Site: St Margaret’s Terrace / Rock Channel, Rye, East Sussex, TN31 7HJ

Client: Martello Developments

Report Date: 18th January 2019
(Rev 1: 20th March 2019)

Project Reference: J13928
SUMMARY

The site, which extends to about 0.64 ha, comprises a warehouse with an open yard area. It is proposed to redevelop the site. This will comprise the conversion of the existing warehouses into an art gallery and artists workshops with three live / work units above. The following new build construction is proposed: five houses and a terrace of three houses, with the demolition of the existing café, to be replaced with a new café with a holiday let on the first level.

Geological records indicate the site to be underlain by Alluvium / Marine Alluvium, underlain by Tidal Flats Deposits and Ashdown Formation.

A historical Ordnance Survey map search and desk study was carried out and indicates that the site has a history of industrial use, comprising use of the site by a furniture removals firm, for over 40 years. Prior to this the site was a timber yard that appears to have incorporated timber treatment. This may have commenced in the late 1800s, but is first noted on the 1929 map.

It is anticipated that clay soils may be present and NHBC High Volume Change Potential soils should be assumed in the absence of soil tests. Suspended floors will likely be required.

There are a number of potential sources on site which may have caused contamination, these include the presence of Made Ground, the previous use of the site as a timber yard with a timber treatment works, the storage and use of petroleum hydrocarbons, PAH compounds and asbestos containing materials within the fabric of the current buildings and within Made Ground beneath the site.

Intrusive investigation is recommended to assess the potential presence of asbestos containing materials, metals, non-metals, PAH compounds and petroleum hydrocarbon contamination in the soils and groundwater beneath the site, which could have an impact on the proposed residential development. Soil gas emissions would also need to be assessed.

This report has been prepared for the sole internal use and reliance of Martello Developments and their appointed Engineers. This report shall not be relied upon or transferred to any other parties without the express written authorisation of Southern Testing Laboratories Ltd. If an unauthorised third party comes into possession of this report they rely on it at their peril and the authors owe them no duty of care and skill.

The findings and opinions conveyed via this Desk Study Report are based on information obtained from a variety of sources as detailed within this report, and which Southern Testing Laboratories Ltd believes are reliable. Nevertheless, Southern Testing Laboratories Ltd cannot and does not guarantee the authenticity or reliability of the information it has obtained from others.

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For and on behalf of Southern Testing Laboratories Limited

STL: J13928
18 January 2019
(Rev 1: 20th March 2019)
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A  INTRODUCTION

1  Authority

Our authority for carrying out this work is contained in a completed STL project order form, dated 8 January 2019, completed and returned by Martello Developments.

2  Site Location

The site is located approximately 300m south of the centre of Rye, East Sussex. The approximate National Grid reference of the site is TQ 923 202.

3  Proposed Construction

It is proposed to redevelop the site. This will comprise the conversion of the existing warehouses into an art gallery and artists workshops with three live / work units above. The following new build construction is proposed: five houses and a terrace of three houses, with the demolition of the existing café, to be replaced with a new café with a holiday let on the first level.

For the purposes of the contamination risk assessment, the proposed development land use is classified as Residential with plant uptake, (CLEA model\textsuperscript{1}/C4SL report\textsuperscript{2}). The gas sensitivity of the proposed development is rated as High (CIRIA C665\textsuperscript{3}).

4  Object

This is a Phase 1 Desk Study and Walkover survey.

The object of the investigation was to assess the likely foundation bearing conditions and other soil parameters relevant to the proposed development, and to assess the potential for soil, groundwater and soil gas contamination on the site.

5  Scope

This report presents our desk study findings, and our interpretation of these data.

This report is not an engineering design and the figures and calculations contained in the report should be used by the Engineer, taking note that variations will apply, according to variations in design loading, in techniques used, and in site conditions. Our figures therefore should not supersede the Engineer’s design.

The findings and opinions conveyed via this Desk Study Report are based on information obtained from a variety of sources as detailed within this report, and which Southern Testing Laboratories Ltd believes are reliable. Nevertheless, Southern Testing Laboratories Ltd cannot and does not guarantee the authenticity or reliability of the information it has obtained from others.

\textsuperscript{1} Environment Agency Publication SC050021/SR3 ‘Updated technical background to the CLEA Model’ (2009).
\textsuperscript{2} SP1010 Development of Category 4 Screening Levels DEFRA (2014)
\textsuperscript{3} CIRIA C665 (2006) Assessing risks posed by hazardous ground gases to buildings.
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The recommendations contained in this report may not be appropriate to alternative development schemes. The contamination screening values used are valid at the time of writing but may be subject to change and any such changes will have implications for the assessments based on them. Their validity should be confirmed at the time of site development.

B    DESK STUDY & WALKOVER SURVEY

6    Desk Study

A desk study has been carried out. Reference has been made to the following information sources.

- Geological Maps
- Hydrogeological/Groundwater Vulnerability maps
- Aerial Photographs
- Historical Ordnance Survey Maps
- Environmental Databases
- Discussions with Site Owner
- Environment Agency website
- BRE Radon Atlas⁴

The environmental databases search report compiled for this desk study contains site-specific environmental data drawn from data sets that comprise publicly available information together with data from third parties, some of which is under review. Accordingly, Southern Testing Laboratories Limited does not warrant its accuracy, reliability or completeness.

The full report is included in Appendix C. A summary of the salient features is included in the following sections of this report.

6.1    Geology

The British Geological Survey Map No 320 indicates that the site geology consists of Alluvium / Marine Alluvium, and Tidal Flats Deposits and Ashdown Formation.

**Alluvium / Marine Alluvium**

Alluvium is, geologically speaking, a recent deposit generally found in association with streams, rivers and other watercourses. It can also be associated with the shallow water, marine, beach environment. It usually consists of soft clays and silts. They often have a high organic content and can contain decayed plant remains. Windblown sand deposits may also be encountered.

⁴ BR 211 (2007) 'Radon: guidance on protective measures for new buildings'
It is inherently variable and rapid lateral transitions in soil type should be anticipated, even though borehole sampling may indicate fairly consistent soil conditions. This can be especially the case with marine alluvial deposits.

The soft and variable nature of the soil gives rise to many construction problems. Running sand or silt is often encountered when least expected. Excavations deeper than 1.5mbgl to 2mbgl are often unstable and close sheeting and strutting is usually required. Bottom heave may be encountered in clayey soils below 3mbgl.

Marine Alluvium deposits have accumulated extensively in the lee of the coastal shingle barriers. These marshlands include Hooe Level, Combe Haven, Pett Level, the lower flood plains of the Brede and Tillingham rivers, East Guldeford Level, Broomhill Level, Denge Marsh and other patches, which lie between the major shingle spreads of Dungeness Foreland. The sediments, which range from fine sand to stiff grey clays, have accumulated up to the level of high tides over the past 3000 years.

**Tidal Flat Deposits**

A composite of 'Beach deposits': comprising shingle, sand, silt and clay; they may be bedded or chaotic; beach deposits may be in the form of dunes, sheets or banks, and 'Tidal Flat Deposits': commonly silt and clay with sand and gravel layers; possible peat layers; from the tidal zone.

**Ashdown Beds Member**

Siltstones and silty fine-grained sandstones with subordinate amounts of finely-bedded mudstone and mudstone arranged in rhythmic units ('cyclothems') commonly divided by thin pebble beds. In south east Sussex, around Hastings, the argillaceous parts of the "cyclothems" are well-developed and a series of clay seams, the informally named Fairlight Clays. Northwards from Hastings, the Fairlight Clays become increasingly thin.

The Ashdown Beds member of the Hastings Beds Formation is a part of the Wealden Group of lake and delta deposits, which were laid down in a shallow sea extending from the Thames to Paris. It consists of fine-grained silty sandstone, silt, and siltstone with subordinate amounts of silty clay, shale and mudstone.

### 6.2 Hydrology and Hydrogeology

Data from the Environment Agency and other information relating to controlled waters is summarised below.

<table>
<thead>
<tr>
<th>Data</th>
<th>Remarks</th>
<th>Possible Hazard to/from Site</th>
<th>Y/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquifer Designation</td>
<td>Secondary Aquifer undifferentiated – Alluvium/tidal flat deposits</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Superficial Deposits</td>
<td>These are 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</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data</td>
<td>Remarks</td>
<td>Possible Hazard to/from Site Y/N</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------</td>
<td></td>
</tr>
<tr>
<td>Bedrock</td>
<td>Secondary A Aquifer – Ashdown Formation These are 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</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Groundwater Vulnerability</td>
<td>Soils of High Leaching Potential (H1) - Soils which readily transmit liquid discharges because they are either shallow, or susceptible to rapid by-pass flow directly to rock, gravel or groundwater</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Abstractions</td>
<td>Three abstractions between 700m and 1000m radius.&lt;br&gt;776m west - Rye, Cadborough&lt;br&gt;874m west - Rye, Cadborough&lt;br&gt;All are for potable supply, abstracting from the Ashdown Sands.</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Source Protection Zones</td>
<td>The site is not within a source protection zone for potable supply.</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Surface Water Features</td>
<td>The River Brede flows to the south east boundary&lt;br&gt;The River Tillingham follows to the south west boundary.&lt;br&gt;The confluence of these two waterways lies to the southern end of the site, beyond the road</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Marine/Fluvial Flood Risk</td>
<td>The site is shown within an area mapped as being at medium risk.&lt;br&gt;Flood defences are present</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Surface Water Flood Risk</td>
<td>The site is shown within an area mapped as being at medium risk.</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>Reservoir Flood Risk</td>
<td>The site is not shown within or adjacent to an area mapped as being at risk.</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Discharge Consents</td>
<td>Five discharge consents are shown within a 250m radius of the site&lt;br&gt;43m south west – sewerage discharges&lt;br&gt;84m north west – sewerage discharges&lt;br&gt;153m south east – private sewerage discharges</td>
<td>N Low</td>
<td></td>
</tr>
</tbody>
</table>

Sources of contamination that may be present on site, could potentially affect the adjacent water courses (River Brede, located to the south east boundary of the site and River Tillingham, to the south west site boundary). Potentially contaminated groundwater could migrate onto the site from the haulage yard located to the north boundary.
The groundwater flow direction appears to be towards the River Tillingham to the south, but may also be towards the groundwater abstraction well to the west, on the other side of the river.

6.3 **Historical Map Search**

Copy extracts of historical Ordnance Survey plans dating from 1872 to 2014 were obtained and are presented in Appendix C, together with a summary of the salient features.

The site has a history that seems to commence with the site being used as a timber yard circa 1929, although this use could have commenced as prior to this year. The timber yard appears to have incorporated timber treatment processes.

The site was developed as a removals firm warehouse from 1970, with the first building to the western side of the site being finished in 1973. Additional, interlinking buildings were added to the east side of this warehouse in 1978/79 and 1981.

The surrounding area has a history of industrial use, with several ship yards, transport yards and other timber yards in the vicinity of the site.

6.4 **Environmental Databases**

<table>
<thead>
<tr>
<th>Distance (m)</th>
<th>Direction</th>
<th>Details</th>
<th>Possible Hazard to site</th>
</tr>
</thead>
</table>
| Historical Industrial Land Uses | - | - | On site  
Saw milling, planing & impregnation (i.e. treatment of timber)  
Transport manufacturing and repair  
Factory or works | Y |
| Historical Industrial Land Uses | 13 | E | Nine within 250m radius, five appear significant  
Transport manufacturing and repair | Y |
| | | | Tanks | Y |
| | 18 | NW | Transport support & cargo handling | Y |
| | 32 | NW | Saw milling, planing & impregnation (i.e. treatment of timber)  
Factory or works – use not specified | Low |
| | | | | |
| Current Industrial Land Uses | adj | N | On site  
T Bourne and Sons – removal firm, fuel storage associated with site | Y |
| Current Industrial Land Uses | 11 | NW | 24 within 250m radius, six appear to be significant  
Haulage yard | Y |
| | 53 | N | Garage services | Low |
| | 55 | W | Car dealers | Low |
| | 55 | W | Engineering services | Low |
| | 55 | W | Car dealers | Low |
| Current and Historical Landfills | 243 | SE | One within 250m radius  
Unknown Filled Ground (Pond, marsh, river, stream, dock etc) | Low |
Potential sources of contamination on site include the two former fuel storage tank areas and the pump islands.

Other possible on site sources include the use of timber treatment products.

Sources to the north could have an impact the site.

Any sources to the south west and south east should not affect the site, due to the presence of the rivers between source and site.

The underlying geology is relatively permeable and may be a source of soil gas emissions.

### 6.5 Geological Hazards and Mining Activities

Data from various sources relating to potential geological hazards at the site are summarised below. The Hazard Potentials listed for the BGS data are as presented in the Envirocheck report, derived from various generic BGS sources, which are not considered as site-specific. It is important that this information is considered in context of the actual site topography, ground conditions encountered during future investigation, and development proposals.
Table:

<table>
<thead>
<tr>
<th>Data Source</th>
<th>Hazard</th>
<th>Hazard Potential to Site</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Potential for Swelling or Shrinking Clay Ground Stability Hazard</td>
<td>Low</td>
<td>Alluvium beneath site, clays will be present</td>
</tr>
<tr>
<td></td>
<td>Shallow Mining Hazard</td>
<td>No hazard</td>
<td></td>
</tr>
<tr>
<td>ARUP</td>
<td>Mining Instability</td>
<td>No hazard</td>
<td></td>
</tr>
<tr>
<td>CSS/KURG*</td>
<td>Underground openings</td>
<td>No hazard</td>
<td>None within 1000m radius</td>
</tr>
</tbody>
</table>

*Chelsea Speleological Society/ Kent Underground Research Group

6.6 Other Sources

Discussions with the site owner revealed that the site was purchased by the firm in 1969. It used to have two above ground fuel storage tanks to store fuel to power the fleet of lorries. The fuel was piped above ground, through the buildings, to two fuel pumps located to the southern side of the warehouses.

6.7 Radon Risk

According to the publication ‘Radon - Guidance on protective measures for new buildings BRE211 (BRE and HPA, 2007)’ the site is not within an area affected by Radon and therefore no special protection measures as regards this gas will be required. See [www.ukradon.org](http://www.ukradon.org) for more details.

7 Walkover Survey

A walkover survey was carried out on 3 March 2015, in the presence of Mr Bourne.

7.1 General Description and Boundaries

The site is roughly triangular in shape. Rock Channel (road) lies to the south east boundary, beyond this are the raised banks of Rock Channel, (part of the River Brede) and the River Brede itself.

St Margaret’s Terrace lies to the south east side of the site, beyond this are three single storey residential dwellings, which lie between St Margaret’s Terrace and the channel of the River Tillingham. There are access gates to the site off Rock Channel and St Margaret’s Terrace.

Three interlinked warehouse buildings lie to the northern side of the site. A parking area that is hard surfaced with concrete and tarmac, is located to the south of the warehouses.

The yard area was used by the removals company and also by a company that runs a fleet of coaches for hire – Novabussung.

Further warehouses and an extensive open yard area lies to the northern site boundary. These are occupied by Jempsons, a road haulage company. A chain-link fence separates the two sites.
7.2 **Topography and Drainage**

The site is flat and level, sloping slightly towards the rivers to the south. The banks of the Rivers Tillingham and Brede have been raised in the past and are set at a higher elevation when compared to the site.

The exact drainage scheme for the site was not ascertained during the walkover survey, but this is likely to be via the combined sewerage system.

7.3 **Vegetation**

To the southern boundary, located within a grassed area, are a number of silver birch trees and one other tree, variety not known. To the north west corner of the site is a sycamore tree and some conifers.

7.4 **Buildings and Land Use on Site and Nearby**

The three interlinked warehouses are of steel portal frame construction, the western warehouse has brick and concrete infill/cladding. The central and eastern warehouses have metal cladding. The warehouse to the western end was constructed circa 1973, the central warehouse was added during 1978/79 and the smaller warehouse to the eastern side of the site was built during 1981.

The western warehouse incorporates an office, which were occupied by the staff of the coach hire company, Novabusung. The western and central warehouses were used to store furniture, which was packed into crates. The eastern warehouse had an upper mezzanine and was used previously as an auction warehouse.

To the rear of the warehouses were two above ground fuel storage tanks, that were used to store diesel, used to fuel the lorries. The fuel was conveyed by an above ground pipe network, to two fuel pumps, located near to and south of the central warehouse. The pumps and tanks had been removed, but the pump bases were still visible within the yard surface.

7.5 **Photographs**

A series of photographs showing the site is included in Appendix B.

C **PRELIMINARY CONCEPTUAL MODEL**

8 **Introduction**

In the context of this report, the conceptual model summarises the potential pollutant linkages identified for the site and forms the basis of the risk assessment for the site. The preliminary model comprises the potential sources of contamination, receptors that could be harmed and exposure pathways identified from the desk study and walkover survey. These potential linkages form the basis upon which the investigation is designed and reported.

9 **Potential Sources of Contamination**

The site has a history of industrial use and is located within an industrial area.

A number of potentially contaminative uses have been identified, both on site and in the locality.
Potential contaminants associated with these uses have been compiled from DoE industry profiles, CLR 8, other desk study information (conversations with site owners) and our experience of such sites.

9.1 On Site Sources

<table>
<thead>
<tr>
<th>Source</th>
<th>Potential Contaminants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Made ground</td>
<td>Metals, polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons, soil gas emissions and asbestos containing materials.</td>
</tr>
<tr>
<td>Alluvium</td>
<td>Soil gas emissions</td>
</tr>
<tr>
<td>Fabric of buildings</td>
<td>Asbestos containing materials</td>
</tr>
<tr>
<td>Timber yard and treatment works</td>
<td>Timber treatment products such as tars, phenols, copper, arsenic and chromium based compounds</td>
</tr>
<tr>
<td>Transport, vehicle repairs</td>
<td>Polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons</td>
</tr>
<tr>
<td>and maintenance</td>
<td></td>
</tr>
<tr>
<td>Fuel storage tanks</td>
<td>Polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons</td>
</tr>
<tr>
<td>Fuel feed - lines</td>
<td>Polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons</td>
</tr>
<tr>
<td>Fuel pumps</td>
<td>Polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons</td>
</tr>
</tbody>
</table>

9.2 Off Site Sources

The site may be impacted by contamination migrating from beyond the site boundary. The following potential off-site sources have been identified.

<table>
<thead>
<tr>
<th>Source</th>
<th>Distance from Site Boundary (m)</th>
<th>Direction</th>
<th>Potential Contaminants</th>
<th>Likely Hazard to Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jempsons road haulage</td>
<td>0</td>
<td>N</td>
<td>Polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons</td>
<td>Moderate</td>
</tr>
<tr>
<td>Timber yard</td>
<td>0</td>
<td>N</td>
<td>Timber treatment products such as tars, phenols, copper, arsenic &amp; chromium based compounds</td>
<td>Moderate</td>
</tr>
<tr>
<td>Made ground</td>
<td>0</td>
<td>N</td>
<td>Soil gas emissions</td>
<td>Moderate</td>
</tr>
<tr>
<td>Alluvium</td>
<td>0</td>
<td>N</td>
<td>Soil gas emissions</td>
<td>Moderate</td>
</tr>
<tr>
<td>Ship yard</td>
<td>30</td>
<td>E</td>
<td>Polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons</td>
<td>Low</td>
</tr>
<tr>
<td>Garage services</td>
<td>11</td>
<td>NW</td>
<td>Polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons</td>
<td>Moderate</td>
</tr>
<tr>
<td>Transport manufacturing and repair</td>
<td>13</td>
<td>E</td>
<td>Polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons</td>
<td>Moderate</td>
</tr>
<tr>
<td>Tanks</td>
<td>18</td>
<td>NW</td>
<td>Polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons</td>
<td>Moderate</td>
</tr>
<tr>
<td>Source</td>
<td>Distance from Site Boundary (m)</td>
<td>Direction</td>
<td>Potential Contaminants</td>
<td>Likely Hazard to Site</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>--------------------------------</td>
<td>-----------</td>
<td>---------------------------------------------------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Transport</td>
<td>32 NW</td>
<td>Polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons</td>
<td>Moderate to low</td>
<td></td>
</tr>
<tr>
<td>Garage services</td>
<td>53 N</td>
<td>Polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons</td>
<td>Moderate to low</td>
<td></td>
</tr>
<tr>
<td>Car sealers/ engineering</td>
<td>55 W</td>
<td>Polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons</td>
<td>Moderate to low</td>
<td></td>
</tr>
<tr>
<td>Timber yard, saw mill and treatment works</td>
<td>60 NW</td>
<td>Timber treatment products such as tars, phenols, copper, arsenic and chromium based compounds</td>
<td>Moderate to low</td>
<td></td>
</tr>
<tr>
<td>Factory</td>
<td>117 W</td>
<td>Polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons, metals</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Fuel filling station</td>
<td>232 NW</td>
<td>Polycyclic aromatic hydrocarbons (PAHs), petroleum hydrocarbons</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Backfilled pond</td>
<td>243 SE</td>
<td>Soil gas emissions</td>
<td>Low</td>
<td></td>
</tr>
</tbody>
</table>

Sources to the south east and south west would be considered low risk, due to the presence of the rivers to the boundaries.
10 Pollutant Linkages and Model Summary

The following diagram shows the potential pollutant linkages identified for the site and summarises the preliminary conceptual model:

```
Sources:                               Pathways:                               Receptors:


Inhalation

Direct ingestion
Dermal contact
Particulate inhalation

Plant Uptake

Run-off

Leaching

Fire/Explosion

Humans: Site workers Future occupants

Controlled Waters: Surface water: south east 15m - River Brede south west 20m River Tillingham Groundwater: Secondary A Aquifer – Ashdown Beds (no SPZ)

Infrastructure: Services

Structures
```

\(//\) Denotes potential pollutant linkage not complete

D CONCLUSIONS AND RECOMMENDATIONS

11 Preliminary Geotechnical Recommendations

The following provisional guidance is supplied based on our knowledge of the likely soil types and ground conditions in the area; however, it should be borne in mind that this information should be considered as crude guidance only at this stage, in the absence of any intrusive work. This is particularly relevant at this site where the soils may be quite variable.

11.1 Swelling and Shrinkage

Intrusive work with testing would be required. Clay soils are likely to be present beneath the site. At this stage it would be prudent to assume NHBC High Volume Change Potential precautions will apply, but other soil conditions may prevail.
11.2 Groundwater
Groundwater levels are anticipated to be located at shallow depth, as the site is low lying and adjacent to two rivers.

11.3 Soakage Potential
The underlying soils are unlikely to provide good soakage potential, as they are clay based in nature, and groundwater levels are likely to be high.

The site lies upon a Secondary A Aquifer and the Environment Agency would need to be consulted about use of soakaways in this instance.

11.4 Foundations & Bearing Capacity
Poor bearing capacity is envisaged within the Alluvium. A piled foundation would be the best option.

11.5 Settlement
Moderate, assuming normal loadings are applied.

11.6 Floor Slabs
Assume suspended slabs at this stage to NHBC high VCP.

11.7 Roads
Assume relatively poor CBR value, in the range 1%-2%; and a potentially frost susceptible subgrade.

11.8 Excavations
At this stage, assume shallow excavations are likely to be unstable. Deeper and longer term excavations will require lateral support.

An allowance for dewatering of excavations should be made.

12 Preliminary Environmental Recommendations
This report has been compiled through a study of information available, including current and historical land use, database survey, web based searches and the site walkover survey, to identify potential areas of concern that could be classed as ‘sources’, which could potentially have an adverse effect upon a sensitive ‘receptor’.

There are a number of potential on site and no off site land uses that could have led to a number of possible sources, environmental hazards and past contaminative uses associated with this site.

Potential historical and current on site and off site sources include:

- Warehousing
- Above ground fuel storage tanks
- Fuel feed lines and pumps
- Use of the site as for vehicle parking
- Made ground
- Presence of alluvium beneath the site
• Probable cement asbestos products used in fabric of buildings
• Use of the site as a timber treatment works and saw mill
• Use of site as a factory
• Transport manufacturing and vehicle repair
• Garages
• Haulage yard
• Ship building

These potential sources of contamination could pose a risk to sensitive receptors, which comprise:

• Site workers
• End users
• Underlying Secondary A Aquifer
• Nearby surface water courses

The various migration pathways taken by the potential contaminants (sources) to impact upon a receptor are shown in the previous Preliminary Conceptual Site Model.

Intrusive investigations of the subsurface strata should be undertaken so that the migration pathways and potential risk to sensitive receptors such as the underlying principal aquifer and the site end users can be fully considered. This would allow revisions to be made to the preliminary conceptual model, the potential migration pathways to be reassessed and recommendations to mitigate impact be made.

12.1 Intrusive Geo-Environmental Site Investigation

The location of all underground services beneath the site should be ascertained prior to commencing intrusive investigations.

An intrusive, geo-environmental site investigation, comprising a number of exploratory holes, installed using a suitable drilling rig and/or mechanical excavator, should be carried out to assess the underlying soils for contamination purposes and to gain information for foundation design.

The exploratory holes would be located to provide reasonable coverage of the site, with respect to potential contamination of underlying soils and to provide information relating to the swelling and shrinkage in the soil, any potential settlement, soakage potential and soil bearing capacity. This information can then be used to recommend foundation systems and floor slab options available for the proposed new buildings.

This would also and allow the potential presence of made ground to be assessed.

Standpipes for groundwater and soil gas monitoring should be installed within selected boreholes, to allow for soil gas and groundwater monitoring.

Soil samples should be taken for chemical analysis. This will determine the nature, extent, and depth of any made ground present and the degree of possible contamination of the ground that may have occurred. This would enable the sources and migration pathways to be assessed and the risk assessment redefined. It would also provide information for foundation design.

A programme of soil gas and groundwater monitoring should also be allowed for.
12.2 Suggested Soil Analysis

Chemical Parameters

Selected soil samples should be tested for the chemical parameters listed upon the following table:

<table>
<thead>
<tr>
<th>Chemical Parameter</th>
<th>Arsenic</th>
<th>Mercury</th>
<th>Sulphide</th>
<th>Phenols</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cadmium</td>
<td>Nickel</td>
<td>Sulphate</td>
<td></td>
<td>Speciated petroleum hydrocarbons with aliphatic aromatic split to allow site specific risk assessment to be carried out</td>
</tr>
<tr>
<td>Chromium</td>
<td>Selenium</td>
<td>Total cyanide</td>
<td>Polyaromatic hydrocarbons, including benzo(a)pyrene</td>
<td></td>
</tr>
<tr>
<td>Copper</td>
<td>Zinc</td>
<td>pH</td>
<td>Timber treatment products such as arsenic and chromium</td>
<td></td>
</tr>
<tr>
<td>Lead</td>
<td>Asbestos</td>
<td>Organic matter</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Geotechnical Analysis of Soil Samples

Geotechnical analysis should be undertaken for the following parameters:

- Plasticity index tests
- Particle size distribution
- pH and sulphate
- Triaxial compression tests

12.3 Soil Gas Monitoring

This aspect is likely to be needed, due to the alluvium that will underlie the site. It is envisaged, based upon current guidance, that a minimum of six monitoring visits should be allowed for.

12.4 Other Recommendations

The contents of this desk study and the recommendations given should be confirmed as acceptable with the local council - planning department and environmental health department and the environment agency prior to proceeding with redevelopment of this site.

Further to this, and following approval of the methods and findings of an intrusive investigation, by the local authority and environment agency; if needed, a method statement, detailing any remediation work that may be required, should then be drawn up and agreed with the regulatory authorities.
APPENDIX A

Site Plans
NB: Positions of Boreholes and/or Trial Pits are only indicative unless dimensioned

Site: T Bourne and Son, St Margaret's Terrace/Rock Channel, Rye, TN31
STL: DS2582
Fig No: 2
Date: 12 March 2015

Site Location Plan – Not to Scale
APPENDIX B

Photographs
Photo 21 – silver birch trees to southern boundary

Photo 22

Photo 23

Photo 24
APPENDIX C

Desk Study Results
<table>
<thead>
<tr>
<th>Map Date</th>
<th>Scale</th>
<th>Features on site</th>
<th>Features in surrounding area</th>
<th>Significant Potential Contamination Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1872</td>
<td>1:2500</td>
<td>A track crosses the site from east to west and a small building lies to the south of this track.</td>
<td>A ship yard is shown to the east boundary and a timber yard to the north boundary.</td>
<td>Ship yard, Timber yard</td>
</tr>
<tr>
<td>1898</td>
<td>1:2500</td>
<td>No significant changes noted.</td>
<td>A tank is now shown within the timber yard to the north of the site.</td>
<td>Ship yard, Timber yard</td>
</tr>
<tr>
<td>1929</td>
<td>1:2500</td>
<td>The site layout remains the same but is now called a timber yard on the map.</td>
<td>Warehouses or works units have been built to the north boundary.</td>
<td>Warehouses/works, Timber yard</td>
</tr>
<tr>
<td>1961</td>
<td>1:10000</td>
<td>No significant changes noted.</td>
<td>Further warehouses or works units have been built to the north boundary.</td>
<td>Warehouses/works, Timber yard</td>
</tr>
<tr>
<td>1971</td>
<td>1:2500</td>
<td>No significant changes noted.</td>
<td>Further warehouses or works units have been built to the north boundary.</td>
<td>Warehouses/works, including haulage yard to north boundary</td>
</tr>
<tr>
<td>1972/3</td>
<td>-</td>
<td>First warehouse built upon the site</td>
<td>-</td>
<td>Furniture removals, fuel storage Warehouses/works, including haulage yard to north boundary</td>
</tr>
<tr>
<td>1974</td>
<td>1:2500</td>
<td>Western warehouse shown on site</td>
<td>No significant changes noted.</td>
<td>Furniture removals, fuel storage Warehouses/works, including haulage yard to north boundary</td>
</tr>
<tr>
<td>1978/9</td>
<td>-</td>
<td>Middle warehouse built</td>
<td>-</td>
<td>Furniture removals, fuel storage Warehouses/works, including haulage yard to north boundary</td>
</tr>
<tr>
<td>1981</td>
<td>-</td>
<td>Eastern warehouse built</td>
<td>-</td>
<td>Furniture removals, fuel storage Warehouses/works, including haulage yard to north boundary</td>
</tr>
<tr>
<td>1993</td>
<td>1:2500</td>
<td>Site has current layout</td>
<td>Additional warehouses added to the site to the northern boundary</td>
<td>Furniture removals, fuel storage Warehouses/works, including haulage yard to north boundary</td>
</tr>
</tbody>
</table>

NOTE: Additional maps at 1:10,560 and 1:10000 scale of similar age have been obtained. These maps are appended but do not provide much additional information.
For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

**Slice**
Each slice represents a 1:10,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice “grid”. This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

**Segment**
A segment represents a 1:2,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

**Quadrant**
A quadrant is a quarter of a segment. These are labelled as NW, NE, SW, SE and are referenced in the datasheet to allow features to be quickly located on plots. Therefore a feature that has a quadrant reference of A7NW will be in Slice A, Segment 7 and the NW Quadrant.

A selection of organisations who provide data within this report:

- Envirocheck reports are compiled from 136 different sources of data.

Client Details
MR D Spearman, Southern Testing, Keeble House, Stuart Way, East Grinstead, West Sussex, RH19 4QA

Order Details
Order Number: 64668474 1_1
Customer Ref: DS28281 / ER
National Grid Reference: 592030, 120020
Site Area (Ha): 0.66
Search Buffer (m): 1000

Site Details
St Margaret’s Terrace / Rock Channel, Rye, East Sussex, TN31 7HJ

Full Terms and Conditions can be found on the following link:
http://www.landmarkinfo.co.uk/Terms/Show/515
Sussex
Published 1872 - 1874
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840s. In 1864 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Historical Map - Segment A13

Order Details
Order Number: 64666474 1.1
Customer Ref: DS2582 / ER
National Grid Reference: 592030, 120020
Slice: A
Site Area (Ha): 0.66
Search Buffer (m): 100

Site Details
St Margaret's Terrace / Rock Channel, Rye, East Sussex, TN31 7HU
Sussex
Published 1898
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Historical Map - Segment A13

Order Details
Order Number: 64666474 1.1
Customer Ref: DS2652 / ER
National Grid Reference: 592030, 120020
Slice: A
Site Area (Ha): 0.66
Search Buffer (m): 100

Site Details
St Margaret’s Terrace / Rock Channel, Rye, East Sussex, TN31 7HU
Sussex

Published 1909

Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.
Sussex
Published 1929
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Order Details
Order Number: 64666474_1.1
Customer Ref: DS2582 / ER
National Grid Reference: S92030, 120020
Slice: A
Site Area (Ha): 0.66
Search Buffer (m): 100

Site Details
St Margaret's Terrace / Rock Channel, Rye, East Sussex, TN31 7HU
Ordnance Survey Plan
Published 1971 - 1977
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

Historical Map - Segment A13

Order Details
Order Number: 64888474  1.1
Customer Ref: DS2582 / ER
National Grid Reference: S92030, 120020
Slice: 0.66
Search Buffer (m): 100

Site Details
St Margaret's Terrace / Rock Channel, Rye, East Sussex, TN31 7HJ
Supply of Unpublished Survey Information
Published 1974
Source map scale - 1:2,500
SUSI maps (Supply of Unpublished Survey Information) were produced between 1972 and 1977, mainly for internal use at Ordnance Survey. These were more of a ‘work-in-progress’ plan as they showed updates of individual areas on a map. These maps were unpublished, and they do not represent a single moment in time. They were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

Historical Map - Segment A13

Order Details
Order Number: 6466474 1.1
Customer Ref: DS2582 / ER
National Grid Reference: S92020, 120020
Slice: A
Site Area (Ha): 0.66
Search Buffer (m): 100

Site Details
St Margaret’s Terrace / Rock Channel, Rye, East Sussex, TN31 7HJ
Supply of Unpublished Survey Information

Published 1974

Source map scale - 1:2,500

SUSI maps (Supply of Unpublished Survey Information) were produced between 1972 and 1977, mainly for internal use at Ordnance Survey. These were more of a 'work-in-progress' plan as they showed updates of individual areas on a map. These maps were unpublished, and they do not represent a single moment in time. They were produced at both 1:2,500 and 1:1,250 scales.
Additional SIMs
Published 1977 - 1989
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's Survey of Information on Microfilm) are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

Historical Map - Segment A13

Order Details
Order Number: 64666474 1.1
Customer Ref: DS2582 / ER
National Grid Reference: S92030, 120020
Slice: 0.66
Search Buffer (m): 100

Site Details
St Margaret's Terrace / Rock Channel, Rye, East Sussex, TN31 7NJ
Order Details
Order Number: 64666474 1 1
Customer Ref: DB2582 / ER
National Grid Reference: S92030, 120020
Slice: A
Site Area (Ha): 0.66
Search Buffer (m): 100

Site Details
St Margaret's Terrace / Rock Channel, Rye, East Sussex, TN31 7HJ

Historical Map - Segment A13

Ordnance Survey Plan
Published 1989
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840s. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

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Additional SIMs
Published 1989
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Historical Map - Segment A13

Order Details
Order Number: 64666474 1.1
Customer Ref: D52582 / ER
National Grid Reference: 592030, 120020
Slice: A
Site Area (Ha): 0.66
Search Buffer (m): 100

Site Details
St Margaret's Terrace / Rock Channel, Rye, East Sussex, TN31 7HU
Large-Scale National Grid Data
Published 1993
Source map scale - 1:2,500

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the forerunners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

Order Details
Order Number: 646667411
Customer Ref: DSS2582 / ER
National Grid Reference: 592030, 120020
Slice: 0.66
Search Buffer (m): 100

Site Details
St Margaret’s Terrace / Rock Channel, Rye, East Sussex, TN31 7HJ
Kent
Published 1877 - 1878
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840’s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,550 maps. The published date given therefore is often some years later than the surveyed data. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940’s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

Historical Map - Slice A

Order Details
Order Number: 64666474 1 1
Customer Ref: DS2582 / ER
National Grid Reference: 592030, 120020
Slice: A
Search Buffer (m): 1000

Site Details
St Margaret's Terrace / Rock Channel, Rye, East Sussex, TN31 7HJ
Sussex
Published 1878
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,500 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.
Sussex
Published 1899 - 1900
Source map scale - 1:10,560
The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,500 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1840s a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Historical Map - Slice A
Order Details
Order Number: 64666474 1 1
Customer Ref: DS2986 / ER
National Grid Reference: 592030, 120020
Slice: A
Site Area (Ha): 0.66
Search Buffer (m): 1000

Site Details
St Margaret's Terrace / Rock Channel, Rye, East Sussex, TN31 7HJ
Sussex
Published 1910
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,500 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In 1938, the 1:10,000, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

Historical Map - Slice A

Order Details
Order Number: 64666474 1 1
Customer Ref: DS2582 / ER
National Grid Reference: 592030, 120020
Slice: A
Site Area (Ha): 0.66
Search Buffer (m): 1000

Site Details
St Margaret's Terrace / Rock Channel, Rye, East Sussex, TN31 7HJ

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Sussex
Published 1930
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Historical Map - Slice A

Map Name(s) and Date(s)

Order Details
Order Number: 64666474 1.1
Customer Ref: DS2582 / ER
National Grid Reference: 592030, 120020
Slice: A
Site Area (Ha): 0.66
Search Buffer (m): 1000

Site Details
St Margaret's Terrace / Rock Channel, Rye, East Sussex, TN31 7HJ
Sussex
Published 1938 - 1940
Source map scale - 1:10,560

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840s. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,500 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940s, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

Map Name(s) and Date(s)

Order Details
Order Number: 64666474_1_1
Customer Ref: D26562 / ER
National Grid Reference: 592030, 120020
Slice: A
Site Area (Ha): 0.66
Search Buffer (m): 1000

Site Details
St Margaret's Terrace / Rock Channel, Rye, East Sussex, TN31 7HJ