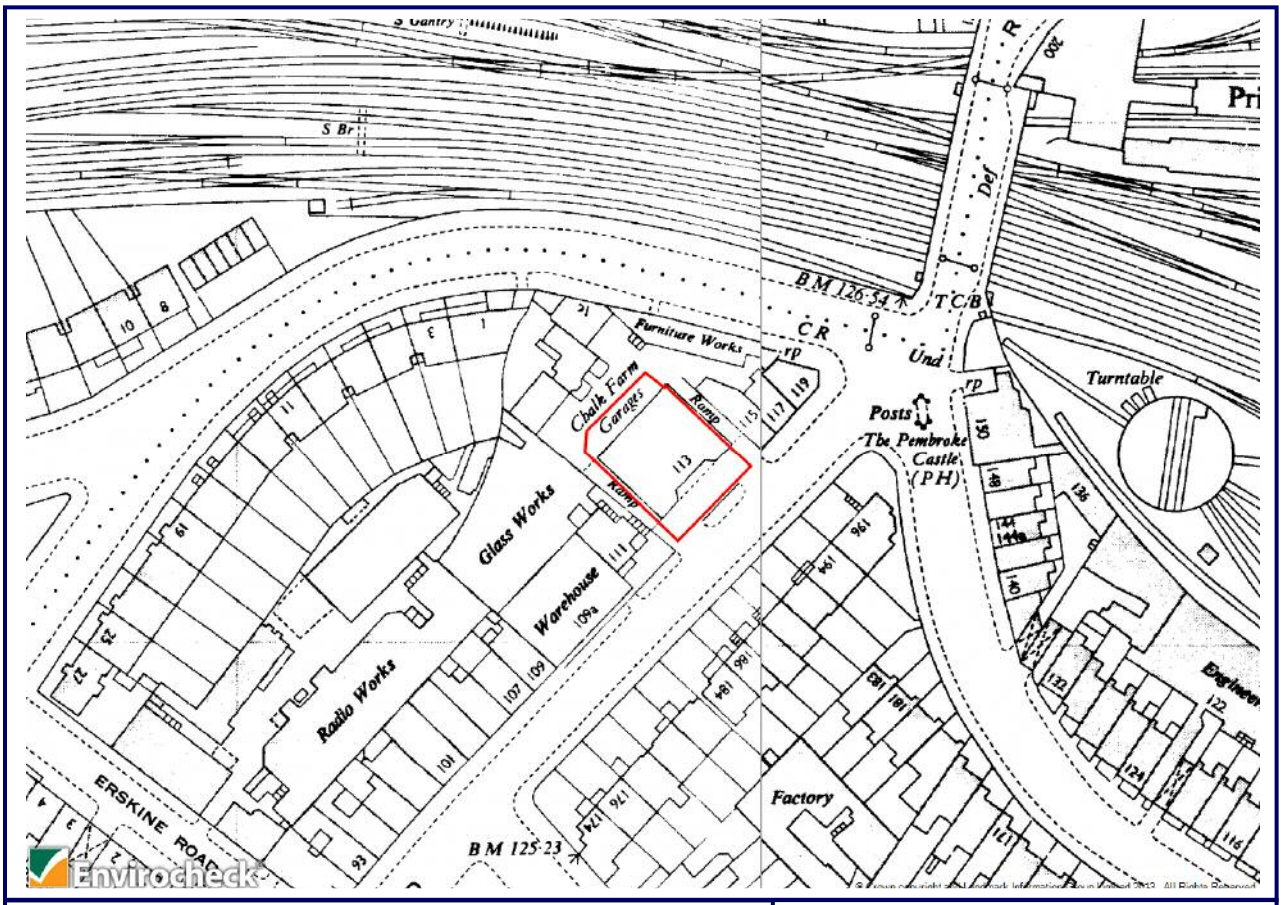

Figure 5: Historical Map Extract

Map Date: 1954

Scale: Not to scale

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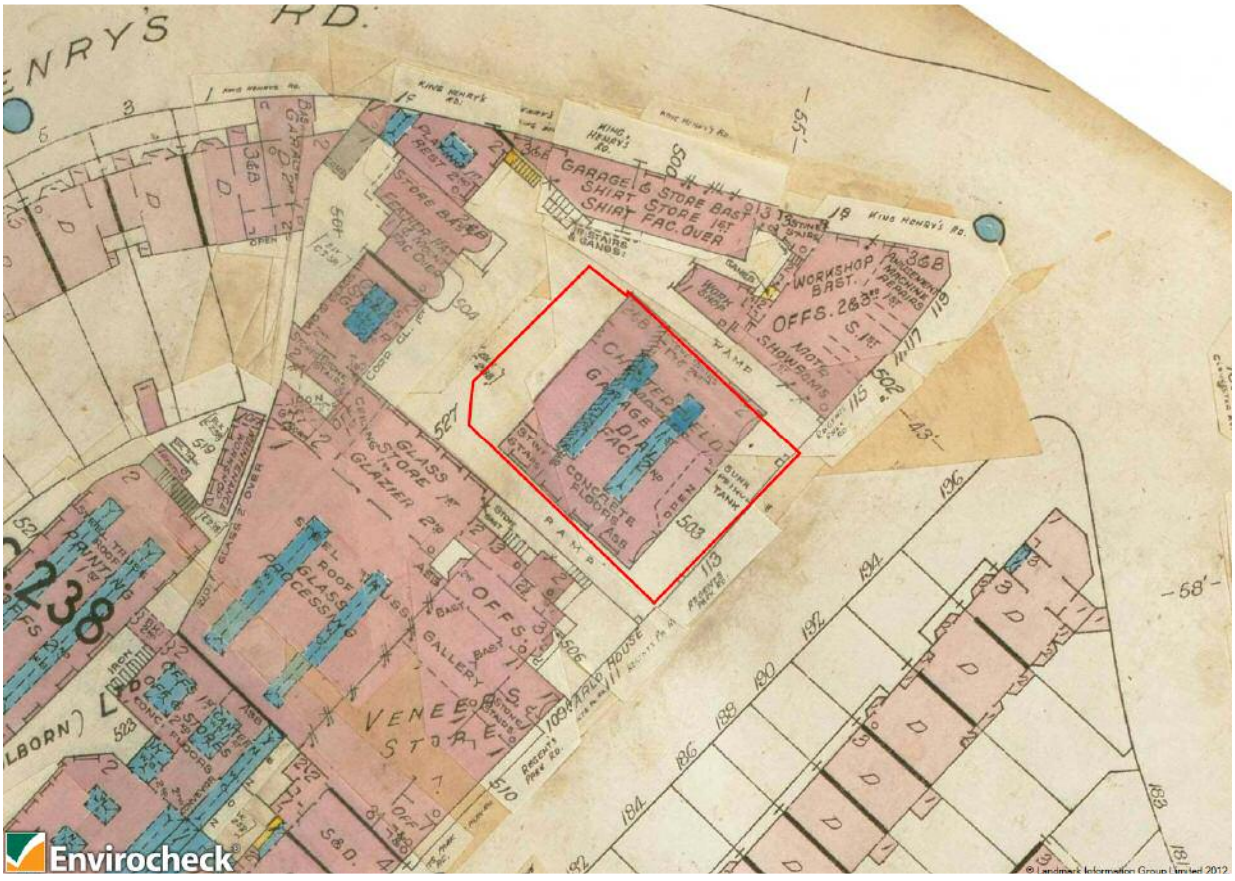

Figure 6: Historical Building Plan Extract

Map Date: 1966

Scale: Not to scale

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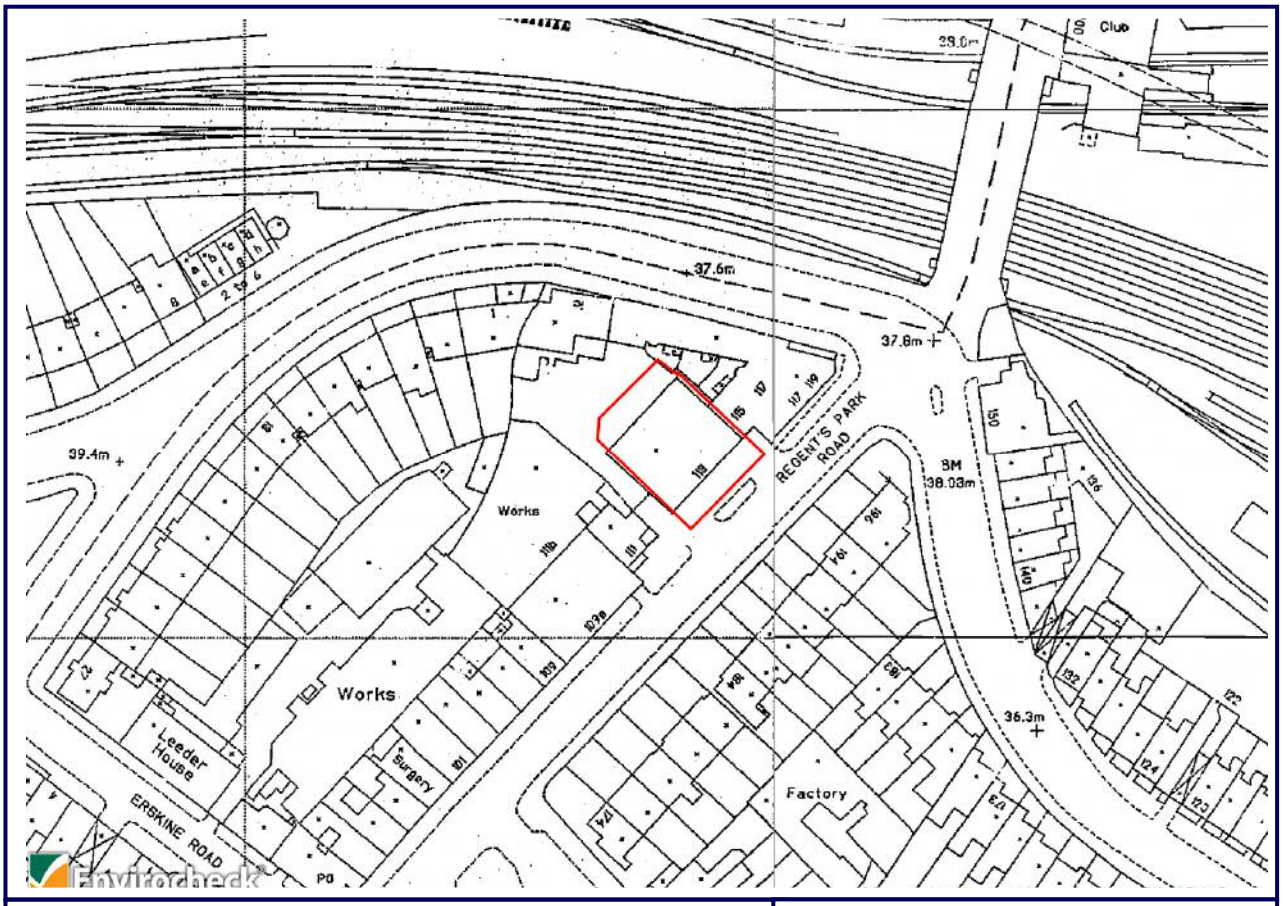

Figure 7: Historical Map Extract

Map Date: 1992 – 1994

Scale: Not to scale

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