



Phase 1 Preliminary Risk Assessment Proposed Residential Development Kingsgate Road, Wythenshawe

Prepared for
**Wythenshawe Private Hire Ltd on behalf of
CP Property & Developments**

December 2023

10/2348/001 Rev. 00

Philip Hill
Senior Geoenvironmental Consultant
phil.hill@clancy.co.uk
0161 613 6000

enquiries@clancy.co.uk
www.clancy.co.uk

Clancy Consulting Limited
Dunham Court
2 Dunham Road
Altrincham
Cheshire
WA14 4NX

Document Control Sheet

Issued by	Clancy Consulting Ltd Dunham Court 2 Dunham Road Altrincham Cheshire WA14 4NX	Tel: 0161 6136000 Email: enquiries@clancy.co.uk Website: www.clancy.co.uk
Client	Wythenshawe Private Hire Ltd on behalf of CP Property & Developments Oatlands House Oatlands Road Wythenshawe M22 1BE	
Document	Phase 1 Preliminary Risk Assessment	
Project Name	Proposed Residential Development, Kingsgate Road, Wythenshawe	
Reference	10/2348/001/ Rev 00	
Date	December 2023	

"This document has been prepared for the titled project, or named part thereof, and should not be relied upon or used for any other project, or part, without an independent check being made on it. Clancy Consulting shall not be liable for the consequences of using this document other than for the purpose for which it was commissioned, and any user and any other person using or relying on this document for such other purpose, agrees and will be such use or reliance be taken to confirm this agreement to indemnify Clancy Consulting for all loss or damage resulting therefrom".

Document Origin

Revision	Date	Revision Description		Name
00	December 2023	Original	Prepared	Phil Hill Senior Geoenvironmental Consultant phil.hill@clancy.co.uk
			Checked	Robert Philip Associate robert.philip@clancy.co.uk
			Approved	Nick Riding Divisional Director nick.riding@clancy.co.uk

Executive Summary

Client	Wythenshawe Private Hire Ltd on behalf of CP Property Development Limited
Location	Woodpecker Inn, Kingsgate Road, Wythenshawe
Description	The Woodpecker Inn, a two storey building with single storey extensions, occupies the centre of the site, with landscaped areas along the frontage with Kingsgate and Selstead Roads. An access road leading to a car park forms the eastern section of the site, leading off Kingsgate Road to the north. The surrounding land use is predominantly residential in nature. Painswick Park is present 100m to the west.
Development	It is proposed to develop the site with a three-storey residential development, with associated areas of landscaping and car parking.
Site History	The site comprised part of Woodhouse Park until the 1960's when the Woodhouse Inn was developed. Residential development began in the surrounding area by the 1950's.
Geology	British Geological Survey mapping indicates the site to be underlain by Devensian Till, overlying Bolin Mudstone Member.
Radon	The radon guidance on protective measures for new dwellings indicates that the site is in a 'low' probability radon area where less than 1% of homes are estimated to be at or above the Action Level. Radon gas protection measures are therefore not required in the construction of new dwellings or extensions.
Mining & Ground Stability	The site is not located within an area affected by coal mining. No further assessment of the potential risk posed by coal mining is considered to be required. No BGS recorded mineral sites are indicated to be present within 500m of the site.
Flood Risk	According to the Flood Map for Planning, available on the gov.uk website, the site is located within Flood Zone 1, whereby there is less than a 0.1% (1 in 1000) chance of flooding from rivers or the sea occurring each year.
Environmental Setting	The Devensian Till is classified by the Environment Agency as an Undifferentiated Secondary Aquifer and the Bollin Mudstone a Secondary B Aquifer. The site is not located within a groundwater Source Protection Zone (SPZ) and there are no currently active groundwater abstraction points for potable water supply located within 1km of the site. The nearest surface water feature is a lake, located approximately 100m to the west. The Baguley Brook is located approximately 120m to the south. There are no recorded landfills within 250m of the site. Historically a number of small ponds were present within the surrounding area, which may have been infilled. However, given their age and size, these are not considered to be potentially significant sources of ground gas.
UXO	Zetica Bomb Risk Mapping indicates the site to be in an area of moderate UXO risk. Zetica were contacted for clarification of the potential risk posed by UXO on the site and a Pre-Desk Study Assessment (PDSA) requested. The PDSA stated that no records were present indicating the site had been bombed. Although caution was advised, no further risk mitigation measures with respect to UXO were considered to be required.

Conclusions

Potentially significant sources of contamination have not been identified on site or in the immediate surrounding area. However, given the requirement for a geotechnical site investigation to enable foundation design for the proposed development, it would be prudent to analyse a limited number of soil samples to confirm the contamination status of the site.

Potentially significant sources of ground gas were not identified as part of the Phase 1 Preliminary Risk Assessment. However, if significant thicknesses of Made Ground or putrescible material area identified beneath the site during the intrusive site investigation, wells should be installed in boreholes to allow monitoring of ground gas concentrations and flow rates.

Further Works / Considerations

The following should be considered for the proposed development:

- Carry out a geotechnical site investigation to confirm ground conditions beneath the site and provide recommendations for foundation design.
- A limited number of soil samples should be recovered from selected exploratory holes and tested for potential contaminants of concern. This should include pH, metals, asbestos screening, speciated PAH and speciated TPH.
- Samples of existing topsoil should be analysed to confirm its suitability for potential re-use on-site.
- The makeup of the existing car park surface and subbase should be investigated to confirm whether it is suitable to retain and reuse as part of the proposed development.
- Soakaway testing should be carried out to determine whether infiltration drainage is suitable to discharge surface water runoff from the proposed development.
- If deep Made Ground or putrescible material is recorded, wells should be installed in boreholes to allow assessment of the potential risk to future site users posed by ground gas.

Contents

1.0	Introduction	1
1.1	Background	1
1.2	Objectives	1
1.3	Limitations of the Study	1
2.0	Desk Study	2
2.1	General	2
2.2	Site Setting and Description	2
2.3	Site History	2
2.4	UXO Risk Assessment	3
2.5	Geology	3
2.6	Mining and Ground Stability	3
2.7	Hydrogeology	3
2.8	Hydrology	4
2.9	Soil Geochemistry	4
2.10	Flood Risk	4
2.11	Radon Risk Potential	5
2.12	Landfill Sites	5
2.13	Industrial Land Uses	5
2.14	Sensitive Land Uses	5
2.15	Potential Geotechnical Constraints	5
3.0	Preliminary Conceptual Site Model	7
3.1	General	7
3.2	Guidance	7
3.3	Potential Contaminant Sources	7
3.4	Potential Pathways	7
3.5	Potential Receptors	7
3.6	Preliminary Risk Assessment	8
4.0	Conclusions and Recommendations	10

Drawings

Site Location Plan
Proposed Development Plan
Borehole Location Plan

Appendices

Appendix I	Drawings
Appendix II	Historical Maps
Appendix III	Zetica Bomb Risk Mapping
Appendix IV	Geological Maps
Appendix V	EA Groundwater Vulnerability & Flood Risk Maps
Appendix VI	Environmental Datasheets

1.0 Introduction

1.1 Background

Clancy Consulting Limited has been instructed by Wythenshawe Private Hire Ltd on behalf of CP Property & Development Limited to carry out a Phase 1 Preliminary Risk Assessment at the former Woodpecker Inn, located on the corner of Kingsgate Road, Wythenshawe M22 1TL.

It is proposed to develop the site with a three-storey residential development, with associated areas of landscaping and car parking.

A proposed development plan is included in Appendix I.

1.2 Objectives

The objectives of this investigation are summarised below:

- Provide a review of the site's land use history by reference to ordnance survey maps of the area.
- Assess the environmental setting, geology, hydrology, hydrogeology, mining and subsidence history of the site and surrounding area.
- Consider the potential risk to end users of the site from unexploded ordnance (UXO).
- Consider the potential risk to end users of the site from hazardous ground gas.
- Consider potential geotechnical constraints for the proposed development.
- Develop a preliminary risk assessment and a detailed 'conceptual site model' with regard to potential contamination sources, pathways and receptors.
- Provide recommendations regarding the requirement for further investigations, if required, to satisfy the Local Planning Authority.

1.3 Limitations of the Study

CCL cannot be held responsible for any omissions, misrepresentation, errors or inaccuracies with the supplied third-party report information. The report is written in the context of an agreed scope of work and budget and should not be used in a different context. New information or improved practices and changes in legislation may require a reinterpretation of the report in whole or in part.

CCL reserves the right to amend either conclusions or recommendations in light of any further information that may become available. The report is provided for the sole use of Wythenshawe Private Hire Ltd on behalf of CP Property & Development Limited for the objectives discussed previously only and is confidential to them.

The report may not be relied upon by any other party without prior written consent of CCL. Those using this information in subsequent assessments or evaluations do so at their own risk.

2.0 Desk Study

2.1 General

Background information was sought from the following sources:

- Ordnance Survey historical maps (selected copies included in Appendix II).
- Zetica Bomb Risk Mapping and PDSA (Appendix III).
- British Geological Survey (BGS) sheets (Appendix IV).
- Environment Agency site sensitivity & flood risk maps (Appendix V).
- Environmental datasheets (Appendix VI).

2.2 Site Setting and Description

The site is located on the corner of Kingsgate Road and Selstead Road in Wythenshawe M22 1TL, approximately 700m north west of Manchester Airport. The site covers an area of 0.21ha and is at an approximate elevation of 66m AOD.

The Woodpecker Inn, a two storey building with single storey extensions, occupies the centre of the site, with landscaped areas along the frontage with Kingsgate and Selstead Roads. An access road leading to a car park forms the eastern section of the site, leading off Kingsgate Road to the north. A number of large mature trees are located along the verges of Selstead Road, with additional smaller trees located within the landscaping in the north of the site.

The surrounding land use is predominantly residential in nature. Painswick Park is present 100m to the west. Woodhouse Park Lifestyle Centre and associated sports pitches is are present 150m to the north west.

2.3 Site History

In order to investigate the development history and previous land uses at the site and surrounding area, historical OS maps were examined. Copies of the maps are presented in Appendix II.

Table 1 below is not intended to provide a comprehensive review of all the changes which have occurred at the site and instead provides a summary of the most salient points relating to the development history of the site. The most significant historical land uses are highlighted in bold text for ease of reference.

Table 1 – Site History

Date(s)	Site	Surrounding Land
1872 to 1877	The site comprised part of Woodhouse Park.	The surrounding land comprised parkland and rural land , a number of small ponds were present approximately 150m from the site. Baguley Brook was present approximately 120m south west of the site, flowing in a northerly direction.
1954	No significant changes.	The surrounding area included a network of roads , although limited development had occurred. Buildings associated with Manchester Airport were present approximately 1.2km to the south
1960 to 1963	No significant changes.	The site was located within a residential area bounded to the north by Kingsgate Road and Selstead Road to the west. Woodhouse Park Labour Club was located to the south west of the site. A small area of parkland (Woodhouse Park) remained to the north of the site. Playing fields were present to the west of Selstead Road.
1967	The Woodhouse Inn was present in the center of the site.	No significant changes.
1975	No significant changes.	A large lake was present in the area of playing fields approximately 100m to the west of the site. The Baguley Brook appeared to have been

Date(s)	Site	Surrounding Land
		diverted, now skirting the southern edge of the lake and was no longer indicated to be present in the north. The M56 motorway was present approximately 600m to the south at its closest
1977	No Significant changes.	Further residential development had taken place in the small area of parkland to the north of the site. Further development of the airport had occurred bringing it within approximately 900m of the site.
1996	No significant changes.	Further extensions of the airport had occurred (Terminal 2 and associated car parks) occupying the area up to the M56 motorway approximately 600m south of the site.
1999	No significant changes.	Additional car parks had been created, which were within 160m of the southern site boundary.
2006	No significant changes.	The Labour Club to the south of the site was no longer present.
2023	No significant change.	Residential housing was present on the previous Labour Club site. Development had occurred converting some of the car parking to the south east to commercial properties and hotels. Alterations to the road network around the car parks and hotel had occurred.

2.4 UXO Risk Assessment

Zetica Bomb Risk Mapping indicates the site to be in an area of moderate UXO risk. Zetica were contacted for clarification of the potential risk posed by UXO on the site and a Pre-Desk Study Assessment (PDSA) requested. The PDSA stated that no records were present indicating the site had been bombed. Although caution was advised, no further risk mitigation measures with respect to UXO were considered to be required.

Zetica bomb risk mapping and the PDSA for the site is included in Appendix III.

2.5 Geology

British Geological Survey mapping indicates the site is underlain by Devensian Till overlying the Bollin Mudstone Member.

Given the limited development history of the site, a significant thickness of Made Ground is not anticipated to be present overlying natural strata. No previous site investigation information has been reviewed in order to confirm this.

Copies of the geological plans are provided in Appendix IV.

2.6 Mining and Ground Stability

The site is not located within an area affected by coal mining. On this basis, no further assessment of the risk posed by historical coal mining is considered to be required.

The environmental database report indicates that the site represents a low risk with regard to ground stability issues relating to collapsible ground, landslides, shrinking/swelling clay, compressible ground, dissolution features and running sand.

No BGS recorded mineral sites are indicated to be present within 500m of the site.

2.7 Hydrogeology

The Devensian Till, indicated to be present beneath the site, is classified by the EA as an Undifferentiated Secondary Aquifer. These are strata with varying permeability characteristics in different area and it has not been possible to assign either a Secondary A or B Aquifer designation.

The underlying Bollin Mudstone is classified as a Secondary B Aquifer. These are mainly lower permeability rocks that may store and yield limited amounts of groundwater within thin cracks, fissures or openings.

According to EA data, the site is not located within a groundwater Source Protection Zone (SPZ).

Information provided by the EA indicates that there are no records of licensed groundwater abstractions within 1km of the site.

Groundwater quality beneath the site has not been classified under an EA Local River Basin Management Plan.

2.8 Hydrology

The nearest surface water feature is a lake located in Painswick Park, approximately 100m west of the site.

Baguley Brook is present approximately 120m to the south of the site at its closest, running in a south east / north west orientation towards the lake on Painswick Park, before skirting the south of the lake and heading in a westerly direction away from the site.

There are no records of licensed surface water abstractions indicated to be present within 1km of the site.

There are no records of active discharge consents within 500m of the site.

There is one record of one significant incident to controlled waters within 500m of the site, relating to the release of unknown contaminants into the Fairywell Brook approximately 340m to the north east of the site.

2.9 Soil Geochemistry

According to the BGS National Geoscience Information Service, the following background soil concentrations can be expected within natural soils at the site:

- Arsenic – <15 mg/kg
- Cadmium - <1.8 mg/kg
- Chromium – 60-90 mg/kg
- Lead – <100 mg/kg
- Nickel – <15 mg/kg

These concentrations are not considered to be elevated.

It should be noted that the soil geochemistry has been estimated solely on the basis of published geology and not empirical data.

2.10 Flood Risk

According to the Flood Map for Planning, available on the gov.uk website, the site is located within Flood Zone 1, whereby there is less than a 0.1% (1 in 1000) chance of flooding from rivers or the sea occurring each year.

The environmental database report indicates that there is potential for groundwater flooding to occur at the ground surface.

The site may be located within a critical drainage area. The appointed drainage engineer should consult with the Lead Local Flood Authority (LLFA) to confirm this.

Copies of the site sensitivity and flood risk maps are included in Appendix V.

2.11 Radon Risk Potential

The radon guidance on protective measures for new dwellings indicates that the site is in a 'low' probability radon area where less than 1% of homes are estimated to be at or above the Action Level.

Radon gas protection measures are therefore not necessary in the construction of new dwellings or extensions.

2.12 Landfill Sites

No current or former landfill or waste management sites are indicated to be present within 500m of the site.

Seven potential areas of infilled land, thought to be associated with former ponds, are present from approximately 121m to 250m of the site. The closest is indicated to be present approximately 121m to the east.

2.13 Industrial Land Uses

There are no Local Authority Pollution Prevention and Control permits recorded within 500m of the site.

There are three active Contemporary Trade Directory entries recorded within 500m of the site. These relate to an MOT Test centre, car breakdown & recovery and domestic cleaning services. The closest entry refers to the MOT test centre approximately 282m to the north of the site.

Full details of the waste management and industrial land uses are detailed in the environmental database presented in Appendix VI.

2.14 Sensitive Land Uses

Natural England data indicates that there are no ecologically sensitive sites indicated within 500m of the site that constitute environmental receptors as defined within Table 1 of the DEFRA Environmental Protection Act 1990: Part 2A - Contaminated Land Statutory Guidance (2012).

2.15 Potential Geotechnical Constraints

The table below summarises the potential geotechnical hazards identified during this study. The table provides an assessment of whether the site is likely to be affected by the hazard and the possible consequences and engineering considerations. It should however be noted that this assessment should be considered preliminary and should be confirmed through intrusive investigations.

Table 2: Geotechnical Hazards

Hazard Description	Is hazard likely to be present / affect the site? (H / M / L?)	Comments
Made Ground	L/M	Given the development history of the site a significant thickness of Made Ground is not anticipated to be present. If encountered Made Ground would not form a suitable bearing stratum for foundations and also may contain high concentrations of sulphates and other contaminants that are potentially harmful to buried structures
Obstructions (including foundations, basements, tunnels and adjacent sub-structures)	L/M	The site is currently occupied by a pub. It is possible that basements may be present.
Ground dissolution features/natural cavities	L	Ground conditions beneath the site are not susceptible to these hazards.

Hazard Description	Is hazard likely to be present / affect the site? (H / M / L?)	Comments
Compressible or low bearing capacity soils.	L	Made Ground may be present this material would not form suitable bearing layers for traditional foundations. It is considered possible that foundations would need, terminating in the deeper Devensian Till.
Shrinking and swelling clays	M	Clay soils are expected at shallow depth and may be susceptible to volume change hazards. The presence of trees or tree removal may necessitate any shallow foundations to be over deepened and heave protection provided. Foundations should be constructed in accordance with Appendix 4.2H of the NHBC guidance (Building Near Trees) when designing foundations.
Slope stability/Retaining wall issues	L	Retaining walls aren't indicated to form part of the proposed development. However, any temporary or permanent slopes or retaining walls created as part of the development should be subject to appropriate geotechnical design based on site-specific site investigation information.
High groundwater table (including waterlogged ground)	L/M	Perched groundwater may be present in granular layers of the Made Ground and underlying Devensian Till. The groundwater conditions beneath the site should be confirmed as part of any upcoming intrusive site investigation.
Underground mining and mine entries	L	The site is not indicated to be located in an area affected by underground mining.
Aggressive ground conditions / concrete classification	M	Made Ground and natural soils beneath the site may contain high concentrations of sulphates and other contaminants that are potentially harmful to buried structures. Suitable testing will be required during any site investigation works.
Seismic Activity	L	The Eurocode 8 seismic hazard zoning maps for the UK (Musson and Sargeant, 2007) indicate that horizontal Peak Ground Acceleration (PGA) values with 10% probability of being exceeded in 50 years (475 year return period) are between 0.00g and 0.02g, which is considered very low.
NOTES: H – High Risk; M – Medium Risk; L – Low risk		

3.0 Preliminary Conceptual Site Model

3.1 General

The “suitable for use” approach is adopted for the assessment of contaminated land and remedial measures are only undertaken where unacceptable risk to human health or the environment can be proven when taking into account the proposed use of the site and environmental setting.

A risk assessment process should be carried out to determine potential hazards to human health and the environment and be based on the “source” “pathway” “receptor” principal. For a potential risk to be present there must be a viable pollutant linkage whereby a contamination source may impact upon a receptor. The absence of one or more of these key components (source, pathway or receptor) prohibits a viable pollution linkage being formed.

3.2 Guidance

In accordance with the ‘Land Contamination Risk Management’ (LCRM) guidance on the gov.uk website (updated October 2020) and BSI 10175 “Code of Practice for Investigation of Potentially Contaminated Land” (2011), a Preliminary Conceptual Site Model was developed to identify potential contamination sources, migration pathways and receptors within the study area.

3.3 Potential Contaminant Sources

The site has not had a potentially significant contaminative development history. However, Made Ground may be present from the construction of the car park and public house, which may represent a source of contaminants of concern and ground gas.

Historical surrounding land use was predominantly rural before becoming residential in nature. Several areas of potentially backfilled land (small ponds) were indicated to be present in the vicinity of the site, which may represent a source of contamination and ground gas. However, these were small in area and at sufficient distance from the site not to be considered a significant risk to the proposed development.

Various phases of development have occurred to the south of the site, relating to the expansion of Manchester Airport and its surrounding infrastructure. However, given its distance from the site, this is not considered to represent a significant risk to the proposed development.

Current surrounding land use is predominantly residential in nature. Potential sources of contamination associated with these land uses are likely restricted to runoff from roads and car parks.

3.4 Potential Pathways

The site is proposed to be developed with a three storey residential building with associated access roads, car parking and soft landscaped area. The following potential pathways are considered applicable at the site:

- Direct contact (within gardens and areas of soft landscaping at the site)
- Inhalation (dust / vapors)
- Ingestion
- Vertical / lateral migration (of both contamination and potentially hazardous ground gases)

3.5 Potential Receptors

Potential human health receptors include future site users and neighboring residential property occupiers.

Groundwater resource receptors include the underlying Devensian Till Undifferentiated Secondary Aquifer and underlying Bolin Mudstone Member Secondary B Aquifer. However, the site is not located within a groundwater SPZ and no licensed potable groundwater abstractions are indicated to be present within 1km of the site.

The nearest surface water feature is a lake located in Painswick Park, approximately 100m west of the site. Baguley Brook is present approximately 120m to the south of the site at its closest, running in a south east / north west orientation.

3.6 Preliminary Risk Assessment

A preliminary risk assessment can be carried out using guidance outlined in Section 6.3 of CIRIA Document C552 "Contaminated Land Risk Assessment – A Guide to Good Practice" (2001). For a risk to be present there must be a viable pollutant linkage whereby a contamination source can impact on a receptor via a pathway. To carry out the risk assessment an estimate must be made of the potential severity of the risk and the likelihood of the risk occurring. The following Tables set out the criteria for this principal.

Table 3 - Severity of Risk

Severity	Description
Severe	Acute risk to human health likely to result in 'significant harm' i.e. very high concentrations of contamination or ground gases. Catastrophic damage to building i.e. by explosion from high gassing sites or VOC concentrations. Major pollution of controlled waters i.e. surface watercourses and Principal aquifers, source protection zones. Short term damage to ecosystems.
Medium	Long term risk to human health likely to result in 'significant harm' i.e. elevated concentrations of contaminants or ground gases. Pollution of sensitive controlled watercourses i.e. Principal or Secondary Aquifers. Significant effects on sensitive ecosystems or species.
Mild	Pollution of non-sensitive waters i.e. smaller surface watercourses or unproductive strata. Significant damage to crops, buildings, structures or services i.e. by explosion from sites with medium gassing potential, elevated concentrations of contaminants.
Minor	Non-permanent human health effects i.e. requirement for protective equipment during site works to mitigate health effects. Damage to non-sensitive ecosystems or species. Minor damage to buildings, structures or services.

Table 4- Probability of Risk Occurring

Probability	Description
High Likelihood	Pollutant linkage may be present that appears very likely in the short term and risk is almost certain to occur in long term or evidence of harm to receptor exists.
Likely	Pollutant linkage may be present and is likely that the risk will occur over the long term.
Low Likelihood	Pollutant linkage may be present and there is a possibility of the risk occurring although no certainty that it will do so.
Unlikely	Pollutant linkage may be present but the circumstances under which harm would occur even in the long term are improbable.

Table 5 - Comparison of Risk & Probability

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

A summary of potential pollutant linkages and perceived risks for this site are outlined in the Table below:

Table 6 - Pollutant Linkages & Perceived Risk

Sources of Contamination	Pathways	Receptors	Severity	Probability	Risk	Justification	Further Action Required
On site: Made Ground	Inhalation, ingestion and dermal contact of soil	Future site users	Medium Long term risk to human health	Low Likelihood	Low	Contaminants of concern may be present beneath the site, associated with the Made Ground. However, given the generally uncontaminative nature of the site's development history, concentrations of any contaminants present in soils beneath the site should be low. It is considered likely that these risks may be controlled via the provision of a clean topsoil capping layer in soft landscaped areas.	Potentially significant sources of contamination have not been identified on site or in the immediate surrounding area. However, given the requirement for a geotechnical site investigation to enable foundation design for the proposed development, it would be prudent to analysed a limited number of soil samples to confirm the contamination status of the site.
		Construction workers during development	Minor Non-permanent human health effects i.e. requirement for protective equipment during site works to mitigate health effects	Low Likelihood	Very Low	If construction workers come into contact with potential contaminated soils during the construction phase, such contact would be short term, limiting potential exposure. Construction workers are expected to undertake good working practices including regular hand washing and other hygiene techniques which would reduce the likelihood of long-term exposure to any contamination.	
	Acidic conditions affecting future site buildings	Building infrastructure	Minor Minor damage to buildings	Low Likelihood	Very Low	Made Ground and natural soils beneath the site may contain elevated concentrations of sulphates and low pH. Chemical testing for water soluble sulphate and pH should be undertaken to inform concrete classification. Chemical testing should be undertaken to assess the likely water supply pipe construction materials.	
	Vertical and lateral migration	Neighbouring commercial properties	Medium Long term risk to human health	Unlikely	Low	Based on the site's development history, it is considered unlikely that contamination would be present in sufficient concentrations beneath the site to adversely affect neighbouring site users.	
		Controlled waters	Mild Pollution of non-sensitive controlled water receptors	Low Likelihood	Very Low	Groundwater resource receptors include the underlying Devensian Till Undifferentiated Secondary Aquifer and underlying Bolin Mudstone Member Secondary B Aquifer. However, the site is not located within a groundwater SPZ and no licensed potable groundwater abstractions are indicated to be present within 1km of the site. The nearest surface water feature is a lake located in Painswick Park, approximately 100m west of the site. Baguley Brook is present approximately 120m to the south of the site at its closest, running in a south east / north west orientation. Based on the site's development history, it is considered unlikely that contamination would be present in sufficient concentrations beneath the site to adversely affect the identified controlled water receptors.	
	Lateral migration onto site with subsequent dermal contact of soils	Future site users	Medium Long term risk to human health	Unlikely	Low	Current surrounding land use is predominantly residential in nature. Potential sources of contamination associated with these land uses are likely restricted to runoff from roads and car parks	
Potential hazardous ground gas and vapours from Made Ground	Migration of ground gas	Future site users	Severe Acute risk to human health (asphyxiation)	Unlikely	Moderate/Low	Made Ground beneath the site may represent a source of ground gas. However, given the site's development history, it is considered unlikely that a significant thickness of Made Ground would be present.	Potentially significant sources of ground gas were not identified as part of the Phase 1 Preliminary Risk Assessment. However, if significant thicknesses of Made Ground or putrescible material area identified beneath the site during the intrusive site investigation, wells should be installed in boreholes to allow monitoring of ground gas concentrations and flow rates.
		Building Infrastructure	Severe Significant damage to buildings (explosion)	Unlikely	Moderate/Low		

4.0 Conclusions and Recommendations

Clancy Consulting Limited was instructed by Wythenshawe Private Hire Ltd on behalf of CP Property & Development Limited to carry out a Phase 1 Preliminary Risk Assessment at the former Woodpecker Inn, located on the corner of Kingsgate Road, Wythenshawe M22 1TL. It is proposed to develop the site with a three-storey residential development, with associated areas of landscaping and car parking.

The site comprised part of Woodhouse Park until the 1960's when the Woodhouse Inn was developed. Residential development began in the surrounding area by the 1950's.

British Geological Survey mapping indicates the site to be underlain by Devensian Till, overlying Bolin Mudstone Member.

The radon guidance on protective measures for new dwellings indicates that the site is in a 'low' probability radon area where less than 1% of homes are estimated to be at or above the Action Level. Radon gas protection measures are therefore not required in the construction of new dwellings or extensions.

The site is not located within an area affected by coal mining. No further assessment of the potential risk posed by coal mining is considered to be required.

No BGS recorded mineral sites are indicated to be present within 500m of the site.

According to the Flood Map for Planning, available on the gov.uk website, the site is located within Flood Zone 1, whereby there is less than a 0.1% (1 in 1000) chance of flooding from rivers or the sea occurring each year.

The Devensian Till is classified by the Environment Agency as an Undifferentiated Secondary Aquifer and the Bollin Mudstone a Secondary B Aquifer. The site is not located within a groundwater SPZ and there are no currently active groundwater abstraction points for potable water supply located within 1km of the site.

The nearest surface water feature is a lake, located approximately 100m to the west. The Baguley Brook is located approximately 120m to the south.

There are no recorded landfills within 250m of the site. Historically a number of small ponds were present within the surrounding area, which may have been infilled. However, given their age and size, these are not considered to be potentially significant sources of ground gas.

Zetica Bomb Risk Mapping indicates the site to be in an area of moderate UXO risk. Zetica have been contacted for clarification of the potential risk posed by UXO on the site and a Pre-Desk Study Assessment (PDSA) requested. This section will be updated once it has been received.

Potentially significant sources of contamination have not been identified on site or in the immediate surrounding area. However, given the requirement for a geotechnical site investigation to enable foundation design for the proposed development, it would be prudent to analyse a limited number of soil samples to confirm the contamination status of the site.

Potentially significant sources of ground gas were not identified as part of the Phase 1 Preliminary Risk Assessment. However, if significant thicknesses of Made Ground or putrescible material area identified beneath the site during the intrusive site investigation, wells should be installed in boreholes to allow monitoring of ground gas concentrations and flow rates.

The following should be considered for the proposed development:

- Carry out a geotechnical site investigation to confirm ground conditions beneath the site and provide recommendations for foundation design.

- A limited number of soil samples should be recovered from selected exploratory holes and tested for potential contaminants of concern. This should include pH, metals, asbestos screening, speciated PAH and speciated TPH.
- Samples of existing topsoil should be analysed to confirm its suitability for potential re-use on-site.
- The makeup of the existing car park surface and subbase should be investigated to confirm whether it is suitable to retain and reuse as part of the proposed development.
- Soakaway testing should be carried out to determine whether infiltration drainage is suitable to discharge surface water runoff from the proposed development.
- If deep Made Ground or putrescible material is recorded, wells should be installed in boreholes to allow assessment of the potential risk to future site users posed by ground gas.

APPENDIX I
DRAWINGS

Client CP Property & Development Limited

Project Kingsgate Road, Wythenshawe

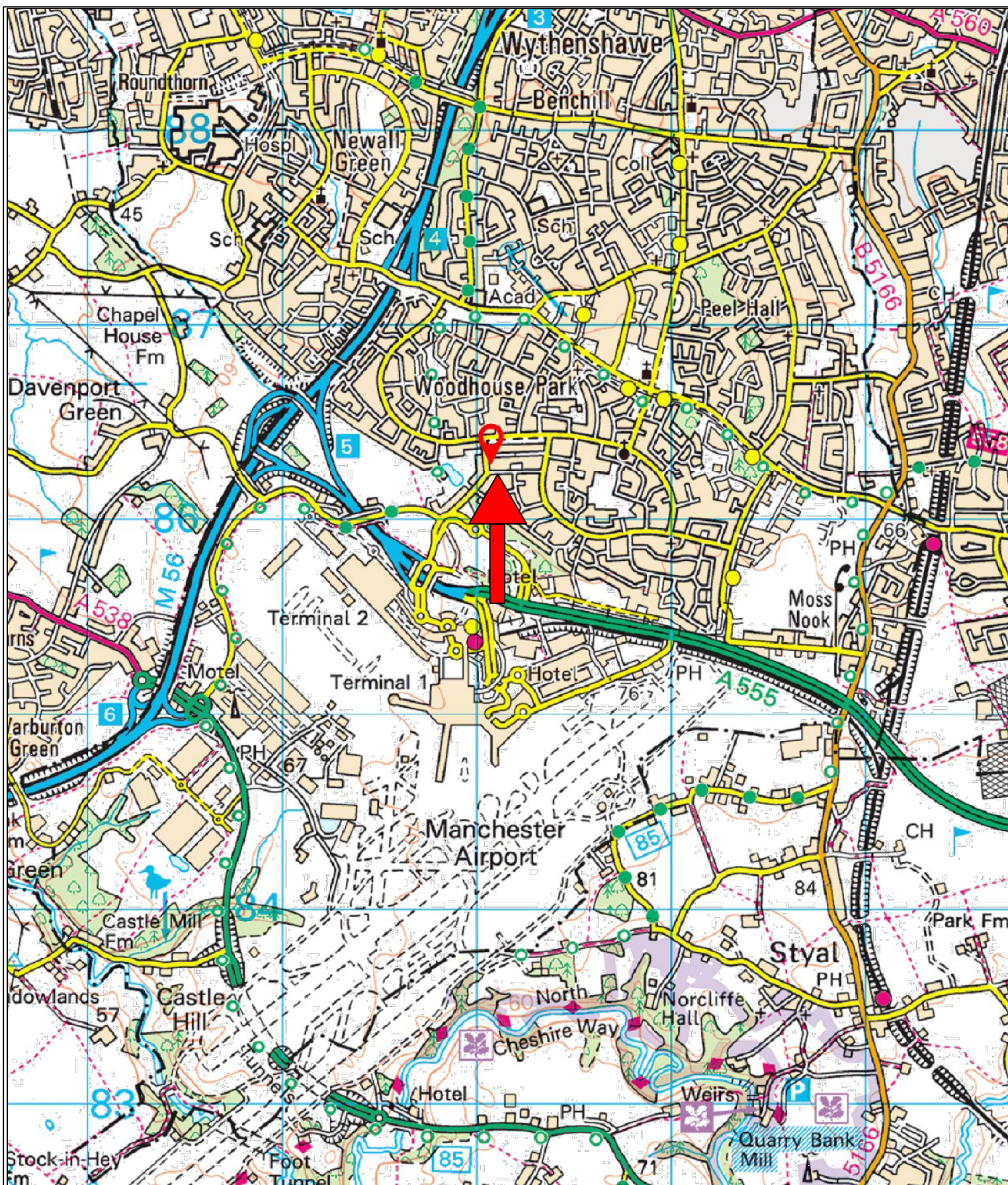
Title Site Location Plan

Office Altrincham

Discipline Geo



www.clancy.co.uk

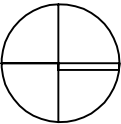
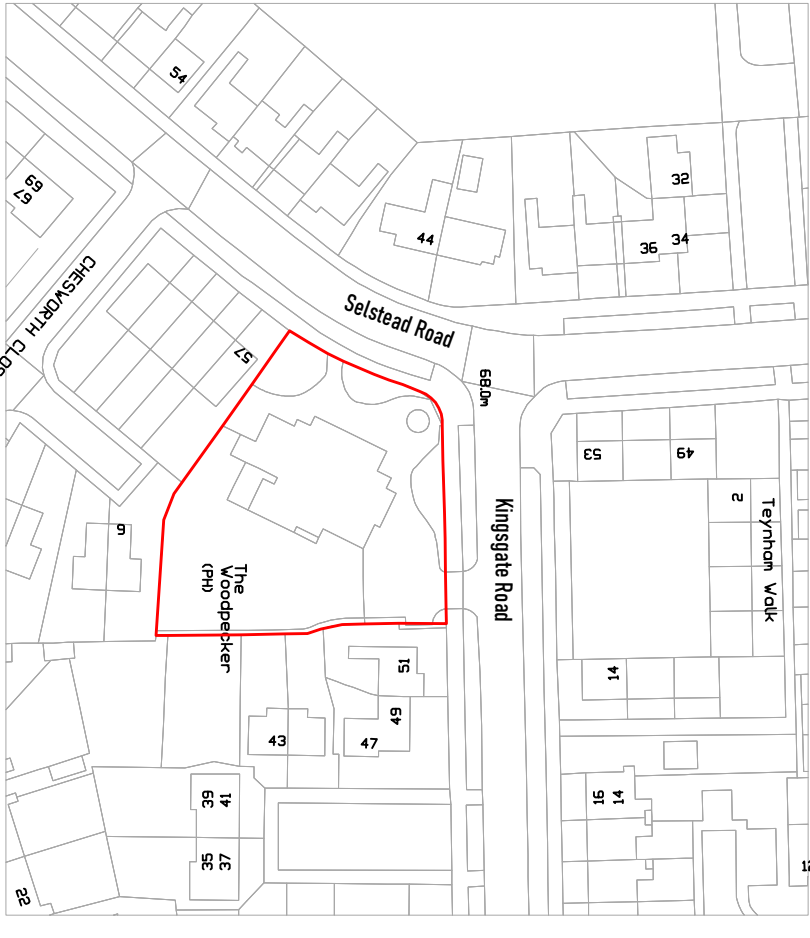


XX	XX.XX.XX	XXX	XXX	XX	XX	XXX	Drawn	PJH	Date	Nov 23	COPYRIGHT: THE COPYRIGHT OF THIS DRAWING IS VESTED IN CLANCY CONSULTING. IT SHALL NOT BE USED WITHOUT PERMISSION BY ANYONE FOR ANY PURPOSE. DO NOT SCALE THIS DRAWING ELECTRONICALLY OR MANUALLY. WORK TO FIGURED DIMENSIONS ONLY. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE. DO NOT TURN ON LAYERS THAT HAVE BEEN TURNED OFF. DO NOT THAW LAYERS THAT HAVE BEEN FROZEN.	Job number	Drawing number	Revision
Rev	Date	Description	By	Check	App.	Approved	DK	Scale @ A4	NTS			10/2348	001	-
							DK	Status	Live					

Construction (Design and Management) Regulations 2015

Designer Considerations

Paul Carr Design Ltd's duty on this project is that of "Designer" as defined by Regulation 9, and have avoided foreseeable risks to those involved in the construction and future use of the structure and in so doing eliminated hazards (so far as is reasonably practical, taking account of other design considerations) and reduced risks associated with those hazards. The Designer has provided adequate information about any significant risks associated with the design and co-ordinated the work with others in order to improve the way in which risks are managed and controlled. The associated risks are restricted to site or project specific risks and as such are not considered as a complete and final list of all hazards that may exist.



© Crown copyright and database rights 2023 OS 100042766

RedquestPlan
Map number: TORQM2308135609131
Title: Woodpecker
Map Produced for: Woodpecker
? Crown copyright and database rights 2023 OS 100042766
Project ID:
Date of Purchase: 27-07-2023
1 Years subscription from 27-07-2023 for 1 workstation.

revision:		date:	
client:	project:	drawing:	
	Former Woodpecker hotel, Kingsgate Road, Wythenshawe	Location Plan	
project no:	drawing no:	revision:	drawn: checked: date: scale @ A3
22.018	P01	-	SP PC 27/07/23 1:1250



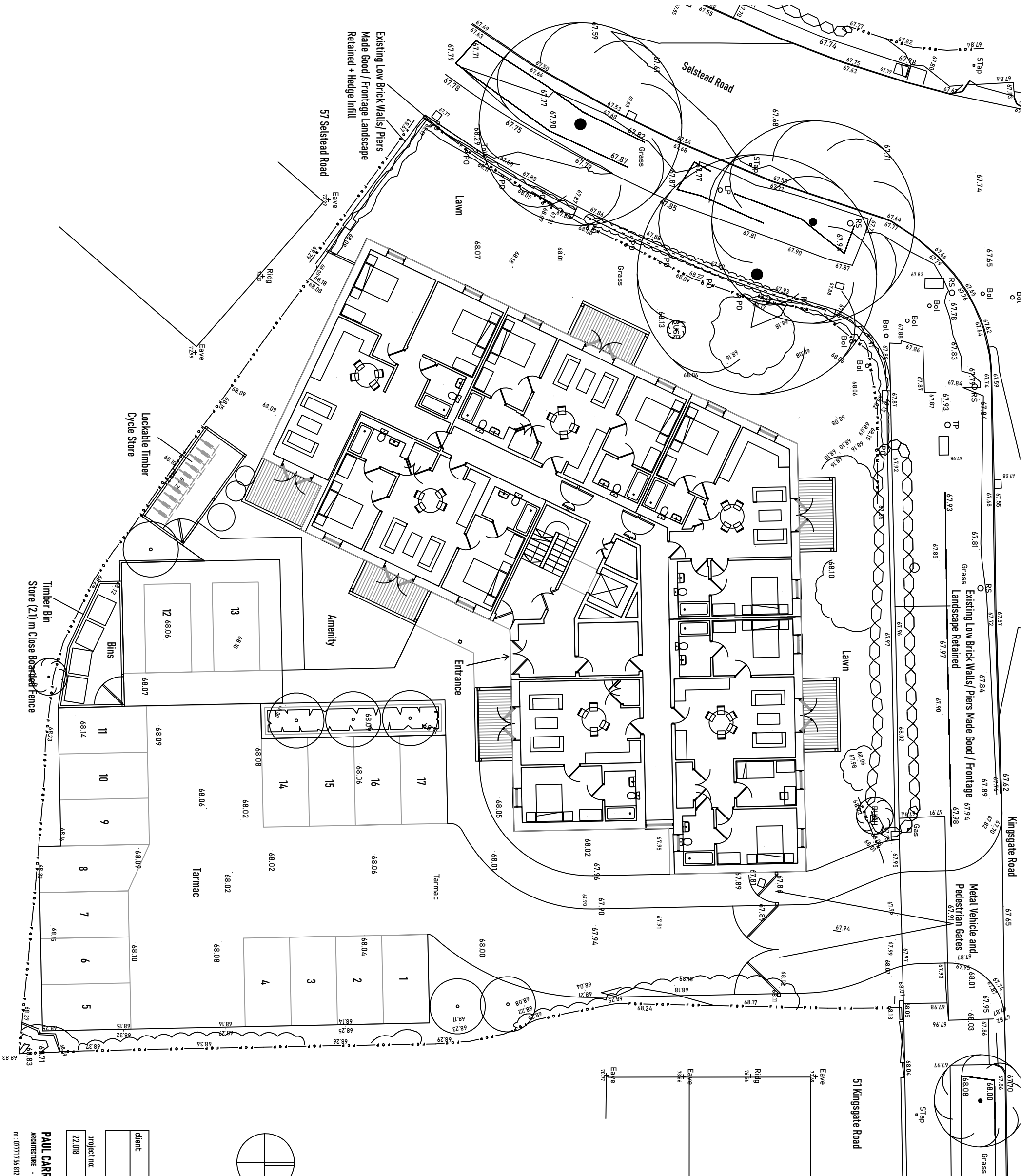
NOTED NOT SCALE FROM THIS DRAWING. ALL DIMENSIONS TO BE CHECKED ON SITE.
TO BE READ IN CONJUNCTION WITH ALL RELEVANT CONSULTANTS DOCUMENTATION

Construction (Design and Management) Regulations 2015

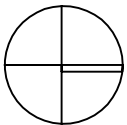
Designer Considerations

Paul Carr Design Ltd's duty on this project is that of "Designer" as defined by Regulation 2, and have avoided foreseeable risks to those involved in the construction and future use of the structure and in so doing eliminated hazards (so far as is reasonably practical, taking account of other design considerations) and reduced risks associated with those hazards.

The Designer has provided adequate information about any significant risks associated with the design and co-ordinated the work with others in order to improve the way in which risks are managed and controlled. The associated risks are restricted to site or project specific risks and as such are not considered as a complete and final list of all hazards that may exist.



51 Kingsgate Road



Survey By The Survey House Ltd



revision A: Access/ Boundaries Amended / SP date 27/07/23

client	project	drawing
	Former Woodpecker Hotel	Proposed Site Plan
	Kingsgate Road, Wythenshawe	

project no.	drawing no.	revision	drawn	checked	date	scale
22.018	P03	A	SP	PC	11/07/23	1:200

PAUL CARR DESIGN LTD

ARCHITECTURE - URBAN DESIGN

m: 07711 756 812 e: paul.carr@paulcarrdesign.com



APPENDIX II
HISTORICAL MAPS