# Land South and East of Adastral Park

**Geo-Environmental Phase 1 Desk Study** 

**Carlyle Land Ltd and Comercial Estates Group** 

# **Document Control Sheet**

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# **Appendix A**

Historical map index – Ordnance Survey

Historical site mapping – Ordnance Survey

# **Appendix B**

Landmark Bomb Search/ 6 Alpha Associates – Preliminary Unexploded Ordnance Risk Assessment

# **Appendix C**

## Correspondence:

- 1. Environmental Health Officer (Suffolk Coastal and Waveney District Councils)
- 2. Petroleum Lead, Trading Standards (Suffolk County Council)
- 3. Environment Planning & Engagement (Environment Agency)
- 4. Consultations Team (Natural England)

## 1 Introduction

- 1.1 Brookbanks Consulting Ltd is appointed by Carlyle Land Ltd and CEG to complete a Phase 1 Geo-Environmental Desk Study for a proposed mixed use development at Land south and east of Adastral Park in Ipswich, Suffolk.
- 1.2 The objective of the study is to research the likely geotechnical and chemical characteristics of the soil and ground water environment.

# 2 Background Information

#### **Location & Details**

- 2.1 The proposed development Site boundary measures an area of approximately 113.3ha and comprises of BT's Adastral Park (which is to be retained) to the north and north-west. The remainder of the Site (which is to be developed), composes of undeveloped land and is situated to the south and south east of Adastral Park. The Site is bound to the west by the A12 and to the north-west by Barracks Square, Gloster Road and Belts Avenue, which form boundaries to Adastral Park. The south of the Site is bound by Newbourne Road and Ipswich Road, with the east of the Site bound a by a footpath which separates the current surrounding agricultural land.
- 2.2 The proposed development area is outlined in red, as shown on Figure 2a, below:



★ BT's Adastral Park

Figure 2a: Site Location

#### **Development Criteria**

2.3 Outline application for up to 2,000 dwellings, an employment area of c0.6ha (use Class B1), primary local centre (comprising use classes A1, A2, A3, A4, A5, B1, C3, D1 and D2), secondary centre (comprising possible use Classes A1, A3, A5 and D2), a school, green infrastructure (including Suitable Accessible Natural Green Space (SANGS), outdoor play areas, sports ground and allotments/community orchards), public footpaths and cycleways, vehicle accesses and associated infrastructure.

#### **Sources of Information**

- 2.4 The following bodies were consulted during the study:
  - Historic Landfill Register and Hazardous Waste Register Environment Agency (EA)
  - Historic Landfill Register, Hazardous Waste Register
     & Waldringfield Pit SSSI
  - Trading Standards: Petroleum
     Suffolk County Council
  - Environmental Health Department
     Suffolk Coastal District Council
- 2.5 The following information has been gathered and reviewed during the study:
  - Environmental Search Landmark Envirocheck Report, September 2016

Natural England

- Preliminary Unexploded Ordnance (UXO) Landmark Bomb Search / 6 Alpha Associates,
  Risk Assessment September 2016
- Published Geology British Geological Survey
- Published maps: Flooding Environment Agency and Gov.UK Website
- The Deben Estuary Plan

   Deben Estuary Partnership/EA/ Suffolk Coast and

  Heaths AONB Unit/ The River Deben Association,

  July 2015
- 2.6 As part of a previous planning application submitted in 2008, a number of supporting documents and reports were submitted and have also been reviewed in preparation of this independent study:
  - Phase 1 Environmental Assessment:

     Environ UK Limited, September 2007

     Undeveloped Land, Martlesham Heath, Ipswich
  - Earthworks Strategy Report: Adastral Park,
     WSP, September 2009
     Ipswich, BT c/o Telereal Services Ltd

## 3 Historical Site Uses

BT c/o Telereal Services Ltd

- 3.1 In appraising the Site history, published Ordnance Survey maps have been reviewed dating from 1884 up to the present day. A selection of large and small scale maps used in this report are contained within the Appendix.
- 3.2 Inspection of the maps has revealed that the Site, located in the rural area of Martlesham Heath, is shown to have initially comprised undeveloped Greenfield heath land. A small woodland area was shown in the centre, part of the 'Swale Plantation', and a number of footpaths are shown to cross the site.
- 3.3 The following historical **on-site** activities are shown over the years:

Site Use / Activity	Date first shown	Date last Shown	Direction	Map Page (Appendix)
Sand Pit (Waldringfield Quarry)	1957	Still Present	Centre	12
Sewage Works with associated filter beds and tanks	1965	1986	West	15
Small Buildings	1965	Still Present	South West	17
Tank	1986	1986	Centre	24
Building (Helipad)	1994 (1999)	Still Present	North East	30 (32)
Ponds (former Sand Pits)	1996	Still Present	Centre	31
Tower	2016	Still Present	West	41

Table 3a: On-Site Historical Site Uses

- 3.4 As listed above in Table 3a, the land is shown to have been largely worked for its minerals from around 1957. As a result, there are a number of ponds (former sand pits) shown in the centre of the Site by 1996. Additional tracks and paths are shown to cross the site from the early 70s. An unspecified tank is shown adjacent to the sand pit at Waldringfield Quarry but is only shown on the 1986 map.
- A Sewage Works with associated filter beds and tanks are shown in the west of the site (south of Adastral Park) in 1965, however by 1994 these are no longer shown. This may potentially have been associated with the now disused Martlesham Heath Airfield (potential extension of the runway).
- A number of small buildings are shown in 1965 to the present day, within the south western corner of the Site. Another building is shown in the north east of the Site on the 1994 map which includes an access road and a Helipad by 1994. A tower is also shown in the west of the Site, off the existing tracks by 'The Swale'.
- 3.7 The historical **off-site** activities are detailed in Table 3b in order of distance from the Site boundary:

Site Use / Activity	Approximate Distance (m)	Date first shown	Date last Shown	Direction	Map Page (Appendix)
Number of small Buildings (later	A dia cont	1057	Ca:II Dunnana	Cauth	12 (17)
shown as Sheep Drift Farm by 1965)	Adjacent	1957	Still Present	South	12 (17)
Number of large buildings which					
include two Works (now part of	Adjacent	1965	Still Present	West	15
Adastral Park) and a reservoir					
Potential extension of Martlesham		1971	Still Present	West	18 /19
Heath Airfield runway (disused)	Adjacent	19/1	Still Present	west	10/19
Post Office Research Centre, BT					
Research Laboratories, Factory with a		1979	2006 (Still	North West	21 / 34
number of small electrical Sub Stations	Adjacent	1979	Present)	North West	(38/41)
spaced around (Adastral Park)					
A1093/ A12 (Trunk road)	Adjacent	1979/ 1980	Still Present	West	21 / 22
Piggeries (shown as Seven Acres Farm		1986	1994		
in 2000 and by 2016 as Seven Acres	Adjacent	(2000 /	(2006 / Still	East	26 (39)
Business Park)		2016)	Present)		
Caravan Park (now the Moon &	Adjacent	1993	Still Present		28
Sixpence Holiday Park)	Aujacent	1333	Juli Fresent	North East	20
Gravel Pit ('Old Pits')	175	1884	(1905)	West	4
Falcon Trailer Park	225	1971	Still Present	North	19
Clothing Factory, Printing Works,	250	1985	1986	14/t	24
works	230	1303	1300	West	24
Golf Course	250	1994	Still Present	South East	30
Sand Pits	250, 400 &	1884, 1993	1904,1904	South West	4/7
	750		& 2000		
Warehouses	400	1971	2000	North West	19
Large Sand & Gravel Pit with a depot,	800	1980	Still Present	South West	27 / 35 / 38
parts of which are shown as disused					(41)
workings (later shown as a landfill					
site).					
'Martlesham Heath Airfield' (disused)	800	1971	1927	West	18/ 19
'Civic Amenity Site', by 2016 shown as	1000	2000	Still Present	South West	35 / 38 /41
a 'Recycling Centre'					

Table 3b: Off-Site Historical Site Use

- 3.8 The surrounding rural area is shown to include a number of potentially historic and current contaminative land uses within 1km of the Site boundary. These mainly include: a number of sand and gravel Pits; industrial uses such as works, depots and factories; a piggery; former RAF Airfield and a commercial area which included small substations and a research laboratory/ research centre (now Adastral Park). Some of these uses are shown to have since been developed over or are no longer in operation.
- 3.9 The residential areas of Martlesham Heath, Waldringfield and Newbourne are shown to have expanded (notably in the 70s and 80s), along with associated road infrastructure such as the A12 trunk road and local amenities.
- 3.10 Potentially significant contaminative land uses identified on Site include: agricultural, mineral extraction work, former sewage works, unspecified tank, small buildings and tower.

# 4 Recent & Current Site Usage

4.1 Since the 1960's mineral extraction has taken place within the area of the proposed development. Brett Aggregates currently lease a vast majority of the proposed Site for mineral extraction along with concrete mixing and subsequent inert landfilling activities. The mineral extraction works on site has resulted in the creation of a number of large ponds. Sheep Drift Farm lease the remaining areas which are used for agricultural purposes. The extent of the extraction works and location of the ponds can be seen below on Figure 4a:



Figure 4a: Google Map Image, 2016

- 4.2 From previous work undertaken, the Suffolk County Council Minerals Plan states that the area currently used as agricultural land is a "preferred option" for mineral extraction. A number of areas have also previously been identified which have potential to be used for sand and gravel extraction. Two main areas in the south west and north east of the boundary have been identified as areas which have yet to be extracted. It was previously proposed to phase the extraction to enable parts of the proposed development to be built, whilst the extraction works are undertaken, minimising potential impacts on new receptors.
- 4.3 An Extraction Programme was previously produced which outlined a five stage phasing plan. The Programme outlines a plan of individual Phases along with Brett Occupation Start date, Brett Completion (with the earliest Handover to BT), Tonnage to be extracted and overall area. This is summarised in the Table 4a, and illustrated in Figure 4b.

Pha	se	Brett Occupation Starts	Brett Completion – Earliest Handover to BT	Tonnage to be Extracted (approx.)	Area (Ha)
1		N/A	N/A	N/A	4.76
2A		3 <sup>rd</sup> January 2012	5 <sup>th</sup> November 2014	200,000	6.43
	1	3 <sup>rd</sup> January 2012	4 <sup>th</sup> September 2014		2.66
2B	2	3 <sup>rd</sup> January 2012	3 <sup>rd</sup> December 2015	426,000	4.23
20	3	3 <sup>rd</sup> January 2012	4 <sup>th</sup> April 2017	420,000	5.26
3		3 <sup>rd</sup> January 2017	3 <sup>rd</sup> April 2020	357,000	20.81
4		3 <sup>rd</sup> January 2020	3 <sup>rd</sup> April 2024	513,000	25.24
5A		4 <sup>th</sup> April 2015	4 <sup>th</sup> April 2025		5.55
5B		Now	4 <sup>th</sup> April 2026	163,000	14.03

Table 4a: Mineral Extraction Programme (Sourced from David Lock Associates - 2011)

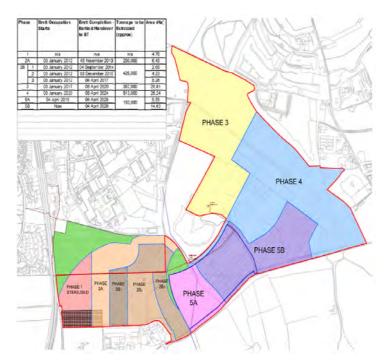


Figure 4b: Mineral Extraction Programme (Sourced from David Lock Associates - 2011)

- 4.4 Figure 4c is an extract from the previous desktop study undertaken by Environ in 2007 for the Site which indicates there are a number of potential contaminant sources on site (such as fuel tanks, a former landfill and the mineral washing plant). It was also reported that the site was part of the former RAF and US Army Airforce Airfield between 1917 and 1963. It has therefore been considered necessary to carry out further UXO (Unexploded Ordnance Survey) Risk Assessment work for the Site, which is further detailed in Section 8.
- 4.5 Also included within the Environ report is a summary of the main buildings and structures associated with Brett Aggregates, which is as follows:

"Administration Building: the first building encountered at the end of the access road is a single storey structure housing the site's administrative activities. The building is reportedly provided with electrically powered heaters and does not currently, nor did it historically, house any chemical storage. The building is located in the central site area;

**Warehouse**: a high bay single storey, brick constructed building, with corrugated sheet roofing and cladding, is present to the north west of the Admin Building. Historically, this building was used for the maintenance of Brett's fleet of HGV vehicles. Presently, the building is rarely used, although chemical and bulk fuel storage was noted internally and externally within the vicinity of the building;

**Emergency Generator House**: a single storey, brick outbuilding, is present to the south of the Warehouse and west of the Admin Building. This building houses one redundant and one operational, diesel powered emergency generator. The diesel fuel supply is present externally, adjacent to the east of the building;

**Mineral Washing Plant**: Extracted minerals are washed (water only) in the plant located to the north of the Admin Building and to the east of the Warehouse. The plant consists of an electrically powered conveyor belt, a cylindrical water tank and a hopper / large skip;

**Concrete Mixing Plant**: The plant is located to the south west of the emergency generator house and to the north of the leisure pond. Concrete is stored in silos, and combined with water and additives to create cement, which is then distributed to awaiting HGV vehicles.

The wastewater settling lagoons are located to the north of the warehouse and admin buildings, with the currently operational landfilling area located to the east south-east of the lagoons."

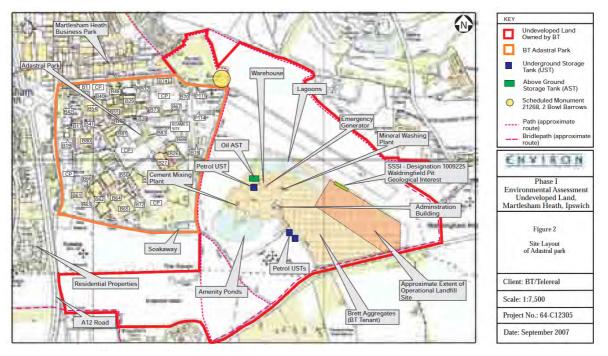


Figure 4c: Phase 1 Environmental Assessment (Sourced from Environ - 2007)

As the Site is proposed to be worked in phases, WSP previously produced an Earthworks Strategy in 2009 whereby they proposed a 'Development Platform' on which the proposed development may be built upon. Included within their report was a Ground Conditions Plan which indicated previous inert landfill activity on Site, to depths between 8-9m bgl (as illustrated by the orange shaded areas on Figure 4d).

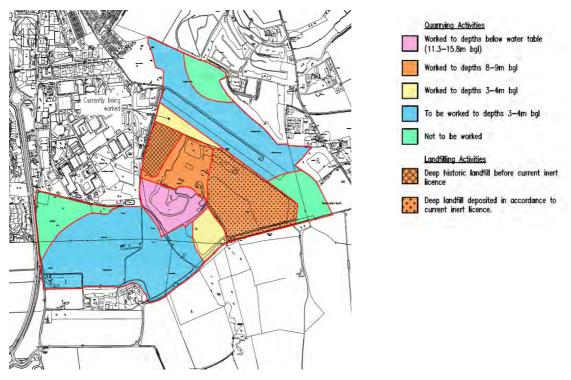


Figure 4d: Ground Conditions Plan extract (Sourced from WSP Earthworks Strategy - 2009)

4.7 Further details, such as the type of historic inert landfill material or the presence/extent of contamination, if any, were not reported therefore further consultation with the appropriate consultees was carried out. This is further outlined in Section 8.

## **5** Ground Conditions

## Geology

- 5.1 With reference to the British Geological Survey map, the Site is shown to be underlain by bedrock geology comprising sand from the Crag Formation, with areas of overlying superficial deposits of sand and gravel belonging to the Kesgrave Catchment Subgroup.
- 5.2 There is no Artificial Ground/ Made Ground or Landslip areas reported on Site.
- 5.3 The Site geology, as described above is illustrated on Figure 5a:

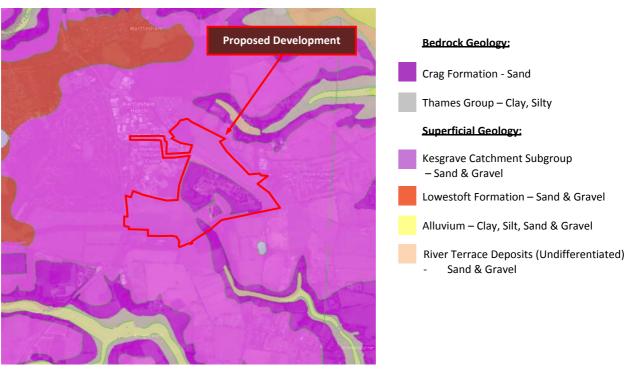


Figure 5a: BGS Published Geology

5.4 Similarly, a geological cross section through the Site was produced in a previous *Earthworks Strategy*, by *WSP Consultants*. Figure 5b, is an extract of the diagram which illustrates the underlying geology across the extent of the Site.

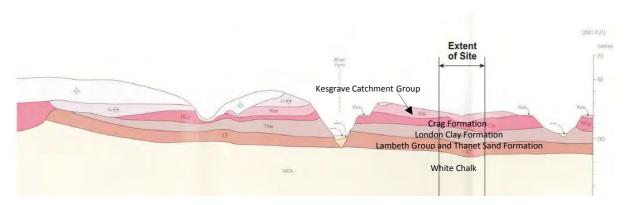


Figure 5b: Modified Geological Cross Section, 2009 (Sourced from WSP, based on Ordinance Survey map)

- 5.5 BGS records include the following ratings for a number of potential ground stability hazards on or within 250m of the Site boundary:
  - Collapsible ground stability:
  - Compressible ground:
  - Ground Dissolution:
  - Landslide:
  - Running Sand:
  - Shrinking & Swelling Clay:
    - \*potential ground stability hazard on Site

No Hazard\*/Very Low\*

No Hazard\*/Moderate\*

No Hazard\*

Very Low\*

No Hazard/ Very Low\*/Low\*

No Hazard\*/ Very Low\*

# Mining

5.6 The Site is in an area that is considered might not be affected by coal mining.

- 5.7 It is reported that there is No Hazard of the Site being in a Non-Coal Mining Area of Great Britain.
- 5.8 There are two active, opencast BGS Recorded Mineral Sites recorded within 1,000m of the Site boundary, these are onsite and issued to Waldringfield Quarry. A further twenty-two, ceased, mineral sites are recorded and outlined in Table 5c:

Site Name - Location	Commodity - Geology	Status	Distance (m)	Direction
Waldringfield Quarry – Waldringfield	Sand & Gravel – Crag Group	Active	On-Site	East
Waldringfield Quarry – Waldringfield	Sand & Gravel – Kesgrave Formation	Active	On-Site	East
Black Heath Gravel Pit – Martlesham Heath	Sand & Gravel – Kesgrave Catchment Subgroup	Ceased	83	North
Oak Wood Pit – Martlesham Heath	Sand – Red Crag Formation	Ceased	85	South East
Martlesham Heath Gravel Pits – Martlesham Heath	Sand & Gravel – Kesgrave Catchment Subgroup	Ceased	190	North
Martlesham Heath Gravel Pits – Martlesham Heath	Sand & Gravel – Kesgrave Catchment Subgroup	Ceased	203	North West
Martlesham Heath Gravel Pits – Martlesham Heath	Sand & Gravel – Kesgrave Catchment Subgroup	Ceased	222	North West
Martlesham Heath Gravel Pits – Martlesham Heath	Sand & Gravel – Kesgrave Catchment Subgroup	Ceased	254	North West
Martlesham Heath Pit – Martlesham Heath	Sand & Gravel – Kesgrave Catchment Subgroup	Ceased	309	North West
The Folly Pit, Waldringfield	Sand & Gravel – Kesgrave Catchment Subgroup	Ceased	407	South
Oak Wood Pit – Martlesham Heath	Sand – Red Crag Formation	Ceased	412	South West
Oak Wood Pit – Martlesham Heath	Sand – Red Crag Formation	Ceased	415	South West
Brightwell Crag Pit – Brightwell	Sand & Gravel – Kesgrave Catchment Subgroup	Ceased	463	East
Alder Carr Pit – Woodbridge	Sand – Red Crag Formation	Ceased	727	South
Brightwell Hall Sand Pit – Brightwell	Sand – Red Crag Formation	Ceased	746	South
Brightwell Hall Sand Pit – Brightwell	Sand – Red Crag Formation	Ceased	750	South
Brightwell Hall Sand Pit – Brightwell	Sand – Red Crag Formation	Ceased	779	South East
Brightwell Hall Sand Pit – Brightwell	Sand – Red Crag Formation	Ceased	822	South
Alder Carr Pit – Woodbridge	Sand – Red Crag Formation	Ceased	895	South West
Mill Cottages Pit - Martlesham Heath	Sand & Gravel – Lowestoft Formation	Ceased	896	North West
Alder Carr Pit – Woodbridge	Sand – Red Crag Formation	Ceased	924	South
Foxhall Quarry – Brightwell	Sand– Kesgrave Formation Subgroup	Ceased	952	South West
Foxhall Quarry – Brightwell	Sand –Crag Group	Ceased	952	South West
Brightwell Pit – Brightwell	Sand – Red Crag Formation	Ceased	975	South West

Table 5c: BGS Recorded Mineral Sites

## Radon

- 5.9 The Site is shown to be within a low probability area affected by radon, where less than 1% of homes are above the action level.
- 5.10 The Site is reported that no radon protective measures are necessary in the construction of new dwellings or extensions.

## **Estimated Soil Chemistry**

- 5.11 The Department of Education, Food and Rural Affairs (DEFRA)/Environment Agency (EA) Soil Guideline Values (SGVs) are indicators of levels of contamination in the soil that may present unacceptable risks to human health (should there be any contact), as well as providing guidance to Local Authorities to determine contaminated land under Part 2A. However, these are merely indicative values in which exceedance may simply require further site-specific investigation as opposed to definitive remedial works.
- 5.12 Figure 5d summarises the reported estimated soil chemistry on Site in comparison to the Contaminated Land Exposure Assessment (CLEA) Soil Guideline Values:

Heavy Metal	*Rural Soil: Estimated Site Concentration (mg/kg)	**Urban Soil: Estimated Site Concentration (mg/kg)	***BGS Urban Soil Chemistry Measured Concentrations Values (mg/kg)	CLEA SGV – Residential (mg/kg)	CLEA SGV – Commercial & Industrial (mg/kg)	Year SGV Published
Arsenic	<15	<15	6.70	32	640	2009
Cadmium	< 1.8	< 1.8	0.50	10	230	2009
Chromium	20-40	20-40	26.00	130	5000	2002
Lead	< 100	< 100	13.30	450	750	2002
Nickel	<15	<15	4.10	130	1800	2009

Table 5d: Estimated Soil Chemistry & CLEA SGVs

\*The British Geological Survey (BGS) Estimated Soil Chemistry dataset provides modelled estimates of ambient background concentrations of Potentially Harmful Elements (PHE) in topsoil: Arsenic (As), Cadmium (Cd), Chromium (Cr), Nickel (Ni) and Lead (Pb). The data has been created by combining high resolution geochemical data (from the BGS G-BASE and Imperial College Wolfson geochemical survey database) and the soil parent material maps derived from the BGS DiGMapGB geological data and covers the whole of Great Britain (excluding London).

\*\*The British Geological Survey (BGS) Urban Soil Geochemistry dataset comprises the location and concentration (mg/kg) of the following five Potentially Harmful Elements (PHE) in topsoil: Arsenic (As), Cadmium (Cd), Chromium (Cr), Nickel (Ni) and Lead (Pb). These concentrations were measured in topsoil samples taken by the BGS in 23 UK cities.

5.13 The soil sample type on site is reported to be *Rural Soil*. The estimated heavy metal concentrations on Site are all shown to be below the published CLEA SGVs and may be confirmed should a soil assessment be required at the detailed design stage.

## 6 Hydrology

## Flooding

- 6.1 The Environment Agency's (EA) National Generalised Modelling (NGM) Flood Zones Plan indicates predicted flood envelopes of Main Rivers across the UK. In many circumstances, the NGM is based on basic catchment characteristic data and modelling techniques. Where appropriate, more accurate Section 105 / SFRM models are produced using more robust analysis techniques.
- A number of surface water bodies are present on site including: mineral extraction ponds, two amenity ponds, a fishing pond and one soakaway pond. The closest watercourse to the site is an unnamed groundwater-fed stream, which lies approximately 230m to the northeast of the site at its closest point. This watercourse flows in an easterly direction, before joining the River Deben approximately 4 km to the east. A surface-water fed stream is located 630m to the south of the site and is tributary of Bucklesham Mill River.

<sup>\*\*\*</sup>The BGS measured point on site is in the north-west, south of Adastral Park.

- 6.3 The nearest surface water feature, an unnamed tributary stream approximately 500m to the north-west of the site, which runs into the River Deben.
- 6.4 The nearest main river is recorded as Bucklesham Mill River, approximately 900m to the south of the site. Bucklesham Mill River flows in an easterly direction for approximately 6km before flowing into the River Deben.
- 6.5 The EA mapping shows that the Site lies within Flood Zone 1; being an area of Low Probability of flooding, outside both the 1 in 100 (1% AEP) and 1 in 1,000 (0.1% AEP) year flood events. This is further illustrated on Figure 6a:

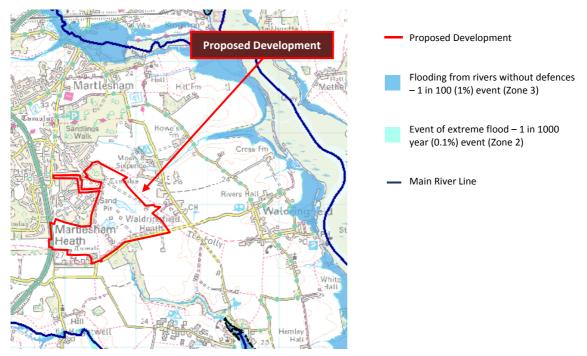


Figure 6a: EA Flood Zone Plan showing 1 in 100 & 1 in 1,000 year floodplains

Advice provided by the Government's online Flood Warning Information Service, indicates that the overall risk of surface water flooding on site is *Very Low*, as illustrated below on Figure 6b. A very low risk means that each year this area has a chance of flooding of less than 0.1%. However, flooding from surface water is difficult to predict as rainfall location and volume are difficult to forecast.



Figure 6b: EA Risk of Flooding from Surface water

6.7 According to the **BGS Groundwater Flooding Susceptibility** records there is Limited Potential for Groundwater Flooding to occur on and up to 250m from the site, as illustrated below on Figure 6c:

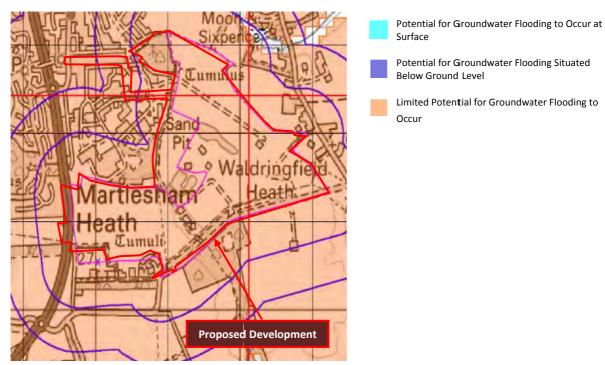


Figure 6c: BGS Groundwater Flooding Susceptibility Map

## **Discharge Consents**

6.5 There are two **Discharge Consents** recorded within 1,000m of the proposed Site. The closest to the site, a 'Post National Rivers Authority Legislation where issue date >31/08/1989' permit was issued to the R.S.P.C.A premises at Sunnyland Mill Lane, Martlesham, approximately 376m south of the Site on 11/12/1989. However, the permit to discharge onto the land was revoked on 15/10/1998.

The second consent issued, is to Mrs N. Causton at Hall Farm, approximately 725m south of the Site in Brightwell on 18/05/2000. The permit has been issued for 'Trade Discharge – Agriculture and Surface' onto land (as part of their arable farming process), with a status 'Deemed Groundwater Regulations Authorisation'.

#### **Water Quality**

- 6.7 The Environment Agency monitor 40,000km of rivers across England. To help protect these areas each stretch of river was monitored between 1990 and 2009 and given a river quality grade. The General Quality Assessment (GQA) scheme was based upon the chemical quality of the water and graded from A to E, with A representing a river with very good water quality and E, a river with very poor water quality.
- 6.8 It is reported that in 2000 the reach of Bucklesham Mill River (between Bucklesham Mill and Kirton Sluice), approximately 906m south of the site, was assessed as Grade B water quality.
- 6.9 To improve the quality of water bodies, European legislation known as the Water Framework Directive (WFD) was introduced in 2009 to promote a new approach to water management through river basin planning. One aim of the Water Framework Directive was to improve the ecological health of inland and coastal waters and to prevent further deterioration. A requirement was placed on nearly all inland and coastal waters to achieve 'Good' status by 2015. However, for many local authorities this has been extended until 2027.
- 6.10 There are no recorded River Quality Biology or Chemistry Sampling Points situated within 1,000m of the Site boundary.

#### **Surface Water Abstraction**

- 6.11 There are fifty-one **Surface Water Abstraction** permits recorded within 2,000m of the Site boundary. The abstractions are from Mill River and a number of reservoirs, mainly for general agricultural purposes.
- 6.12 The closest recorded permits, up to 1,000m from the Site boundary, are detailed below in Table 6e:

Operator - Location	Abstraction	Permit Start  Date	Permit End Date	Distance (m)	Direction
Howes Farm - Martlesham	General Agriculture: Spray Irrigation- direct	01/09/1980	Not Supplied	833	North East
W. O. & P. O Jolly Holdings Ltd  – Mill River south of Brightwell  Hall	General Agriculture: Spray Irrigation- direct	10/10/2003	Not Supplied	901	South
Mrs N. Causton – Mill River south of Brightwell Hall	General Agriculture: Spray Irrigation- direct	01/01/1988	Not Supplied	901	South

Table 6e: Groundwater Abstractions

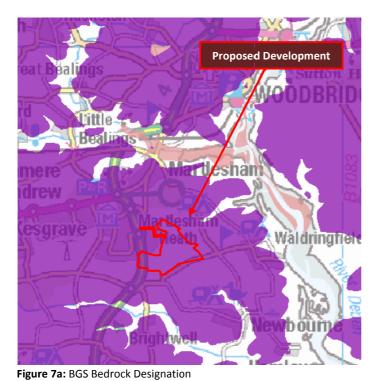
Principal Aquifer

Secondary A Aquifer

# 7 Hydrogeology

## **Aquifer Designation**

7.1 According to the Environment Agency the underlying solid geology (sand) forms a Principal Aquifer, as illustrated on Figure 7a:



7.2 According to the Environment Agency the superficial deposits on site form a Secondary A Aquifer, as illustrated in Figure 7b:

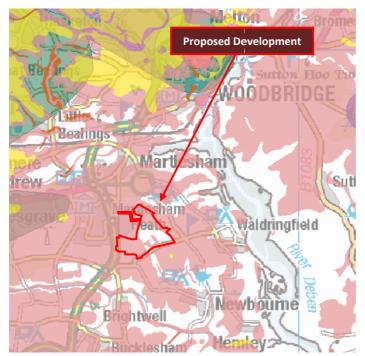


Figure 7b: EA Superficial Deposits Designation

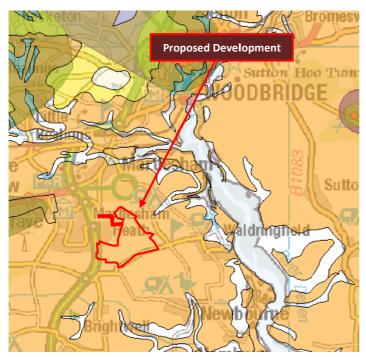
- 7.3 The following definitions are provided by the EA for the BGS Aquifer Designations:
  - Principal Aquifer "These are layers of rock or drift deposits that have high intergranular and/or fracture
    permeability meaning they usually provide a high level of water storage. They may support water supply and/or
    river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major
    aquifer."
  - **Secondary Aquifers** "These include a wide range of rock layers or drift deposits with an equally wide range of water permeability and storage. Secondary aquifers are subdivided into two types:

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

#### **Groundwater Vulnerability**

7.4 In terms of groundwater vulnerability the underlying geology forms a Minor Aquifer, with soils of high leaching potential.

This is illustrated in Figure 7c:



Minor Aquifer with soils of a High Leaching Potential

Figure 7c: Groundwater Vulnerability

- 7.5 The Environment Agency defines Minor Aquifers as "fractured or potentially fractured rocks, which do not have a high primary permeability, or other formations of variable permeability including unconsolidated deposits. Although not producing large quantities of water for abstraction, they are important for local supplies and in supplying base flow to rivers."
- 7.6 Soils of High Leaching Potential are reported to be "deep, permeable, coarse textured soils which readily transmit a wide range of pollutants because of their rapid drainage and low attenuation potential".

#### **Groundwater Abstractions**

7.7 There are forty-nine **Groundwater Abstraction** permits recorded within 2,000m of the **S**ite boundary. The borehole abstractions are for general agricultural purposes, general uses and associated mining uses such as extractive mineral washing.

7.8 There are 18 recorded borehole permits on site (in the north-east at Waldringfield Pit), these are further detailed in Table 7d:

Operator - Location	Abstraction	Permit Start Date	Permit End Date
Brett Aggregates Ltd – Swale Plantation, Martlesham	Extractive: Mineral Washing	16/12/2013	Not Supplied
Brett Aggregates Ltd – Swale Plantation, Martlesham	Mineral Products: drinking, cooking, sanitary, washing, (small garden)	16/12/2013	Not Supplied
Brett Aggregates Ltd – Swale Plantation, Martlesham	Mineral Products: Process Water	16/12/2013	Not Supplied
Brett Aggregates Ltd – Swale Plantation, Martlesham	Extractive: Mineral Washing	01/04/2004	Not Supplied
Brett Aggregates Ltd – Swale Plantation, Martlesham	Mineral Products: drinking, cooking, sanitary, washing, (small garden)	01/04/2004	Not Supplied
Brett Aggregates Ltd – Swale Plantation, Martlesham	Mineral Products: Process Water	01/04/2004	Not Supplied
Brett Aggregates Ltd – Swale Plantation, Martlesham	Extractive: Mineral Washing	01/04/2004	Not Supplied
Brett Aggregates Ltd – Swale Plantation, Martlesham	Mineral Products: drinking, cooking, sanitary, washing, (small garden)	01/04/2004	Not Supplied
Brett Aggregates Ltd – Swale Plantation, Martlesham	Mineral Products: Process Water	01/04/2004	Not Supplied
Wilding & Smith Ltd – Swale Plantation, Martlesham	Extractive: Mineral Washing	03/02/1984	Not Supplied
Wilding & Smith Ltd – Swale Plantation, Martlesham	Extractive: Process Water	03/02/1984	Not Supplied
Wilding & Smith Ltd – Swale Plantation, Martlesham	Mineral Products: drinking, cooking, sanitary, washing, (small garden)	03/02/1984	Not Supplied
Sheepdrift Farm – Brightwell	General Agriculture: Spray Irrigation - direct	01/04/2009	Not Supplied
Sheepdrift Farm – Brightwell	General Agriculture: Spray Irrigation - direct	02/04/1999	Not Supplied
Sheepdrift Farm – Brightwell	General Farming and Domestic	01/01/1999	Not Supplied
Sheepdrift Farm – Brightwell	General Agriculture: Spray Irrigation - direct	01/01/1999	Not Supplied
Sheepdrift Farm – Brightwell	General Agriculture: Transfer between sources	01/01/1999	Not Supplied
Sheepdrift Farm – Brightwell	Unspecified	Not Supplied	Not Supplied

Table 7d: Groundwater Abstractions

7.9 A further twenty-nine permits are recorded, up to 1,000m from the Site boundary and are further detailed in Table 7de.

Operator - Location	Abstraction	Permit Start Date	Permit End Date	Distance (m)	Direction
R. H. Johnson – Well at Seven Acres, Martlesham	General Farming and Domestic	01/12/1971	Not Supplied	51	North West
Wilding & Smith Ltd – Seepage Reservoir Swale Plantation, Martlesham	Extractive: Mineral Washing	03/02/1984	Not Supplied	57	North East
Wilding & Smith Ltd – Seepage Reservoir Swale Plantation, Martlesham	Extractive: Mineral Washing	16/12/2013	Not Supplied	61	North East
Wilding & Smith Ltd – Seepage Reservoir Swale Plantation, Martlesham	Extractive: Mineral Washing	01/04/2004	Not Supplied	61	North East

**Table 7e:** Groundwater Abstractions

Operator - Location	Abstraction	Permit	Permit End	Distance	Direction
		Start Date	Date	(m)	
Wilding & Smith Ltd – Seepage Reservoir Swale Plantation,	Extractive: Mineral Washing	01/04/2004	Not	61	North East
Martlesham			Supplied		
J. D. Morrella – Waldringfield	Aquaculture: Make-up or		Not		
Heath Golf Club	top-up water	11/09/2003	Supplied	146	North
J. D. Morrella – Waldringfield	Golf Courses: Spray		Not		
Heath Golf Club	Irrigation- direct	11/09/2003	Supplied	146	North
J. D. Morrella – Waldringfield	Golf Courses: Make-up or		Not		
Heath Golf Club	top-up water	11/09/2003	Supplied	146	North
J. D. Morrella – Waldringfield	Golf Courses: Spray		Not		
Heath Golf Club	Irrigation- direct	11/09/2003	Supplied	146	North
Clarke Demolition & Construction	General Farming and		Not		
Co Ltd – Well at Heath Farm	Domestic	01/10/1973	Supplied	179	North
P. J. Little - Oak Wood,	Private Water Undertaking:	04/05/4000	Not	246	
Martlesham	General use (medium loss)	01/05/1980	Supplied	246	South West
P. J. Little – Well at Canada Farm,	Private Water Undertaking:	04/05/4000	Not	222	
Martlesham	General use (medium loss)	01/05/1980	Supplied	320	West
P. J. Little – Canada Farm,	land a condition	Not	Not	252	Cauth Mast
Martlesham	Impounding	Supplied	Supplied	353	South West
Oak Tuan Faura Manthachan	Domestic & Agriculture	Not	Not	277	Cauth Mast
Oak Tree Farm, Martlesham	(revoked)	Supplied	Supplied	377	South West
Ook Troe Form Mortleshom	Domestic & Agriculture	Not	Not	270	Courth Mast
Oak Tree Farm, Martlesham	(revoked)	Supplied	Supplied	378	South West
W. O. & P. O Jolly Holdings Ltd –	General Agriculture: Spray	17/05/2016	Not	628	Courth Mast
Seepage Reservoir at Brightwell	Irrigation- direct	17/05/2016	Supplied	028	South West
W. O. & P. O Jolly Holdings Ltd –	General Agriculture: Spray	17/05/2016	Not	628	South West
Seepage Reservoir at Brightwell	Irrigation- storage	17/03/2010	Supplied	028	Journ West
W. O. & P. O Jolly Holdings Ltd –	General Agriculture: Spray	31/07/2012	Not	702	South West
Seepage Reservoir at Brightwell	Irrigation- direct	31/07/2012	Supplied	702	South West
W. O. & P. O Jolly Holdings Ltd –	General Agriculture: Spray	10/10/2003	Not	702	South West
Seepage Reservoir at Brightwell	Irrigation- direct	10/10/2003	Supplied	702	Joden West
Mrs N Causton – Seepage	General Agriculture: Spray	01/04/1989	Not	702	South West
Reservoir at Brightwell	Irrigation- direct		Supplied		
	Other		Not		
Wilding & Smith Ltd – Well at	industrial/commercial/public	01/11/1994	Supplied	742	South West
Brightwell	services: general use				
	(medium loss)				
Well at Howes Farm, Martlesham	General Farming and	01/09/1980	Not	745	North
	Domestic		Supplied		
J. D. Morrella – Waldringfield	Golf Courses: Spray irrigation	11/09/2003	Not	895	North
Heath Golf Club	- direct		Supplied		
W. O. & P. O Jolly Holdings Ltd –	General Agriculture: Spray	10/10/2003	Not	901	South
Mill River south of Brightwell Hall	Irrigation- direct		Supplied		
W. O. & P. O Jolly Holdings Ltd –	General Agriculture: Spray	10/10/2003	Not	901	South
Mill River south of Brightwell Hall	Irrigation- direct		Supplied		
D. E. Parken – New Oak Tree	General Agriculture: Spray	01/03/1967	Not	923	East
Farm	Irrigation- direct		Supplied		
D. E. Parken – Near Cross Farm	General Agriculture: Spray	01/03/1989	Not	943	South East
Cottages, Martlesham	Irrigation- direct	Not	Supplied		
Wilding & Smith Ltd – Foxhall Pit, Foxhall	Sand and gravel washing (Revoked)	Not Supplied	Not Supplied	998	South West
I OAIIaii	(Nevokeu)	Supplied	Supplied		

Table 7e Continued: Groundwater Abstractions

#### **Source Protection Zones**

7.10 There are no **Source Protection Zones** within 1000m of the site boundary.

# 8 Potential Contaminative Uses & Statutory Registers

8.1 There are eight Integrated Pollution Prevention and Control permits recorded within 1,000m of the Site boundary which are further detailed in Table 8a. A permit for Waldringfield Quarry, dated 31/03/2008, is shown for waste landfilling on site by Brett Aggregates Ltd, however the permit has been revoked.

Property Type – Location	Activity	Permit Status	Permit Start Date	Distance (m)	Direction
Brett Aggregates Ltd, Waldringfield Quarry - Brightwell	Waste Landfilling; any other landfill to which the 2002 Landfill Regulations apply	Revoked	31/03/2008	On Site	North East
Novera Energy Generation, Foxhall Generation Plant - Brightwell	Combustion; waste derived fuel greater or equal to 3Mw but less than 50Mw	Superseded by Variation	06/11/2006	985	West
Viridor Waste Management Ltd, Foxhall Landfill Site - Brightwell	Waste Landfilling; greater than 10 T/D with capacity greater than 25,000T excluding inert waste.	Effective	23/12/2014	994	West
Viridor Waste Management Ltd, Foxhall Landfill Site - Brightwell	Waste Landfilling; greater than 10 T/D with capacity greater than 25,000T excluding inert waste.	Superseded by Variation	28/02/2014	994	West
Viridor Waste Management Ltd, Foxhall Landfill Site - Brightwell	Waste Landfilling; greater than 10 T/D with capacity greater than 25,000T excluding inert waste.	Superseded by Variation	21/03/2012	994	West
Viridor Waste Management Ltd, Foxhall Landfill Site - Brightwell	Combustion; waste derived fuel greater or equal to 3Mw but less than 50Mw	Superseded by Variation	07/06/2010	994	West
Viridor Waste Management Ltd, Foxhall Landfill Site - Brightwell	Waste Landfilling; greater than 10 T/D with capacity greater than 25,000T excluding inert waste.	Superseded by Variation	15/05/2009	994	West
Viridor Waste Management Ltd, Foxhall Landfill Site - Brightwell	Waste Landfilling; greater than 10 T/D with capacity greater than 25,000T excluding inert waste.	Superseded by Variation	14/07/2005	994	West

Table 8a: Integrated Pollution Prevention and Controls

8.2 There are thirteen Local Authority Pollution Prevention and Controls (from Suffolk Coastal District Council, Environmental Health Department) recorded within 1,000m of the Site boundary. Four permits are recorded on site (one permitted and three revoked), these are further detailed in Table 8b along with the other nine permits:

Property Type – Location	Activity	Permit Status	Permit Start Date	Distance (m)	Direction
Brett Concrete Ltd, Waldringfield Quarry - Brightwell	PG3/1 Blending, packing, loading and use of bulk cement.	Permitted	03/07/2003	On Site	North East
Widing Readymix Ltd - Brightwell	PG3/16 Mobile screening and crushing processes	Revoked	29/07/2002	On Site	North East
Wilding & Smith Ltd - Brightwell	PG6/34 Respraying of road vehicles	Revoked	30/09/1993	On Site	North East
Wilding & Smith Ltd - Brightwell	PG3/8 Quarry processes including roadstone plants and the size reduction of bricks, tiles and concrete.	Application Withdrawn	Not Supplied	On Site	North East
DT Engineering Ltd, Seven Acres Farm – Waldringfield	PG1/1 Waste oil burners, less than 0.4MW net rated thermal input	Authorised	Not Supplied	119	North West
Clarkes Demolition Ltd, Chapel Works - Waldringfield	PG3/16 Mobile screening and crushing processes	Permitted	06/02/2013	159	North
Clarkes Demolition Ltd, Chapel Works - Waldringfield	PG3/16 Mobile screening and crushing processes	Revoked	22/06/1999	189	North
Eurovia Roadstone, Foxhall Four Quarry - Brightwell	PG3/15 Mineral dying and roadstone coating processes	Permitted	26/05/1992	665	South West
Brett Concrete Ltd, Foxhall Four Quarry - Brightwell	PG3/1 Blending, packing, loading and use of bulk cement	Revoked	01/11/1994	811	South West
Ipswich Body Repair Centre – Martlesham Industrial Estate	PG6/34 Respraying of road vehicles	Revoked	17/02/1997	629	West
Nationwide Crash Repair Centres Ltd – Martlesham Industrial Estate	PG6/34 Respraying of road vehicles	Permitted	30/07/2004	689	West
Tesco Petrol Station – Anson Road, Martlesham	PG1/14 Petrol Filling Station	Permitted	06/09/1999	824	West
Martlesham Heath Services – Anson Road, Martlesham	PG1/14 Petrol Filling Station	Authorised	06/09/1999	895	West

Table 8b: Local Authority Pollution Prevention and Controls

- There is one Pollution Incident to Controlled Water recorded within 1,000m of the Site boundary. The incident, classed 8.3 as a Category 3 – Minor Incident, occurred in the north-west of the site on 26<sup>th</sup> January 1994. It involved the accidental spillage/leakage of oils into Mill River.
- None of the following have been recorded within 1,000m of the Site boundary: 8.4
  - Contaminated Land Register Entries and Notices
  - **Enforcement and Prohibition Notices**
  - **Integrated Pollution Controls**
  - Local Authority Integrated Pollution Prevention And Control
  - Local Authority Pollution Prevention and Control Enforcement
  - **Prosecutions Relating to Authorised Processes**
  - **Prosecutions Relating to Controlled Waters**
  - **Registered Radioactive Substances**

- Substantiated Pollution Incident Register
- Water Industry Act Referrals

#### **Hazardous Substances**

- 8.5 There are no records of the following Hazardous Substances on or within a 1,000m radius of the Site boundary:
  - Control of Major Accident Hazards Sites (COMAH)
  - Explosive Sites
  - Notification of Installations Handling Hazardous Substances (NIHHS)
  - Planning Hazardous Substance Consents
  - Planning Hazardous Substance Enforcements
- 8.6 There are one hundred and eleven **Contemporary Trade Directory Entries** recorded within 1,000m of the Site boundary, of which thirty seven are recorded as 'Active'.
- 8.7 Two 'inactive' trade directory entries are recorded onsite (in the north-east), both of which were issued to Brett Aggregates Ltd for the extraction of 'Sand, Gravel and Other Aggregates'.
- 8.8 There are twenty four Trade Directory Entries identified between 0m and 250m from the Site boundary, eight of which are listed as 'Active'. These are further detailed in Table 8c:

Name - Location	Classification	Status	Distance (m)	Direction
Waldringfield Reproductions Ltd – Lower Flat, Waldringfield	French Polishing	Inactive	15	North West
Booth Tarmacadam – Woodbridge	Asphalt & Coated Macadam Laying Contractors	Active	27	North West
B & M Car Body Centre – Unit 3 Seven Acres Business Park, Woodbridge	Car Body Repairs	Inactive	31	North West
Goodwoodz – Unit 14c Seven Acres Business Park, Woodbridge	Furniture Manufacturers – Home & Office	Inactive	51	North West
Brett Aggregates Ltd – Sheep Drift Farm, Brightwell	Sand, Aggregates & Other Aggregates	Active	42	North East
Image Autosales Ltd – Martlesham Heath	Car Dealers - Used	Inactive	57	North West
Ipswich Packaging Services – Sheep Drift Farm, Brightwell	Packaging Materials  Manufacturers & Suppliers	Active	76	East
Haven Trailaway – Unit 17a Seven Acres Business Park, Woodbridge	Trailers & Towing Equipment	Inactive	76	North
G. Driver Caravans Ltd – Unit 11b, Brightwell	Caravans – Servicing & Repairs	Inactive	89	South East
Brett Aggregates Ltd – Brightwell	Concrete & Motar Ready Mixed	Active	89	South East
A W Smart Repairs – Unit 12a Seven Acres Business Park, Woodbridge	Car Painters & Sprayers	Active	92	North West
P Blasting Services – Brightwell	Blast Cleaning	Inactive	102	South East
P Blasting Services – Sheep Drift Farm, Brightwell	Blast Cleaning	Inactive	110	South East
Stromberg Carburetor – Unit 15a Seven Acres Business Park, Woodbridge	Fuel Injection Services	Active	110	North West
Mark Cutting Services Ltd – Unit 10 Seven Acres Business Park, Woodbridge	Fork Lift Trucks	Active	112	North West
Hangar 111– Unit 8b Seven Acres Business Park, Woodbridge	Car Dealers	Active	114	North West
Suffolk – Unit 10 Seven Acres Business Park, Woodbridge	Cabinet Makers	Inactive	119	North West
Haven Trailaway – Unit 17a Seven Acres Business Park, Woodbridge	Trailers & Towing Equipment	Inactive	139	North West

Table 8c: Contemporary Trade Directory Entries Located between 0 and 250m

Name - Location	Classification	Status	Distance (m)	Direction
Pevex Enterprises Ltd – Woodbridge	Fireplaces & Mantelpieces	Inactive	135	North
Newbourne Cars - Woodbridge	Car Body Repairs	Inactive	154	North West
B & M Car Body Centre – Unit 3 Seven Acres Business Park, Woodbridge	Car Body Repairs	Active	164	North West
Suffolk Foods Ltd – Martlesham Heath	Food Products – Manufactures	Inactive	234	South
Cargo World Logistics – Martlesham Heath	Freight Forwarders	Inactive	234	South
First4 Cargo Handling Ltd – Martlesham Heath	Cargo Handling Services	Inactive	234	South

Table 8c Continued: Contemporary Trade Directory Entries Located between 0 and 250m

8.9 The following remaining Trade Directory Entries are located between 250m and 1,000m from the Site boundary, and these are listed in Table 8d:

Active	Inactive
Commercial Vehicle Dealers	Asphalt & Coated Macadam Laying Contractors x2
Cleaning Materials & Equipment	Road Haulage Services x4
Icecream Manufacturers & Suppliers	Freight Forwarders x3
Car Breakdown & Recovery Services	Car Dealers – Used
Boilers – Servicing, Replacements & Repairs	Garage Services x2
Scientific Apparatus & Instruments	Waste Disposal Services x2
Joinery Manufacturers	Ventilators & Ventilation Systems
Freight Forwarders	Water Coolers
Tyre Dealers	Car Body Repairs x5
Garage Services	Electric Motor Sales & Service
Car Dealers	Window Tinting
Blinds, Awnings & Canopies	Heating Equipment – Sales & Service x2
Carpet, Curtain & Upholstery Cleaners	Window Frames Sales & Service
Printers x2	Medical & Dental Laboratories
Wood Burning Stoves	Printers / Photocopiers x2
Engineers – general	Engineering Services
Piggeries	Joinery Manufacturers x2
Power Transmission Services	Food Colouring, Flavouring & Additive Manufacturers & Distributors
Builders & Merchants x4	Blinds, Awnings & Canopies
Blast Cleaning Equipment manufacturers	Copying & Duplicating Machines & Suppliers
Engineering Materials	Electronic Engineers x3
Sewage Disposal – Equipment & Services	Refrigeration Equipment – Commercial
Gum & Resin Manufacturers & Distributors	Office Furniture & Equipment x4
Hospitals	Gas Appliances - Sales & Repairs
	Petrol Filling Stations x2
	X-Ray Services
	Waste Disposal Services
	Electrical Goods Sales, Manufacturers & Wholesalers x2
	Laboratories
	Automation Systems & Equipment

Table 8d: Contemporary Trade Directory Entries Located between 250m and 1,000m

8.10 There are two Fuel Station Entries reported within 1,000m of the Site in Martlesham Heath. A Tesco Extra Petrol Station is located approximately 840m west of the site, off Anson Road and a BP Petrol Station is located approximately 895m to the west, off Betts Avenue.

#### Waste

- 8.11 There is one **BGS Recorded Landfill Site** identified within 1,000m of the Site. Foxhall Tip is located approximately 885m west of the site off Foxhall Road in Brightwell. It is reported that there are no threats to ground or surface water.
- 8.12 There are four **Historical Landfill Sites** identified within 1,000m of the Site boundary. These are further illustrated below in Table 8e.

Site Name - Location	Specified Waste	First Input Date	Last Input Date	Distance (m)	Direction
Wilding & Smith - The Swale, Brightwell	Deposited waste included inert waste	31/12/1980	31/12/1996	On-Site	North East
Not Supplied – Caravan Site, Waldringfield Caravan Site	Not Supplied	Not Supplied	Not Supplied	159	South West
Suffolk County Council – Foxhall Road, Brightwell	Deposited waste included inert, industrial, commercial, household and special waste	30/09/1963	Not Supplied	450	South West
Not Supplied – Foxhall Road, Brightwell	Deposited waste included inert, industrial, commercial, household and special waste	31/12/1994	Not Supplied	460	South West

Table 8e: Historical Landfill Sites

8.13 There are three Licensed Waste Management Facilities (Landfill Boundaries) identified within 1,000m of the Site. These are further illustrated below in Table 8f.

Site Name - Location	Site Category	Licence Status	Date Issued	Distance (m)	Direction
Brett Aggregates - Waldringfield Quarry, Brightwell	Landfills taking non-biodegradable wastes (not construction)	Issued	10/03/1995	On-Site	North East
Brett Aggregates - Waldringfield Quarry, Brightwell	Landfills taking non-biodegradable wastes (not construction)	Issued	10/03/1995	On-Site	North West
Viridor Waste Management Limited - Foxhall Landfill Site	Waste landfilling; >10 T/D with capacity >25,000T excluding inert waste.	Effective	23/12/2014	441	South West

Table 8f: Licensed Waste Management Facilities (Landfill Boundaries)

8.14 There are eight Licensed Waste Management Facilities (Locations) identified within 1,000m of the Site. These are further illustrated in Table 8g.

Site Name - Location	Site Category	Licence Status	Date Issued	Distance (m)	Direction
Brett Aggregates - Waldringfield Recycling Facility, Brightwell	Physical treatment facilities	Issued	10/07/2012	On-Site	North West
Brett Aggregates - Waldringfield Quarry, Brightwell	Management of inert or extractive waste at mine	Issued	23/08/2011	On-Site	North East
Brett Aggregates - Brightwell	Inert Landfill	Modified*	29/09/2006 *18/05/2016	On-Site	North East
Brett Aggregates - Waldringfield Quarry, Brightwell	Landfills taking non- biodegradable wastes (not construction)	Modified*	10/03/1995 *18/05/2016	On-Site	North East
F C Waste Services (UK) Ltd - Foxhall Waste Transfer Station, Brightwell	Household, commercial and industrial transfer stations	Transferred*	19/03/2008 *21/11/2012	745	South West
Viridor Waste Suffolk Ltd - Brightwell	Household, commercial and industrial transfer stations	Surrendered*	12/02/2003 *07/07/2010	917	West
Viridor Waste Suffolk Ltd - Brightwell	Composting	Modified*	06/04/2000 *13/06/2001	922	West
Viridor Waste Suffolk Ltd - Brightwell	Co-disposal landfill sites	To PPC	25/05/1994	922	West

Table 8g: Licensed Waste Management Facilities (Locations)

- 8.15 Suffolk County Council (SCC) and Suffolk Coastal District Council (SCDC) are the Local Authorities Landfill Coverage for the Site. SCC have supplied landfill data and SCDC have passed their data on to the relevant environment agency.
- 8.16 Foxhall Landfill Site in Brightwell, approximately 532m south west of the site, is a Local Authority Recorded Landfill Site.
  The site closed on 31/12/1982 and the types of waste accepted included domestic, commercial, dry non-hazardous industrial and asbestos.
- 8.17 There are ten **Potentially Infilled Land (Non-Water)** areas identified within 1,000m of the Site boundary. These are further detailed below in Table 8h.

Date of Mapping	Use	Distance (m)	Direction
1975	Unknown Filled Ground (Pit, quarry, etc.)	On Site	North East
1975	Unknown Filled Ground (Pit, quarry, etc.)	11	North East
1988	Unknown Filled Ground (Pit, quarry, etc.)	89	North
1988	Unknown Filled Ground (Pit, quarry, etc.)	154	North West
1988	Unknown Filled Ground (Pit, quarry, etc.)	245	North West
1988	Unknown Filled Ground (Pit, quarry, etc.)	253	North West
1993	Unknown Filled Ground (Pit, quarry, etc.)	402	South West
1993	Unknown Filled Ground (Pit, quarry, etc.)	483	West
1993	Unknown Filled Ground (Pit, quarry, etc.)	894	North West
1975	Unknown Filled Ground (Pit, quarry, etc.)	924	South

Table 8h: Potentially Infilled Land (Non-Water)

8.18 There is one **Potentially Infilled Land (Water)** identified within 1,000m of the Site boundary. The unknown filled ground (pond, marsh, river, stream, dock etc.) is shown on a 1958 map approximately 425m south west of the site boundary.

8.19 There are seven Registered Landfill Sites within 1,000m of the Site Boundary, these are further detailed in Figure 8i:

License Holder – Location	Max Input Rate	Authorised Waste	Prohibited Waste	Date - Status	Distance (m)	Direction
Wilding (Plant & Earthmoving) Ltd – Waldringfield Quarry, Brightwell	Large (Equal to or greater than 75,000 and less than 250,000 tonnes per year.)	Inert materials (as in Post '98 E.A Licences and equivalent to 21.00.00) – comprising Suffolk Cat.A Non- decomposing waste.	Contaminated Soil Degradable Household/Commercial/Ind ustrial Waste (As In Post'98 E.A.Lics And Equivalent To 22.09.00) Foundry/Moulding Sands With Phenolic Binders Liquid Wastes Metal Waste/Scrap Metal (As In Post'98 E.A.Lics And Equivalent To 23.00.00) Odour Producing Waste Other Waste/Waste Not Otherwise Specified Packaged Waste (Mixed/Unmixed) Sludge Wastes Special Waste (As In Epa 1990:S62 Of 1996 Regs) Waste Containing List I Substances In Eec Directive 80/68/Eec Waste Containing List Ii Substances In Eec Directive 80/68/Eec Waste Likely To Pollute Environment Waste With Potential To Harm Human Health	17/03/2000 Operational as far as is known	On Site	North East
Wilding (Plant & Earthmoving) Ltd – Waldringfield Quarry, Brightwell	Large (Equal to or greater than 75,000 and less than 250,000 tonnes per year.)	Suffolk Cat. A Non-decomposing waste.	Waste N.O.S	17/03/1995 Superseded	On Site	North East
Wilding & Smith Ltd – The Swale, Brightwell  F	Large (Equal to or greater than 75,000 and less than 250,000 tonnes per year.)	Construction And Demolition Wastes	Special Wastes Liquid/Slurry/Sludge Wastes	01/01/1982 Surrendered	On Site	North East

Figure 8i: Registered Landfill Sites

License Holder – Location	Max Input Rate	Authorised Waste	Prohibited Waste	Date - Status	Distance (m)	Direction
Suffolk Waste Disposal Co Ltd -Foxhall Landfill Site (Composting)	Large (Equal to or greater than 75,000 and less than 250,000 tonnes per year.)	Asbestos Gulley Emptyings Household & Commercial Waste Industrial Wastes Max.Waste Permitted By Licence Road Sweepings Some Clin As In Hsc '92 Grp E Only	Clinical Wastes Liquids/Sludges N.O.S. Percussive/Explosive/Similar Waste Special Wastes N.O.S. Sub'S Control. Radioactive Subs Act'60 Waste N.O.S. Other Similar Wastes	25/05/1994  Operational as far as is known	997	South West
Suffolk County Council – Foxhall Landfill Site, Brightwell	Undefined	Asbestos All Forms (In Acc. Wmp 18) Suffolk Cat. A (Nra) Inert * Suffolk Cat. B (Nra) Slight.Putresc. *	Sodium & Calcium Chlorides Sodium Nitrite/Nitrate Mixtures	01/10/1989 Superseded	997	South West
Suffolk County Council – Foxhall Landfill Site, Brightwell	Undefined	Bentonite Slurry Ex Sizewell'B'	Not Supplied	01/10/1987  Lapsed/ Cancelled/ defunct/ Surrendered / N/A	997	South West
Suffolk County Council – Foxhall Landfill Site, Brightwell	Undefined	Asbestos House, Com + Ind.Waste Liquid/Slurry/Slud ge Wastes Oil Contaminated Sand In Emergency	Not Supplied	01/11/1979  Lapsed/ Cancelled/ defunct/ Surrendered / N/A	997	South West

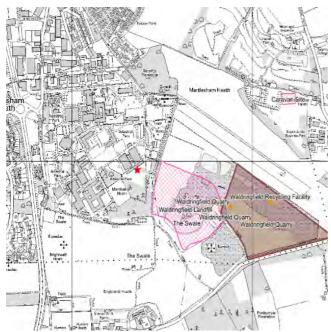
Figure 8i Continued: Registered Landfill Sites

8.20 There are two **Registered Waste Treatment or Disposal Sites** within 1,000m of the Site Boundary, these are further detailed in Figure 8j.

License Holder - Location	Max Input Rate	Authorised Waste	Prohibited Waste	Date - Status	Distance (m)	Direction
Suffolk Waste Disposal Co Ltd -Foxhall Landfill Site (Composting)	Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year)	Degradable Commercial Waste (As In Post'98 E.A.Lics & Equivalent To 22.09.02) Degradable Household Waste (As In Post'98 E.A.Lics & Equivalent To 22.09.01) Degradable Industrial Waste (As In Post'98 E.A.Lics & Equivalent To 22.09.03) Maximum Storage For Composting Maximum Storage Pending Shredding Maximum Waste Permitted By Licence	Inert Materials (As In Post'98 E.A.Lics And Equivalent To 21.00.00) Metal Waste/Scrap Metal (As In Post'98 E.A.Lics And Equivalent To 23.00.00) Other Waste / Waste Not Otherwise Specified Special Waste (As In Epa 1990:S62 Of 1996 Regs)	13/06/200 1 Operation al as far as is known	826	South West
Suffolk Waste Disposal Co Ltd -Foxhall Landfill Site (Composting)	Small (Equal to or greater than 10,000 and less than 25,000 tonnes per year)	Degradable Commercial waste (As In Post'98 E.A.Lics & Equivalent To 22.09.02) Degradable Household Waste (As In Post'98 E.A.Lics & Equivalent To 22.09.01)	Degradable Industrial Waste (As In Post'98 E.A.Lics & Equivalent To 22.09.03) Liquid Wastes Material With Any Haz.Code (H1, H2, H3a,H3b,H4,H5,H6, H7,H8,H9,H10,H11, H12,H13,H14) Metal Waste/Scrap Metal (As In Post'98 E.A.Lics And Equivalent To 23.00.00) Other Waste/Waste Not Otherwise Specified Powders Sludge Wastes Special Waste (As In Epa 1990:S62 Of 1996 Regs)	06/04/200 0 Supersede d	826	South West

Figure 8j: Registered Waste Treatment and Disposal Sites

- 8.21 There are no provided reports of the following within 1,000m of the Site boundary:
  - Integrated Pollution Control Registered Waste Sites
  - Registered Waste Transfer Sites
- 8.22 The Environment Agency were consulted and have confirmed that the Site includes: one historic landfill (The Swale), one current landfill (Waldringfield Quarry) and three waste activities (Waldringfield Quarry and Waldringfield Recycling Facility). In addition to this a historic Landfill Site is shown approximately 175m north east of the site boundary at the Moon & Sixpence Holiday Park (Caravan Site) (consultation details provided within Appendix C).



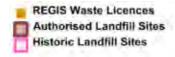


Figure 8k: EA Waldringfield Landfill Sites

- 8.23 Trading Standards were also consulted, as they licence Petroleum storage. Following an investigation into their historical records, underground storage tanks used for the storage of Petrol were found at the following three locations (consultation details provided within Appendix C):
  - 1. "Sheepdrift Farm, Brightwell (750 gallon) which was decommissioned by filling with water in 1989 they were unable to offer any further information on the location of the tank or whether it is still in situ.
  - 2. There were also tanks sited at the gravel pits previously owned by Wilding & Smith, Brightwell. They were licenced in 1978 for 18,000 litre of petrol, but there is no record of what happened to this tank. However the new owners (Brett Aggregates) were licenced until July 2004 to store 10,000 litres of petroleum (in 2 @ 5000litres) underground tanks which were made safe in 2007 (along with a further 22,500 litre underground tank presumably used for diesel or other fuel other than petrol), these tanks were made safe using resin based hard form.
  - 3. BT Adastral Park site, there was at one time a can store, however the records were sent to the local Suffolk Coastal District Council in 2003 as they took over responsibility under DSEAR."
- 8.24 Suffolk Coastal District Council was contacted (consultation details provided within Appendix C) and provided the following response with regards to our enquiry over any potential hazardous landfill waste, contaminated land, petroleum or can storage or any other historic uses on or within close proximity of the Site:

"I can confirm that Waldringfield Quarry which is within this proposed development area, is listed as a 'Former Landfill Site which predates 1974' but that we hold no records of the extent of the pit area or the type of refuse which it contains. Assuming the land fill operation incorporated the disposal of domestic waste, then the pit area would contain a large quantity of contaminants and have potential to emit ground gas. However as we have no detail of the depth, extent or content of the pit we can only advise that intensive investigation is undertaken to establish these facts prior to any future development of the site.

With regard to the remainder of the Adastral Park site, I can confirm that we hold no records of any other landfill, contaminated land, petroleum or can storage and any other historic uses which may be of interest to you. We are aware that much of the site has been used by BT and recommend that you approach them for further information together with the other current land owners."

## **Unexploded Ordnance (UXO)**

- 8.25 A Preliminary Risk Assessment (PRA); Bomb Search was carried out by 6 Alpha Associates (on behalf of Landmark) for the Site, in which the risk of encountering items of UXO during intrusive works on Site was assessed.
- 8.26 The following potential sources of explosive ordnance were recorded within 1,000m of the Site:

Threat Source	Details			
Airfield/ Military Facilities	RAF Martlesham Heath located on site.			
WWII Defensive Features	A radar station, 2 pillboxes and an RDF tower all located on site and a			
	Pickett-Hamilton fort located 35m west of the site.			
WWII Luftwaffe Designated Bombing	Luftwaffe aerial photography identified an airfield located on site as a			
Targets	primary bombing target.			
WWII Bomb Strikes Within Site	Site ARP records were not available. Anecdotal evidence suggests 'considerable			
Boundary	number' of High Explosive Bomb and IBs landed on-site.			
WWII Near Site Boundary	ARP records were not available. Anecdotal evidence suggests 'considerable			
	number' of High Explosive Bomb and IBs landed within close proximity.			
WWII Bomb Damage	Anecdotal evidence suggests damage occurred to structures within RAF			
wwwii bollib balliage	Martlesham.			
WWII Bombing Density Per 100	The Site was located within Deben Rural District, which recorded three High			
Hectares	Explosive Bomb strikes per 100 hectares.			
Ordnance Manufacture/ Storage	None			
WWII Decoy Bombing Sites	None			
Secondary Bombing Targets	None			
Abandoned Bomb Register	None			

Figure 81: Unexploded Ordnance Probability Assessment

- 8.27 In accordance with current guidelines (*CIRIA* C681 Chapter 5), the site has been assessed as having a risk rating of 4 (out of 5), as detailed within Figure 8k, indicating a 'Medium/ High Probability of UXO Encounter'. Given that both bombing and bomb damage was recorded on-site and within close proximity, it has therefore been recommended by 6 Alpha Associates that the next stage in the risk management framework is a detailed UXO Threat and Risk Assessment.
- 8.28 The detailed UXO Threat and Risk Assessment is currently being finalised by 6 Alpha Associates, however they have indicated that the likely findings are that the site will have a high risk rating due to the historical threat associated with it. However, their suggested mitigation measures will only be applicable in previously undisturbed ground (i.e. areas not covered by the current ponds and quarry).
- 8.29 Their suggestions for risk mitigation measures are likely to include a Risk Management Plan for the site and toolbox briefs for all staff. They recommend that for any intrusive work in previously undisturbed ground an Explosive Ordnance Disposal (EOD) Engineer should be on site, who will offer a non-intrusive survey for the areas in which your ground investigation works are taking place.

## 9 Environmental Setting

- 9.1 The following are reported within 1,000m of the Site boundary:
- 9.2 Lumber Wood an Ancient Woodland is located approximately 1km north of the Site. It is reported as an 'Ancient and Semi-Natural' type of woodland and covers approximately 4.74ha.
- 9.3 Suffolk River Valleys, covers an area of approximately 4,606ha and lies approximately 406m to the south, east and north of the site. It was designated as an **Environmentally Sensitive Area** in 1993 by Natural England.
- 9.4 The site lies on and within proximity to two **Nitrate Vulnerable Zones**. The north, north-west, south and south-west of the site lies within a *Groundwater Nitrate Vulnerable Zone*, whilst the north-west and south-west of the site lies within a *Surface Water Nitrate Vulnerable Zone*.
- 9.5 An additional Surface Water Nitrate Vulnerable Zone is located approximately 831m north of the site.
- 9.6 The Suffolk Coast and Heaths, are located approximately 77m north / north east of the site and cover an area of around 40,512ha. They have been designated as Areas of Outstanding Natural Beauty (AONB) since March 1970 by Natural England.
- 9.7 There are three Sites of Special Scientific Interest (SSSI) located on and within 1,000m of the Site.
- 9.8 Waldringfield Pit is situated in the north-east of the site and covers approximately 0.17ha. The former quarry was designated in December 1991 as a geological SSSI and is listed as being of 'national importance in the Geological Conservation Review' by Natural England (consultation included within Appendix C). It was previously suggested that this could potentially be relocated, and another similar area be designated further east, to the edge of the Site boundary. However, consultation with Natural England is currently taking place to establish whether this is a viable option and if not, what the requirements would be to protect and maintain the SSSI in its current position.
- 9.9 Newbourn Springs SSSI, a Local Wildlife Site is located approximately 855m south and south-east of the site and covers an area of around 15.70ha. The SSSI was designated in March 1986 by Natural England.
- 9.10 The third SSSI, Ipswich Heath, is located approximately 881m west of the site and covers an area of around 39.43ha and was designated in March 1988 by Natural England.
- 9.11 The River Deben Estuary lies approximately 1.5km to the east of the site and has been designated as a SSSI, a Special Protection Area, a Ramsar and an AONB.
- 9.12 The River Deben Estuary Plan (April 2015) addresses the principle issue of flood risk management for the Deben Estuary but also takes into consideration the potential impact that housing and economic development may have on the estuary. However, the wider issues of land based planning such as housing development, economic growth and infrastructure are dealt within the policies and plans produced by the Local Authorities.



9.13 The site is shown to lie outside the boundary of the Deben Estuary Plan as illustrated below in Figure 9a:

Figure 9a: Deben Estuary Plan Boundary – produced by K O'Mahony, 2013 (Deben Estuary Partnership)

- None of the following are reported within 1,000m of the Site boundary:
  - Areas of Adopted Green Belt
  - Areas of Unadopted Green Belt
  - Forest Parks

9.14

- Local Nature Reserve
- Marine Nature Reserves
- National Nature Reserves
- National Park
- Nitrate Sensitive Areas
- Special Areas of Conservation
- World Heritage Sites

## 10 Site Conceptual Model

- Guidance has been published by the Department of the Environment, Transport and the Regions (DETR Circular 02/2000)

  'Environmental Protection Act 1990: Part 11A Contaminated Land (20th March 2000) which promotes the 'suitable for use approach'. This has since been replaced by the DEFRA: Contaminated Land Statutory Guidance (April 2012). The DEFRA guidance note focuses on the risks caused by land contamination. The approach recognises that the risks presented by any given level of contamination will vary greatly according to the use of the land and a wide range of other factors, such as the underlying geology of the site. Risks therefore need to be assessed on a site-by-site basis.
- 10.2 The "suitable for use" approach consists of three elements:
  - Ensuring that land is suitable for its current use in other words, identifying land where contamination is causing unacceptable risks to human health and the environment, assessed on the basis of the current use and

circumstances of the land, and returning such land to a condition where such risks no longer arise ("remediating" the land): the new contaminated land regime provides general machinery to achieve same.

- Ensuring that land is made suitable for any new use, before planning permission is given for that new use in other words, assessing the potential risks from contamination, on the basis of the proposed future use and circumstances, prior to planning permission being granted for the development and, where necessary to avoid unacceptable risk to human health and the environment, remediating the land before the new use commences; Ensuring land is appropriately remediated prior to any new use is commenced is dealt with under the planning process, and planning conditions such as pre-construction remediation can be applied to this effect.
- Limiting requirements for remediation to the work necessary to prevent unacceptable risks to human health or the environment in relation to the current use or future use of the land for which planning permission is being sought in other words, recognising that the risks from contaminated land can be satisfactorily assessed only in the context of specific uses of the land (whether current or proposed), and that any attempt to guess what might be needed at some time in the future for other uses is likely to result either in premature work (thereby risking distorting social, economic and environmental priorities) or in unnecessary work (thereby wasting resources).
- Also addressed within the DEFRA guidance is the issue of 'contaminated land'. The DEFRA guidance explains that before the Local Authority can make the judgement that any land appears to be contaminated land on the basis that significant harm is being caused, or that there is a significant possibility of such harm being caused, the authority must therefore identify a significant pollutant Linkage.
- 10.4 This means that each of the following has been identified:
  - A Contaminant Source
  - A Pathway
  - A Receptor

(This is known as the source-pathway-receptor (SPR)

#### and that:

The contaminant is causing significant harm to that receptor.

Or

- There is a Significant Possibility of such harm being caused by the Contaminant to the Receptor.
- 10.5 Where any of the three elements of the source-pathway-receptor (SPR) are not present, there is no risk and therefore land cannot be classified as statutory 'contaminated land'.
- 10.6 In terms of controlled waters, DEFRA: Contaminated Land Statutory Guidance (April 2012) notes the following:
  - "A.35 Section 78A (9) defines the pollution of controlled waters as: 'The entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter'.
  - A.36 Before determining that pollution of controlled waters is being, or is likely to be, caused, the local authority should be satisfied that a substance is continuing to enter controlled waters or is likely to enter controlled waters. For this purpose, the local authority should regard something as being "likely" when they judge it more likely than not to occur.

- A.37 Land should not be designated as contaminated land where:
  - (a) A substance is already present in controlled waters;
  - (b) Entry into controlled waters of that substance from land has ceased; and
  - (c) It is not likely that further entry will take place.
- A.38 Substances should be regarded as having entered controlled waters where:
  - (a) They are dissolved or suspended in those waters; or
  - (b) If they are immiscible with water they have direct contact with those waters on or beneath the surface of the water.
- A.39 The term "continuing to enter" should be taken to mean any entry additional to any which has already occurred."
- 10.7 In 2004 the EA published the 'Model Procedures for the Management of Land Contamination', CLR11, which provides the technical framework for applying a risk management process, based on the 'suitable for use' approach, when dealing with land affected by contamination.
- 10.8 In 2008, to enable the practical application of good practice of the EA's Model Procedures CLR11, R&D Publication 66 'Guidance for the Safe Development of Housing on Land Affected by Contamination' was published by the National House Builders Council (NHBC), the EA and the Chartered Institute of Environmental Health. Whilst written to be relevant to housing development it is also applicable to other forms of development where sites are land affected by contamination. The guidance describes in detail the process and activities involved for the identification and assessment of hazards for a Phase 1 assessment.
- At Phase 1 stage, it is necessary to develop an initial conceptual site model to understand the possible relationships between contaminants, pathways and receptors (SPR linkages). If a hazardous source, via an exposure pathway to a potential receptor can be established then there is a 'pollutant linkage', which is preliminarily risk assessed using parameters summarised in Table 10a, below. At this stage, the conceptual model is prepared without site specific soils, groundwater or gas testing and as such, the findings should be treated only as first and general indications of possible SPR linkages.
- 10.10 The primary potential sources of contamination **on Site** are indicated below:

Agricultural Use - Soil and Water Contamination

Mineral extraction, former Sand Pit/Landfill and unspecified Tank - Soil and Water Contamination

Small buildings and tower - Soil and Water Contamination

Former Sewage Works - Soil and Water Contamination

10.11 The primary potential sources of contamination **offsite Site** are indicated below:

Adjacent A12 - Soil and Water Contamination

Former works, depots and factories (adjacent Adastral Park) - Soil and Water Contamination

Former adjacent Piggeries - Soil and Water Contamination

Historic Landfill at adjacent Caravan Site - Soil and Water Contamination

Former Pits - Soil and Water Contamination

Former RAF Martlesham Airfield - Soil and Water Contamination

- 10.12 The potential receptors at the site are:
  - End users / site occupiers / visitors
  - Adjacent users / occupiers
  - Controlled waters
  - Flora and fauna
  - Buildings & construction materials
- 10.13 The potential pathways at the site are primarily:
  - Direct ingestion of soil / water / fruit or vegetable
  - Inhalation of dust / vapours
  - Direct skin contact with the ground / water
  - Regression of plant growth due to phytotoxic contamination
  - Vertical and lateral migration of contamination
- 10.14 An initial methodology has been developed to help identify the potential contamination risk and linkages. The severity of damaging effects and the likelihood of any linkage have been considered.
- 10.15 Given the potential consequence and likelihood, a risk rating is given, based on the following matrix:

		Consequence				
Probability (Likelihood)		Severe	Moderate	Mild	Minor	
	Highly Likely	Very High	High	Medium	Low	
	Likely	High	Medium	Medium/Low	Low	
	Possible	Medium	Medium/Low	Low	Very Low	
	Unlikely	Medium/Low	Low	Very Low	Very Low	

Table 10a: Risk ratings

10.16 The risk ratings are described as follows:

Very High: There is a high probability that severe harm could arise to a designated receptor from an identified

hazard at the site without appropriate remediation action.

High: Harm is likely to arise to a designated receptor from an identified hazard at the site without

appropriate remediation action.

Medium: It is possible that without appropriate remediation action harm could arise to a designated receptor. It

is relatively unlikely that any such harm would be severe, and if any harm were to occur it is more

likely that such harm would be relatively mild.

Low: It is possible that harm could arise to a designated receptor from an identified hazard. It is likely that,

at worst if any harm was realised any effects would be mild.

Very Low: The presence of an identified hazard does not give rise to the potential to cause harm to a designated

receptor.

10.17 A summary of the potential SPR linkages on site are detailed in Table 10b.

Source	Pathway	Receptor	Comment	Risk Rating	Potential Mitigation
Contaminated soils On-site:  Mineral extraction, former Sand Pit/Landfill and unspecified Tank, former Sewage Works, Agricultural, small buildings and RDF tower Potential UXO risk due to proximity of former Airfield Off-site:	Direct Ingestion & contact Inhalation of dust  Direct skin contact	Site workers, occupiers & visitors	Historically worked Site which includes a former sand pit / inert landfill shown in the centre of the Site, along with a former Sewage Works, small buildings and RDF tower. Due to the proximity of the former RAF Airfield, a 'Medium / High Probability of UXO Encounter' risk has been assessed.  Former agricultural use may have included the use of pesticides and fertilizers which may pose minor potential contamination, however the activities of the existing quarry and former landfill may pose a higher potential contamination risk to the Site. In order to further assess existing ground conditions and delineate the extent of any potential risks a Phase II ground investigation will be required.	Medium/ High	-
<ul> <li>Agricultural, Adjacent A12 (T), Adjacent Caravan Site historic Landfill</li> <li>Former: piggeries, works, depots and factories (now Adastral</li> </ul>	Vertical & lateral migration	Controlled waters	The bedrock geology forms a Principal Aquifer and the superficial geology forms a Secondary A Aquifer. In terms of groundwater vulnerability the Site is situated on a Minor Aquifer with soils of a High Leaching Potential.	Medium/ High	-
Park), Pits, RAF Martlesham Airfield	Direct uptake	Flora/Fauna	Historically and currently worked Site, on-site activities may discourage significant plant growth. However, existing SSSI and former pits/ponds may accommodate a variety of fauna/flora.	Medium/ High	-
	Direct contact	Building materials	In terms of groundwater vulnerability the Site is situated on a Minor Aquifer with soils of a High Leaching Potential.	Medium/ High	-
Contaminated Groundwater  On-site:  • Mineral extraction, former Sand Pit/Landfill and unspecified Tank, former Sewage Works, Agricultural, small buildings and	Direct Ingestion & contact  Direct skin	Site workers, occupiers & visitors	The former sewage works, inert landfill and quarrying activities may have some detrimental impact on the proposed Site.  The bedrock geology forms a Principal Aquifer and the superficial geology forms a Secondary A Aquifer. In terms of groundwater vulnerability the Site is situated on a Minor Aquifer with soils of a High Leaching Potential, therefore groundwater flow and	Medium/ High	-
<ul> <li>RDF tower</li> <li>Potential UXO risk due to proximity of former Airfield</li> <li>Off-site:</li> </ul>	Vertical & lateral migration	Controlled waters	landfill leachate migration may be a possibility on Site.  However, in order to further assess the existing ground conditions and delineate the extent of any potential risks a Phase II ground investigation will be required.		
<ul> <li>Agricultural, adjacent A12 (T), Adjacent Caravan Site historic Landfill</li> <li>Former: piggeries, works, depots and factories (now Adastral</li> </ul>	Direct uptake  Direct contact	Flora/Fauna Building			
Park), Pits, RAF Martlesham Airfield		materials			

Table 10b – Site SPR summary

Source	Pathway	Receptor	Comment	Risk Rating	Potential Mitigation
Former Sand Pit/Landfill	Vertical & lateral migration	Site workers & occupiers & visitors	The bedrock geology forms a Principal Aquifer and the superficial geology forms a Secondary A Aquifer. The Site is situated on a Minor Aquifer with soils of a High Leaching Potential.	Medium/ High	-
Former Sewage Works     Off-site: None		Adjacent occupiers	The former sewage works and inert landfill onsite may pose potential sources for gassing and the latter will require gas monitoring as part of Phase II Site Investigation works.		

Table 10b (Continued) – Site SPR summary

#### 11 Discussion & Summary

#### **Discussion**

- 11.1 After reviewing the historical mapping, geological data, hydrological data, sensitive land uses, industrial land uses, waste and hazardous substances, the following uses are identified on and within close proximity of the Site that are considered potentially contaminative: mineral extraction activities, historic landfills, former sewage works, adjacent A12 and a potential UXO risk due to the proximity of the former RAF Airfield. However, most of these are shown to have since been developed over.
- 11.2 The Site includes current and historic **mineral extraction** activities which may have included the use and storage of fuel oils and chemicals, potential contamination may include Volatile Organic Compounds, fuel oils and lubricants. Former pits onsite are now shown as either ponds or have been infilled with inert waste material associated with the quarrying activities. In addition to this a historic landfill was recorded by the EA approximately 175m north east of the Site at the Moon & Sixpence Holiday Park (Caravan Site). Due to the sensitivity of the underlying geology and proximity of the landfills and mineral extraction on and offsite, it is considered to be a *Medium/High* risk rating.
- Onsite and offsite **agricultural** land use activities and the adjacent former piggeries may include the following typical contaminants: nitrogen, potassium and phosphorous contained within fertilisers; chemicals from pesticides and herbicides; coliform and non-coliform bacteria from livestock waste and manure application; and hydrocarbons from oil and fuel leakages from machinery. It is considered that this is a **low** risk rating as the majority of the site is either part of the existing Quarry activities or former landfill area.
- A former Sewage Works with associated filter beds and tanks are shown in the west of the site was situated within the south-west of the Site between 1965 and 1994. Potential contaminants may have included: metals, inorganic/organic compounds, acids/alkalis, asbestos, pathogenic micro-organisms, methane, carbon dioxide and hydrogen sulphide. The Sewage Works is no longer shown by 1994 and is shown to have been left undeveloped after being demolished, it is considered a *Medium* risk rating.
- There are three existing roads shown within proximity to the Site (the adjacent A12 (T), Ipswich Road and Newbourne Road). Potential contaminants from surfacewater runoff may include: heavy metals, oils, fuels and Polycyclic Aromatic Hydrocarbons. However, the roads are separated from the Site by agricultural hedges and vegetation therefore it is considered to be a low risk rating.
- 11.6 The surrounding area previously included a number of works, factories and depots which have since been redeveloped as part of the commercial area at Adastral Park (which previously included a research laboratory/ research centre). Potential contaminants may have included: heavy metals, inorganic acids, VOCs, diesel fuels, solvents and oils. The commercial area is separated from the Site by field hedges, woodland and tracks. As agricultural activity occurs, the historic uses are considered to be of a *low* risk rating.

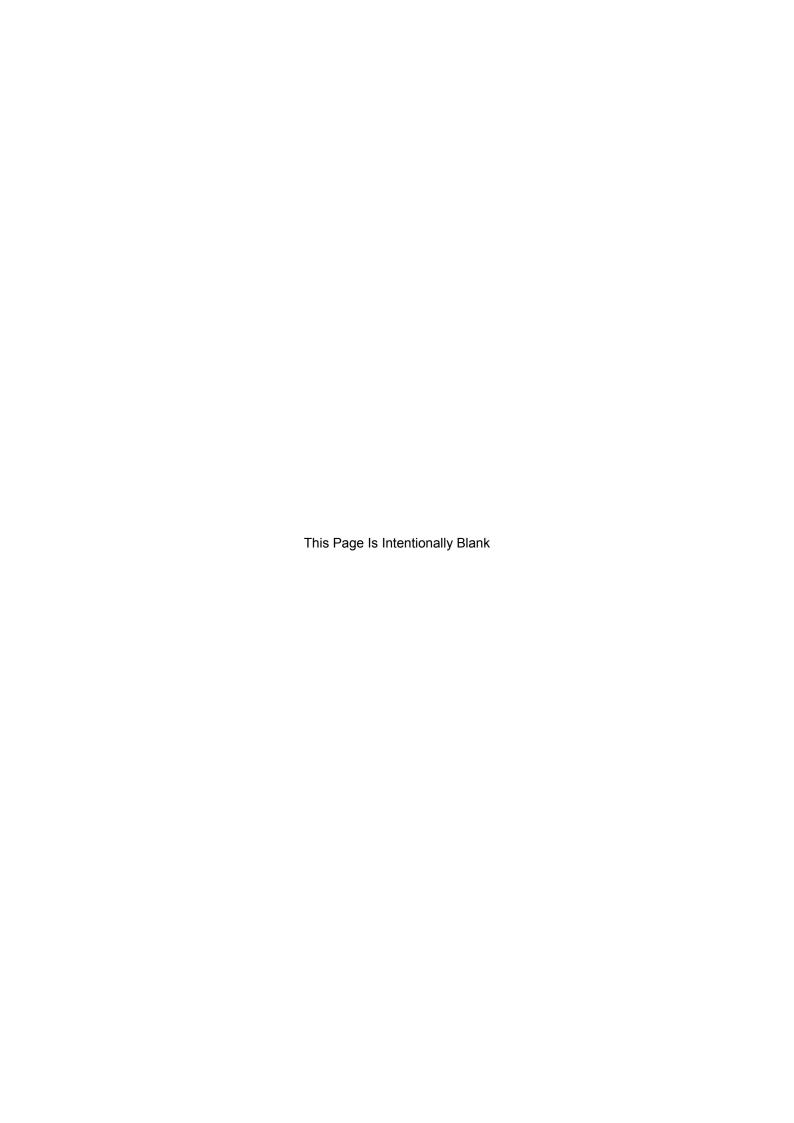
#### Summary

- 11.7 The underlying ground conditions are considered to be sensitive, as the Site is situated on sand bedrock geology which forms a Principal Aquifer and the superficial deposits of sand and gravel which form a Secondary A Aquifer. In terms of groundwater vulnerability the Site lies on a Minor Aquifer, with soils of High Leaching Potential.
- 11.8 Given that both bombing and bomb damage was recorded on-site and within close proximity, the site has been assessed as having a risk rating of '4', indicating a 'Medium/ High Probability of UXO Encounter'. As recommended, a detailed UXO Threat and Risk Assessment is currently being carried out for the site and they have initially indicated that the site will have a High risk rating, due to the historical threat associated with it. However, their suggested mitigation measures will only be applicable in previously undisturbed ground (i.e. areas not covered by the current ponds and quarry).

- In order to further establish the existing baseline ground conditions, it is recommended that a Phase II ground investigation is carried out across the Site. A Phase II ground investigation is currently being carried out, however this will only focus on the areas of the former landfill, the results of which will be presented as a separate report (the area shaded orange on Figure 4d).
- 11.10 Due to the current and previous activities that have taken place on Site and the potential High UXO risk an **overall**Medium/High contaminative risk at the Site has been assessed. However, the results of the Phase II site investigation may demonstrated that this initial contamination risk assessment is higher than the actual existing ground conditions.

#### 12 Limitations

- 12.1 The benefits of this report are provided solely to Carlyle Land Ltd and Commercial Estates Group. The conclusions and recommendations contained herein are limited to those given the general availability of background information and the planned usage of the Site. Brookbanks Consulting Ltd do not confer any third party rights for the information contained in the report.
- 12.2 All distances referred to in this report are measured from the boundary of the planned development Site unless otherwise advised.
- 12.3 Third party information has been used in the preparation of this report, which Brookbanks Consulting Ltd, by necessity assume is correct at the time of writing.



Land south and east of Adastral Park
Geo-Environmental Phase I Desk Study

**Carlyle Land Ltd and Comercial Estates Group** 

**Appendix A** 

### **Historical Mapping Legends**

#### **Ordnance Survey County Series 1:10,560** Other Gravel Pits Orchard Osiers Mixed Wood Deciduous Brushwood Furze Rough Pasture Arrow denotes Trigonometrical flow of water Site of Antiquities Bench Mark Pump, Guide Post, Well, Spring, Signal Post **Boundary Post** .285 Surface Level Sketched Instrumental Contour Contour Fenced Fenced Minor Roads Un-Fenced Sunken Road Raised Road Railway over Road over River Railway Railway over Level Crossing Road Road over Road over River or Canal Stream Road over Stream County Boundary (Geographical) County & Civil Parish Boundary Administrative County & Civil Parish Boundary County Borough Boundary (England) Co. Boro. Bdy. County Burgh Boundary (Scotland) Co. Burgh Bdy. Rural District Boundary R.D. Bdy. Civil Parish Boundary

## Ordnance Survey Plan 1:10,000 Chalk Pit, Clay Pit Gravel Pit or Quarry Disused Pit Sand Pit

*********	. Janu I II	\	or Qu	arry
1.000.00	Refuse or Slag Heap		Lake, or Po	
	Dunes	0000	Bould	ers
* * *	Coniferous Trees	$\varphi \varphi \varphi$	Non-O	Coniferous
<b>ቀ</b> ቀ	Orchard 0 n _	Scrub	mY/	Coppice
។ ជ	Bracken//	ル Heath い	111,	Rough Grassland
<u> ~1.</u> ~	Marsh	, Reeds -	<u> </u>	Saltings
	Dir Building	rection of Flow of W	_	o Shingle
	Glasshouse	Pylon		<u>∵∵</u> Sand
		•	Floor	::4

Cutting	Embankment	Standard Gauge
		Multiple Track
<u></u> ⊔	/ <del></del>	Standard Gauge
Road'''∏''' Ro	Level \\ Foot	Single Track
Under Ov	Crossing Bridge	O: !: T
		Siding, Tramwa
		or Mineral Line

Sloping Masonry

Pole

Electricity

Transmission

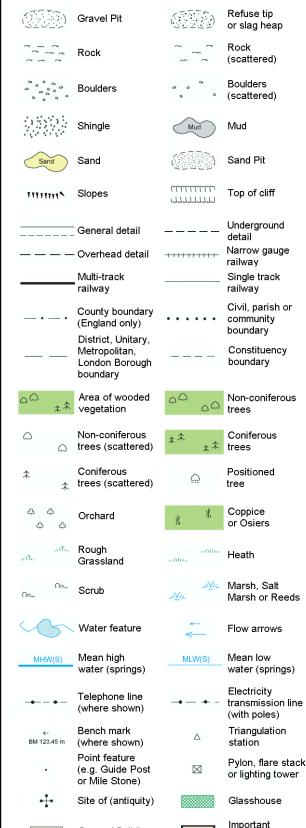
Narrow Gauge

Geographical County Administrative County, County Borough or County of City Municipal Borough, Urban or Rural District,

**Burgh or District Council** Borough, Burgh or County Constituency Civil Parish

BP, BS	<b>Boundary Post or Stone</b>	Pol Sta	Police Station
Ch	Church	PO	Post Office
CH	Club House	PC	Public Convenience
F E Sta	Fire Engine Station	PH	Public House
FB	Foot Bridge	SB	Signal Box
Fn	Fountain	Spr	Spring
GP	Guide Post	TCB	Telephone Call Box
MP	Mile Post	TCP	Telephone Call Post
MS	Mile Stone	W	Well

#### 1:10,000 Raster Mapping



General Building

Building

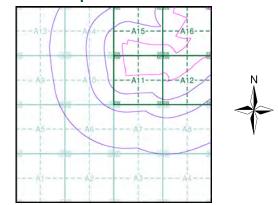
## **Brookbanks**

Consulting

#### Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Suffolk	1:10,560	1884 - 1886	3
Suffolk	1:10,560	1904 - 1905	4
Suffolk	1:10,560	1927 - 1928	5
Suffolk	1:10,560	1938	6
Ordnance Survey Plan	1:10,000	1957 - 1958	7
Ordnance Survey Plan	1:10,000	1971 - 1975	8
Ordnance Survey Plan	1:10,000	1980 - 1988	9
Ordnance Survey Plan	1:10,000	1983	10
Ipswich	1:10,000	1984	11
Ordnance Survey Plan	1:10,000	1993	12
10K Raster Mapping	1:10,000	2000	13
10K Raster Mapping	1:10,000	2006	14
VectorMap Local	1:10,000	2016	15

#### **Historical Map - Slice A**



#### **Order Details**

Order Number: 97754875 1 1 10391 Adastral Park Customer Ref: National Grid Reference: 625020, 244270 Slice: 96.03 Site Area (Ha): Search Buffer (m): 1000

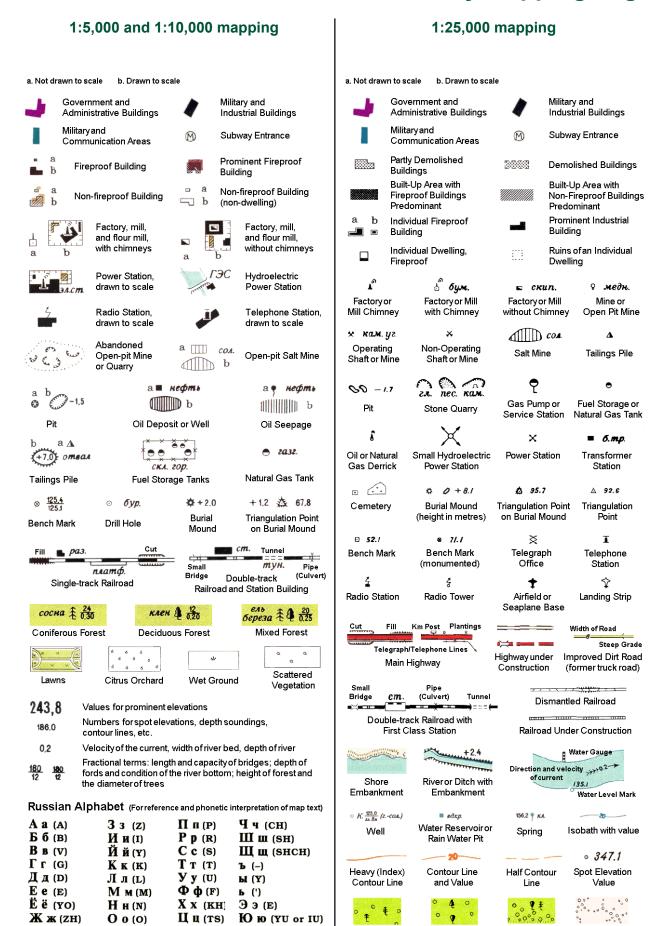
#### Site Details

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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### **Russian Military Mapping Legends**



A (YA or IA)

Coniferous

Deciduous

Mixed

Scrub

**Key to Numbers on Mapping** 

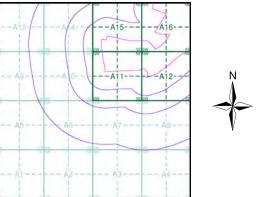
## **Brookbanks**

Consulting

#### **Historical Mapping & Photography included:**

Mapping Type	Scale	Date	Pg
Suffolk	1:10,560	1884 - 1886	3
Suffolk	1:10,560	1904 - 1905	4
Suffolk	1:10,560	1927 - 1928	
Suffolk	1:10,560	1938	- 6
Ordnance Survey Plan	1:10,000	1957 - 1958	7
Ordnance Survey Plan	1:10,000	1971 - 1975	8
Ordnance Survey Plan	1:10,000	1980 - 1988	
Ordnance Survey Plan	1:10,000	1983	10
Ipswich	1:10,000	1984	1
Ordnance Survey Plan	1:10,000	1993	12
10K Raster Mapping	1:10,000	2000	1;
10K Raster Mapping	1:10,000	2006	14
VectorMap Local	1:10,000	2016	15

#### Russian Map - Slice A



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625020, 244270
Slice: A

Site Area (Ha): 96.03 Search Buffer (m): 1000

#### **Site Details**

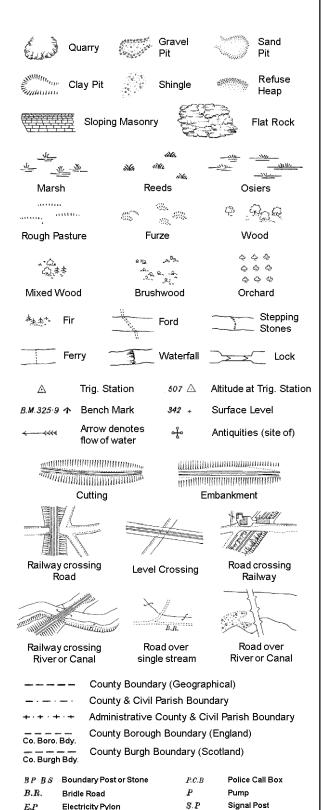
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### **Historical Mapping Legends**

#### **Ordnance Survey County Series and** Ordnance Survey Plan 1:2,500



Foot Bridge

Guide Post or Board

Foot Path

Mile Stone

M.P M.R Mooring Post or Ring

F.B.

F.P.

G.P

M.S

Sl

T.C.B

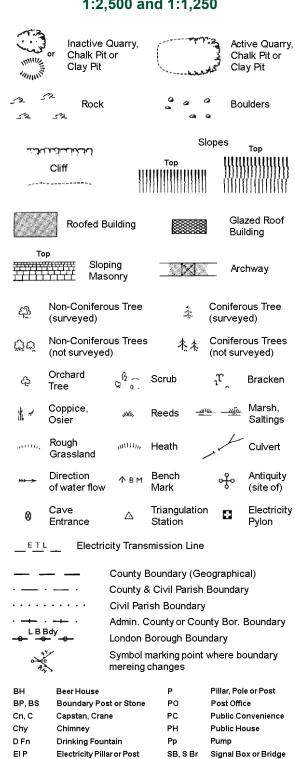
Tr.

Spring

Trough

Telephone Call Box

Ordnance Survey Plan, Additional SIMs and Large-Scale National Grid Data 1:2,500 and **Supply of Unpublished Survey Information** 1:2,500 and 1:1,250



Fire Alarm Pilla

Hydrant or Hydraulic

Normal Tidal Limit

Mile Post or Mooring Post

Foot Bridge

Guide Post

Level Crossing

Manhole

Mile Stone

FB

LC

MP

NTL

SP, SL

Spr

TCB

TCP

Wr Pt, Wr 7

Wd Pp

Signal Post or Light

Telephone Call Box

Telephone Call Post

Water Point, Water Tap

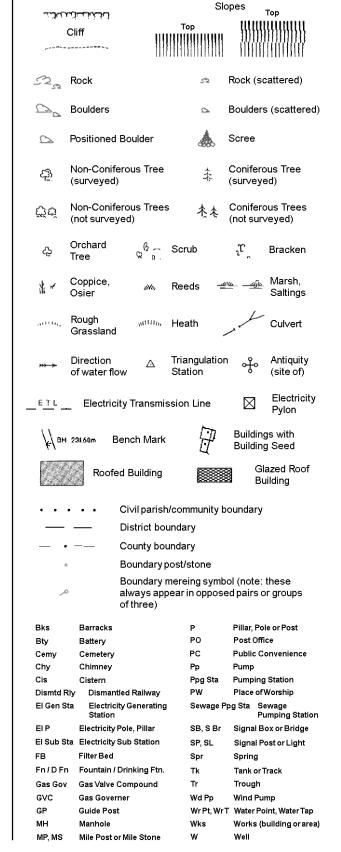
Spring

Trough

Wind Pump

Tank or Track

1:1,250



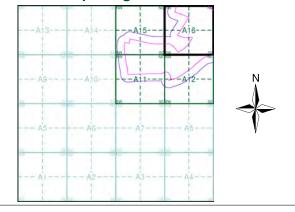
## **Brookbanks**

Consulting

#### **Historical Mapping & Photography included:**

		_
Scale	Date	Pg
1:2,500	1881	2
1:2,500	1904	3
1:2,500	1927	4
1:2,500	1965	5
1:1,250	1979 - 1980	6
1:1,250	1983	7
1:2,500	1986	8
1:1,250	1986	9
1:1,250	1991	10
1:1,250	1994	11
1:2,500	1994	12
1:2,500	1996	13
1:1,250	1996	14
1:2,500	1999	15
	1:2,500 1:2,500 1:2,500 1:2,500 1:1,250 1:1,250 1:1,250 1:2,500 1:1,250 1:1,250 1:1,250 1:2,500 1:2,500 1:2,500	1:2,500 1881 1:2,500 1904 1:2,500 1927 1:2,500 1965 1:1,250 1979 - 1980 1:1,250 1983 1:2,500 1986 1:1,250 1986 1:1,250 1991 1:1,250 1994 1:2,500 1996 1:1,250 1996

#### **Historical Map - Segment A16**



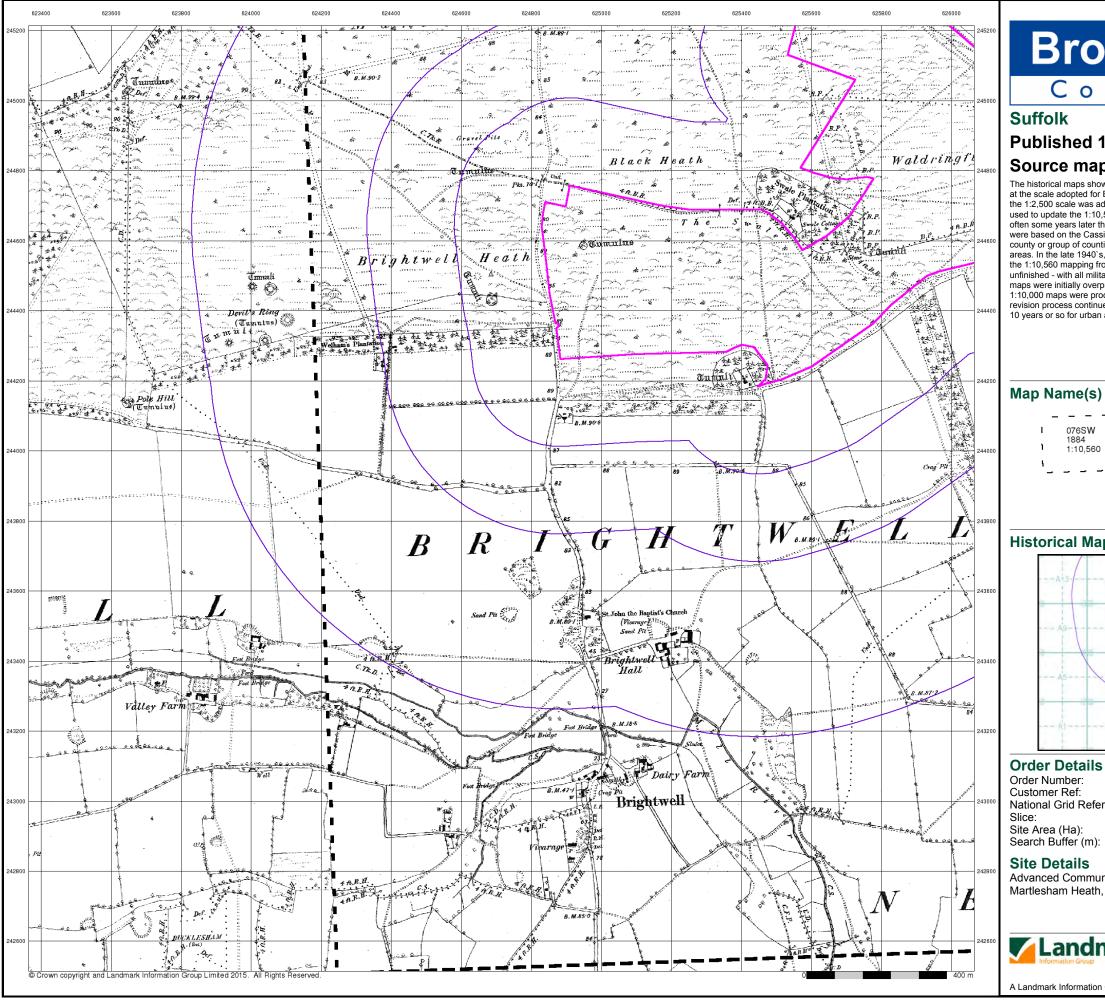
#### **Order Details**

Order Number: 97754875\_1\_1 Customer Ref: 10391 Adastral Park National Grid Reference: 625020, 244270 Slice: 96.03 Site Area (Ha): Search Buffer (m):

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



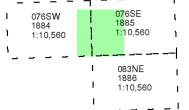


Consulting

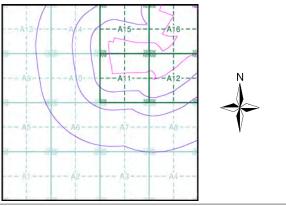
### Published 1884 - 1886 Source map scale - 1:10,560

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 1:10,560 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 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**



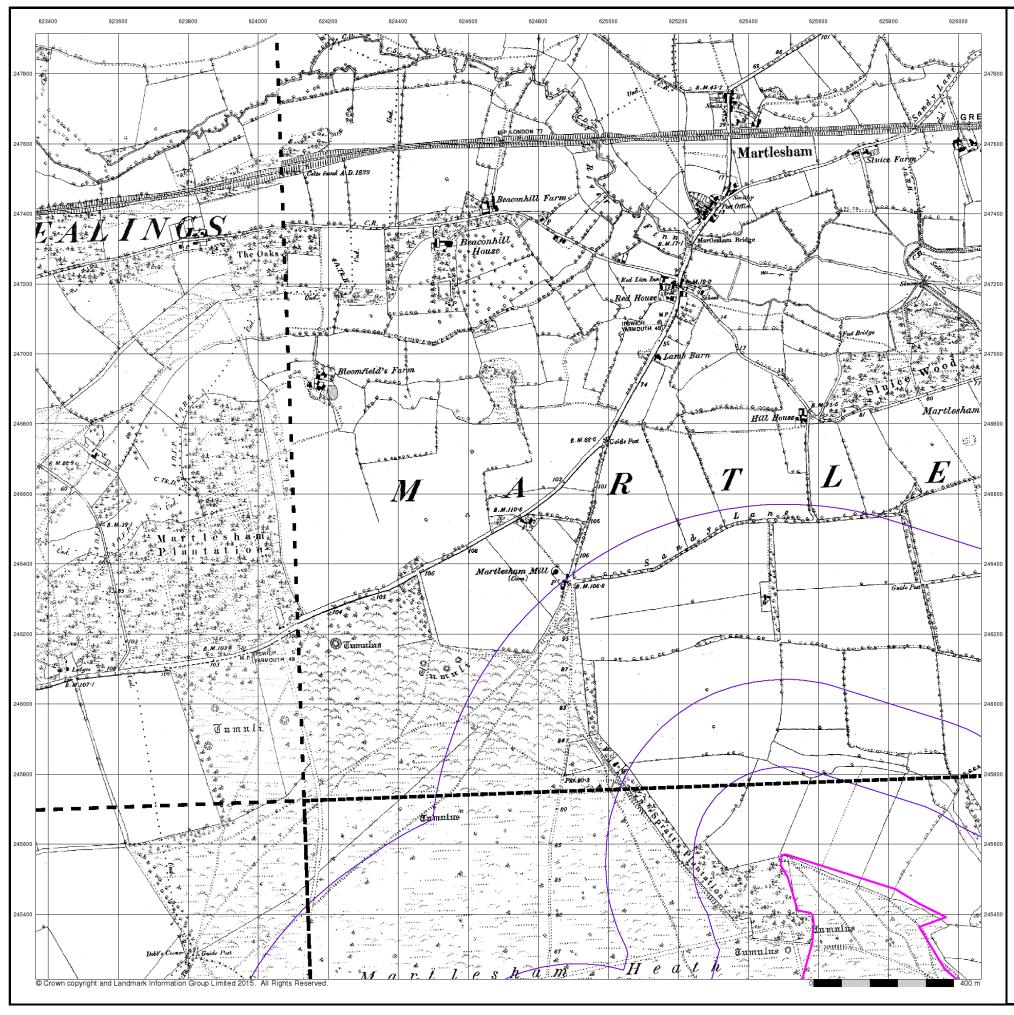
97754875\_1\_1 10391 Adastral Park National Grid Reference: 625020, 244270 96.03

1000

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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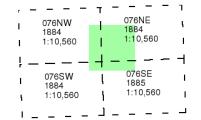
Consulting

#### Suffolk

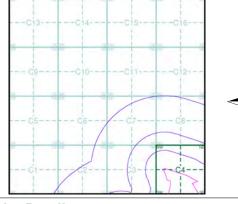
### **Published 1884 - 1885 Source map scale - 1:10,560**

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 1:10,560 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 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 C**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625260, 245800
Slice: C
Site Area (Ha): 96.03

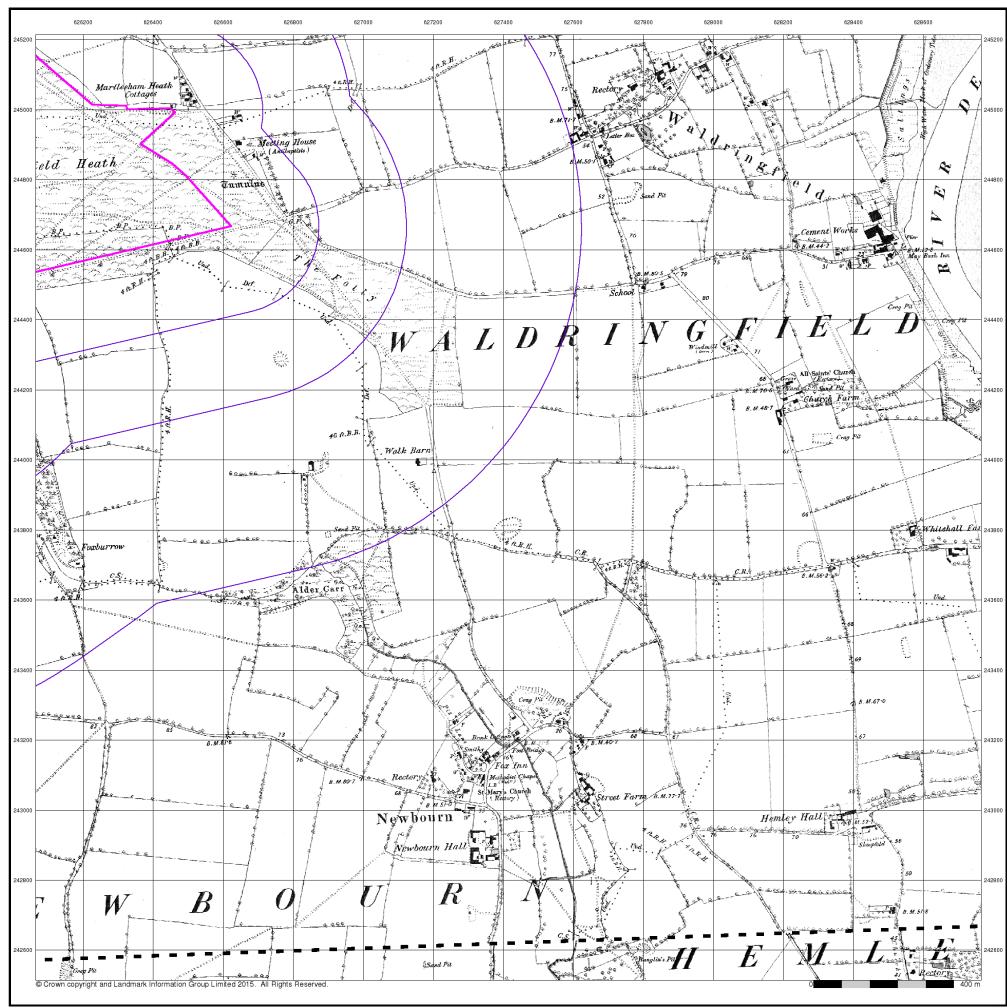
Site Area (Ha): 96.03 Search Buffer (m): 1000

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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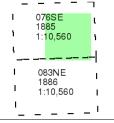
Consulting

#### Suffolk

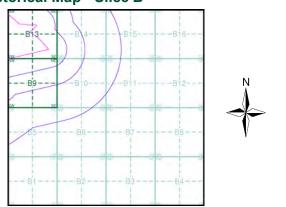
### Published 1885 - 1886 Source map scale - 1:10,560

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 1:10,560 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 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 B**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 626760, 244450
Slice: B
Site Area (Ha): 96.03

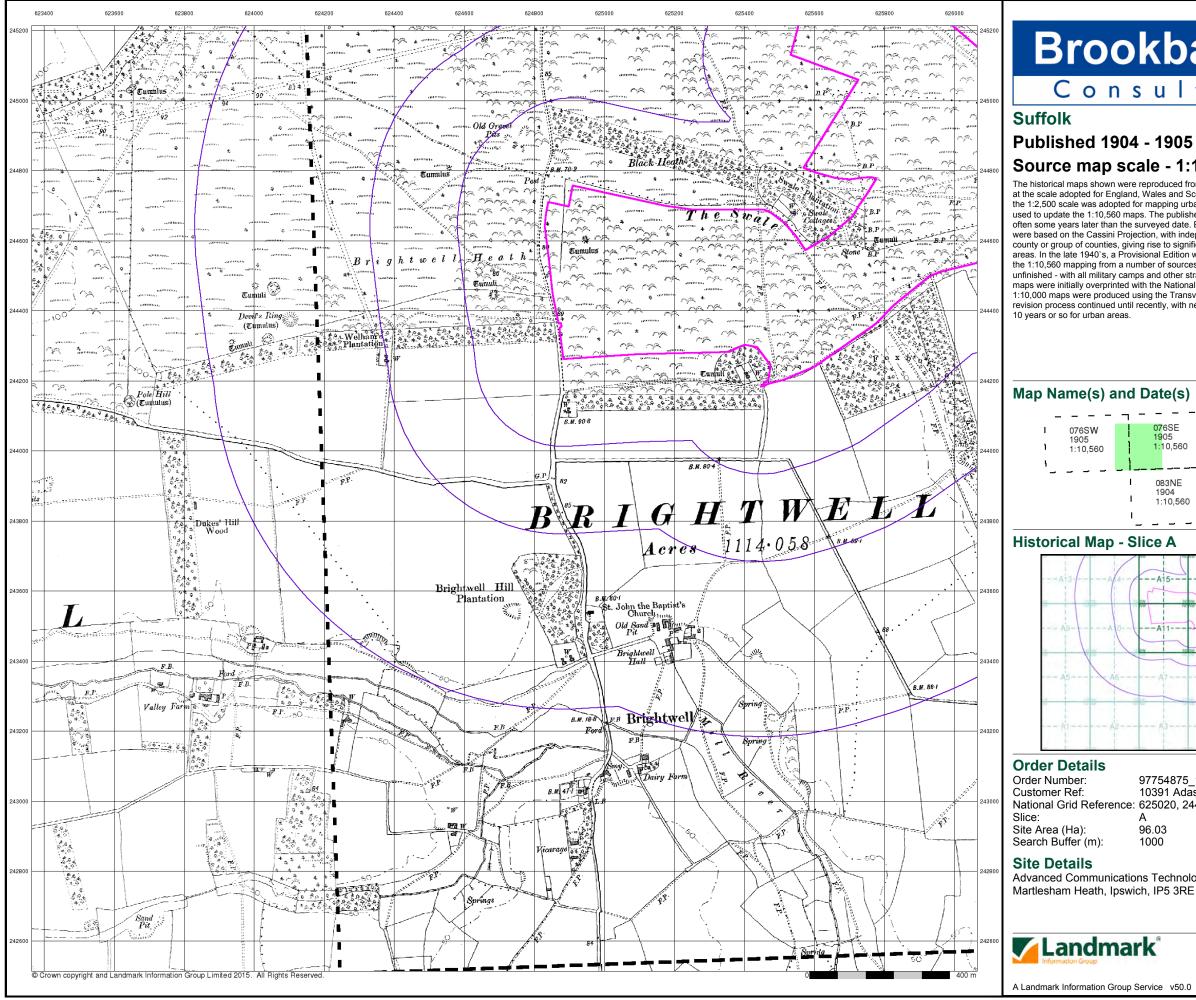
Site Area (Ha): 96.03 Search Buffer (m): 1000

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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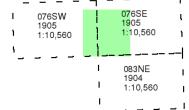


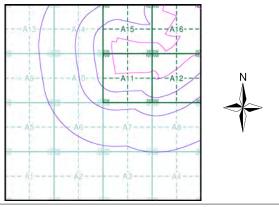
Consulting

### Published 1904 - 1905 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 1:10,560 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 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

#### Map Name(s) and Date(s)



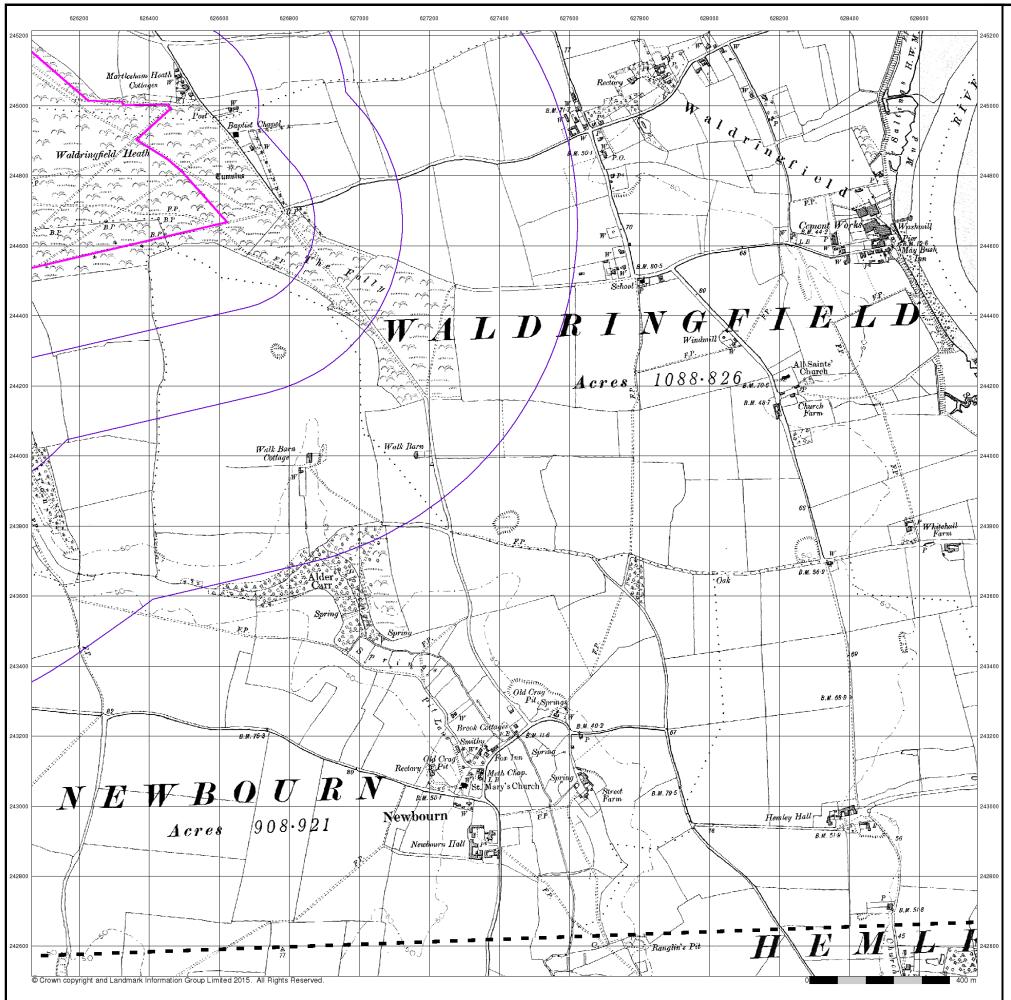


97754875\_1\_1 10391 Adastral Park National Grid Reference: 625020, 244270 96.03

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Consulting

#### Suffolk

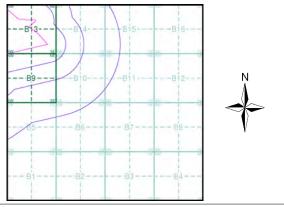
### Published 1904 - 1905 Source map scale - 1:10,560

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 1:10,560 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 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 B**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 626760, 244450
Slice: B
Site Assa (Ha): 06 03

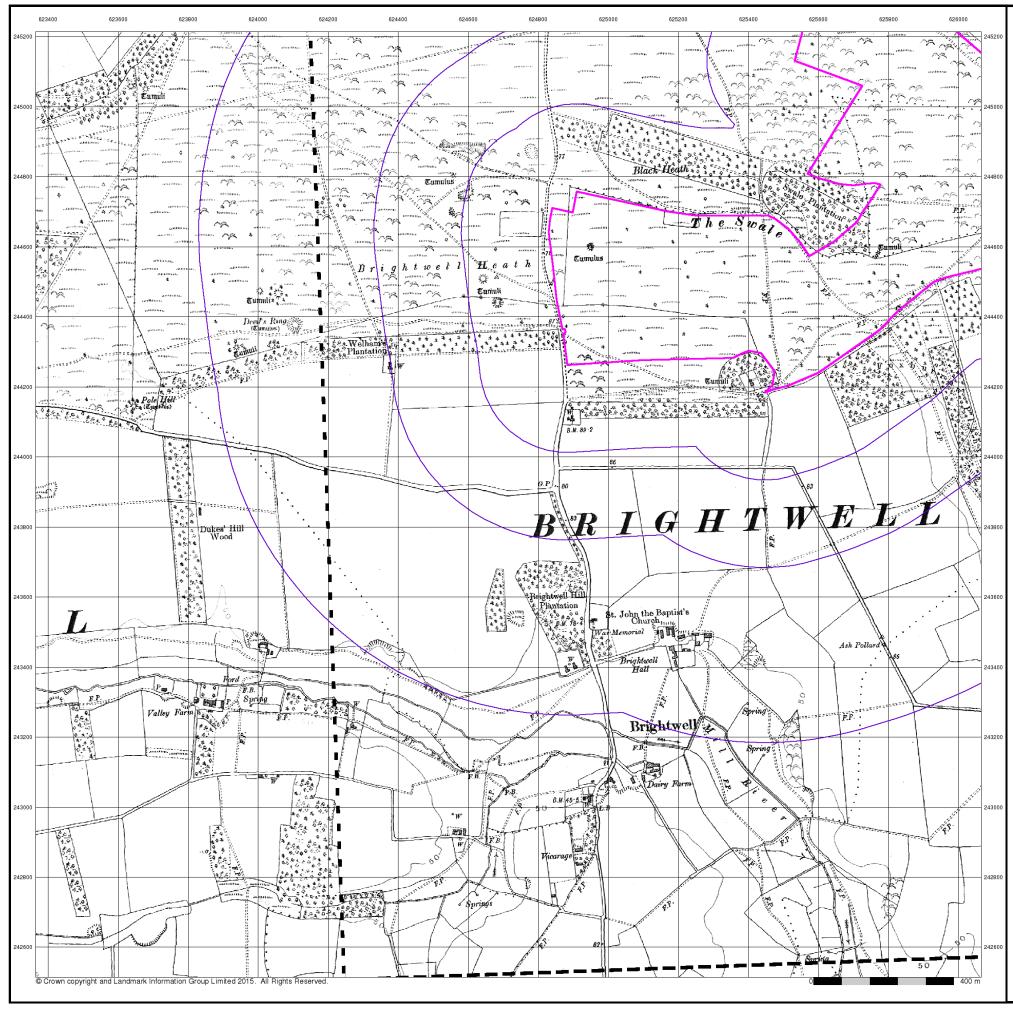
Site Area (Ha): 96.03 Search Buffer (m): 1000

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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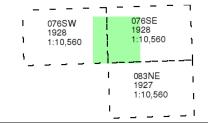
Consulting

#### Suffolk

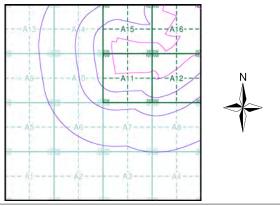
### **Published 1927 - 1928 Source map scale - 1:10,560**

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 1:10,560 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 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**

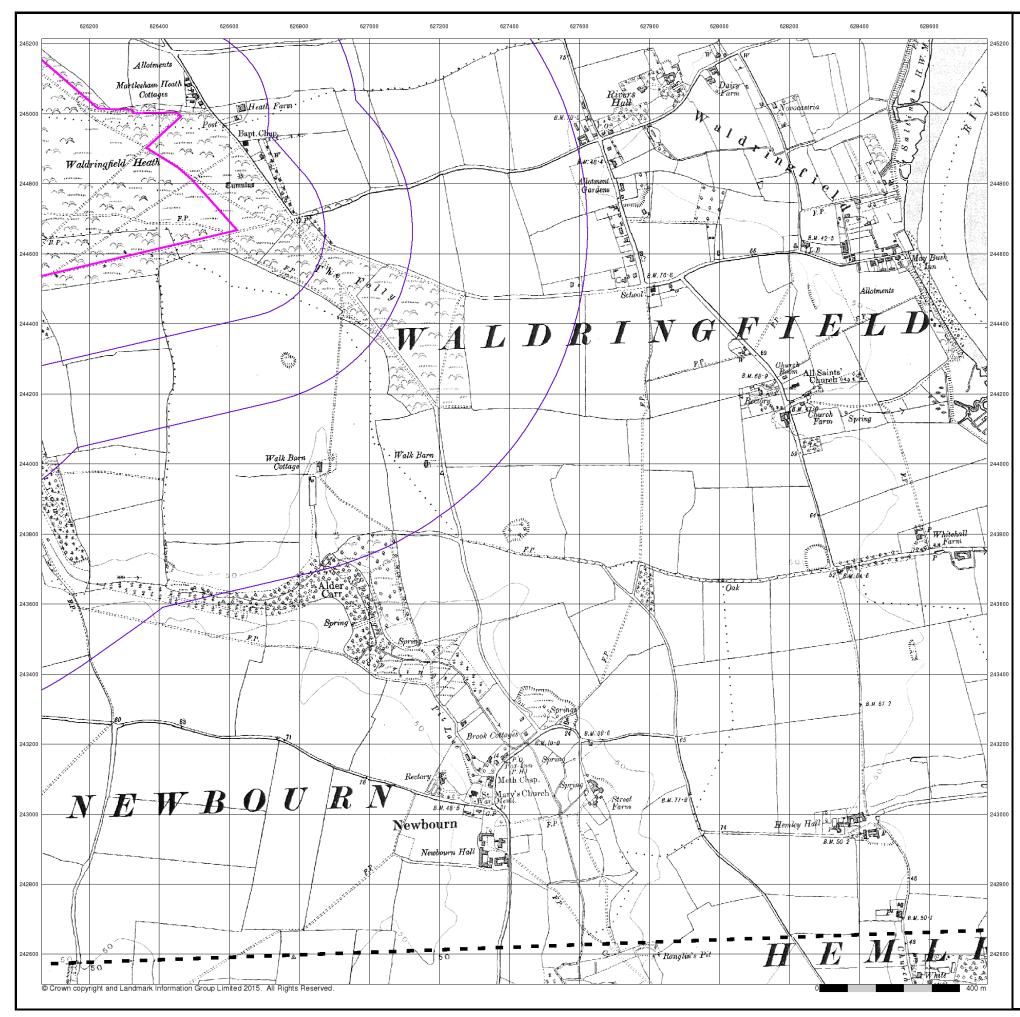
Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625020, 244270
Slice: A
Site Area (Ha): 96.03
Search Buffer (m): 1000

### Search Buffer (m): Site Details

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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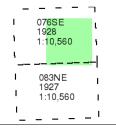
Consulting

#### Suffolk

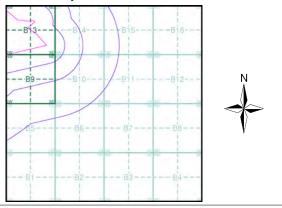
### **Published 1927 - 1928** Source map scale - 1:10,560

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 1:10,560 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 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 B**



#### **Order Details**

97754875\_1\_1 Order Number: 10391 Adastral Park Customer Ref: National Grid Reference: 626760, 244450 Slice: Site Area (Ha): 96.03

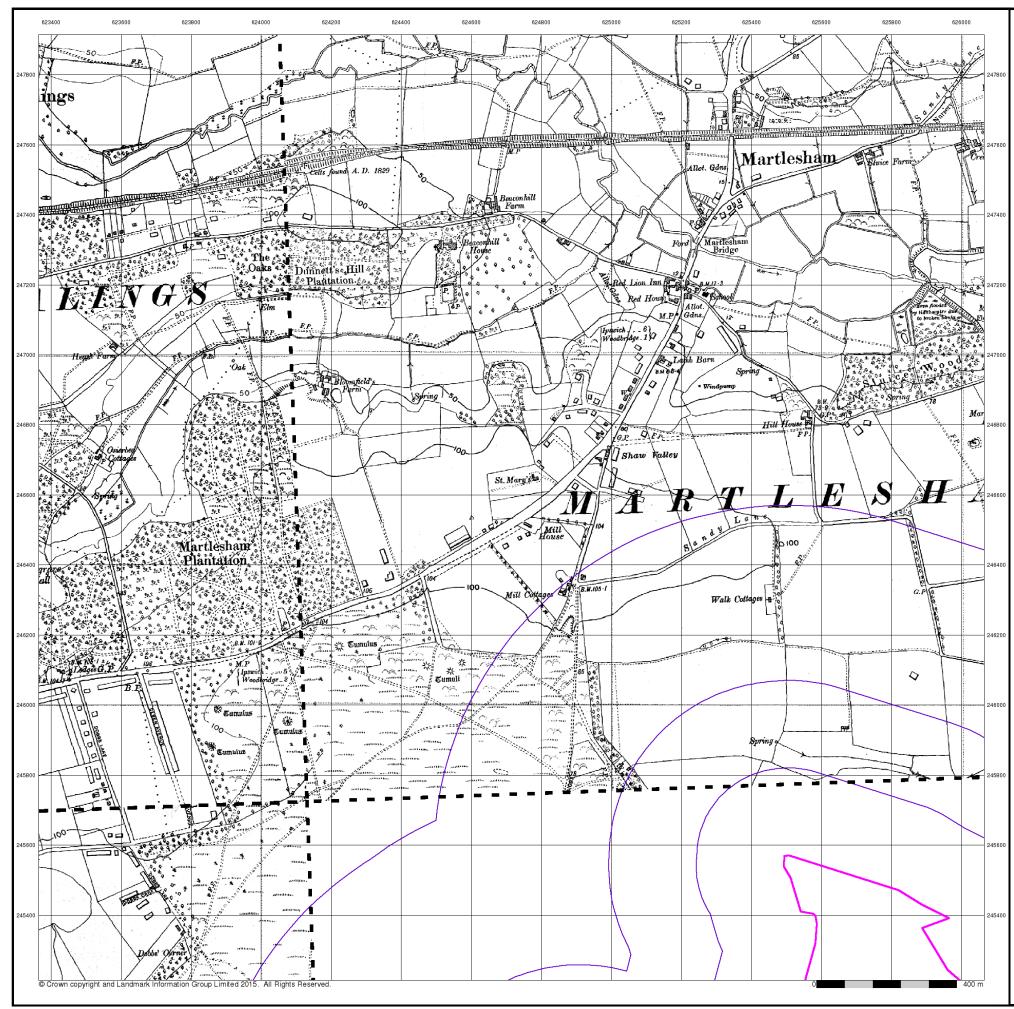
Search Buffer (m): 1000

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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Consulting

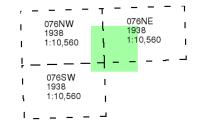
#### Suffolk

### Published 1938

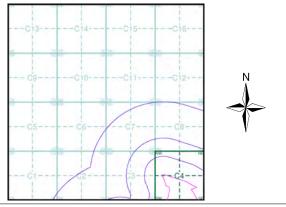
#### Source map scale - 1:10,560

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 1:10,560 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 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 C**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625260, 245800
Slice: C
Site Area (Ha): 96.03

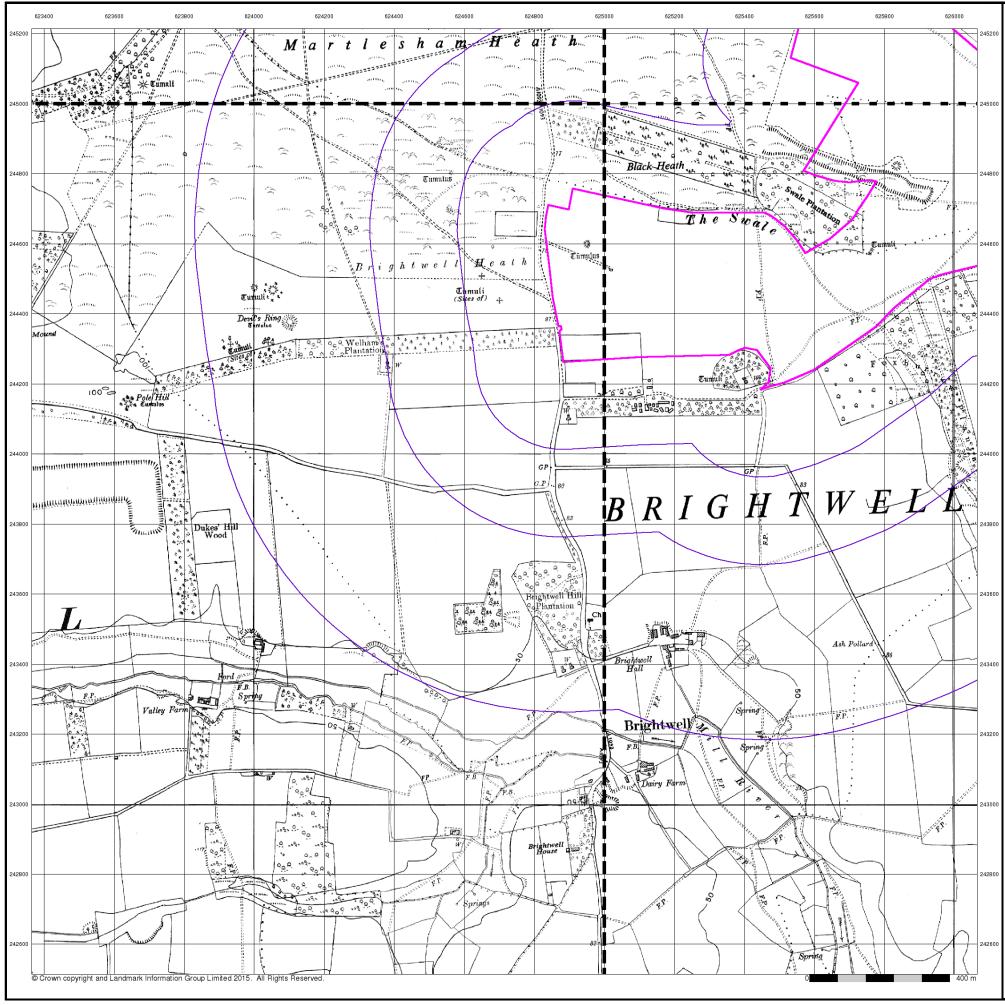
Site Area (Ha): 96.03 Search Buffer (m): 1000

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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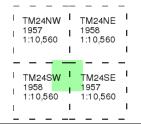


Consulting

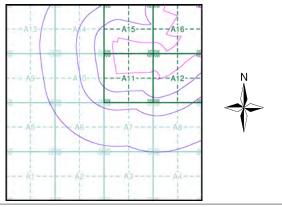
# Ordnance Survey Plan Published 1957 - 1958 Source map scale - 1:10,000

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 1:10,560 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 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: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625020, 244270
Slice: A
Site Area (Ha): 96.03

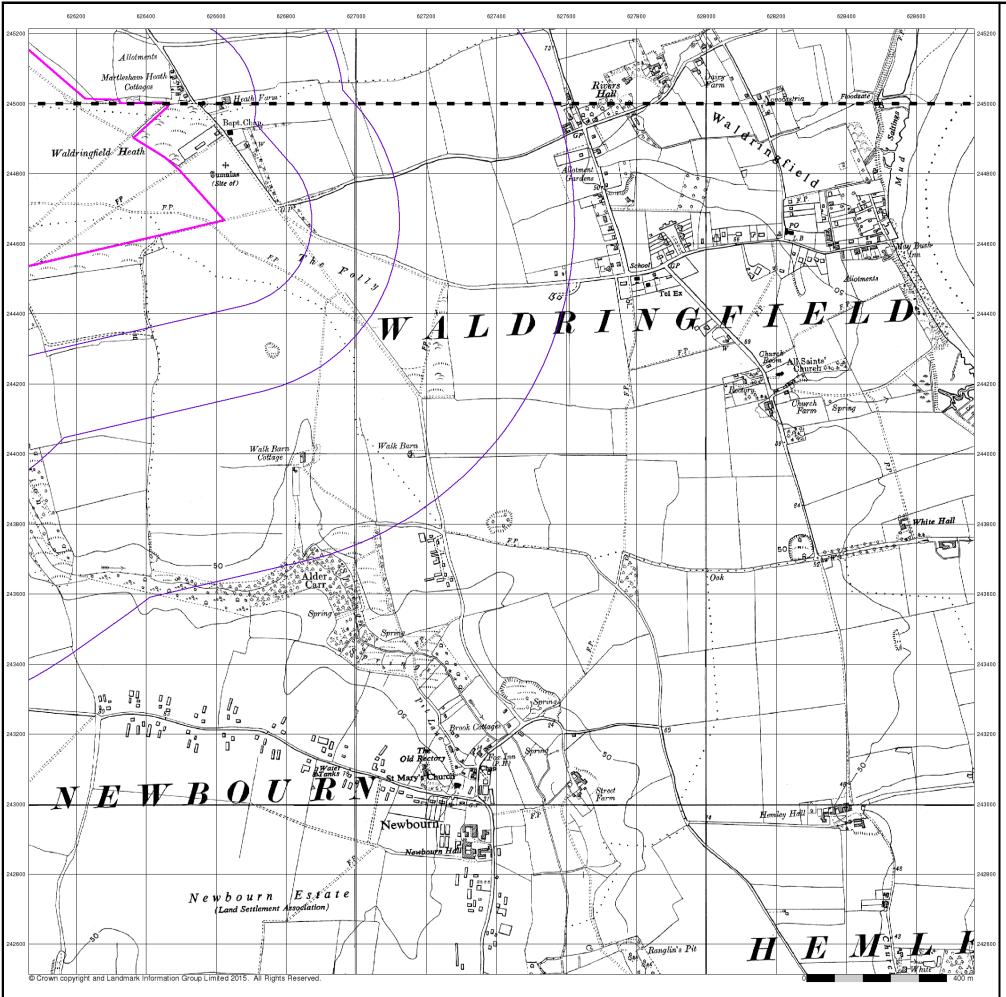
Site Area (Ha): 96.03 Search Buffer (m): 1000

#### Site Details

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



I: 0844 844 9952 x: 0844 844 9951 eb: www.envirocheck

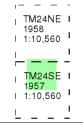


Consulting

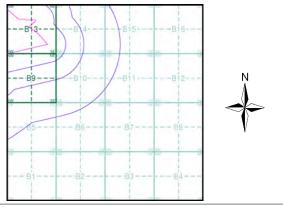
# Ordnance Survey Plan Published 1957 - 1958 Source map scale - 1:10,000

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 1:10,560 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 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 B**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 626760, 244450
Slice: B
Site Area (Ha): 96.03

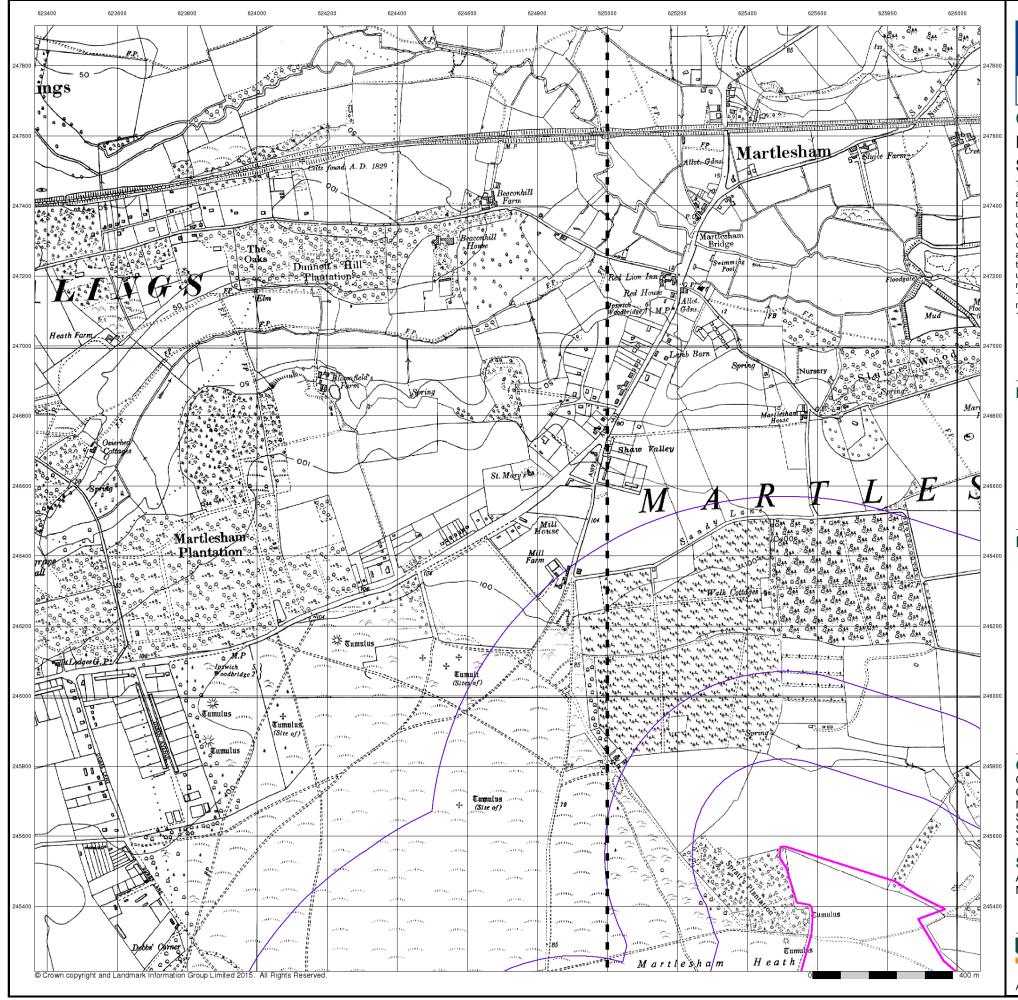
Site Area (Ha): 96.03 Search Buffer (m): 1000

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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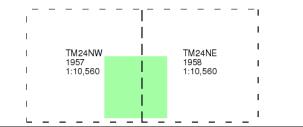


Consulting

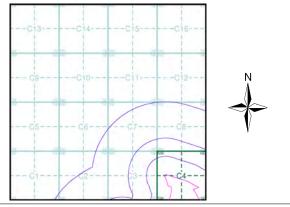
# Ordnance Survey Plan Published 1957 - 1958 Source map scale - 1:10,000

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 1:10,560 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 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 C**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625260, 245800
Slice: C
Site Area (Ha): 96.03

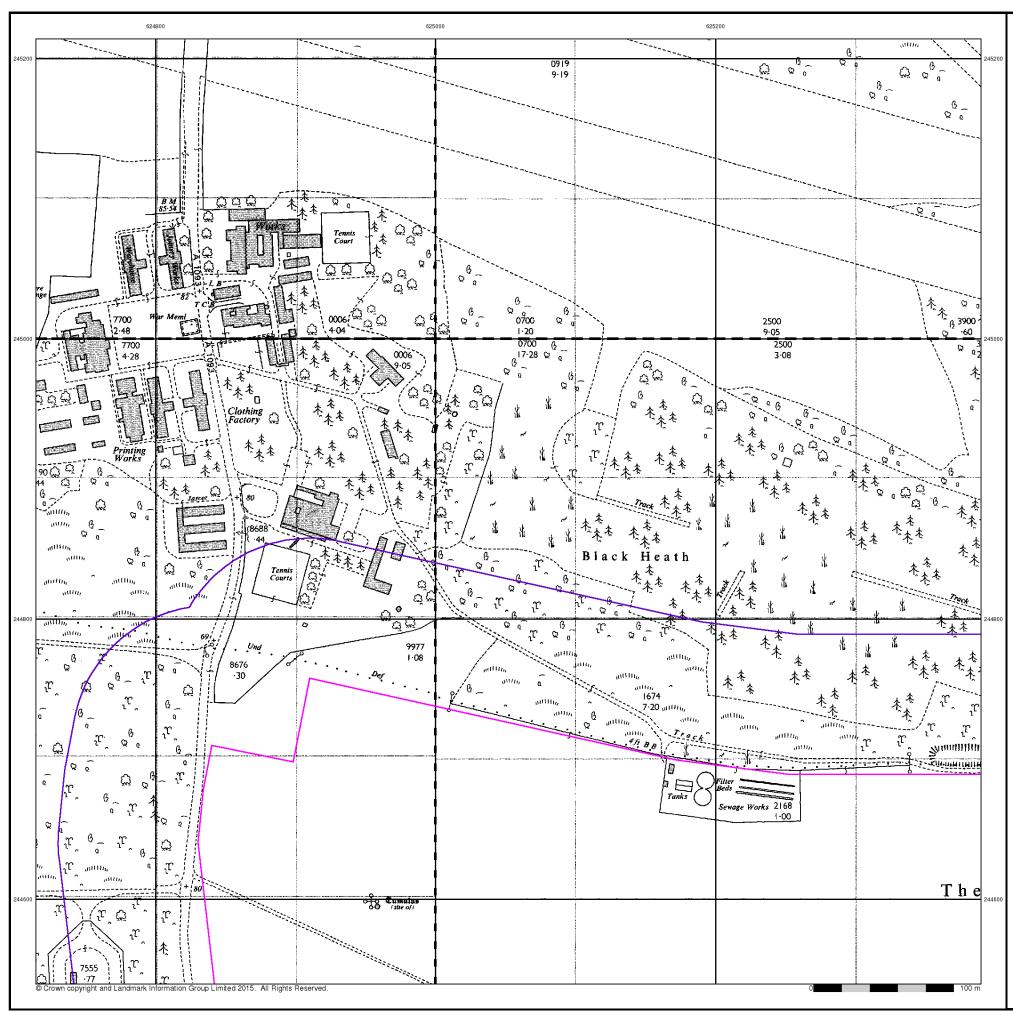
Site Area (Ha): 96.03 Search Buffer (m): 1000

#### **Site Details**

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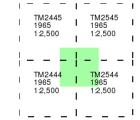
### **Ordnance Survey Plan**

#### Published 1965

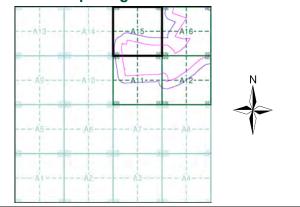
#### Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. 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 A15**



#### **Order Details**

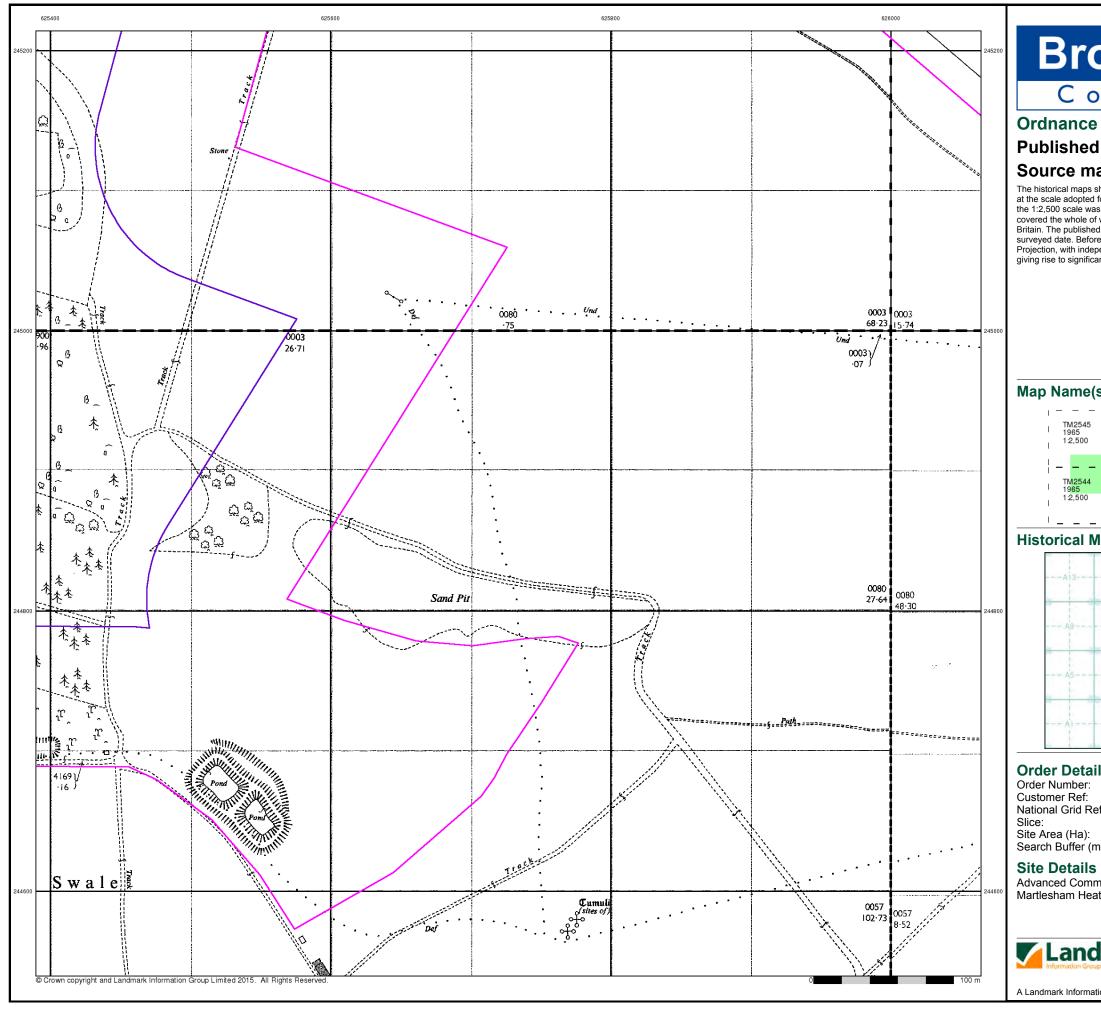
Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625020, 244270
Slice: A
Site Area (Ha): 96.03
Search Buffer (m): 100

#### **Site Details**

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### **Ordnance Survey Plan**

#### Published 1965

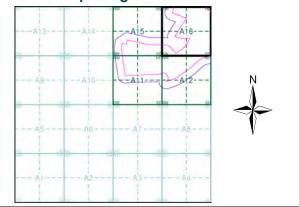
#### Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. 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 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)

1	TM2545 1965 1:2,500	TM2645 1965 1:2,500	 
			l
- 1	TM2544 1965	TM2644 1965	ı
- 1	1:2,500	1:2,500	ı
- 1		1	I

#### **Historical Map - Segment A16**



#### **Order Details**

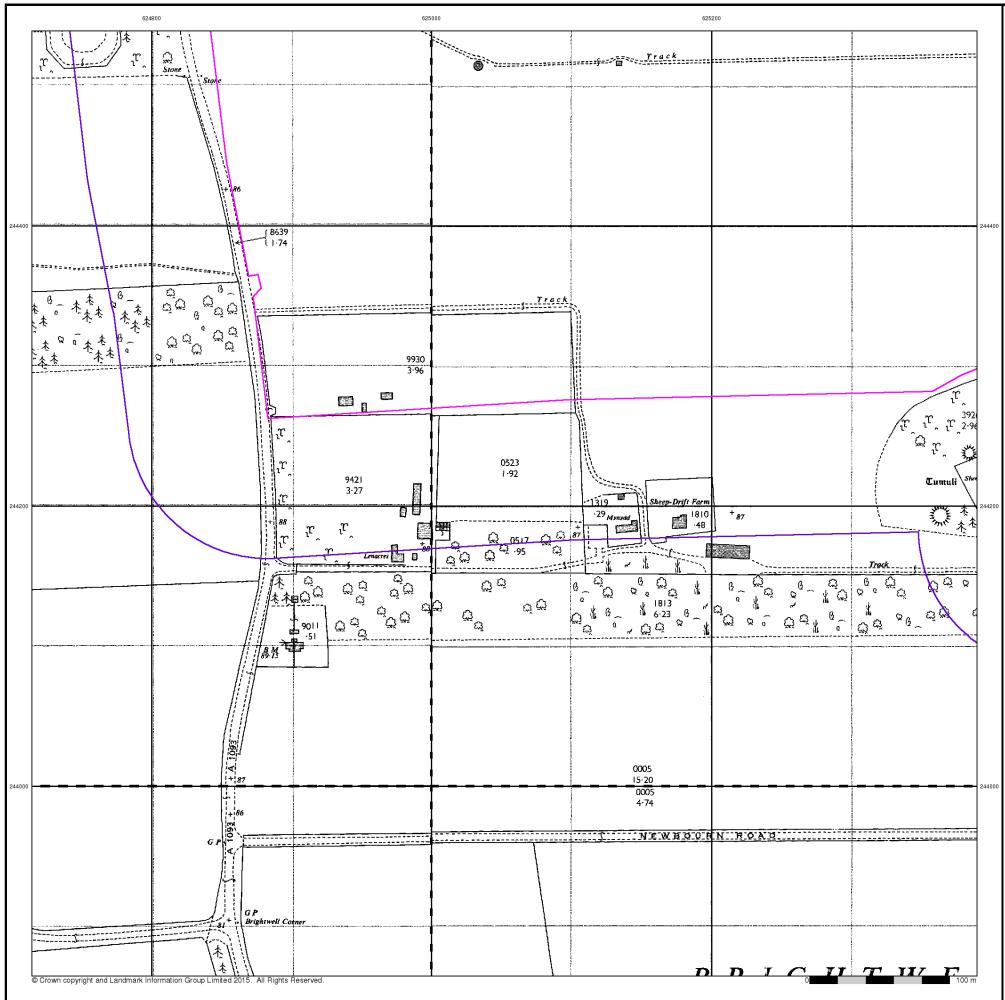
97754875\_1\_1 10391 Adastral Park Order Number: Customer Ref: National Grid Reference: 625020, 244270 Slice: A 96.03 Site Area (Ha):

### Search Buffer (m):

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### Consulting

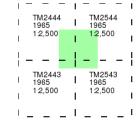
### **Ordnance Survey Plan**

#### Published 1965

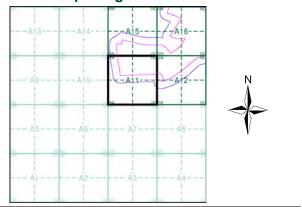
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The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered 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 A11**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625020, 244270
Slice: A
Site Area (Ha): 96.03

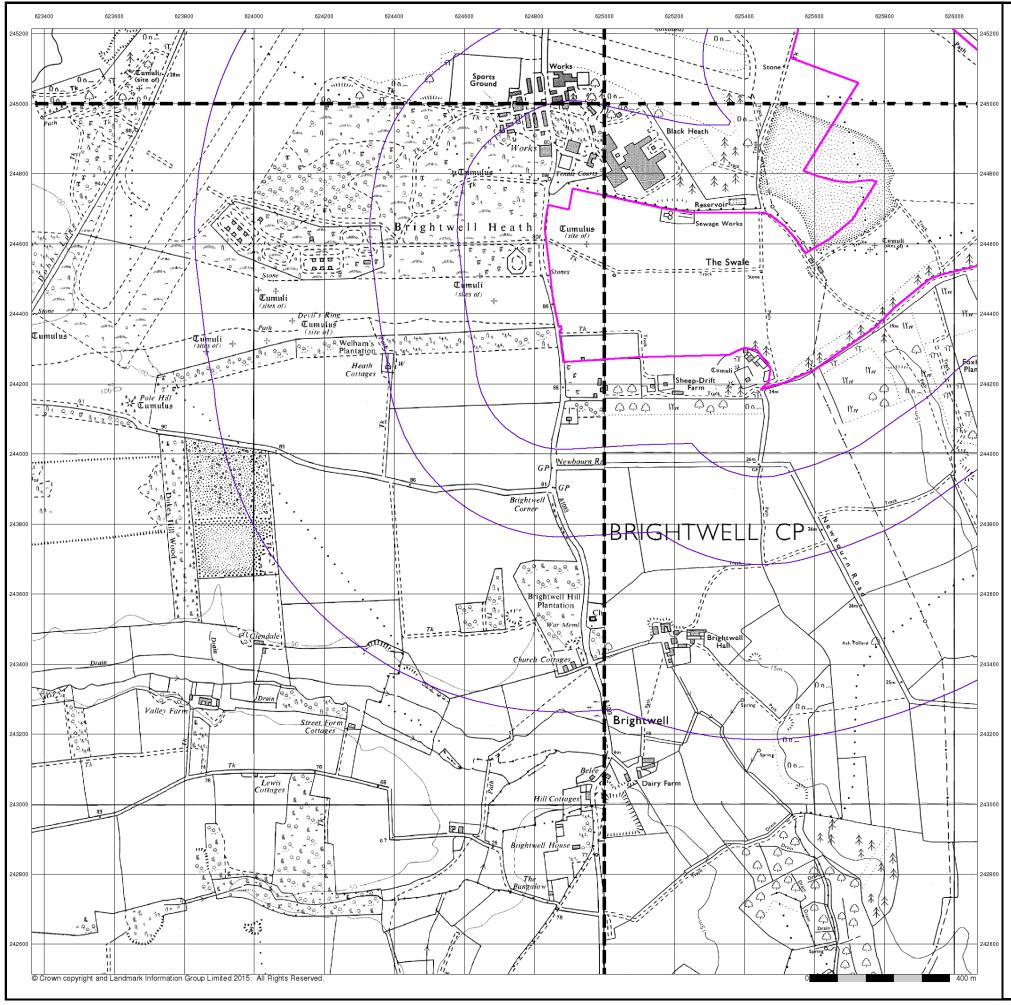
Search Buffer (m): 10

#### **Site Details**

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el: 0844 844 9952 ax: 0844 844 9951 eb: www.envirocheck.co.uk

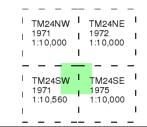


Consulting

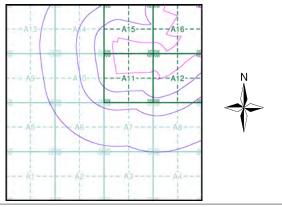
# Ordnance Survey Plan Published 1971 - 1975 Source map scale - 1:10,000

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 1:10,560 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 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**

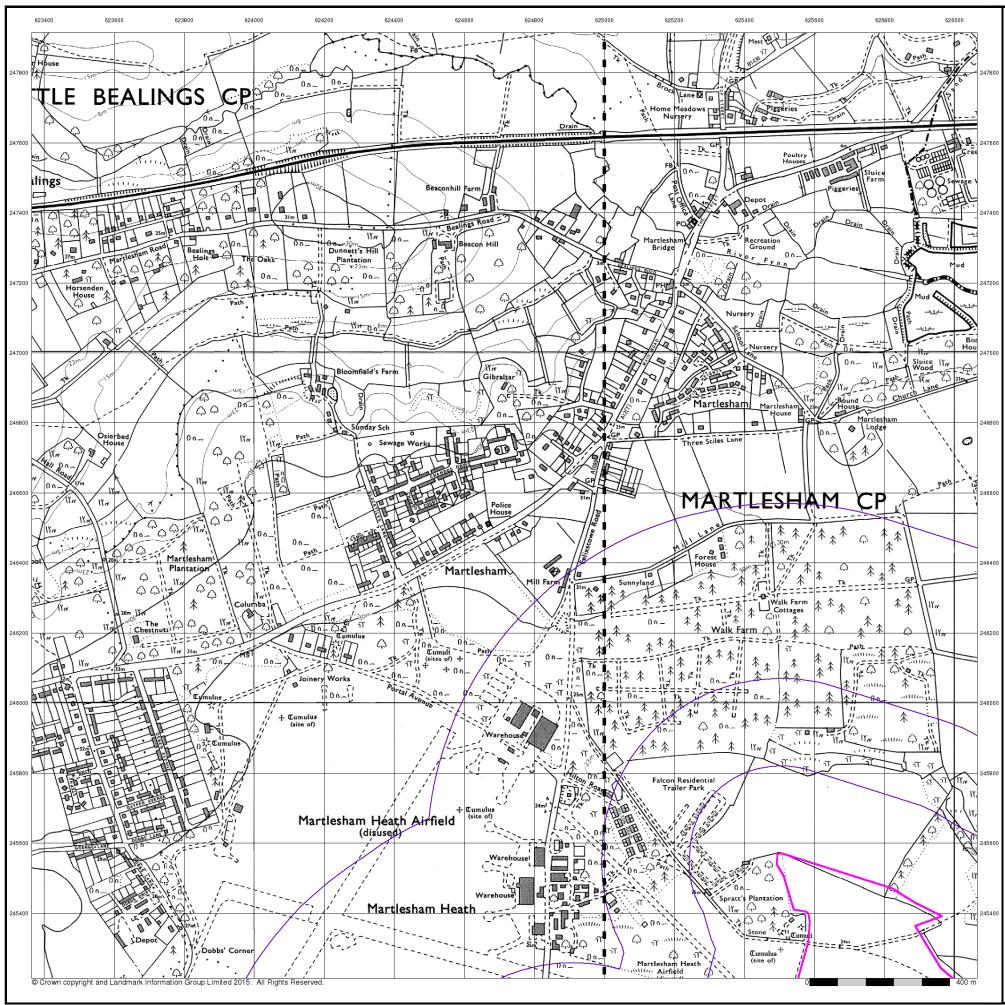
Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625020, 244270
Slice: A
Site Area (Ha): 96.03
Search Buffer (m): 1000

#### **Site Details**

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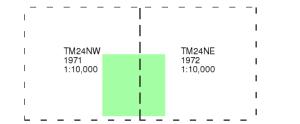


Consulting

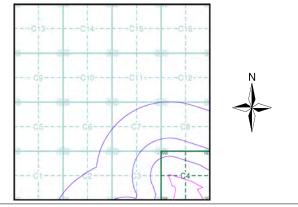
# Ordnance Survey Plan Published 1971 - 1972 Source map scale - 1:10,000

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 1:10,560 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 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 C**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625260, 245800
Slice: C
Site Area (Ha): 96.03

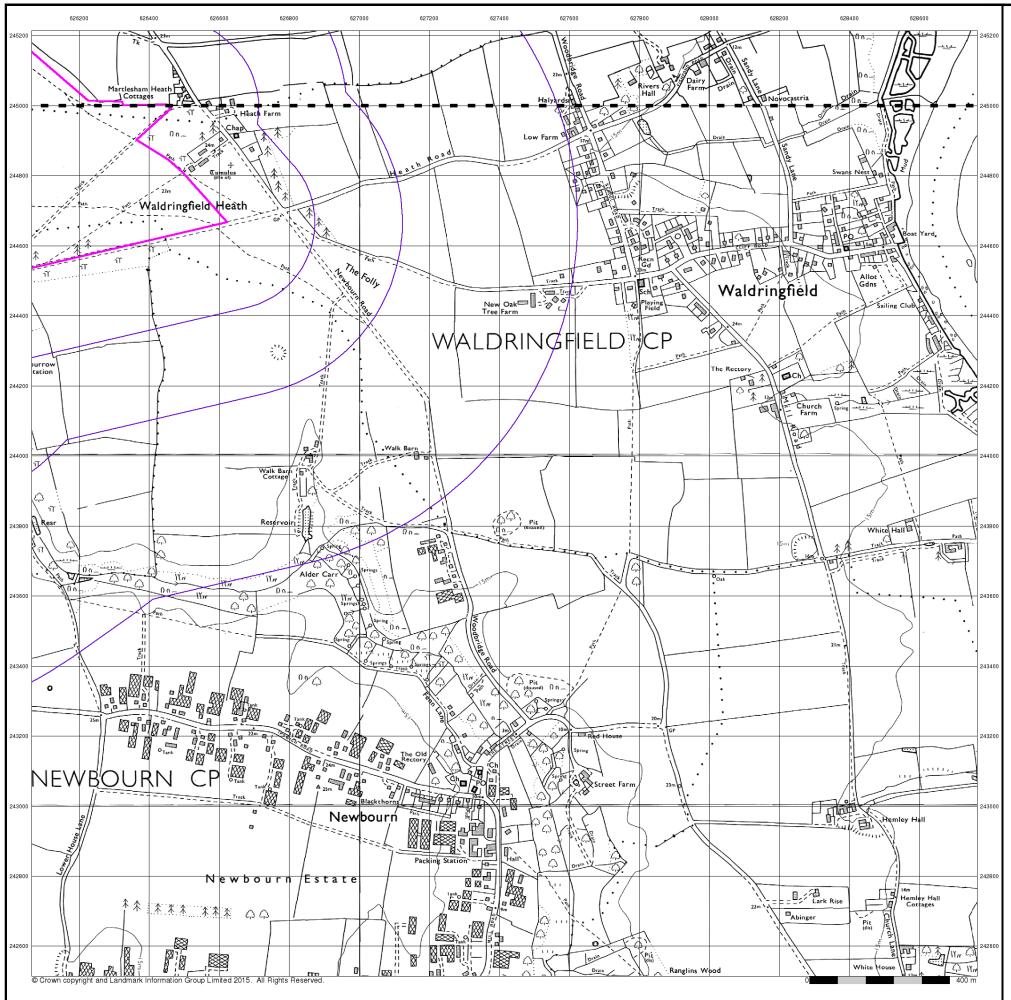
Site Area (Ha): 96.03 Search Buffer (m): 1000

#### **Site Details**

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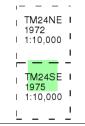


Consulting

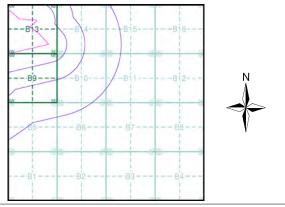
### **Ordnance Survey Plan** Published 1972 - 1975 Source map scale - 1:10,000

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 1:10,560 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 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 B**



#### **Order Details**

97754875\_1\_1 10391 Adastral Park Order Number: Customer Ref: National Grid Reference: 626760, 244450 Slice:

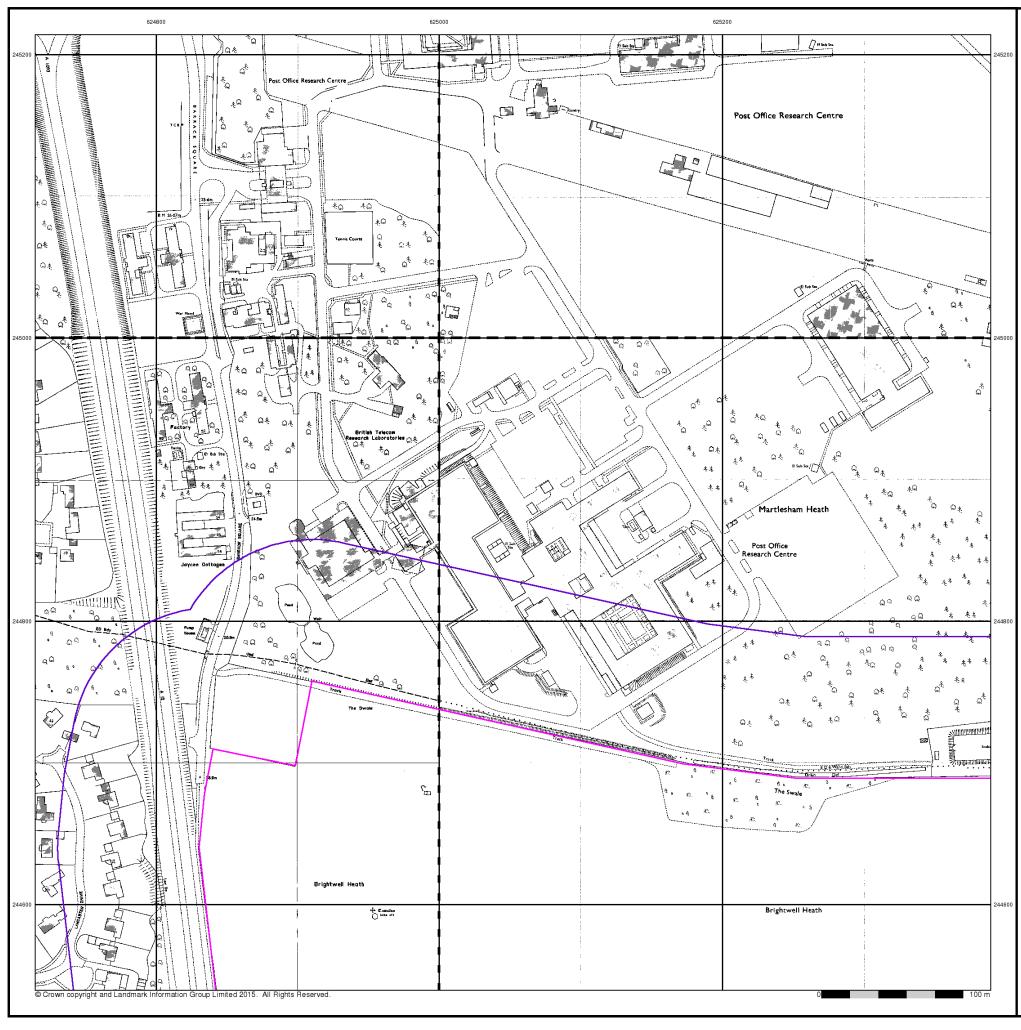
Site Area (Ha): Search Buffer (m): 96.03 1000

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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### Consulting

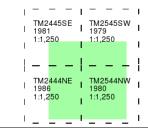
### **Ordnance Survey Plan**

#### Published 1979 - 1986

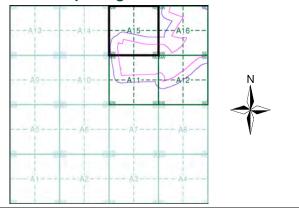
#### Source map scale - 1:1,250

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 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 A15**



#### **Order Details**

97754875\_1\_1 10391 Adastral Park Order Number: Customer Ref: National Grid Reference: 625020, 244270 Site Area (Ha): 96.03

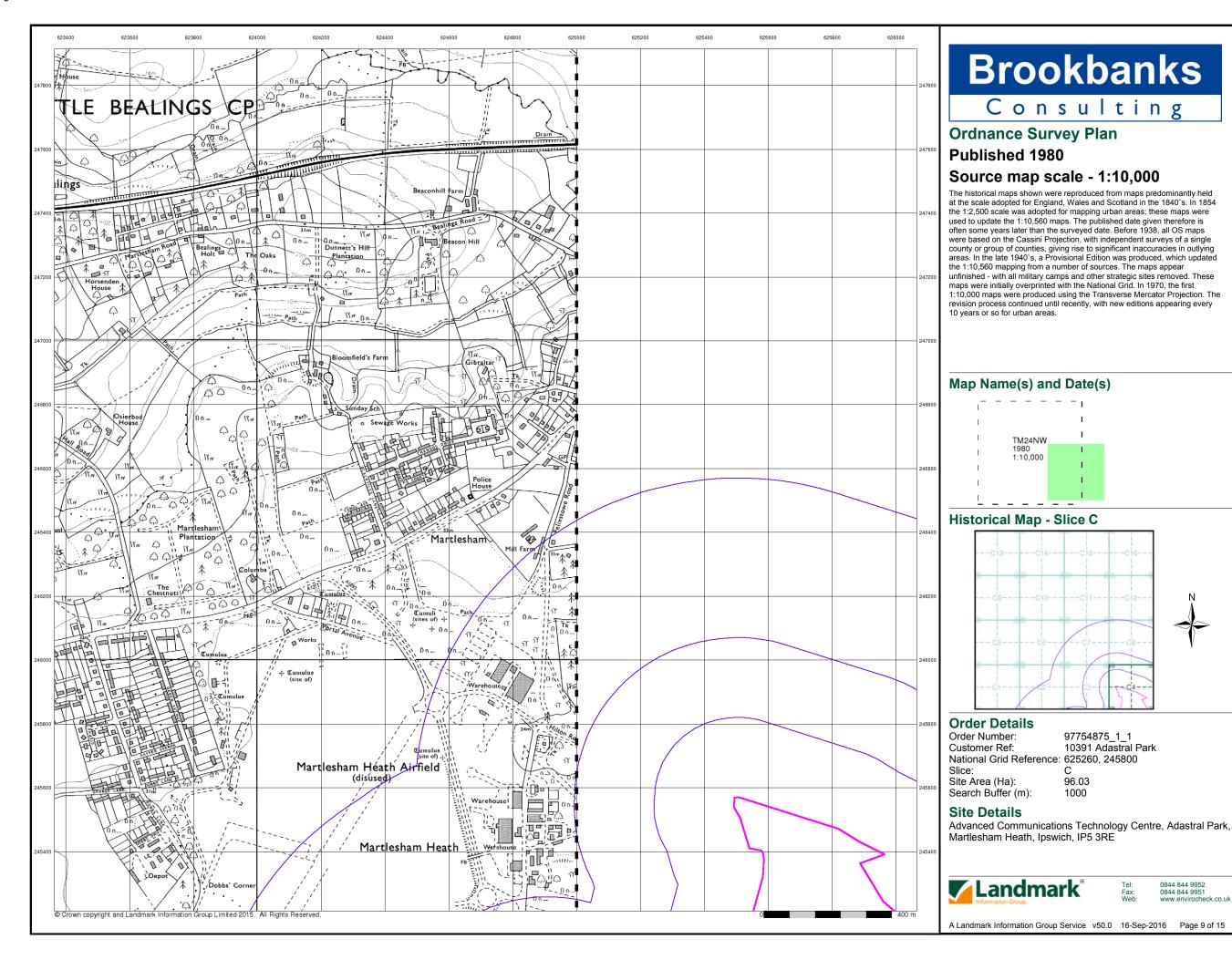
Search Buffer (m):

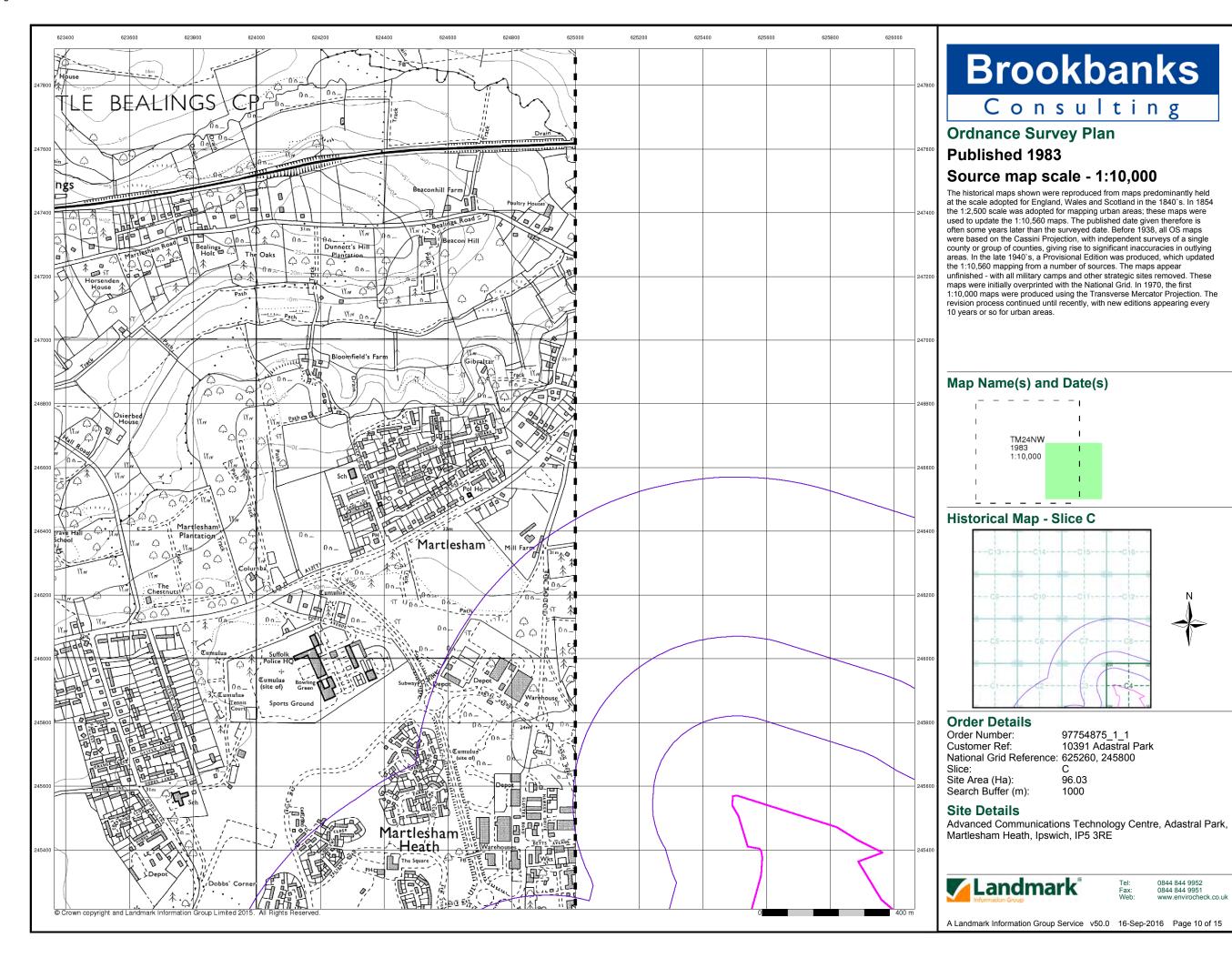
#### **Site Details**

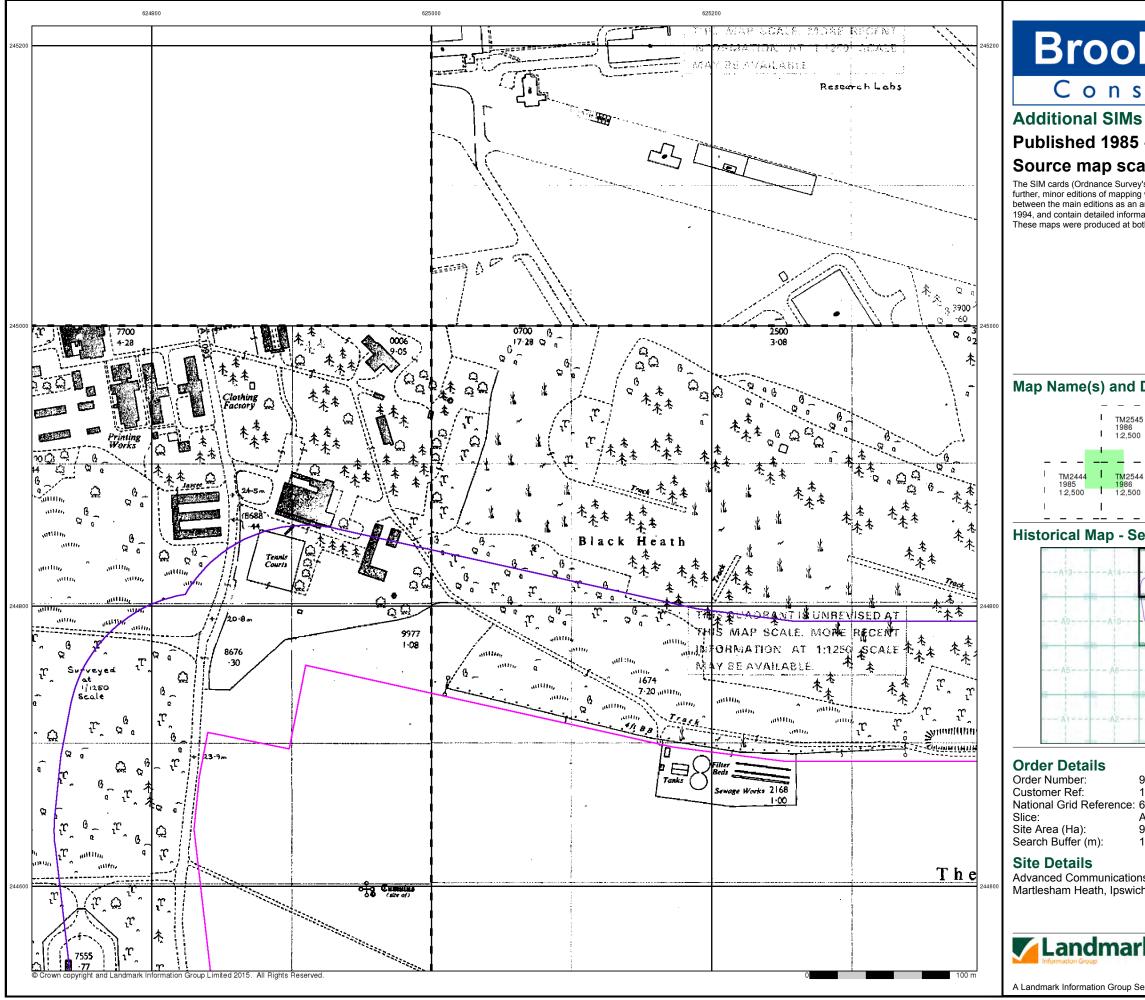
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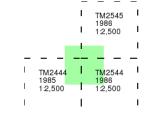


Consulting

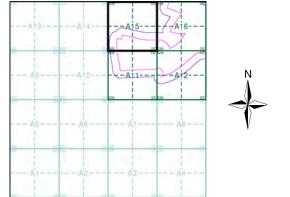
### Published 1985 - 1986 Source map scale - 1:2,500

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 A15**

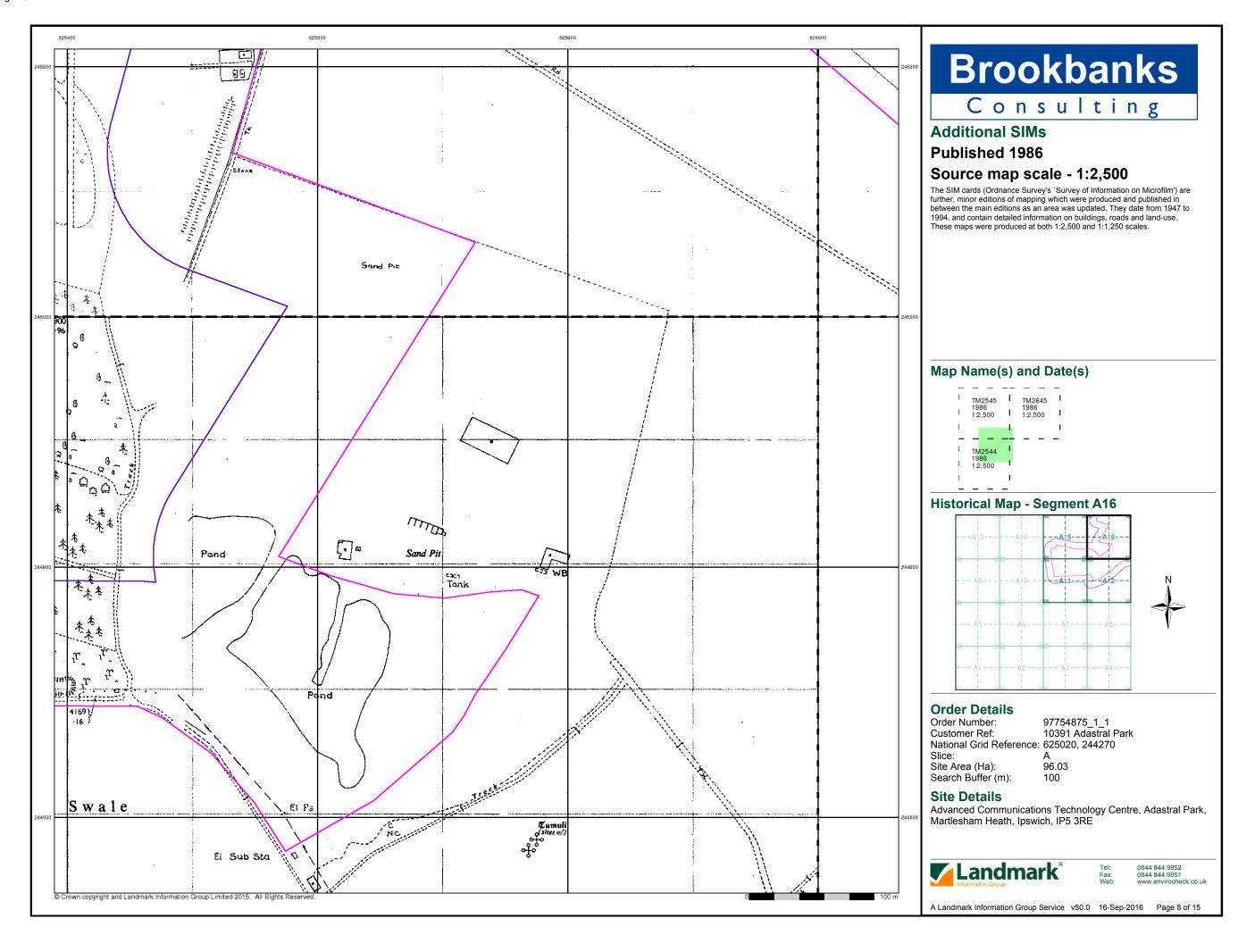


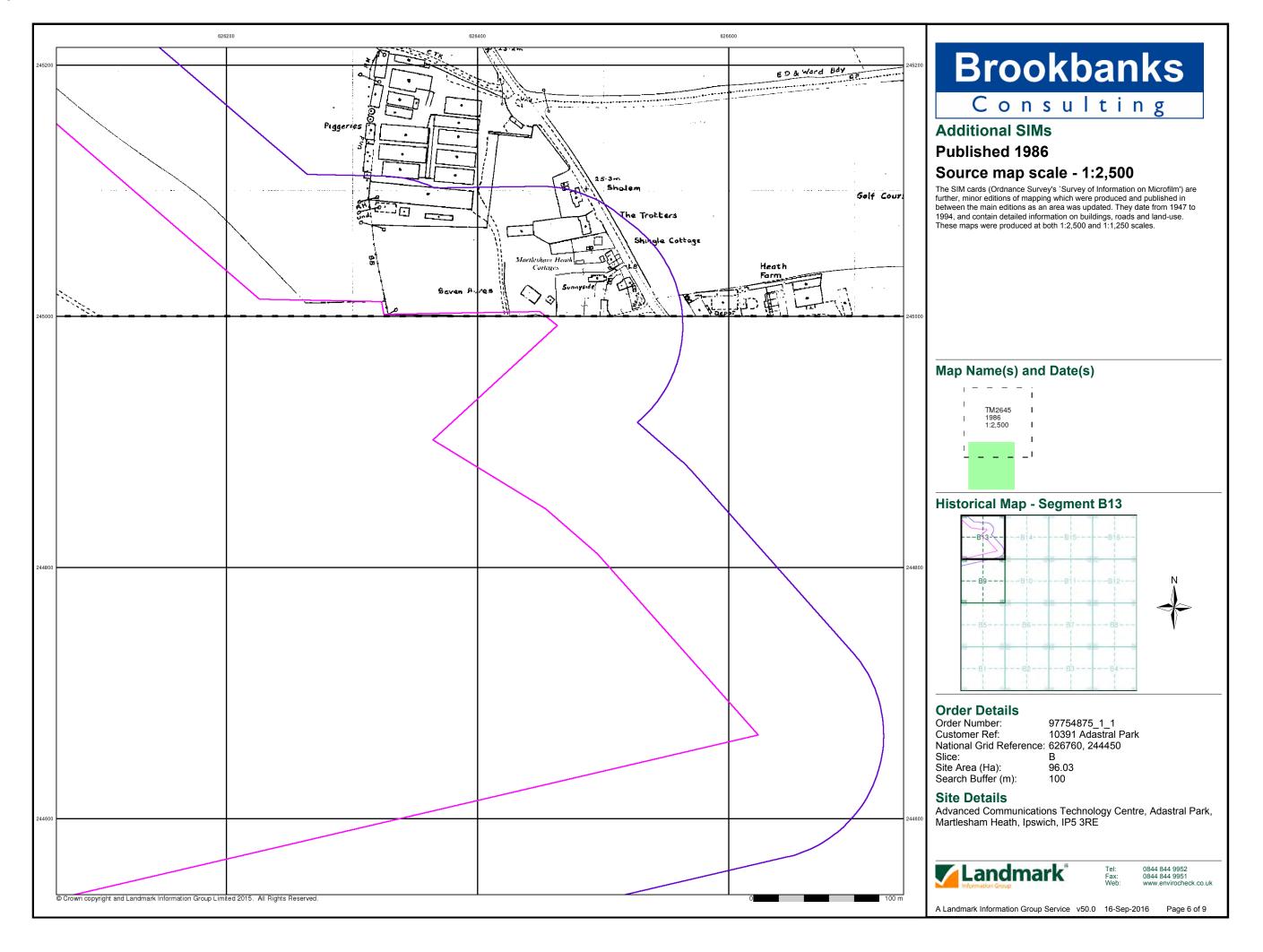
Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625020, 244270 A 96.03

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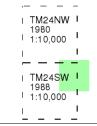


Consulting

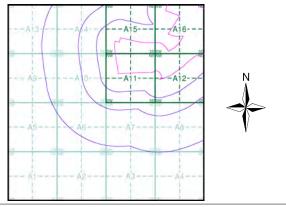
# Ordnance Survey Plan Published 1980 - 1988 Source map scale - 1:10,000

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 1:10,560 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 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**

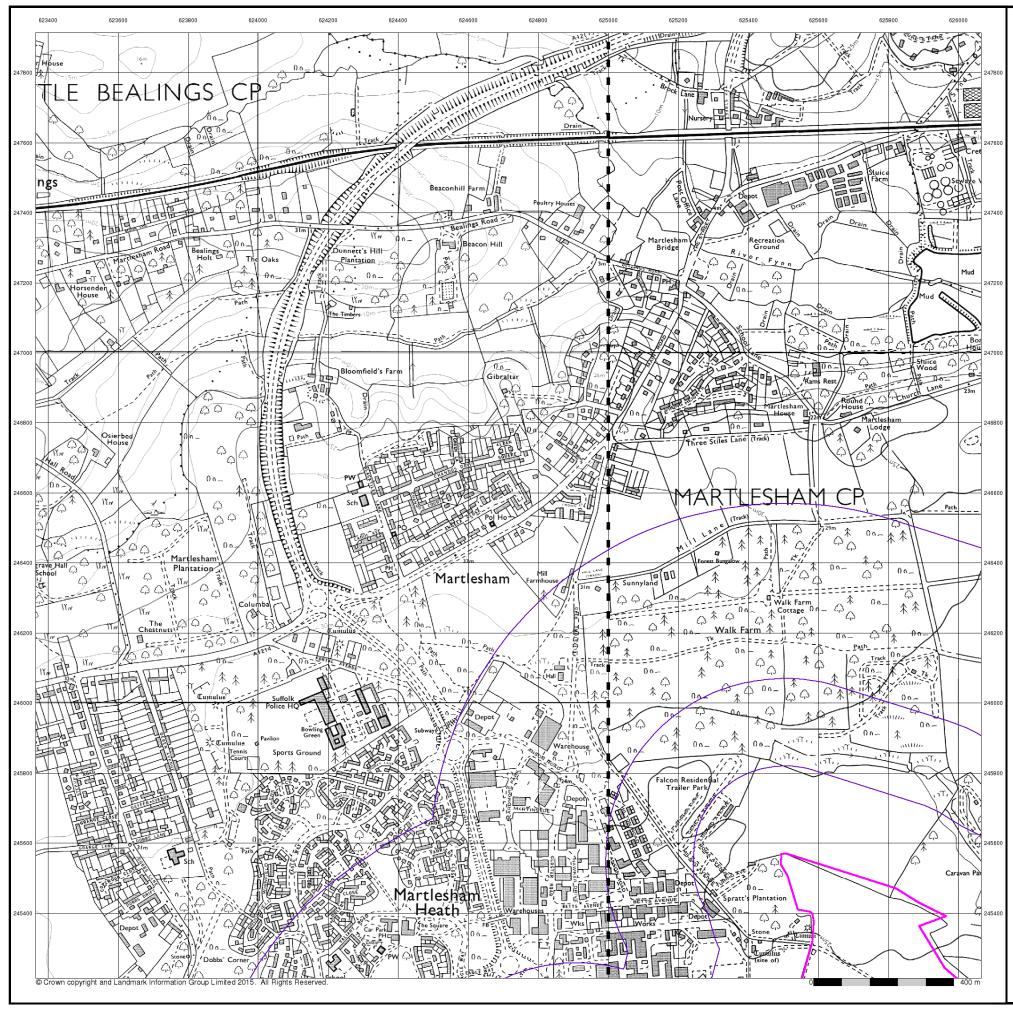
Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625020, 244270
Slice: A
Site Area (Ha): 96.03
Search Buffer (m): 1000

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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Consulting

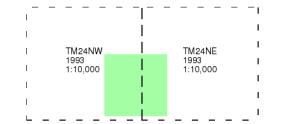
### Ordnance Survey Plan

#### **Published 1993**

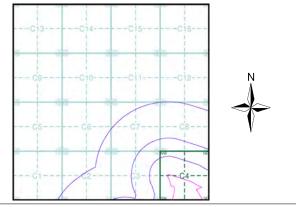
#### Source map scale - 1:10,000

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 1:10,560 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 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 C**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625260, 245800
Slice: C

Site Area (Ha): 96.03 Search Buffer (m): 1000

Dita Datalla

#### **Site Details**

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### **Historical Mapping Legends**

#### **Ordnance Survey County Series 1:10,560** Other Gravel Pits Orchard Quarry Osiers Mixed Wood Brushwood Deciduous Furze Rough Pasture Arrow denotes Trigonometrical flow of water Site of Antiquities Bench Mark Pump, Guide Post, Well, Spring, Signal Post **Boundary Post** XX .285 Surface Level Sketched Instrumental Contour Contour Fenced Fenced Minor Roads Un-Fenced Sunken Road Raised Road Railway o∨er Road over River Railway Railway over Level Crossing Road Road over Road over River or Canal Stream Road over Stream County Boundary (Geographical) County & Civil Parish Boundary Administrative County & Civil Parish Boundary Ch County Borough Boundary (England) Co. Boro. Bdy. F E Sta FB County Burgh Boundary (Scotland) Fn Co. Burgh Bdy GP Rural District Boundary R.D. Bdy. Civil Parish Boundary

#### Ordnance Survey Plan 1:10,000 Chalk Pit, Clay Pit Gravel Pit or Quarry Disused Pit Sand Pit or Quarry Refuse or Lake, Loch Slag Heap or Pond Dunes Boulders Coniferous Non-Coniferous $A \triangle A$ Trees Trees Orchard ∩o\_ Scrub M/I Coppice Rough Bracken WILL Heath Grassland سين Marsh √√V// Reeds →<u>1</u> Saltings Direction of Flow of Water Building Glasshouse Electricity Transmission Sloping Masonry Pole Standard Gauge Multiple Track Standard Gauge Level Road / Over Crossing Siding, Tramway or Mineral Line Narrow Gauge Geographical County Administrative County, County Borough or County of City Municipal Borough, Urban or Rural District, **Burgh or District Council** Borough, Burgh or County Constituency Civil Parish BP. BS Boundary Post or Stone Pol Sta Police Station Church PO Post Office Club House PC Public Convenience РΗ Fire Engine Station SB Signal Box Foot Bridge Spr Fountain Spring Guide Post TCB Telephone Call Box

Telephone Call Post

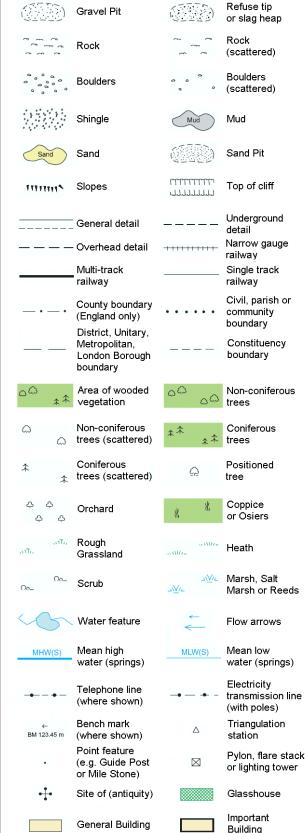
TCP

W

Mile Post

Mile Stone

#### 1:10,000 Raster Mapping



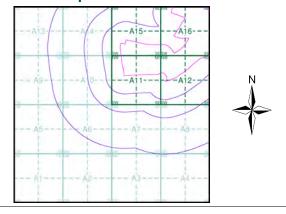
## **Brookbanks**

### Consulting

#### Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Suffolk	1:10,560	1884 - 1886	3
Suffolk	1:10,560	1904 - 1905	4
Suffolk	1:10,560	1927 - 1928	5
Suffolk	1:10,560	1938	- 6
Ordnance Survey Plan	1:10,000	1957 - 1958	7
Ordnance Survey Plan	1:10,000	1971 - 1975	E
Ordnance Survey Plan	1:10,000	1980 - 1988	
Ordnance Survey Plan	1:10,000	1983	10
Ipswich	1:10,000	1984	11
Ordnance Survey Plan	1:10,000	1993	12
10K Raster Mapping	1:10,000	2000	13
10K Raster Mapping	1:10,000	2006	14
VectorMap Local	1:10,000	2016	15

#### **Historical Map - Slice A**



#### **Order Details**

Order Number: 97754875 1 1 10391 Adastral Park Customer Ref: National Grid Reference: 625020, 244270 Slice: 96.03 Site Area (Ha):

Search Buffer (m): 1000

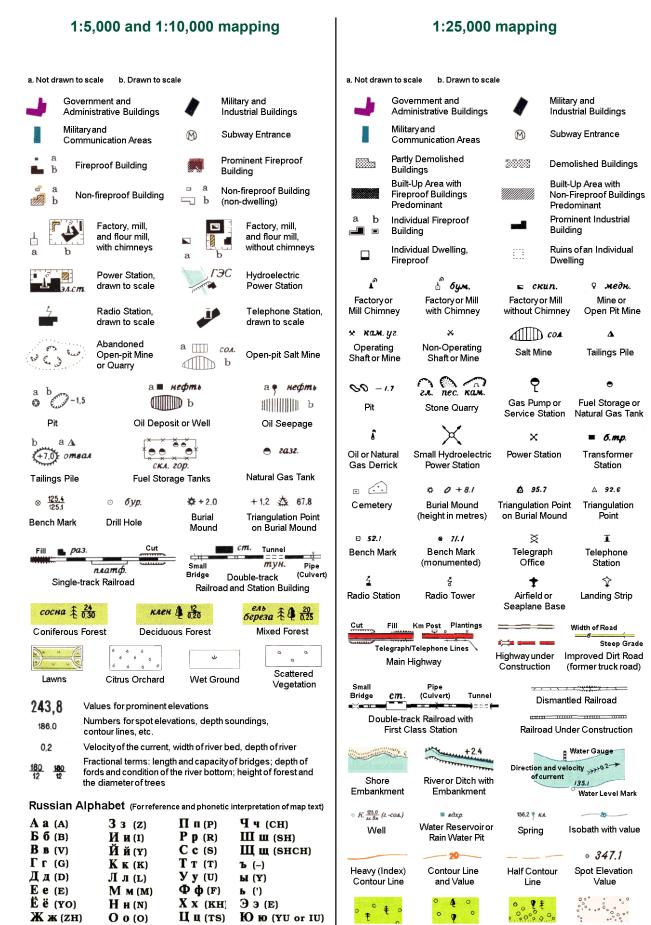
#### Site Details

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



0844 844 9952

### **Russian Military Mapping Legends**



A (YA or IA)

Coniferous

Deciduous

Mixed

Scrub

**Key to Numbers on Mapping** 

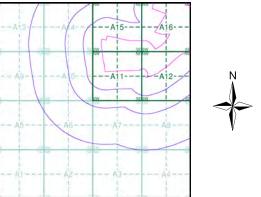
## **Brookbanks**

Consulting

#### **Historical Mapping & Photography included:**

Mapping Type	Scale	Date	Pg
Suffolk	1:10,560	1884 - 1886	- 3
Suffolk	1:10,560	1904 - 1905	4
Suffolk	1:10,560	1927 - 1928	
Suffolk	1:10,560	1938	- 6
Ordnance Survey Plan	1:10,000	1957 - 1958	7
Ordnance Survey Plan	1:10,000	1971 - 1975	1
Ordnance Survey Plan	1:10,000	1980 - 1988	,
Ordnance Survey Plan	1:10,000	1983	10
Ipswich	1:10,000	1984	1
Ordnance Survey Plan	1:10,000	1993	12
10K Raster Mapping	1:10,000	2000	1:
10K Raster Mapping	1:10,000	2006	14
VectorMap Local	1:10,000	2016	1:

#### Russian Map - Slice A



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625020, 244270
Slice: A

Site Area (Ha): 96.03 Search Buffer (m): 1000

#### **Site Details**

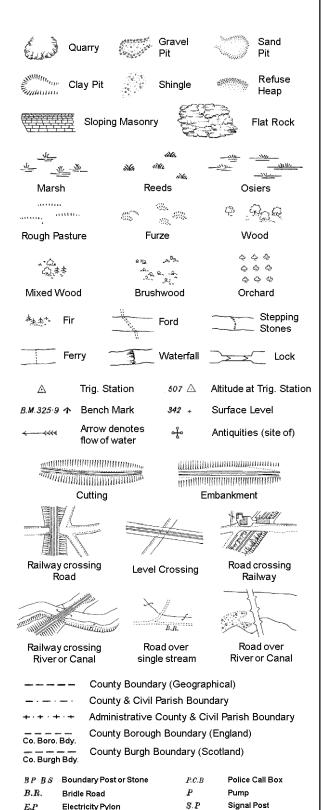
Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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## **Historical Mapping Legends**

#### **Ordnance Survey County Series and** Ordnance Survey Plan 1:2,500



Foot Bridge

Guide Post or Board

Foot Path

Mile Stone

M.P M.R Mooring Post or Ring

F.B.

F.P.

G.P

M.S

Sl

T.C.B

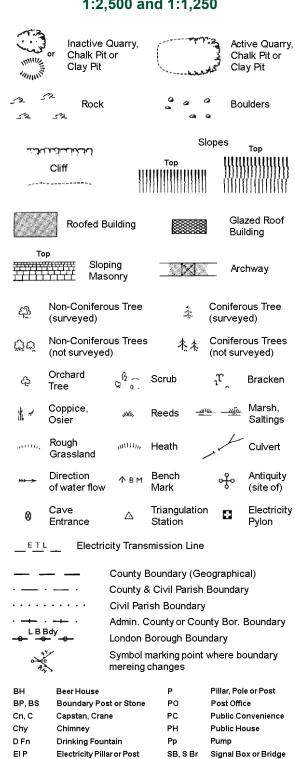
Tr.

Spring

Trough

Telephone Call Box

Ordnance Survey Plan, Additional SIMs and Large-Scale National Grid Data 1:2,500 and **Supply of Unpublished Survey Information** 1:2,500 and 1:1,250



Fire Alarm Pilla

Hydrant or Hydraulic

Normal Tidal Limit

Mile Post or Mooring Post

Foot Bridge

Guide Post

Level Crossing

Manhole

Mile Stone

FB

LC

MP

NTL

SP, SL

Spr

TCB

TCP

Wr Pt, Wr 7

Wd Pp

Signal Post or Light

Telephone Call Box

Telephone Call Post

Water Point, Water Tap

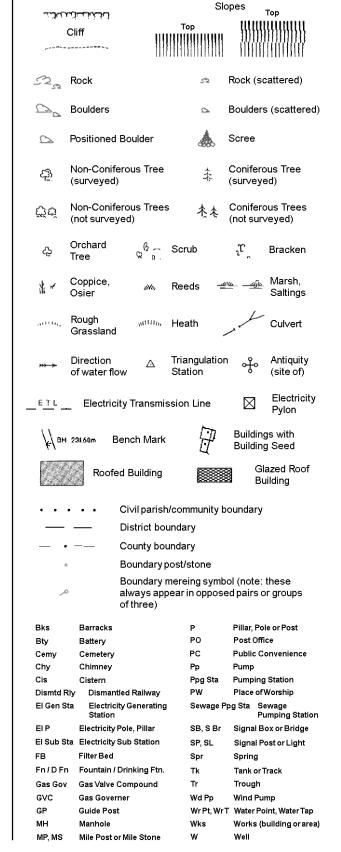
Spring

Trough

Wind Pump

Tank or Track

1:1,250



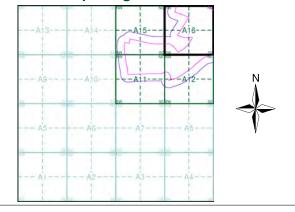
## **Brookbanks**

Consulting

#### **Historical Mapping & Photography included:**

		_
Scale	Date	Pg
1:2,500	1881	2
1:2,500	1904	3
1:2,500	1927	4
1:2,500	1965	5
1:1,250	1979 - 1980	6
1:1,250	1983	7
1:2,500	1986	8
1:1,250	1986	9
1:1,250	1991	10
1:1,250	1994	11
1:2,500	1994	12
1:2,500	1996	13
1:1,250	1996	14
1:2,500	1999	15
	1:2,500 1:2,500 1:2,500 1:2,500 1:1,250 1:1,250 1:1,250 1:2,500 1:1,250 1:1,250 1:1,250 1:2,500 1:2,500 1:2,500	1:2,500 1881 1:2,500 1904 1:2,500 1927 1:2,500 1965 1:1,250 1979 - 1980 1:1,250 1983 1:2,500 1986 1:1,250 1986 1:1,250 1991 1:1,250 1994 1:2,500 1996 1:1,250 1996

#### **Historical Map - Segment A16**



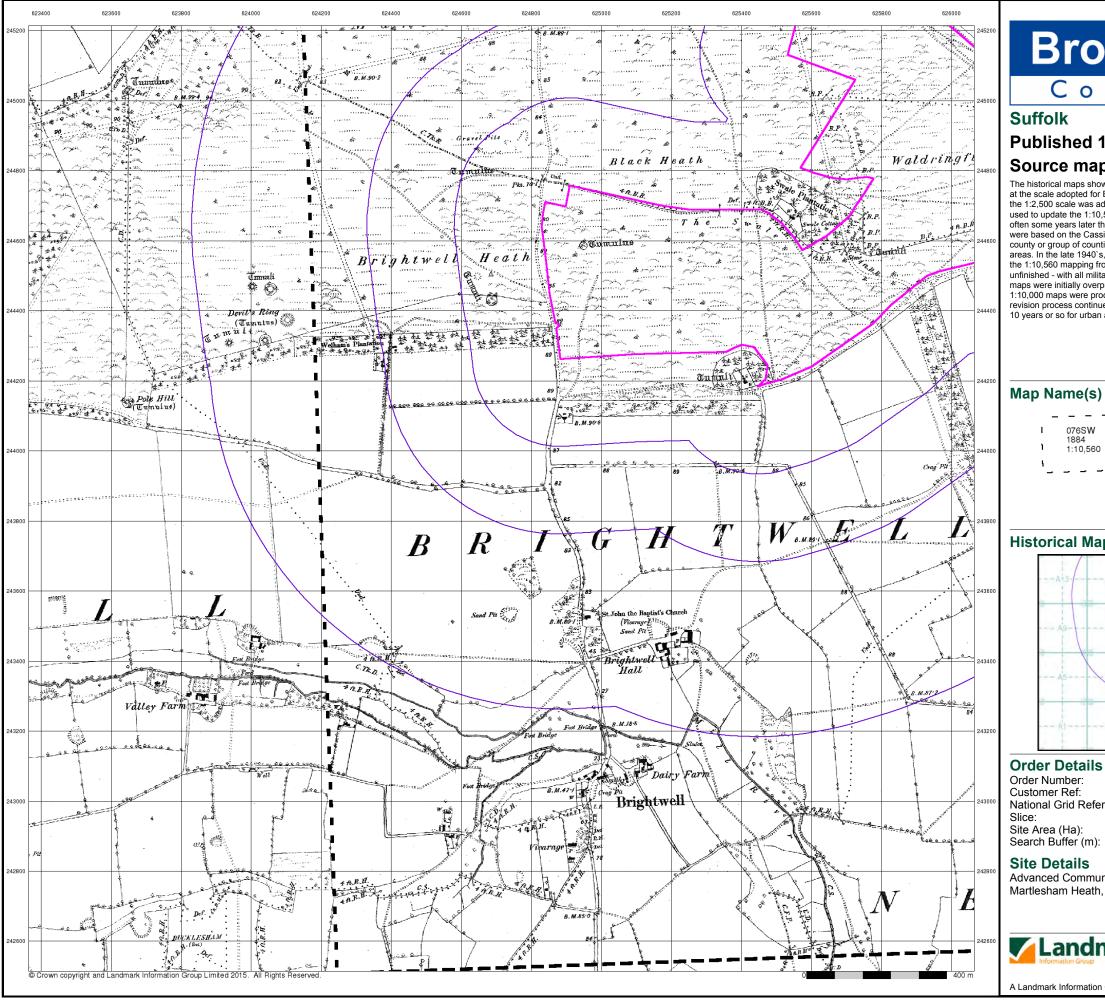
#### **Order Details**

Order Number: 97754875\_1\_1 Customer Ref: 10391 Adastral Park National Grid Reference: 625020, 244270 Slice: 96.03 Site Area (Ha): Search Buffer (m):

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



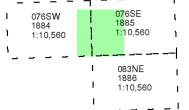


Consulting

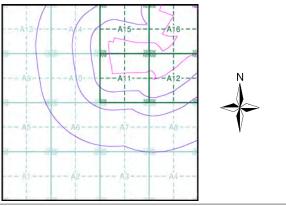
### Published 1884 - 1886 Source map scale - 1:10,560

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 1:10,560 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 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**



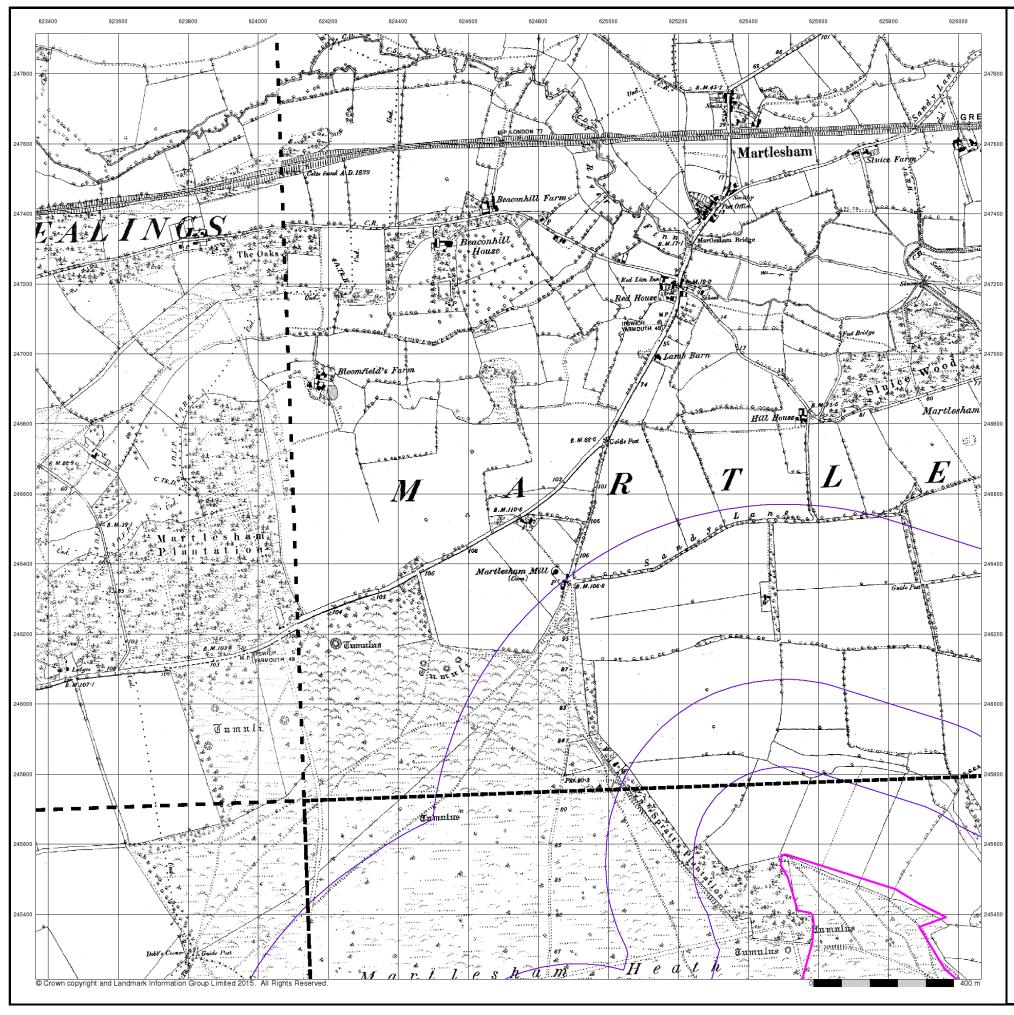
97754875\_1\_1 10391 Adastral Park National Grid Reference: 625020, 244270 96.03

1000

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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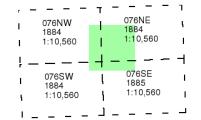
Consulting

#### Suffolk

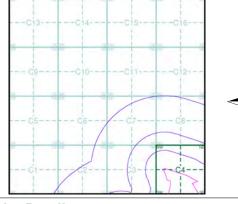
## **Published 1884 - 1885 Source map scale - 1:10,560**

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 1:10,560 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 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 C**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625260, 245800
Slice: C
Site Area (Ha): 96.03

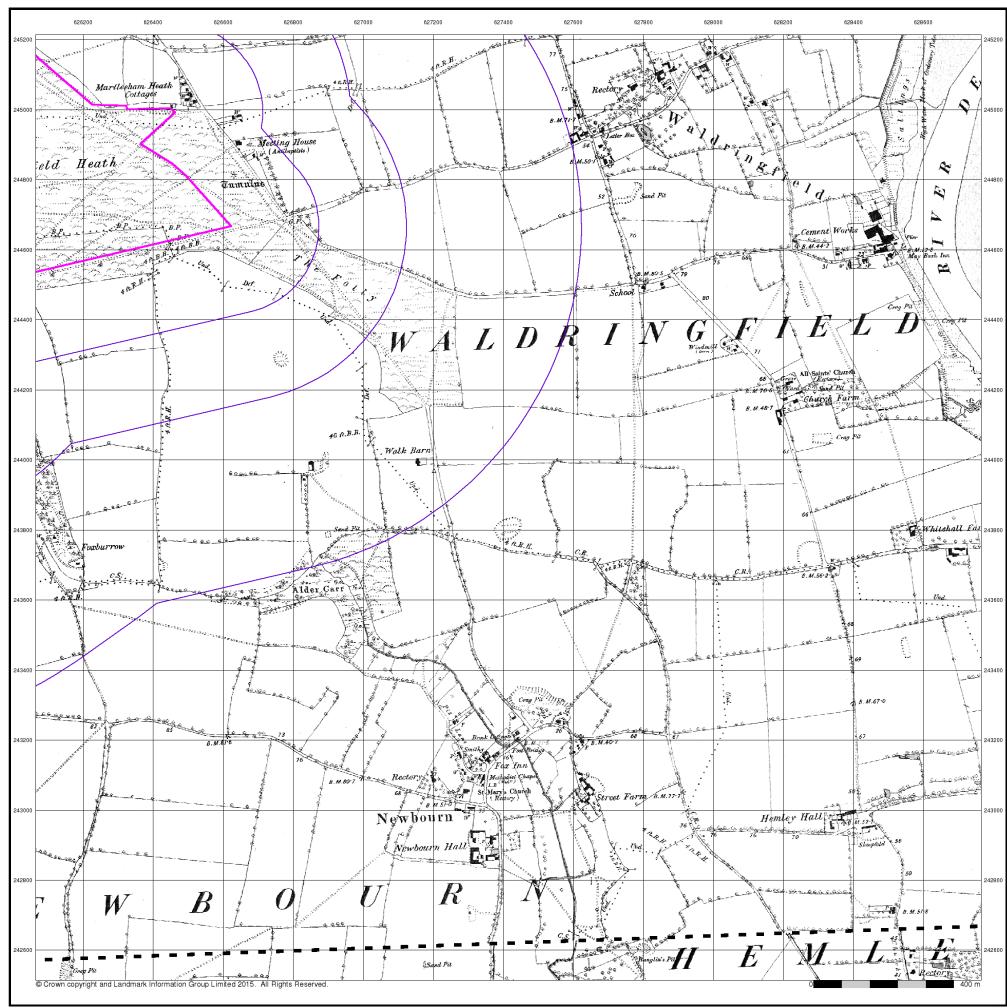
Site Area (Ha): 96.03 Search Buffer (m): 1000

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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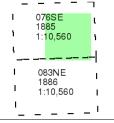
Consulting

#### Suffolk

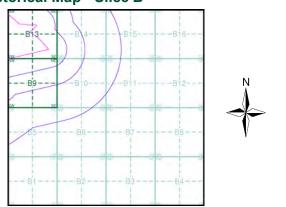
### Published 1885 - 1886 Source map scale - 1:10,560

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 1:10,560 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 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 B**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 626760, 244450
Slice: B
Site Area (Ha): 96.03

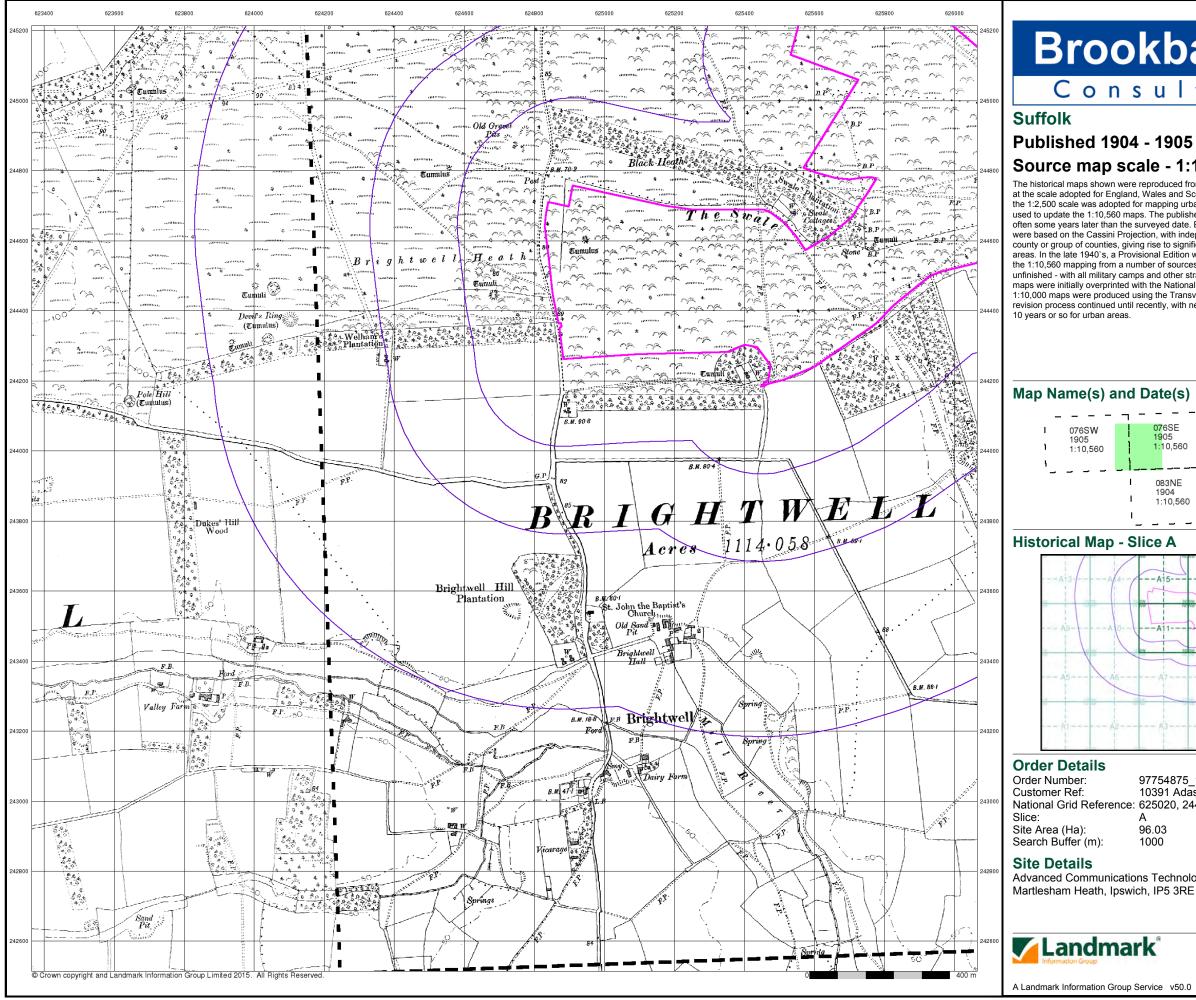
Site Area (Ha): 96.03 Search Buffer (m): 1000

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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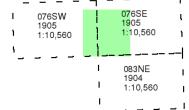


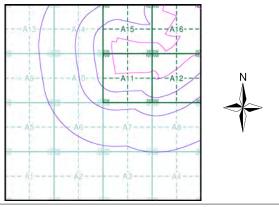
Consulting

### **Published 1904 - 1905** 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 1:10,560 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 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

#### Map Name(s) and Date(s)



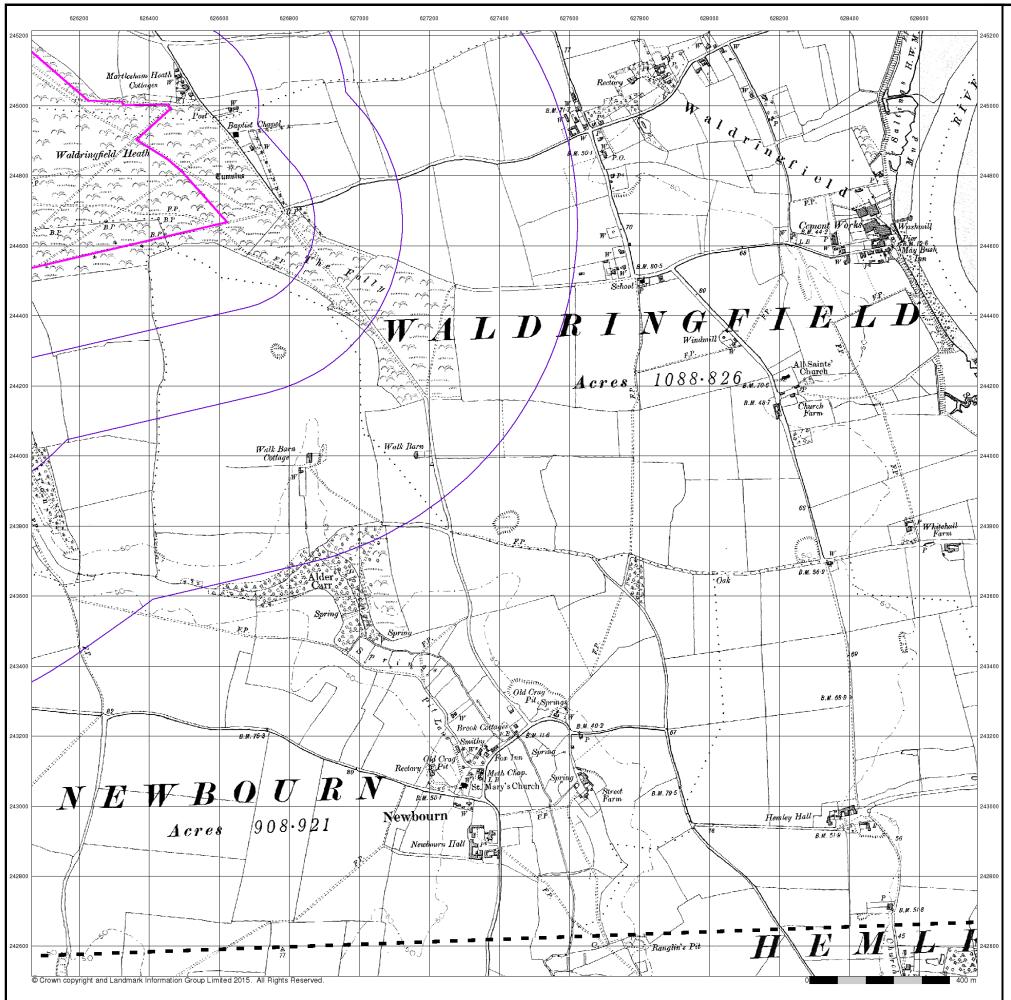


97754875\_1\_1 10391 Adastral Park National Grid Reference: 625020, 244270 96.03

Advanced Communications Technology Centre, Adastral Park,



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Consulting

#### Suffolk

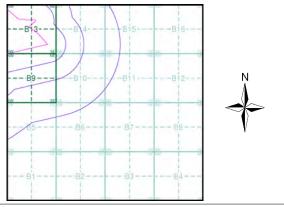
### Published 1904 - 1905 Source map scale - 1:10,560

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 1:10,560 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 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 B**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 626760, 244450
Slice: B
Site Assa (Ha): 06 03

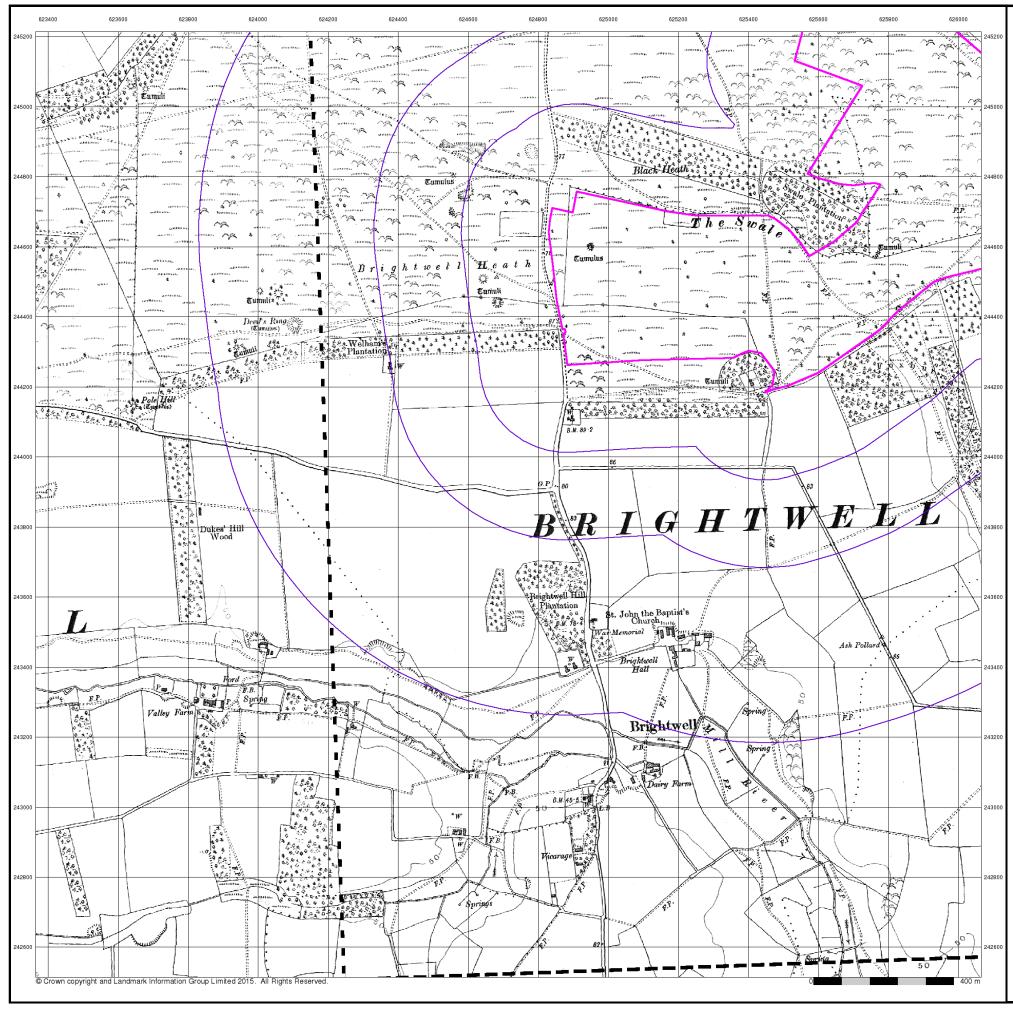
Site Area (Ha): 96.03 Search Buffer (m): 1000

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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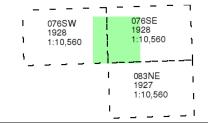
Consulting

#### Suffolk

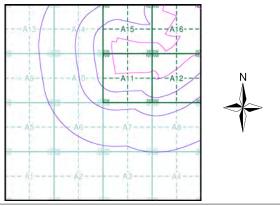
## **Published 1927 - 1928 Source map scale - 1:10,560**

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 1:10,560 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 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**

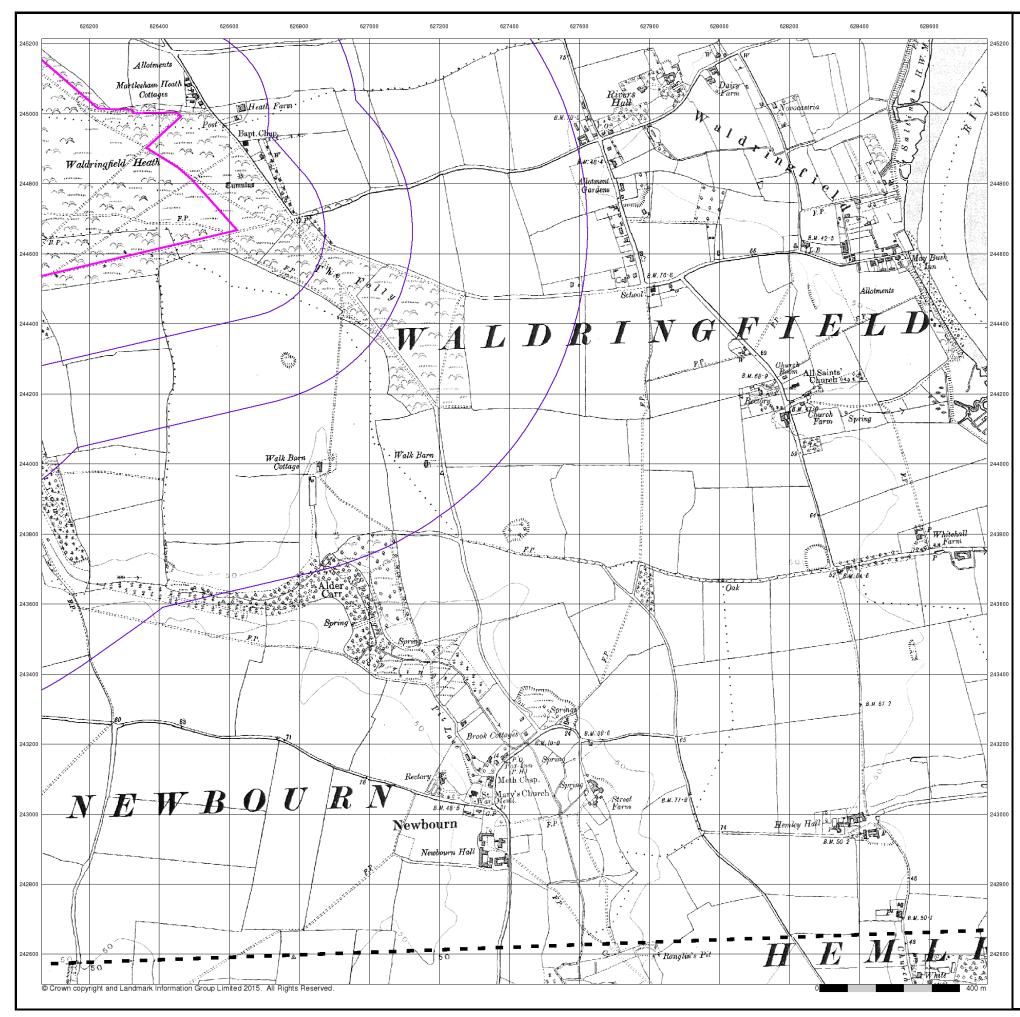
Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625020, 244270
Slice: A
Site Area (Ha): 96.03
Search Buffer (m): 1000

## Search Buffer (m): Site Details

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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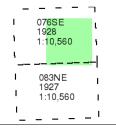
Consulting

#### Suffolk

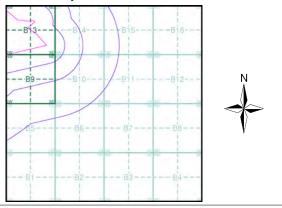
### **Published 1927 - 1928** Source map scale - 1:10,560

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 1:10,560 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 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 B**



#### **Order Details**

97754875\_1\_1 Order Number: 10391 Adastral Park Customer Ref: National Grid Reference: 626760, 244450 Slice: Site Area (Ha): 96.03

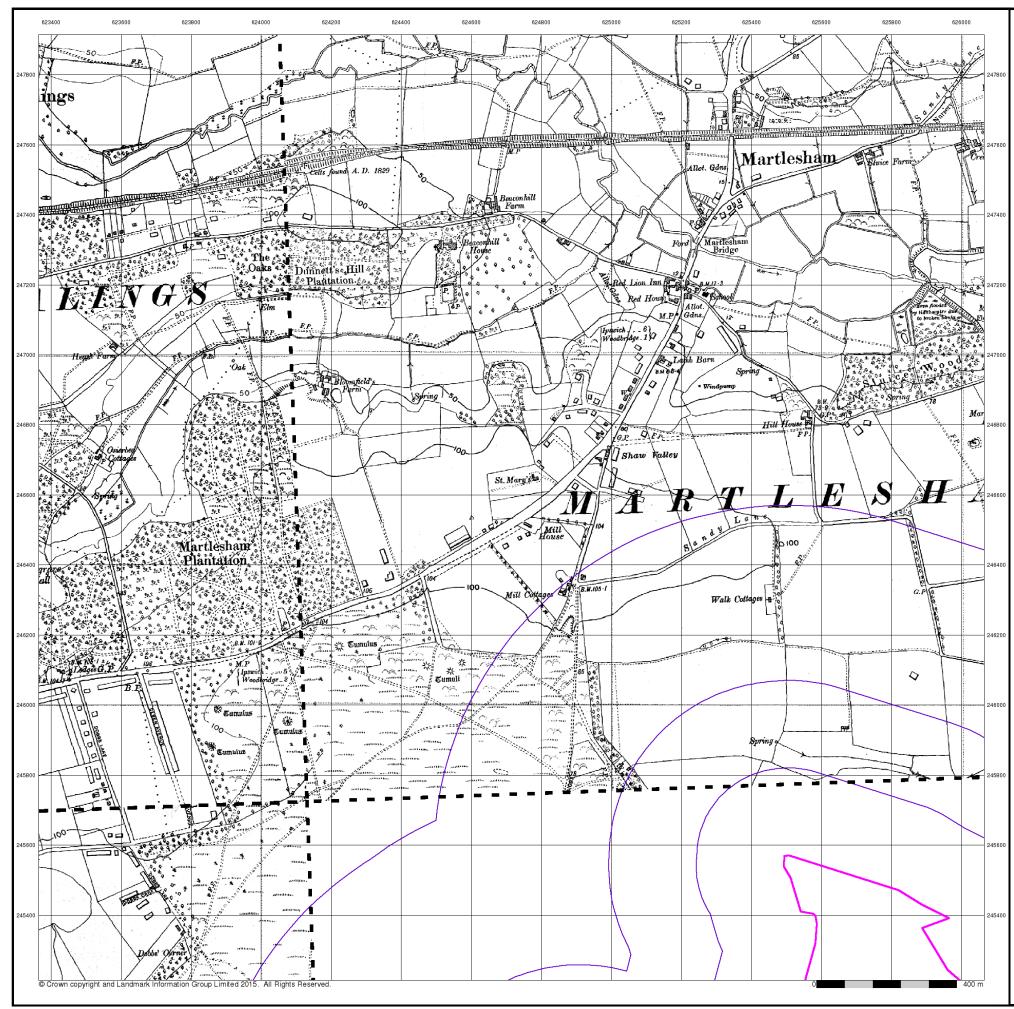
Search Buffer (m): 1000

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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Consulting

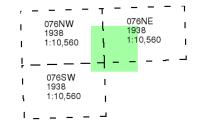
#### Suffolk

### Published 1938

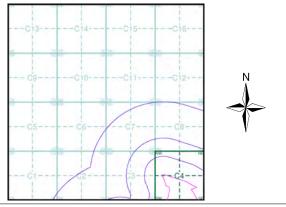
#### Source map scale - 1:10,560

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 1:10,560 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 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 C**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625260, 245800
Slice: C
Site Area (Ha): 96.03

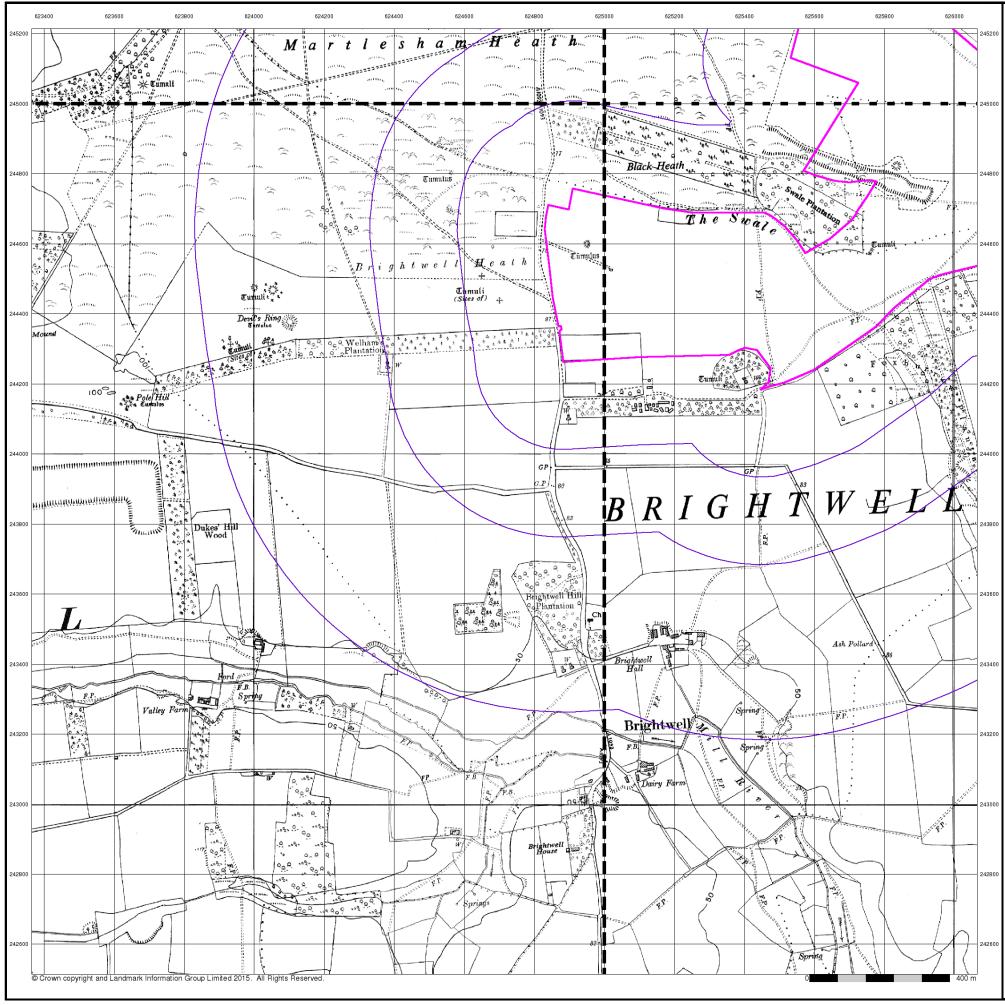
Site Area (Ha): 96.03 Search Buffer (m): 1000

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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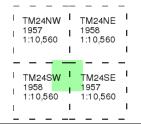


Consulting

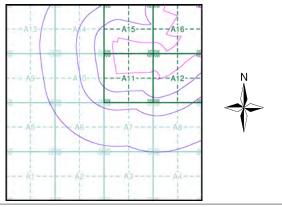
# Ordnance Survey Plan Published 1957 - 1958 Source map scale - 1:10,000

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 1:10,560 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 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: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625020, 244270
Slice: A
Site Area (Ha): 96.03

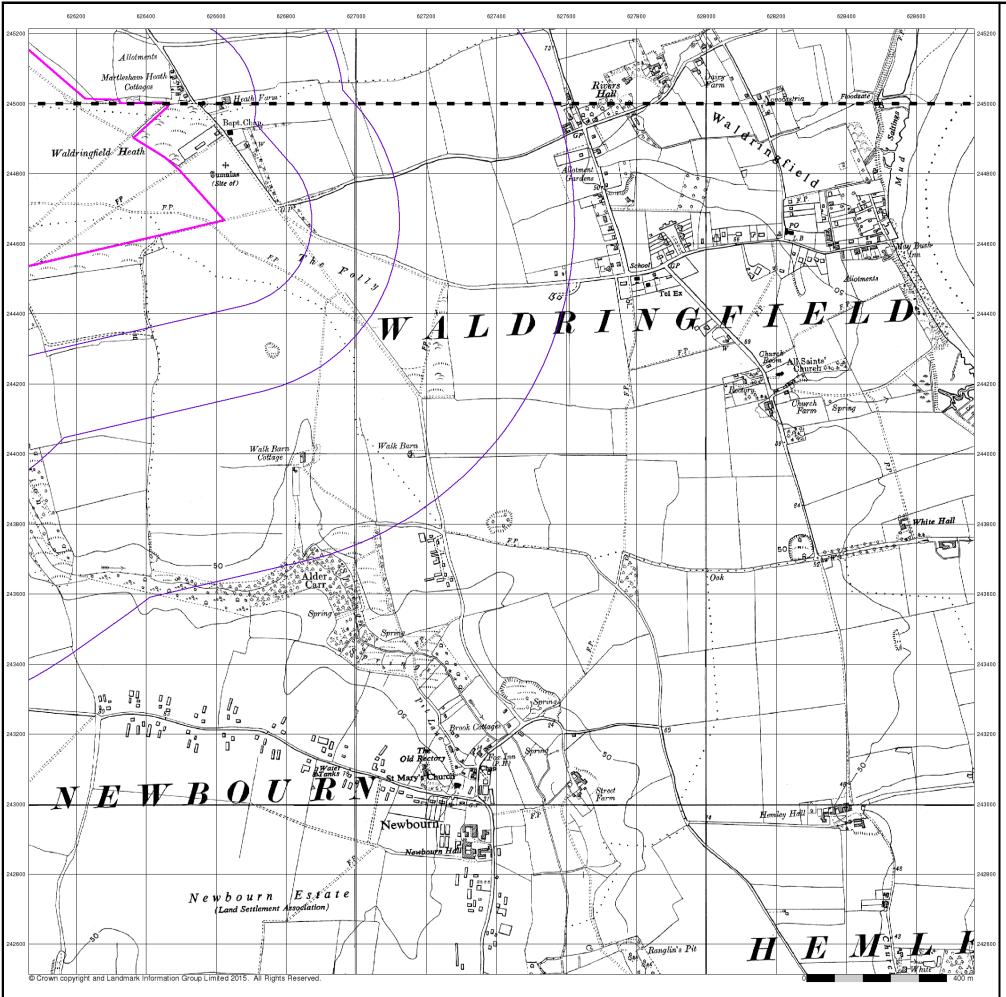
Site Area (Ha): 96.03 Search Buffer (m): 1000

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



I: 0844 844 9952 x: 0844 844 9951 eb: www.envirocheck

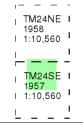


Consulting

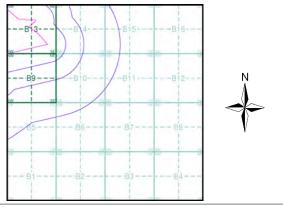
# Ordnance Survey Plan Published 1957 - 1958 Source map scale - 1:10,000

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 1:10,560 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 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 B**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 626760, 244450
Slice: B
Site Area (Ha): 96.03

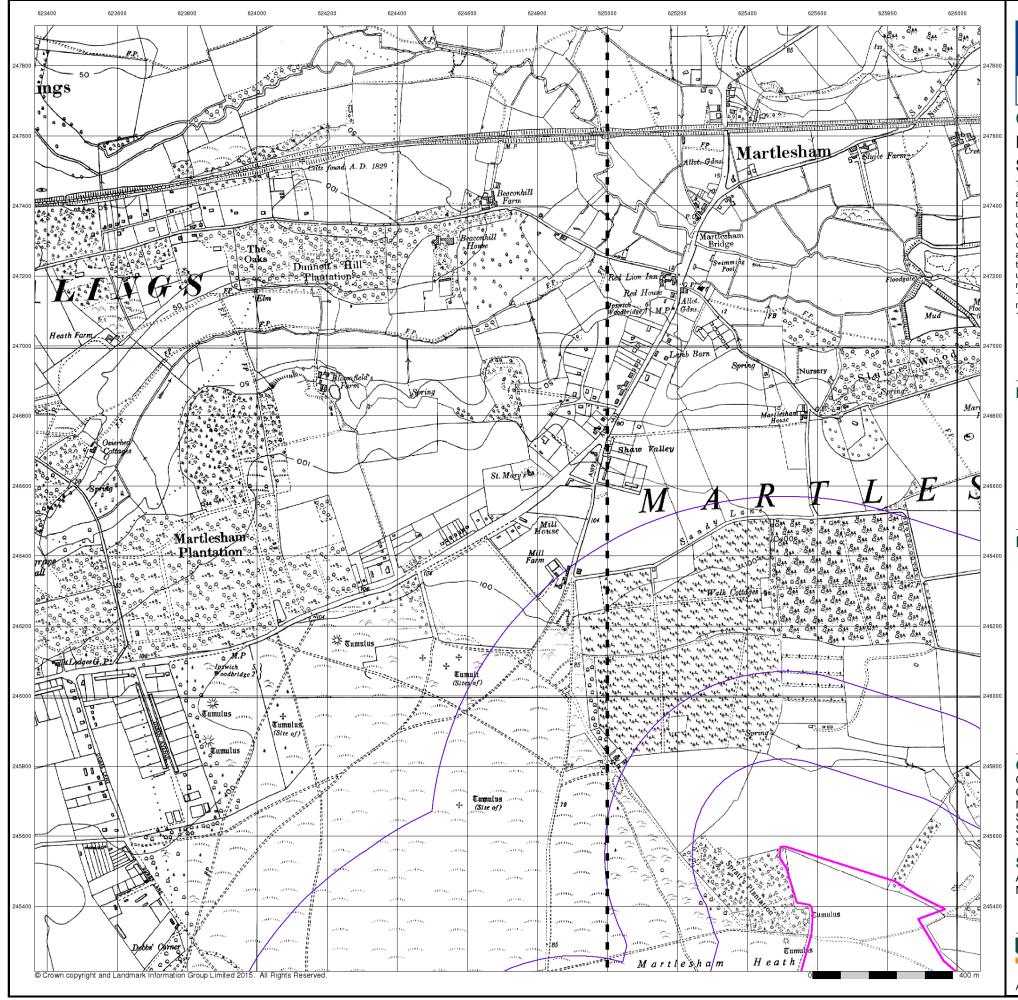
Site Area (Ha): 96.03 Search Buffer (m): 1000

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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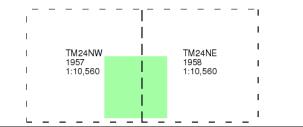


Consulting

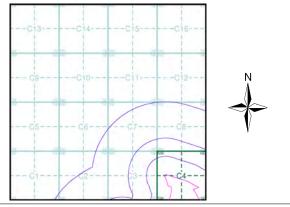
# Ordnance Survey Plan Published 1957 - 1958 Source map scale - 1:10,000

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 1:10,560 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 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 C**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625260, 245800
Slice: C
Site Area (Ha): 96.03

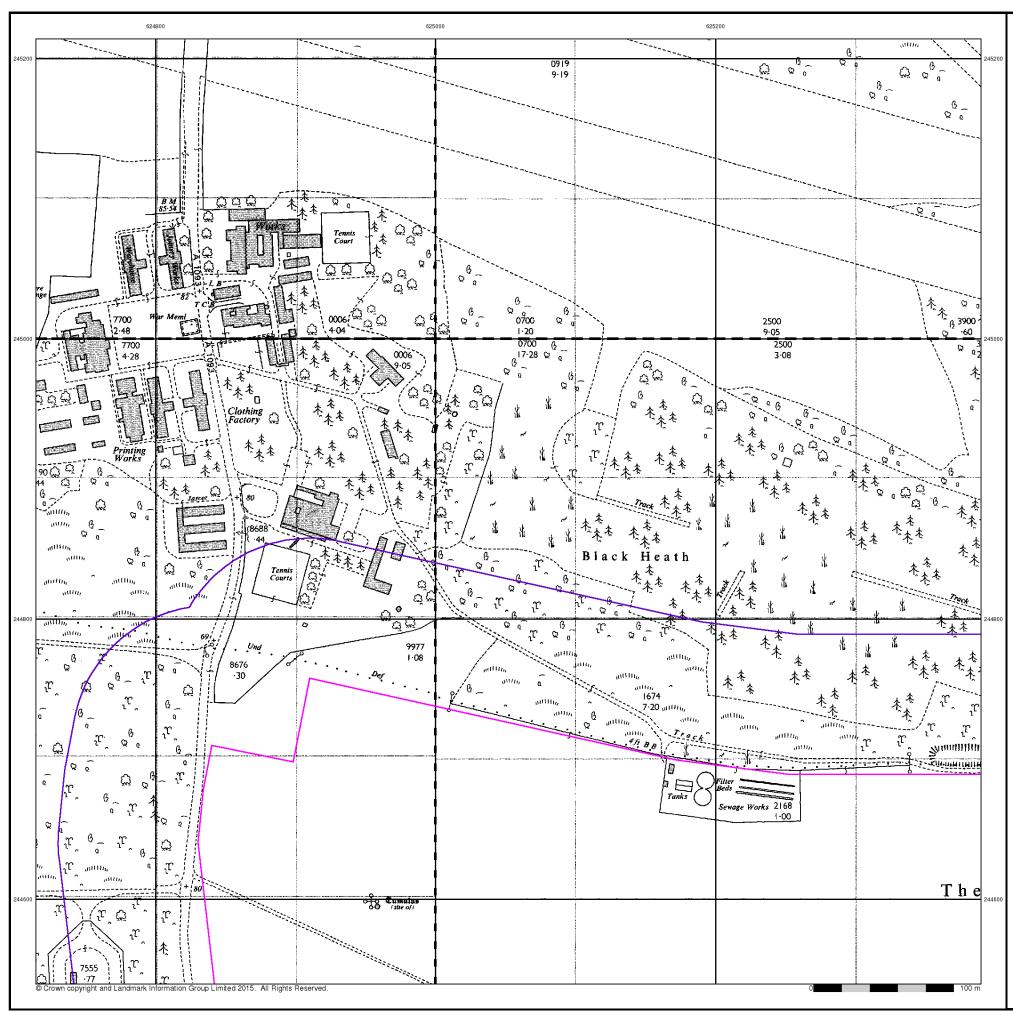
Site Area (Ha): 96.03 Search Buffer (m): 1000

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



0844 844 9952 : 0844 844 9951 b: www.envirochec



Consulting

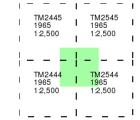
## **Ordnance Survey Plan**

#### Published 1965

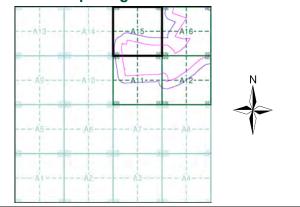
#### Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. 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 A15**



#### **Order Details**

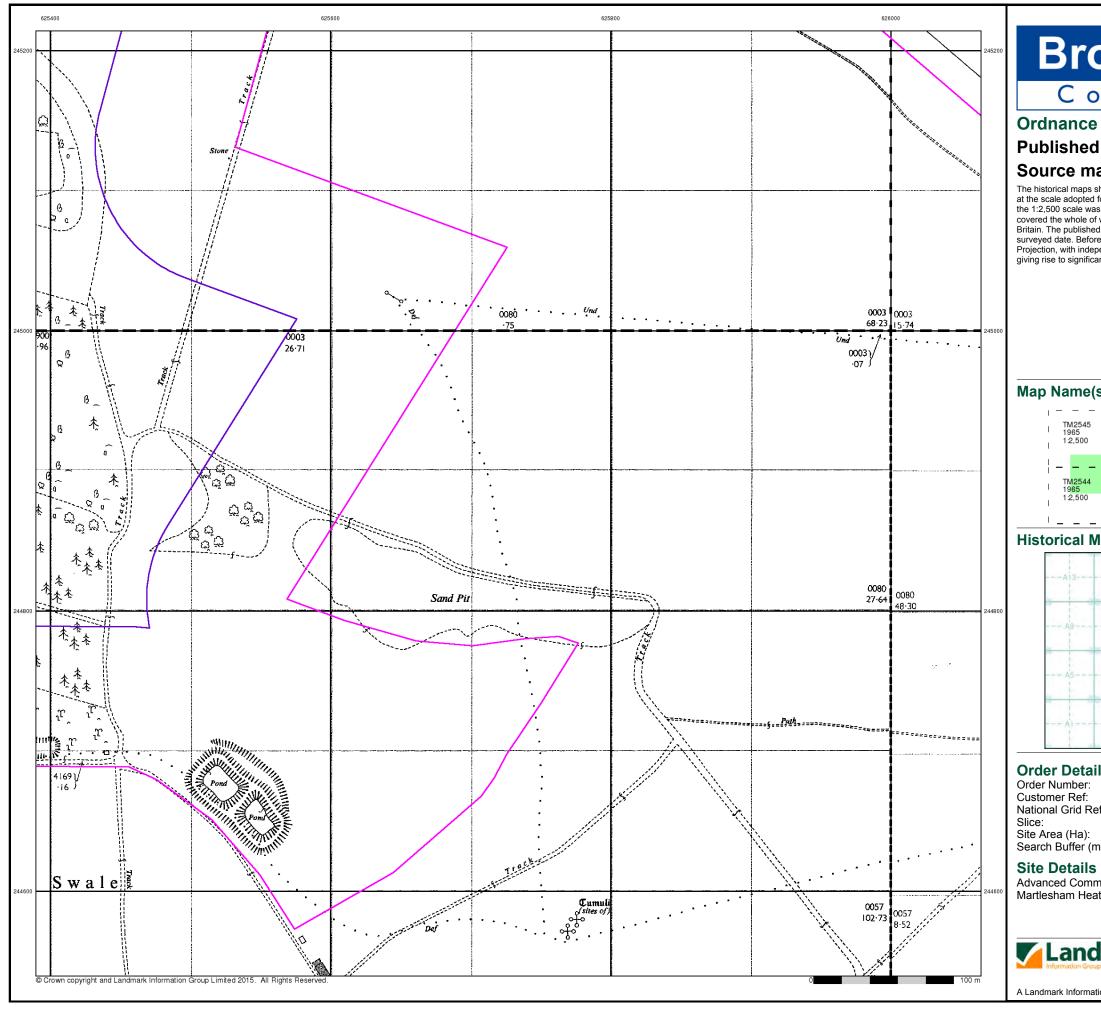
Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625020, 244270
Slice: A
Site Area (Ha): 96.03
Search Buffer (m): 100

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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Consulting

## **Ordnance Survey Plan**

#### Published 1965

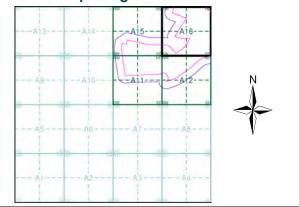
#### Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. 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 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)

1	TM2545 1965 1:2,500	TM2645 1965 1:2,500	 
			ŀ
- 1	TM2544 1965	TM2644 1965	ı
- 1	1:2,500	1:2,500	ı
- 1		1	I

#### **Historical Map - Segment A16**



#### **Order Details**

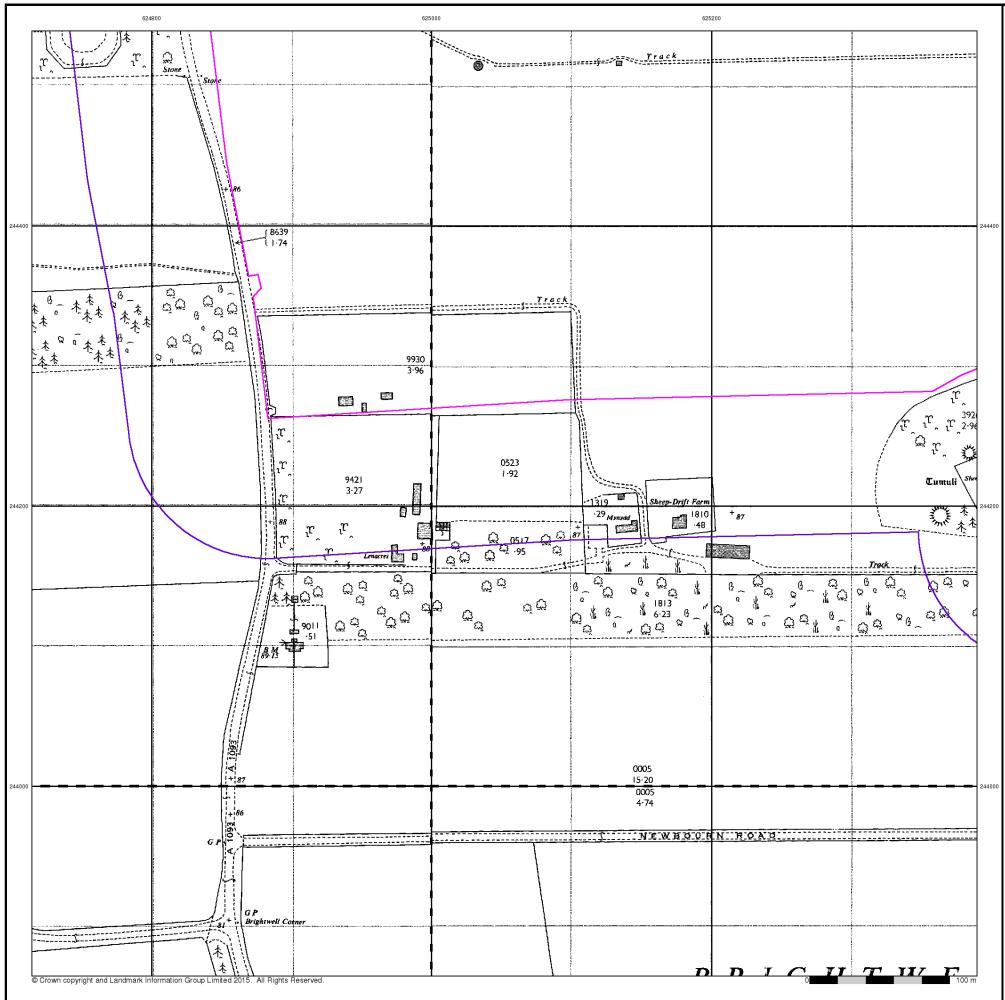
97754875\_1\_1 10391 Adastral Park Order Number: Customer Ref: National Grid Reference: 625020, 244270 Slice: A 96.03 Site Area (Ha):

### Search Buffer (m):

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## Consulting

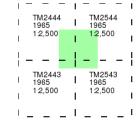
## **Ordnance Survey Plan**

#### Published 1965

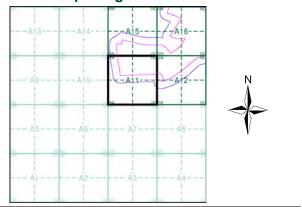
#### Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. 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 A11**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625020, 244270
Slice: A
Site Area (Ha): 96.03

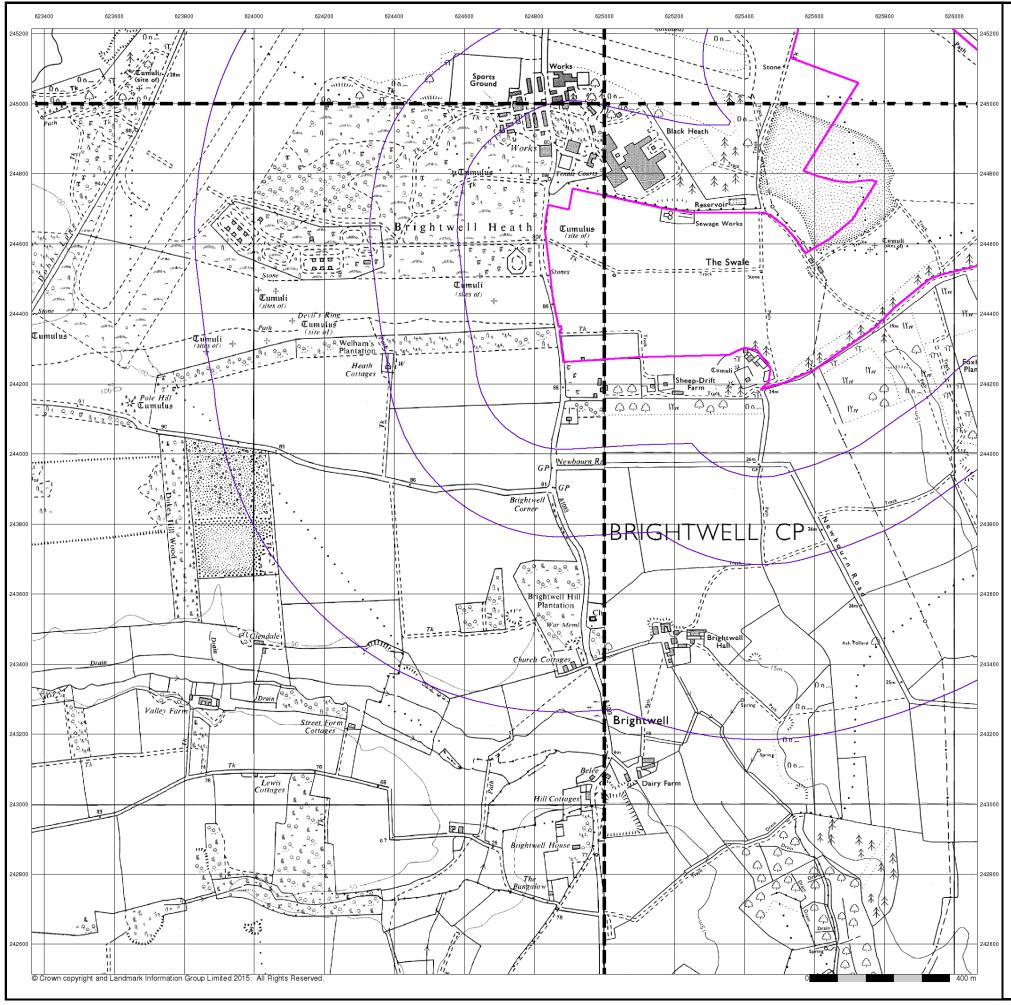
Search Buffer (m): 10

#### **Site Details**

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el: 0844 844 9952 ax: 0844 844 9951 eb: www.envirocheck.co.uk

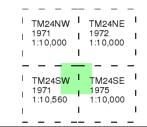


Consulting

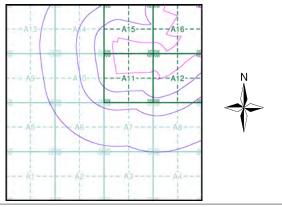
# Ordnance Survey Plan Published 1971 - 1975 Source map scale - 1:10,000

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 1:10,560 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 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**

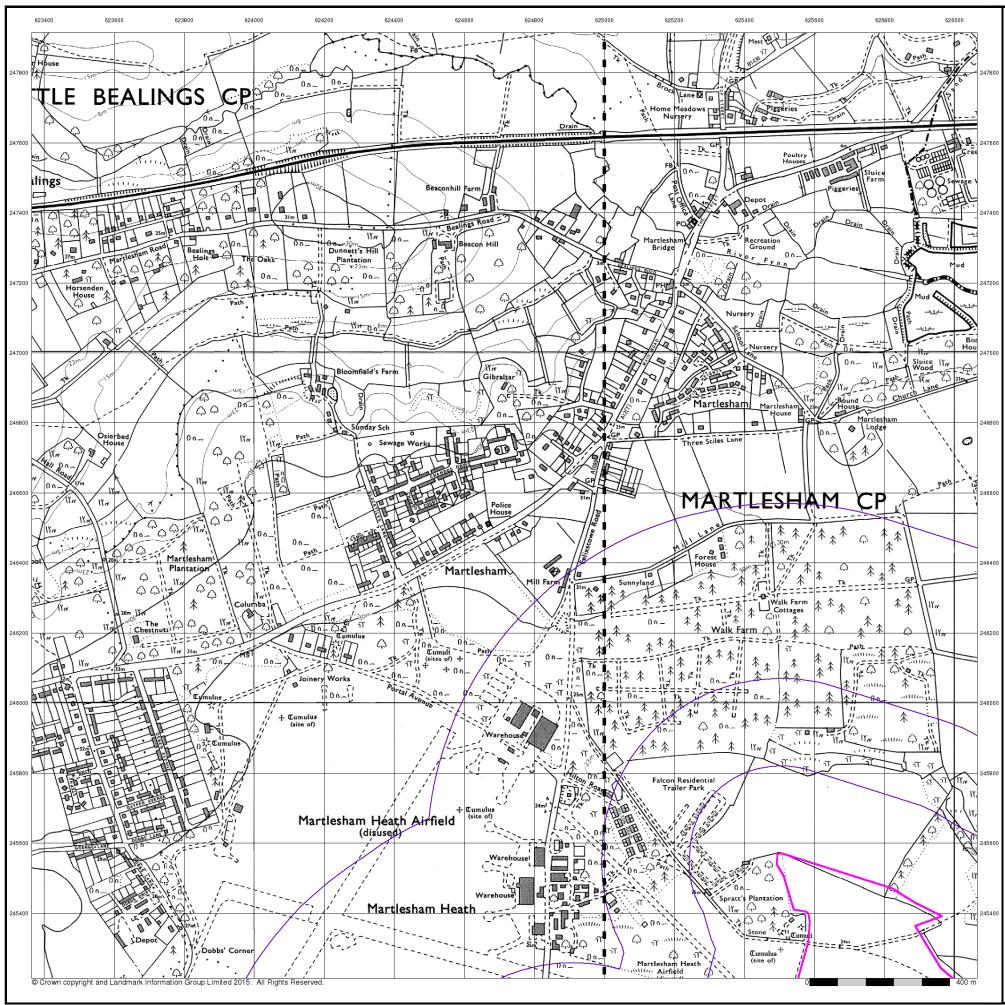
Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625020, 244270
Slice: A
Site Area (Ha): 96.03
Search Buffer (m): 1000

#### **Site Details**

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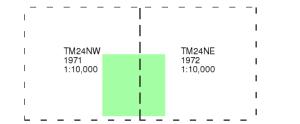


Consulting

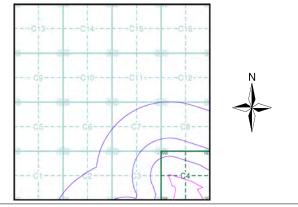
# Ordnance Survey Plan Published 1971 - 1972 Source map scale - 1:10,000

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 1:10,560 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 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 C**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625260, 245800
Slice: C
Site Area (Ha): 96.03

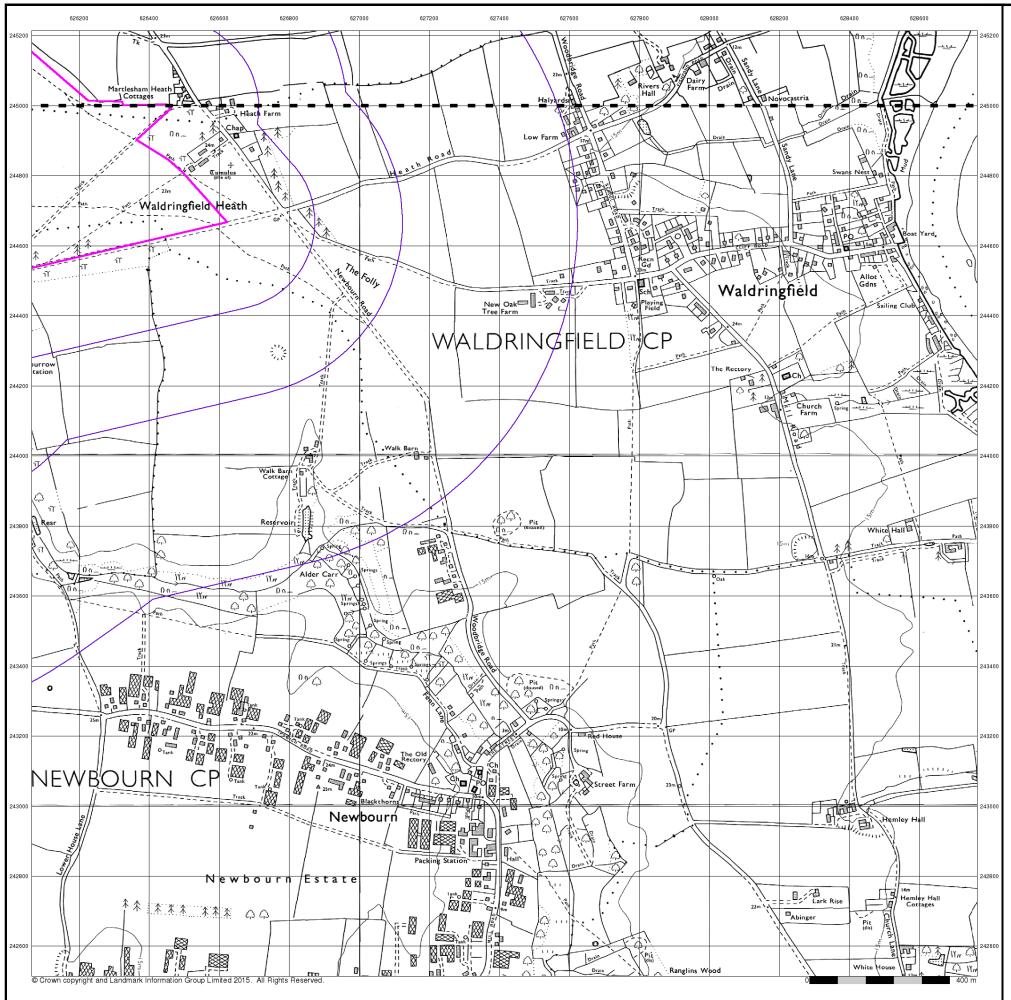
Site Area (Ha): 96.03 Search Buffer (m): 1000

#### **Site Details**

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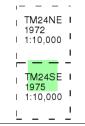


Consulting

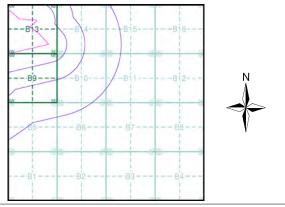
## **Ordnance Survey Plan** Published 1972 - 1975 Source map scale - 1:10,000

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 1:10,560 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 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 B**



#### **Order Details**

97754875\_1\_1 10391 Adastral Park Order Number: Customer Ref: National Grid Reference: 626760, 244450 Slice:

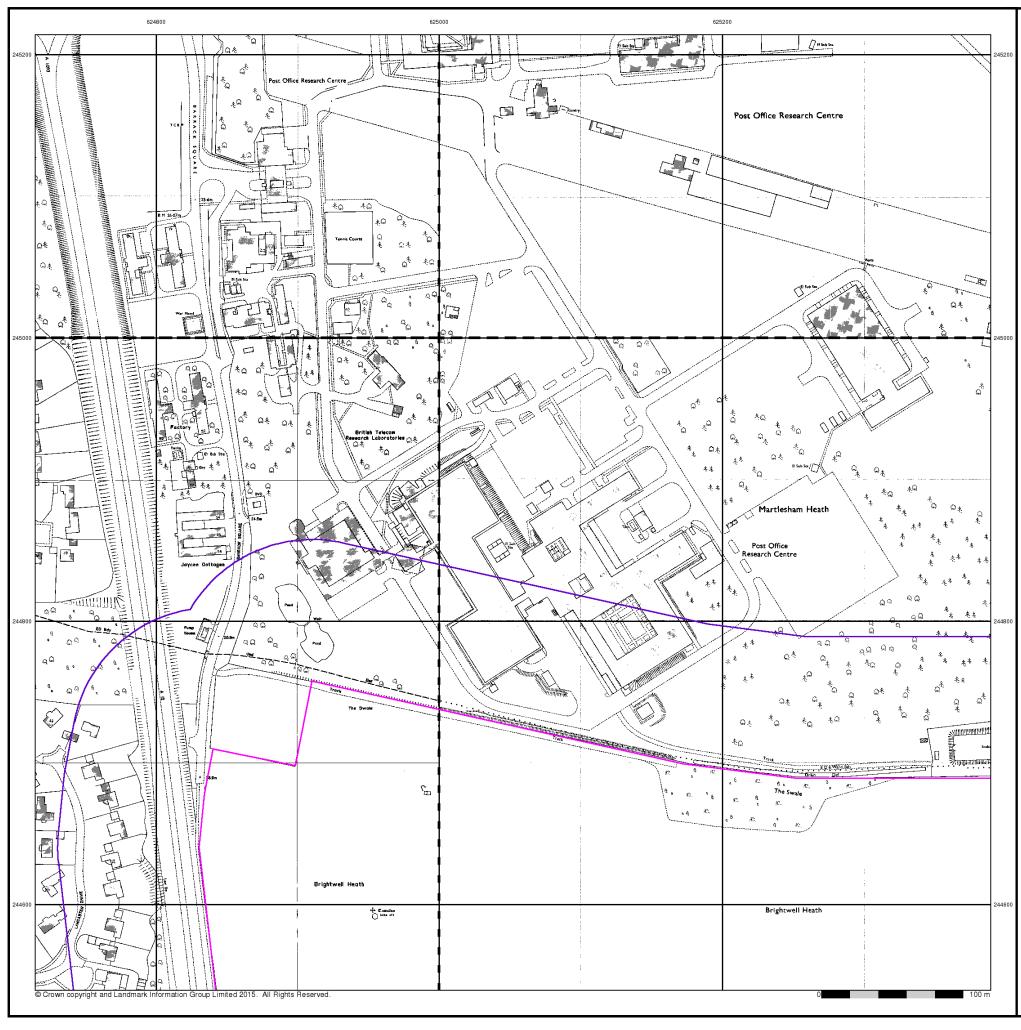
Site Area (Ha): Search Buffer (m): 96.03 1000

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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## Consulting

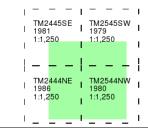
### **Ordnance Survey Plan**

#### Published 1979 - 1986

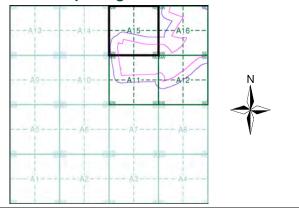
### Source map scale - 1:1,250

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 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 A15**



#### **Order Details**

97754875\_1\_1 10391 Adastral Park Order Number: Customer Ref: National Grid Reference: 625020, 244270 Site Area (Ha): 96.03

Search Buffer (m):

#### **Site Details**

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Consulting

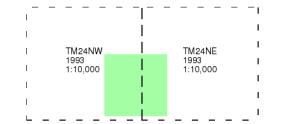
## Ordnance Survey Plan

#### **Published 1993**

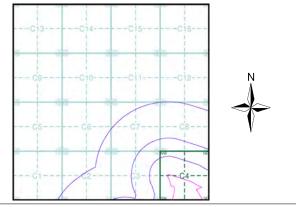
#### Source map scale - 1:10,000

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 1:10,560 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 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 C**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625260, 245800
Slice: C

Site Area (Ha): 96.03 Search Buffer (m): 1000

Dita Datalla

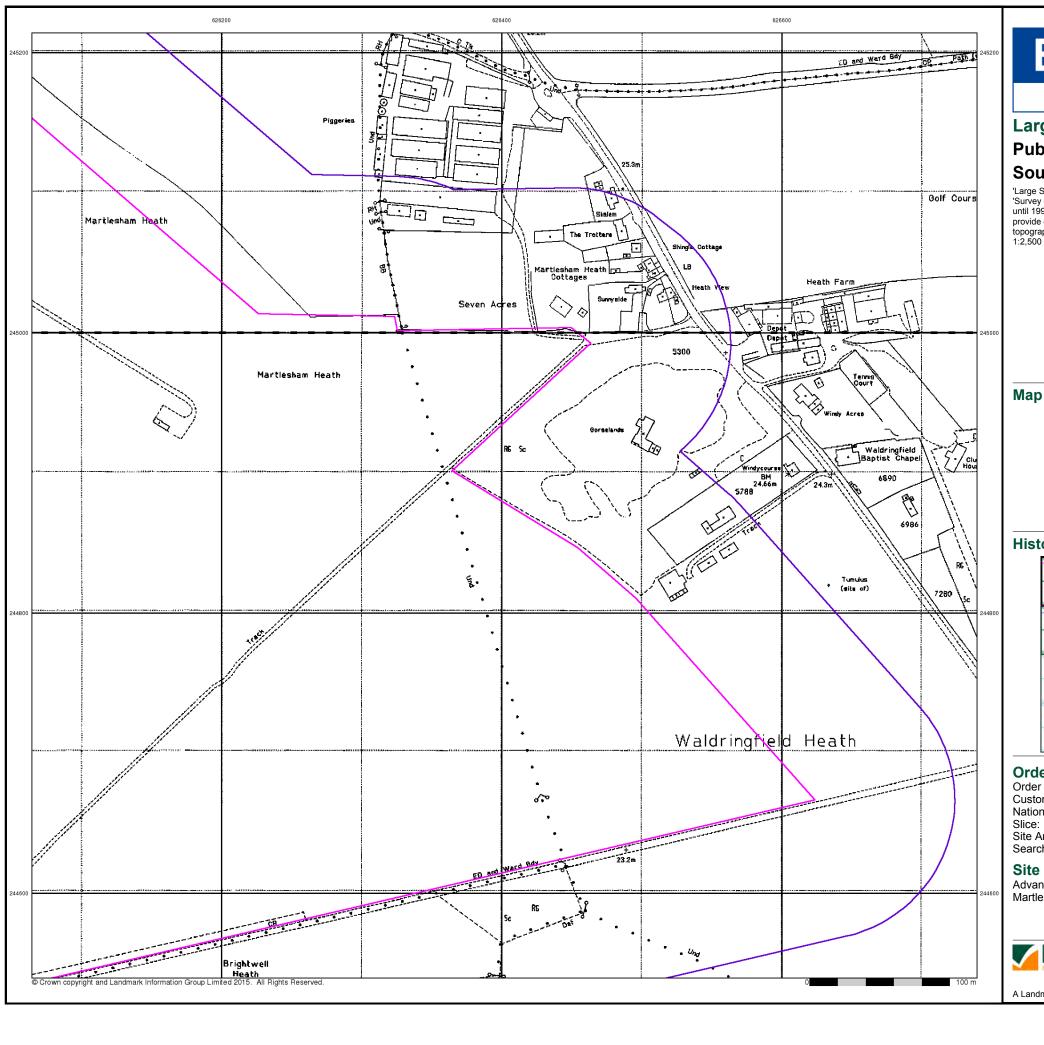
#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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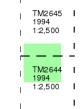
Consulting

## Large-Scale National Grid Data Published 1994

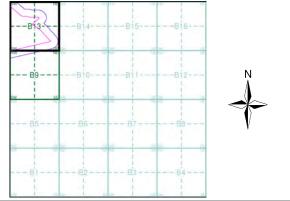
## Source map scale - 1:2,500

'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 fore-runners 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)



#### **Historical Map - Segment B13**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 626760, 244450
Slice: B

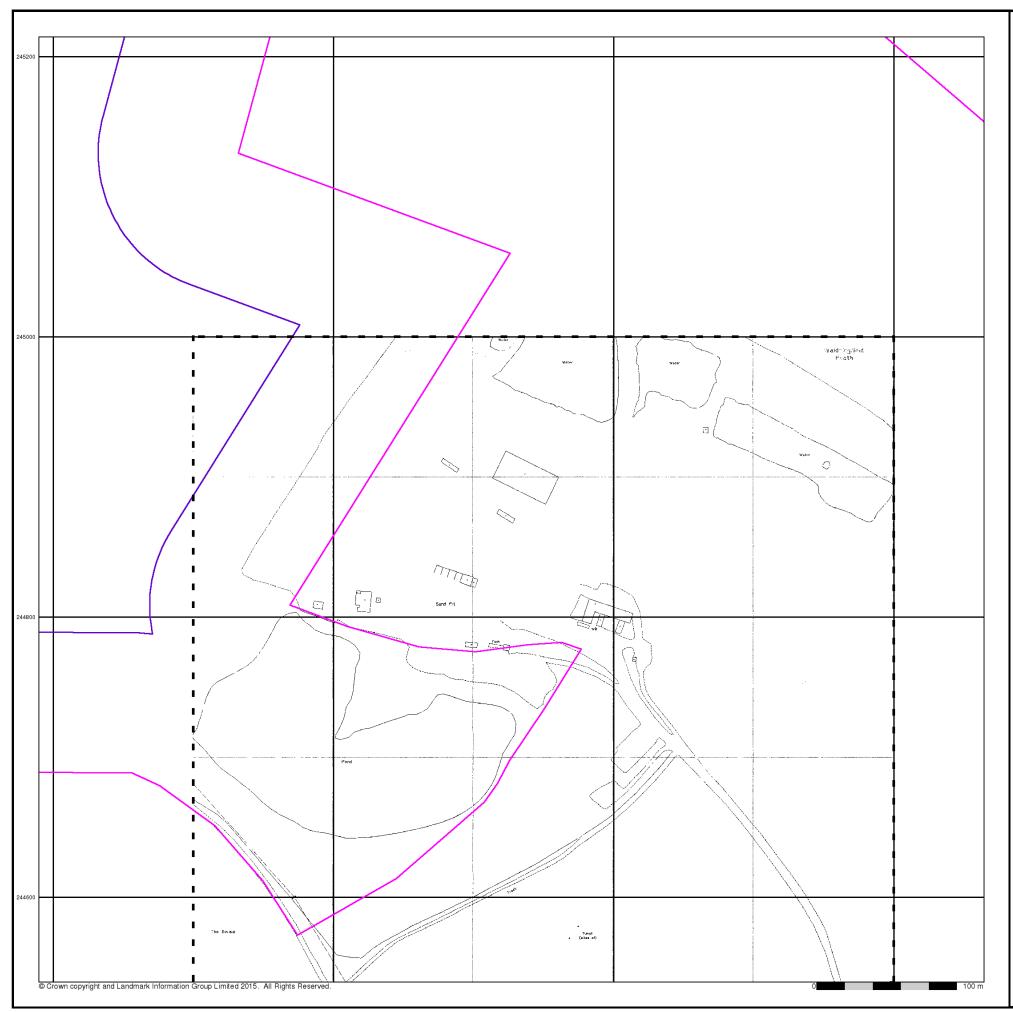
Site Area (Ha): 96.03 Search Buffer (m): 100

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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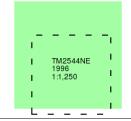
Consulting

### **Large-Scale National Grid Data** Published 1996

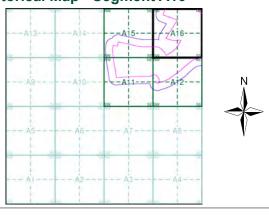
### Source map scale - 1:1,250

'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 fore-runners 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)



#### **Historical Map - Segment A16**



#### **Order Details**

97754875\_1\_1 10391 Adastral Park Order Number: Customer Ref: National Grid Reference: 625020, 244270 Slice: A 96.03

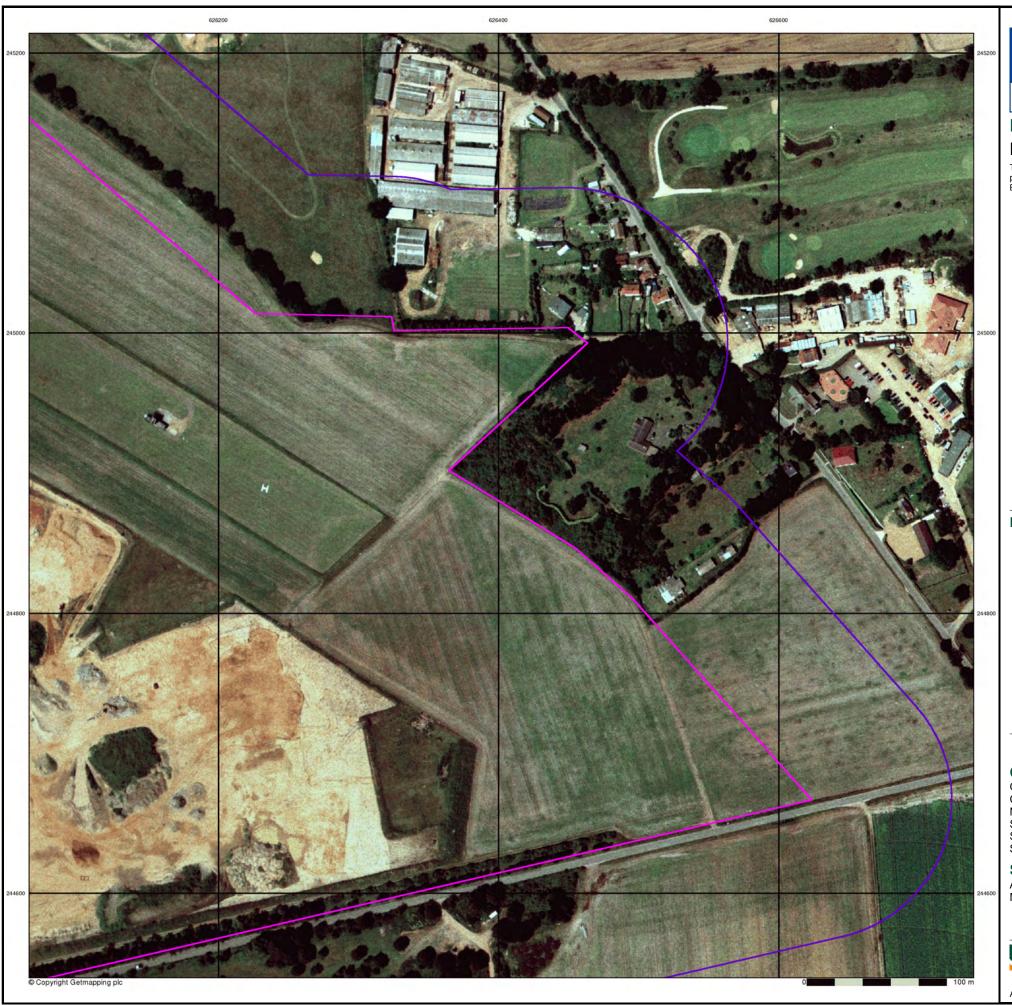
Site Area (Ha): Search Buffer (m):

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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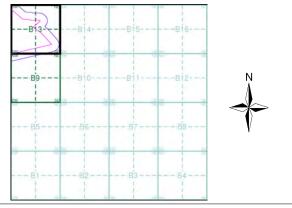
Consulting

## **Historical Aerial Photography**

### Published 1999

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

#### **Historical Aerial Photography - Segment B13**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 626760, 244450

Slice: Site Area (Ha): Search Buffer (m): 96.03

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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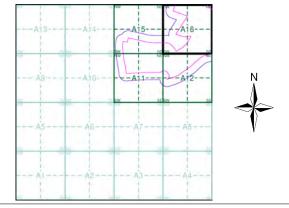


Consulting

## **Historical Aerial Photography** Published 1999

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

#### **Historical Aerial Photography - Segment A16**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625020, 244270 A 96.03

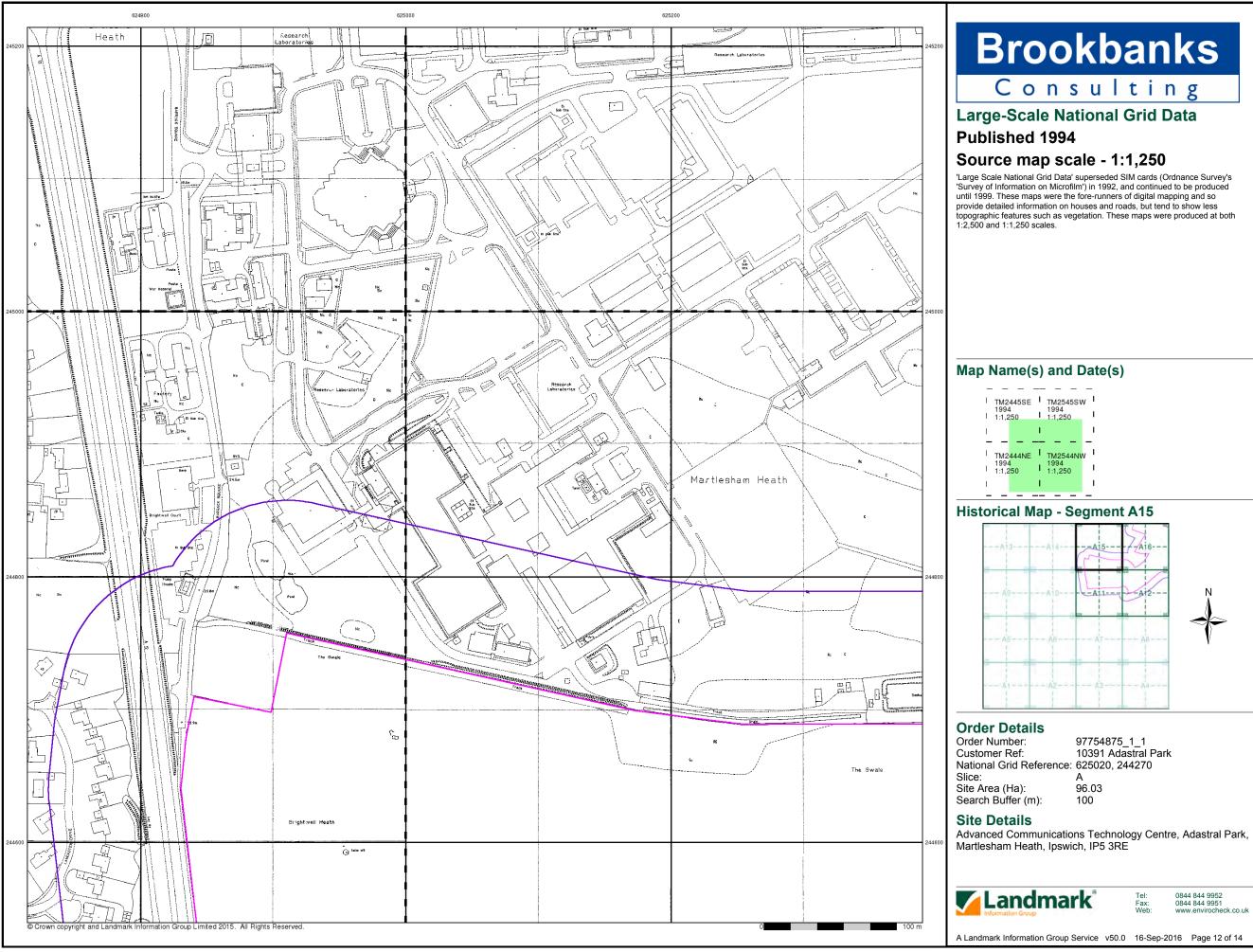
Slice: Site Area (Ha): Search Buffer (m):

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE

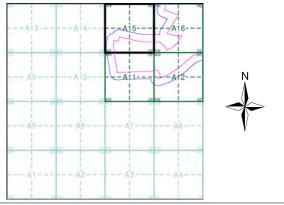


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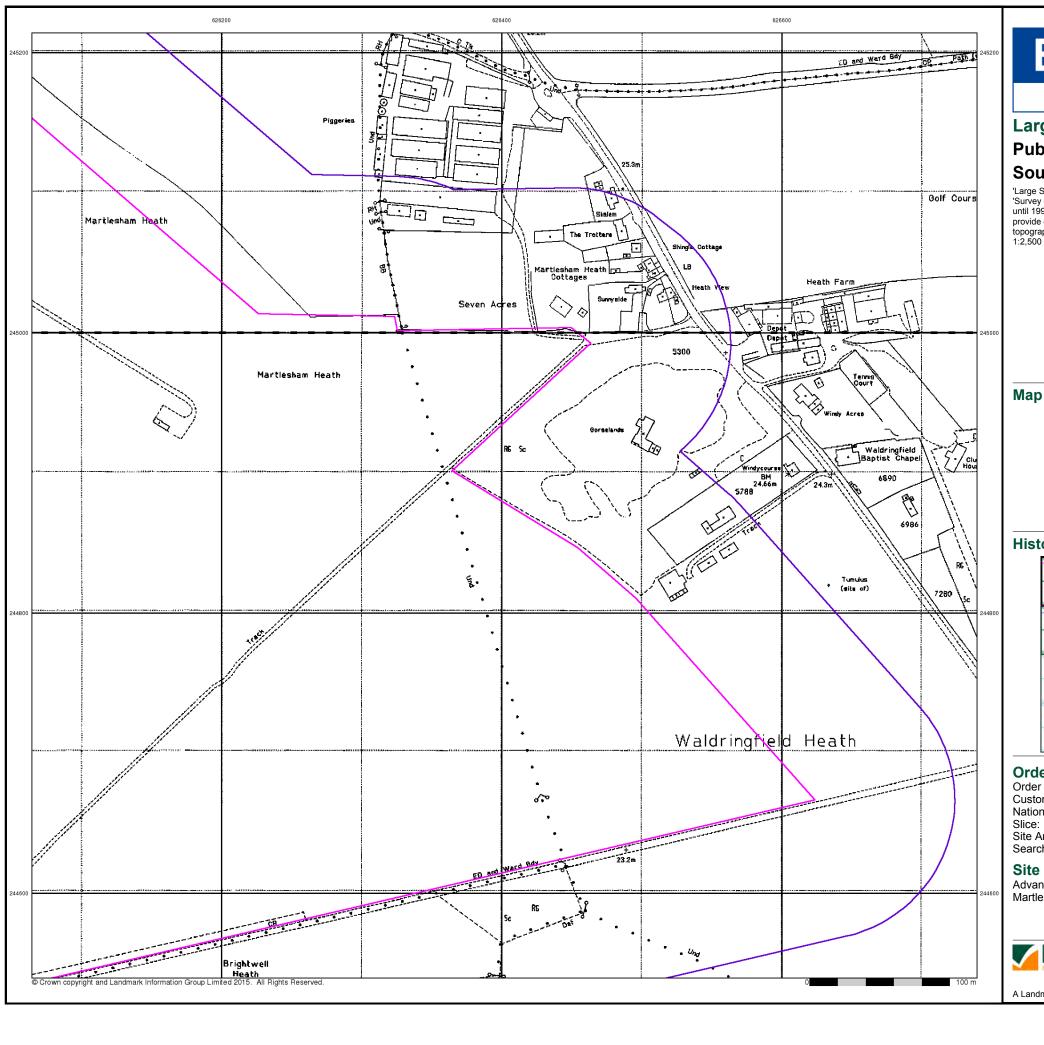


Consulting

'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 fore-runners 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.



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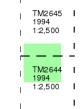
Consulting

## Large-Scale National Grid Data Published 1994

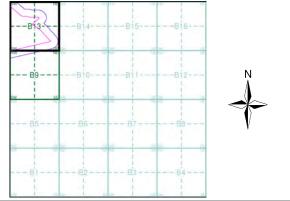
## Source map scale - 1:2,500

'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 fore-runners 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)



#### **Historical Map - Segment B13**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 626760, 244450
Slice: B

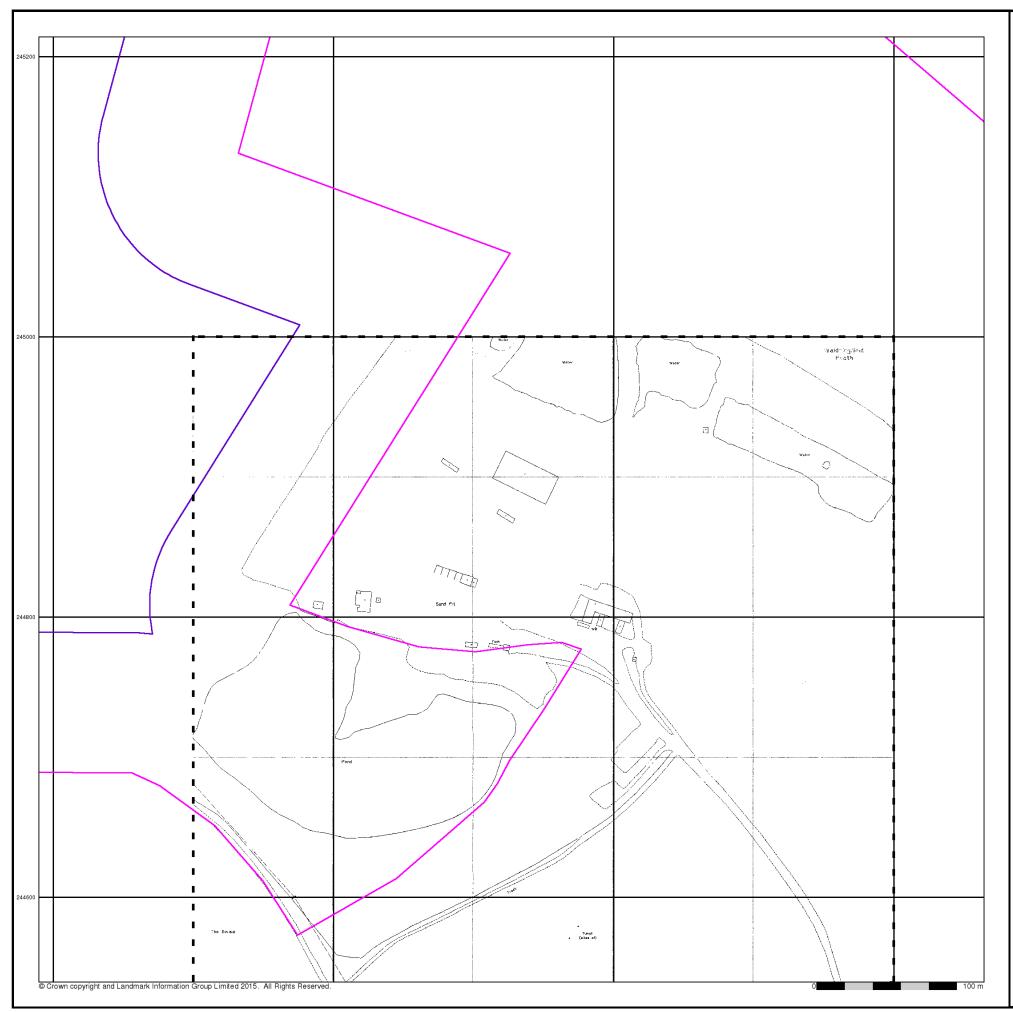
Site Area (Ha): 96.03 Search Buffer (m): 100

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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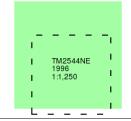
Consulting

### **Large-Scale National Grid Data** Published 1996

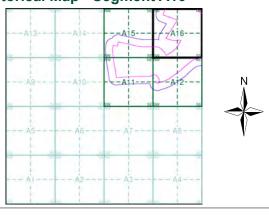
### Source map scale - 1:1,250

'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 fore-runners 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)



#### **Historical Map - Segment A16**



#### **Order Details**

97754875\_1\_1 10391 Adastral Park Order Number: Customer Ref: National Grid Reference: 625020, 244270 Slice: A 96.03

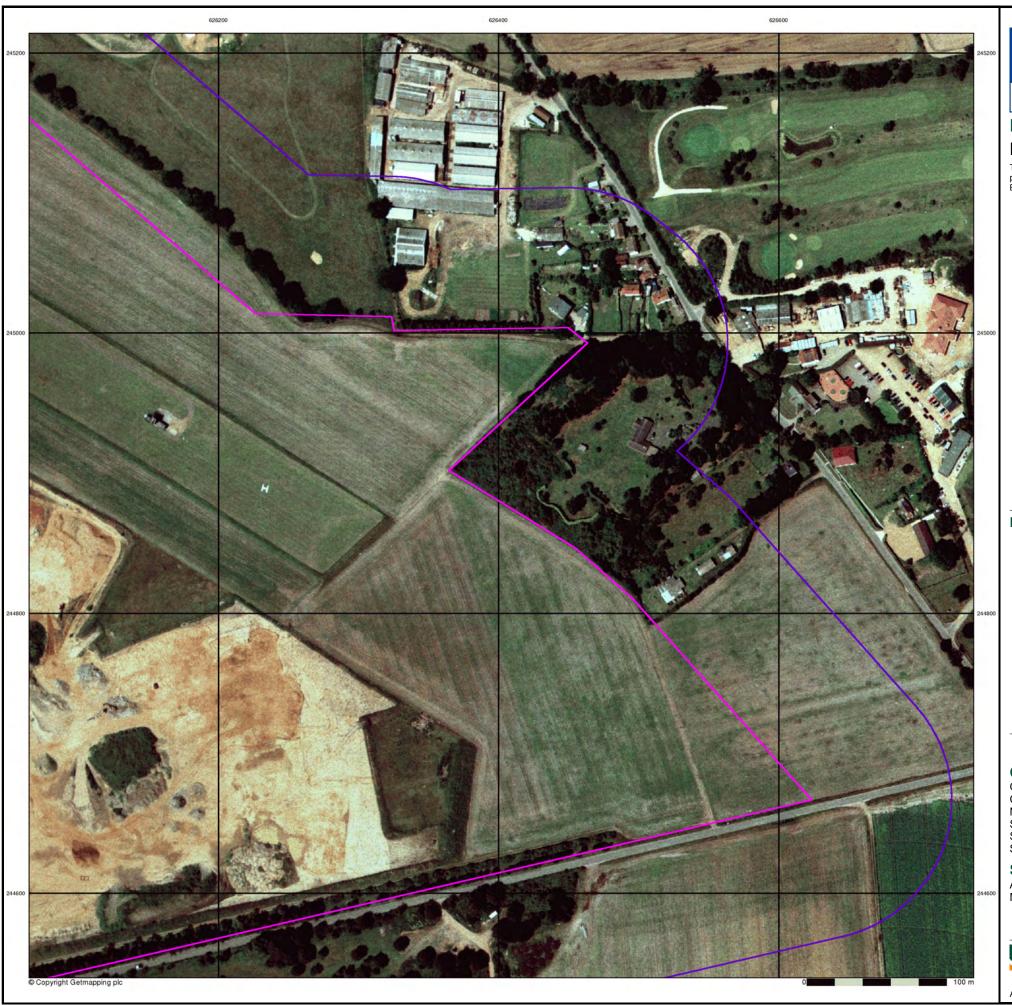
Site Area (Ha): Search Buffer (m):

#### **Site Details**

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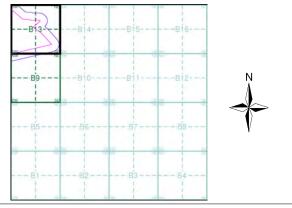
Consulting

## **Historical Aerial Photography**

### Published 1999

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

#### **Historical Aerial Photography - Segment B13**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 626760, 244450

Slice: Site Area (Ha): Search Buffer (m): 96.03

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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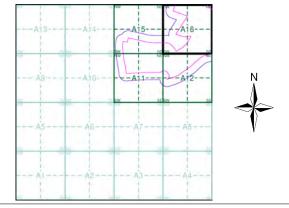


Consulting

## **Historical Aerial Photography** Published 1999

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

#### **Historical Aerial Photography - Segment A16**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625020, 244270 A 96.03

Slice: Site Area (Ha): Search Buffer (m):

#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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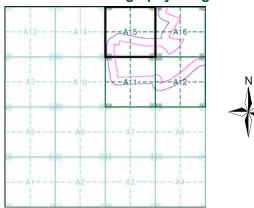
Consulting

## **Historical Aerial Photography**

#### Published 1999

This aerial photography was produced by Getmapping, these vertical aerial photographs provide a seamless, full colour survey of the whole of Great Britain

#### **Historical Aerial Photography - Segment A15**





Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 625020, 244270 A 96.03

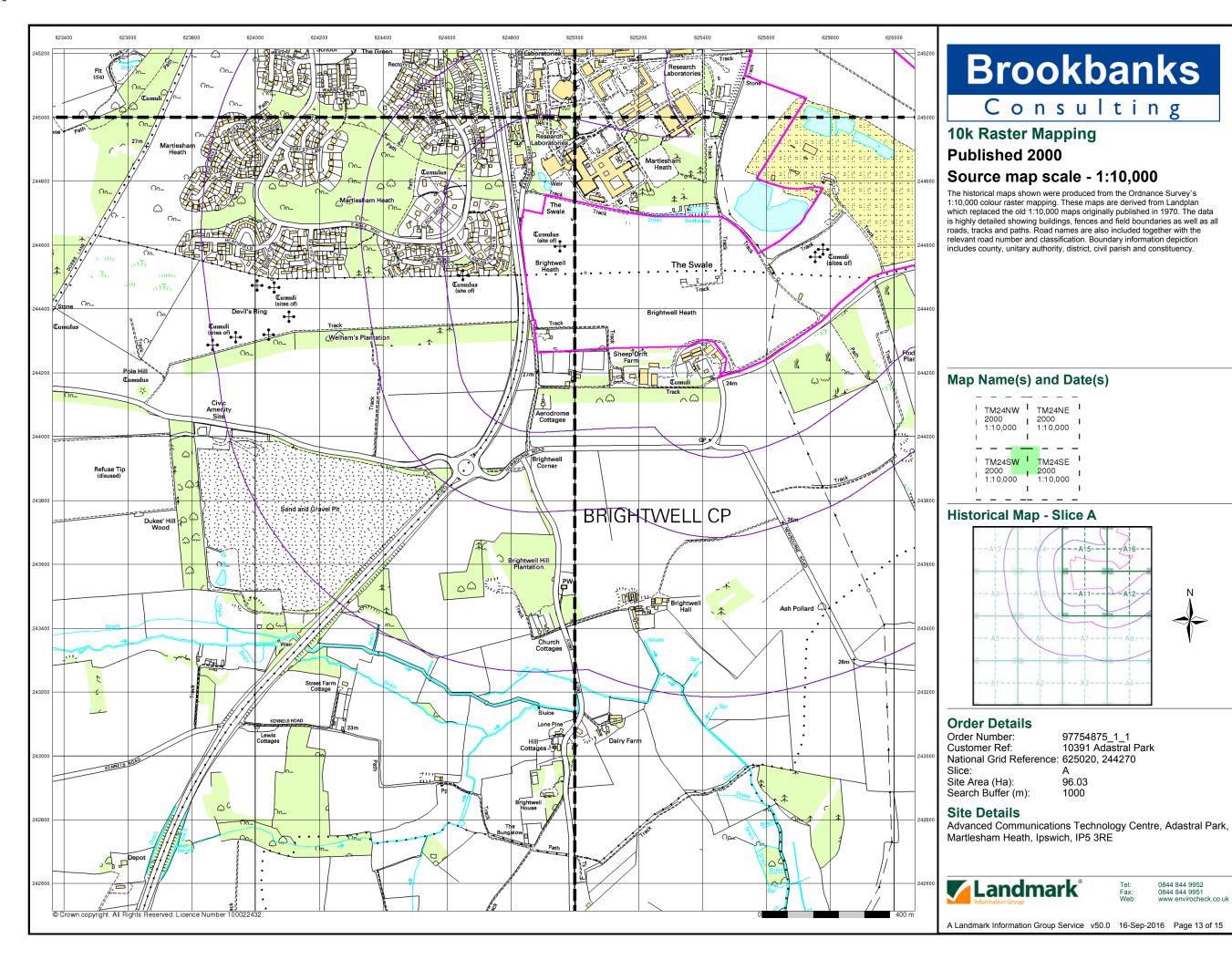
Site Area (Ha): Search Buffer (m): 100

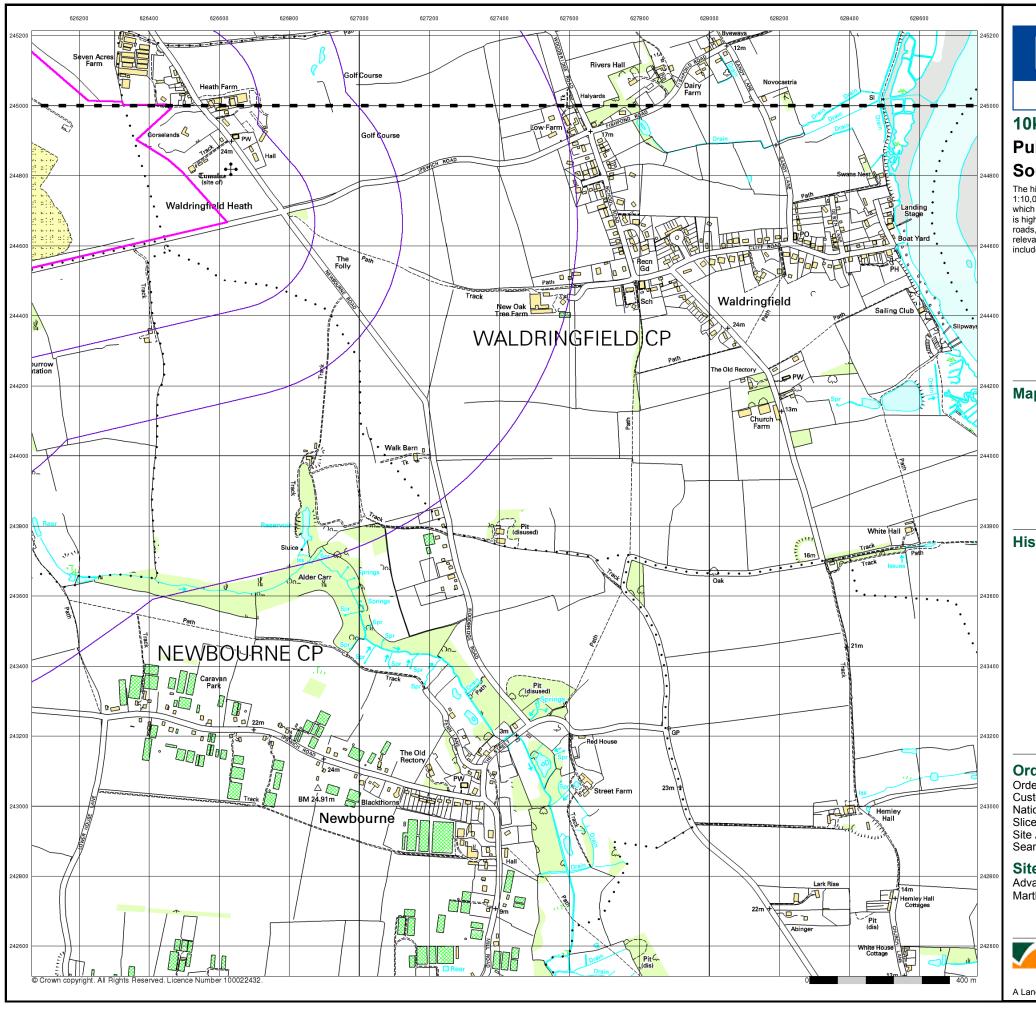
**Site Details** 

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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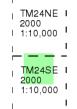


Consulting

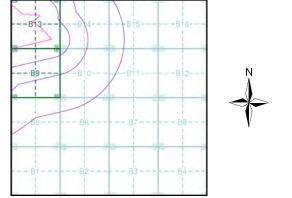
### 10k Raster Mapping **Published 2000** Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

#### Map Name(s) and Date(s)



#### **Historical Map - Slice B**



#### **Order Details**

97754875\_1\_1 Order Number: 10391 Adastral Park Customer Ref: National Grid Reference: 626760, 244450 Slice: 96.03

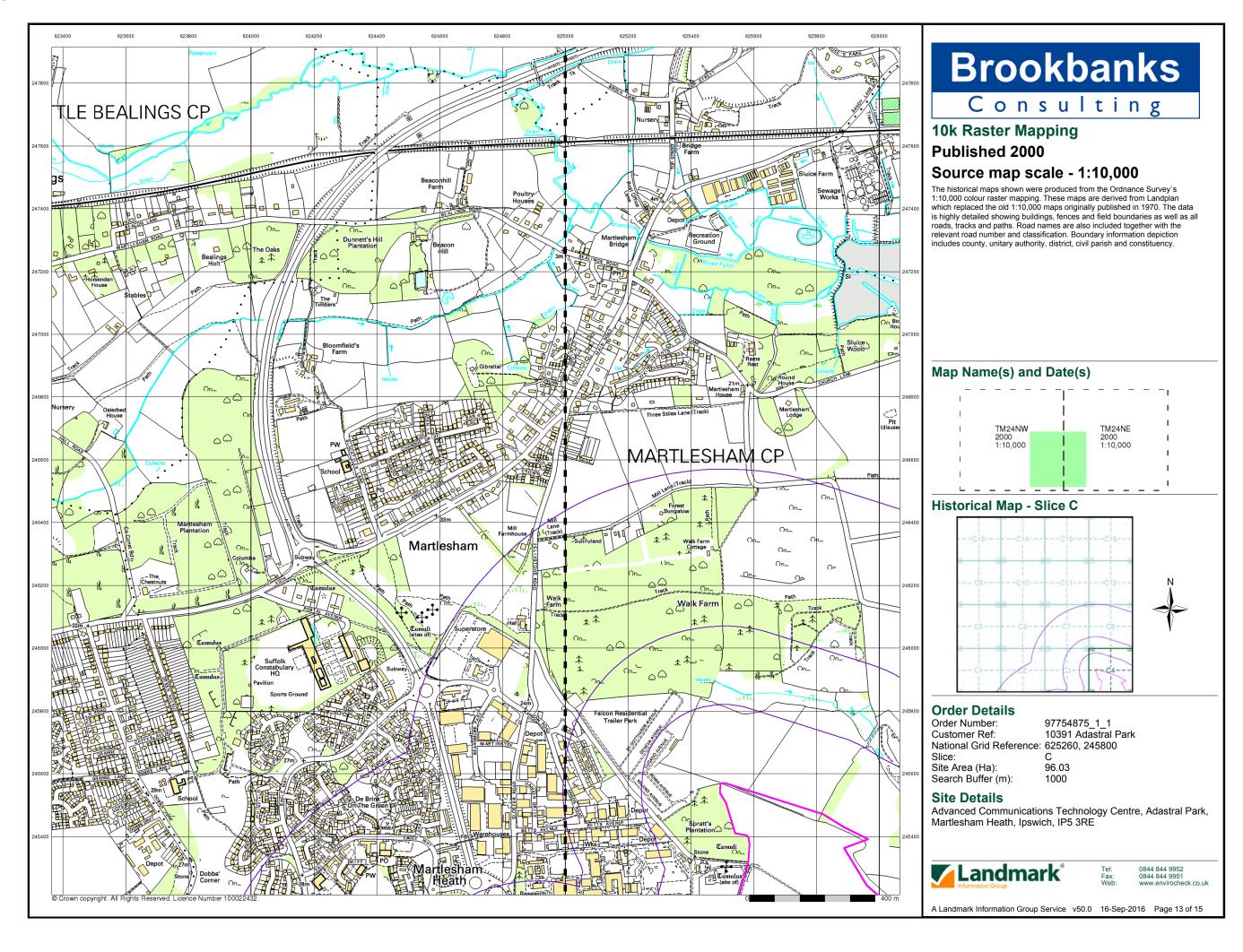
Site Area (Ha): Search Buffer (m): 1000

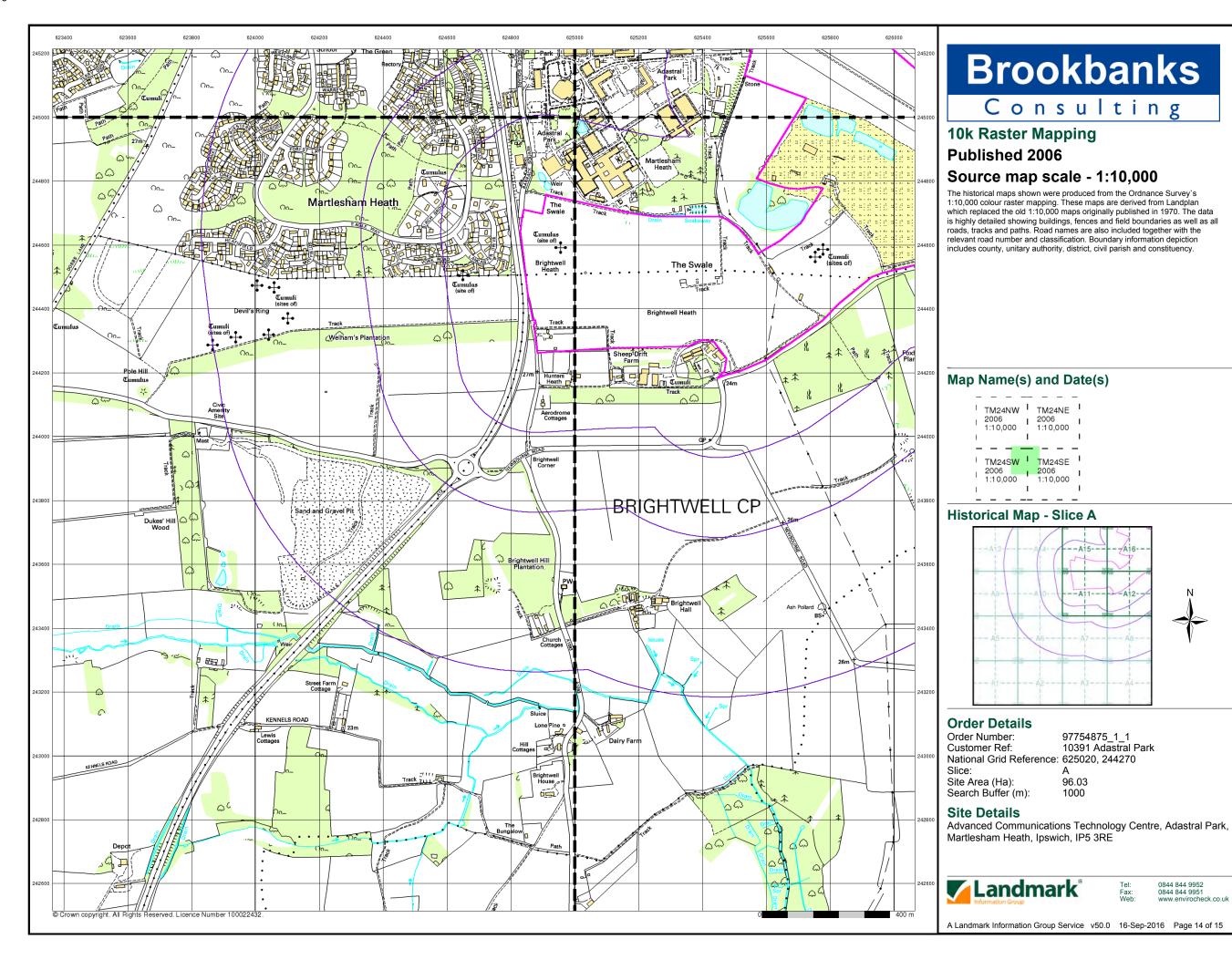
#### Site Details

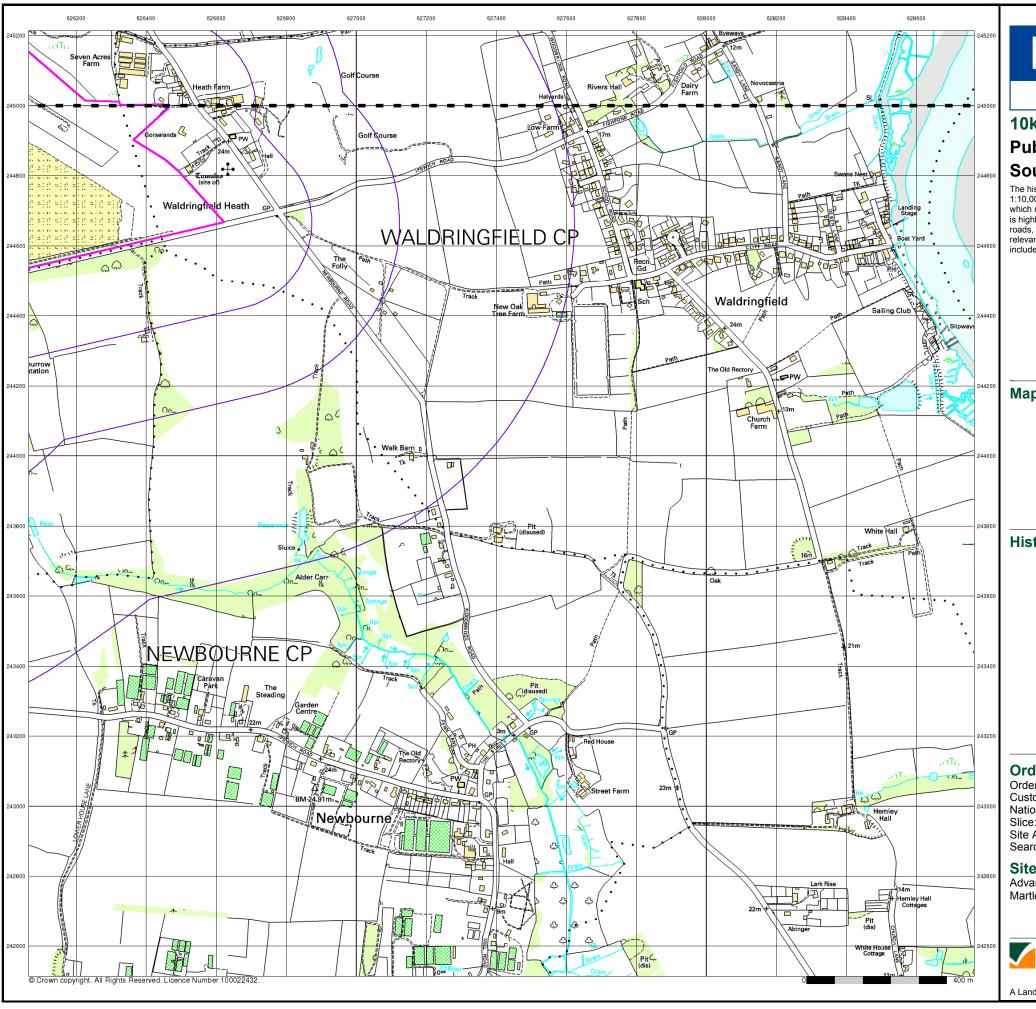
Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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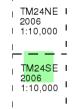


Consulting

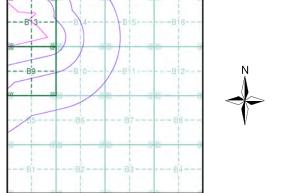
# 10k Raster Mapping Published 2006 Source map scale - 1:10,000

The historical maps shown were produced from the Ordnance Survey's 1:10,000 colour raster mapping. These maps are derived from Landplan which replaced the old 1:10,000 maps originally published in 1970. The data is highly detailed showing buildings, fences and field boundaries as well as all roads, tracks and paths. Road names are also included together with the relevant road number and classification. Boundary information depiction includes county, unitary authority, district, civil parish and constituency.

#### Map Name(s) and Date(s)



#### **Historical Map - Slice B**



#### **Order Details**

Order Number: 97754875\_1\_1
Customer Ref: 10391 Adastral Park
National Grid Reference: 626760, 244450
Slice: B
Site Area (Ha): 96 03

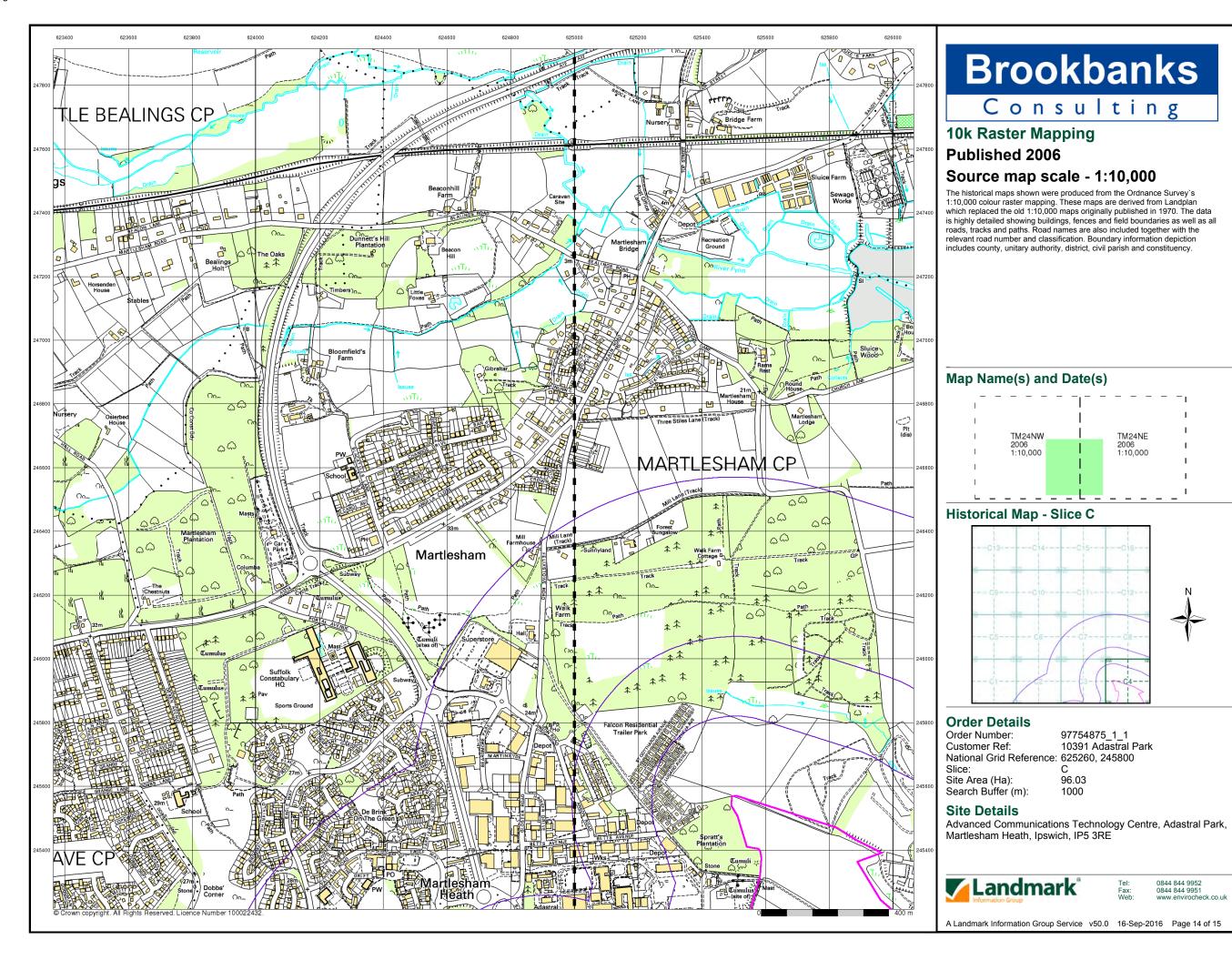
Site Area (Ha): 96.03 Search Buffer (m): 1000

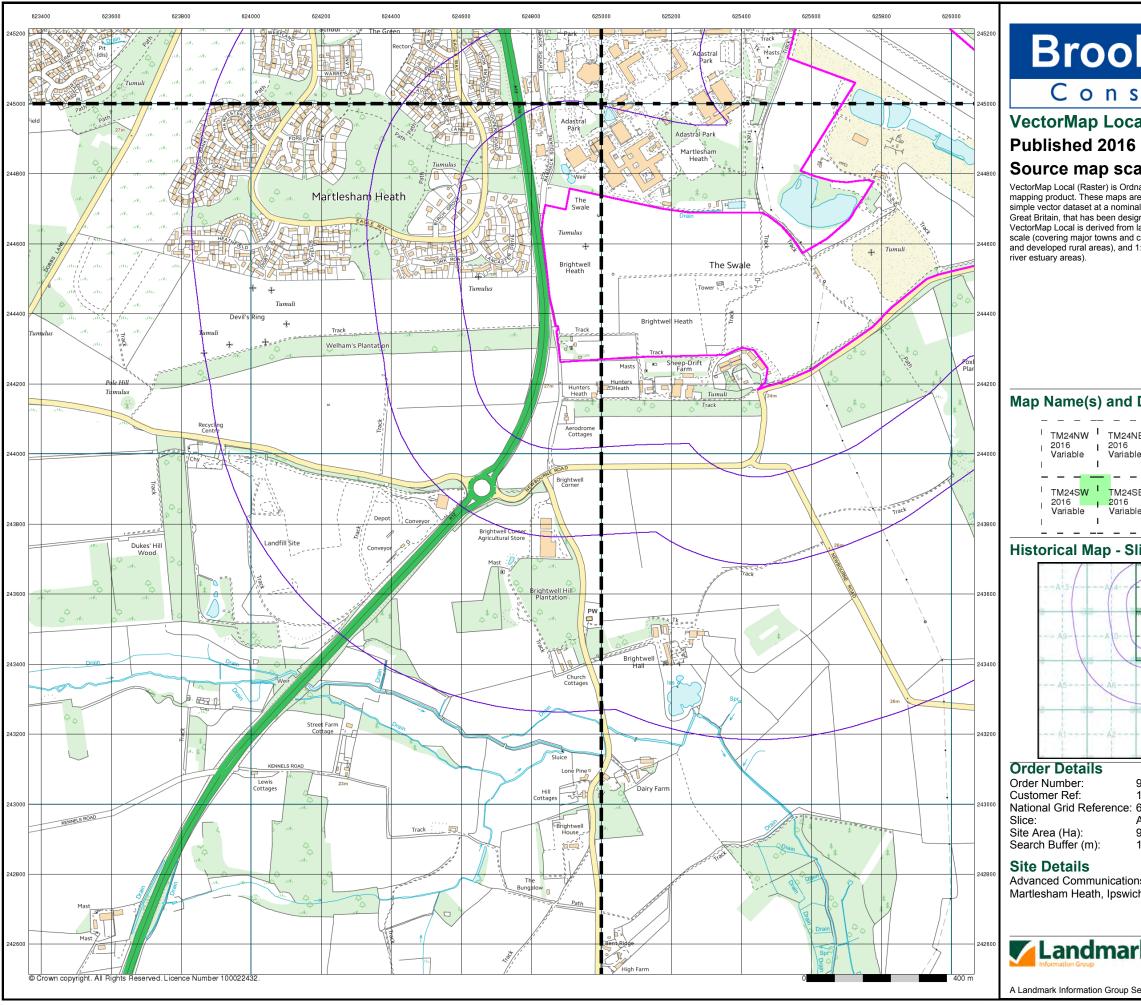
#### Site Details

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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# Brookbanks

Consulting

### **VectorMap Local**

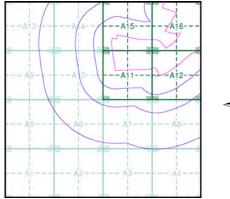
#### Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' vectorMap Local (Kaster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities),1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and giver extraor areas).

#### Map Name(s) and Date(s)

			_
I TM24NW	, Т	TM24NE	ı
l 2016 Variable		2016 Variable	1
I	1	Variable	1
	_		_
I TM24SW	, 1	TM24SE	1
2016 Variable		2016 Variable	1
I	1	Variable	1

#### **Historical Map - Slice A**





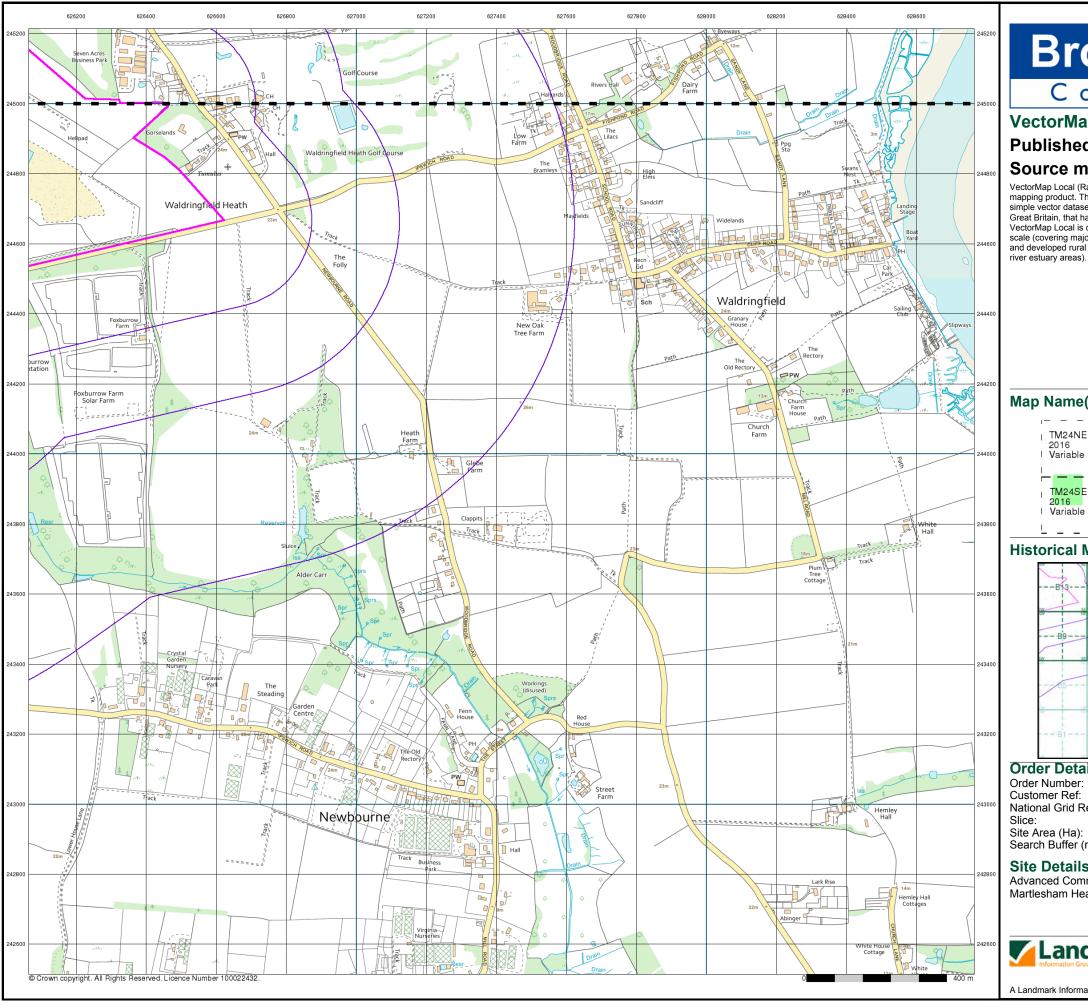
97754875\_1\_1 10391 Adastral Park National Grid Reference: 625020, 244270 96.03 1000

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



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A Landmark Information Group Service v50.0 16-Sep-2016 Page 15 of 15



# Brookbanks

Consulting

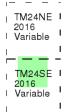
# **VectorMap Local**

### Published 2016

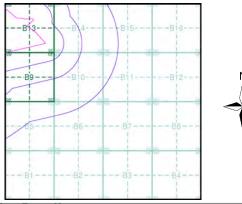
#### Source map scale - 1:10,000

VectorMap Local (Raster) is Ordnance Survey's highest detailed 'backdrop' mapping product. These maps are produced from OS's VectorMap Local, a simple vector dataset at a nominal scale of 1:10,000, covering the whole of Great Britain, that has been designed for creating graphical mapping. OS VectorMap Local is derived from large-scale information surveyed at 1:1250 scale (covering major towns and cities), 1:2500 scale (smaller towns, villages and developed rural areas), and 1:10 000 scale (mountain, moorland and river estuary areas).

#### Map Name(s) and Date(s)



#### **Historical Map - Slice B**



#### **Order Details**

97754875\_1\_1 10391 Adastral Park Customer Ref: National Grid Reference: 626760, 244450 В

Site Area (Ha): Search Buffer (m): 96.03 1000

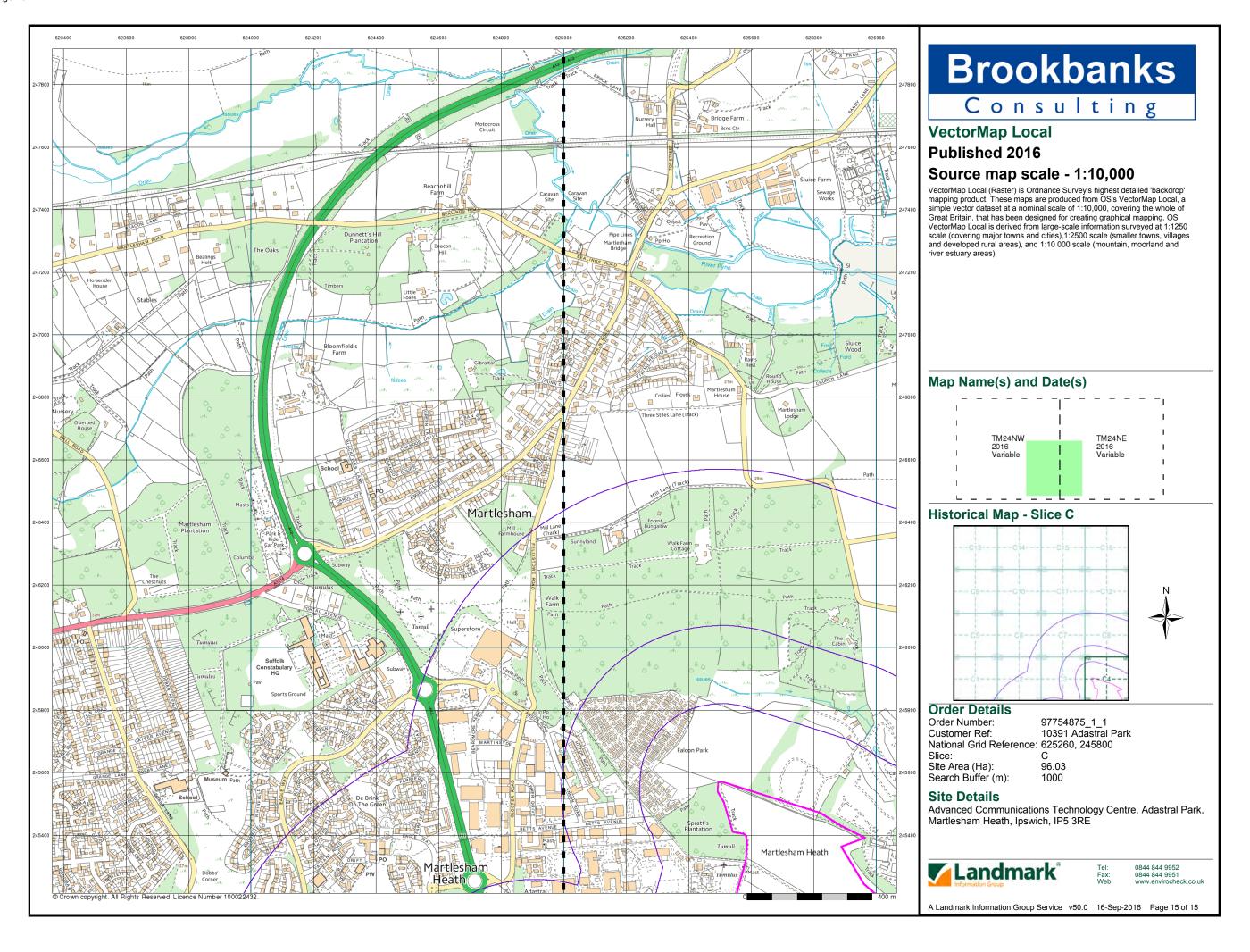
#### **Site Details**

Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE



0844 844 9952 0844 844 9951

A Landmark Information Group Service v50.0 16-Sep-2016 Page 10 of 10



Land	south	and	east	of A	dastra	l Park	
Geo-	Enviro	nme	ntal	Phas	e I Des	k Study	,

**Carlyle Land Ltd and Comercial Estates Group** 

**Appendix B** 

Landmark Information Group Ltd Imperium, Imperial Way Reading, Berkshire RG2 OTD United Kingdom

T: +44 (0)844 844 9952 W: www.envirocheck.co.uk



# Preliminary Unexploded Ordnance (UXO) Risk Assessment

Meeting the requirements of CIRIA C681 'Unexploded Ordnance (UXO) – A guide for the Construction Industry' Risk Management Framework



6 Alpha Project Number: P5507

Site: Advanced Communications Technology Centre, Adastral Park, Martlesham Heath,

Ipswich, IP5 3RE

Originator: Ellicia Petersen

Released By: Rebecca Griffiths (20th September 2016)











## **Envirocheck** Unexploded Ordnance Probability Assessment



#### **Study Site**

The Study Site is described as 'Advanced Communications Technology Centre, Adastral Park, Martlesham Heath, Ipswich, IP5 3RE', and it is centred on National Grid Reference 625700, 244760.

#### **Threat Potential**

### UXO PROBABILITY ASSESSMENT = 4 RATING, INDICATING A

#### MEDIUM/HIGH PROBABILITY OF UXO ENCOUNTER

The rating scale can be seen on *Figure 2* (Probability of UXO Encounter). In accordance with current guidelines (*CIRIA* C681 Chapter 5), the highest risk rating has been determined at this specific site for UXO risk consideration and has been used for the final assessment and recommendations.

#### **Summary**

During WWII the Study Site was situated within *Deben Rural District*, which recorded three High Explosive (HE) bomb strikes per 100 hectares; a low level of bombing.

Luftwaffe aerial reconnaissance photography associated with the Site identified Royal Air Force (RAF) Martlesham Heath located on Site, as a primary bombing target. However, there were no secondary targets recorded within 1,000m of the Site's boundary.

Air Raid Precaution (ARP) records associated with the Site was not available. However, anecdotal evidence suggests HE bombs and a 'considerable amount' of IBs landed on-Site and in the near vicinity.

Official bomb damage mapping associated with the Site was not available. However, anecdotal evidence describes damage by HE bombs and IBs to numerous structures located within *RAF Martlesham*.

Given that both bombing and bomb damage was recorded on-Site and within close proximity; it would suggest that further action is warranted to address the potential for UXO encounter.

#### Recommendations

In accordance with CIRIA C681 Chapter 5 on managing UXO risks, 6 Alpha recommends that the next stage in the risk management framework is:

### **DETAILED UXO THREAT & RISK ASSESSMENT**

We would be pleased to provide this service, please contact *Envirocheck* for further details:

Telephone: +44 (0)844 844 9952 Email: customerservice@envirocheck.co.uk

#### **Using This Report**

This Preliminary Assessment is designed to inform environmental and construction professionals of the potential threat of military related explosives and/or ordnance on, or in, the vicinity of the Study Site.

This assessment is designed to be employed as a site-screening tool to meet with the requirement of Phase One of the *CIRIA UXO Risk Management Framework*; there are two broad prospective outcomes; either the threat level requires a Detailed Threat and Risk Assessment; or no further action is required. In the former instance we can provide a report within 14 working days (or more quickly upon application).

Two figures accompany the report, the *Second World War* (WWII) High Explosive (HE) Bomb Density and the final Probability of UXO Encounter. The purpose of this approach is to demonstrate that whilst bomb density statistics give an indication for WWII bombing, they should not be relied upon exclusively to generate a holistic assessment.

For further information, please contact *Envirocheck*: Telephone: +44 (0)844 844 9952

Website: http://www.envirocheck.co.uk Email: customerservice@envirocheck.co.uk

6 Alpha Project Number: P5507 Landmark Order Number: 97754875\_2 Client Reference: 10391 Adastral Park

# **Envirocheck Unexploded Ordnance Probability Assessment**



Data Findings					
Threat Source	Detail				
(Within 1,000m)	Identified	Comments			
Airfields/Military Facilities	<b>~</b>	RAF Martlesham Heath was located on-Site.			
Ordnance Manufacture/Storage	X	None recorded within 1,000m.			
WWII Decoy Bombing Sites	X	None recorded within 1,000m.			
WWII Defensive Features	<b>~</b>	A radar station, two pillboxes and an RDF tower (all located on-Site) and a <i>Pickett-Hamilton</i> fort (located 35m west).			
WWII <i>Luftwaffe</i> Designated Bombing Targets	<b>V</b>	Luftwaffe aerial photography identified an airfield (located on-Site) as a primary bombing target.			
Secondary Bombing Targets	X	None recorded within 1,000m.			
WWII Bomb Strikes Within Site Boundary	<b>~</b>	ARP records were not available. Anecdotal evidence suggests a 'considerable number' of HE bombs and IBs landed on-Site.			
WWII Bomb Strikes Near Site Boundary	<b>~</b>	ARP records were not available. Anecdotal evidence indicates a 'considerable number' of HE and IBs landed within close proximity.			
WWII Bomb Damage	<b>V</b>	Anecdotal evidence suggests damage occurred to structures within <i>RAF Martlesham</i> .			
Abandoned Bomb Register	X	The official abandoned bomb list did not identify any abandoned bombs within 1,000m.			
WWII Bombing Density Per 100 Hectares	<b>V</b>	The Site was located within <i>Deben Rural District</i> , which recorded three HE bomb strikes per 100 hectares.			

#### **Important Notes**

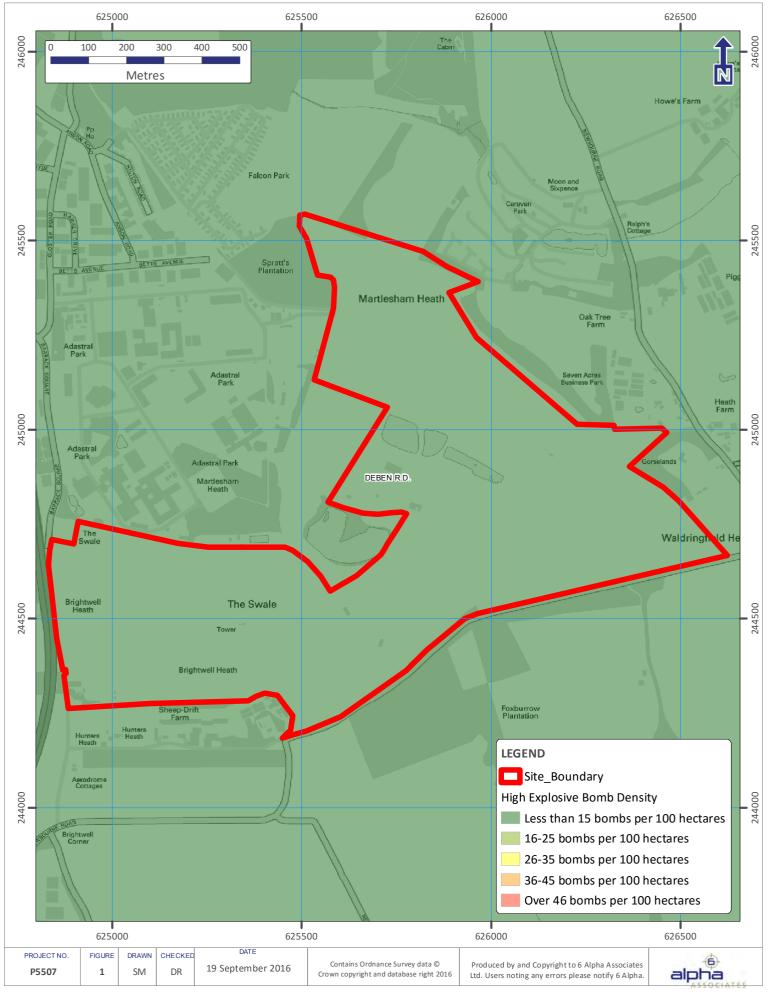
- 1. The term 'Preliminary UXO Risk Assessment' has been used to describe this report, to fall in line with the CIRIA C681 guidelines. Whilst the term 'Risk' can be justifiably used at this stage, the reader should note that the 'Consequence' function of 'Risk' is not considered. Should it be required, this would be addressed in the 'Detailed UXO Threat & Risk Assessment' (Stages 2 and 3).
- 2. This report is accurate and up to date at the time of writing.
- 3. The assessment levels have been generated from historical data and third party sources. Where possible *6 Alpha* have sought to verify the accuracy of such data, but cannot be held accountable for inherent errors that may be in third party data sets (e.g. *National Archives* or library sources).
- 4. 6 Alpha have exercised all reasonable care, skill and due diligence in producing this service.
- 5. Whilst every effort has been used to identify all potential UXO/explosive threats, there were a number of private facilities, which may not have released privately recorded information concerning UXO/explosive threats into the public domain. It is therefore possible that some of the aforementioned sites may not be included within the database.



# ADVANCED COMMUNICATIONS TECHNOLOGY CENTRE, ADASTRAL PARK, MARTLESHAM HEATH, IPSWICH, IP5 3RE

# BOMB SEARCH

# **WWII High Explosive Bomb Density**

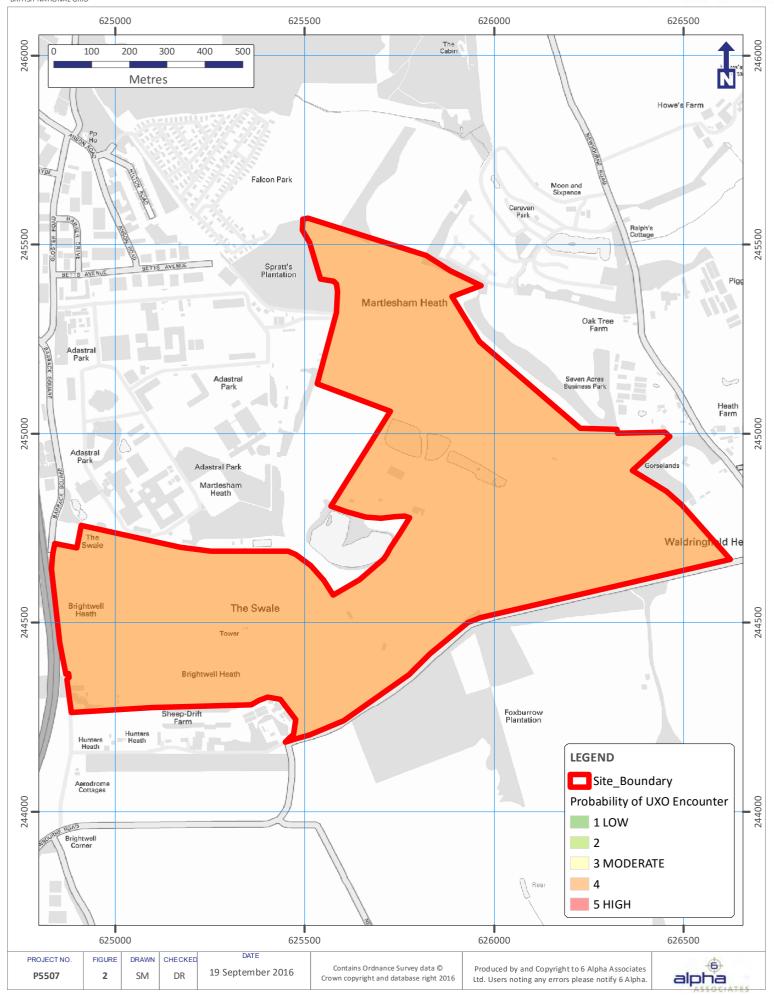




# ADVANCED COMMUNICATIONS TECHNOLOGY CENTRE, ADASTRAL PARK, MARTLESHAM HEATH, IPSWICH, IP5 3RE

# BOMB SEARCH

# **Probability of UXO Encounter**



Land south and east of Adastral Park Geo-Environmental Phase I Desk Study	

Carlyle Land Ltd and Comercial Estates Group

**Appendix C** 

#### Aisha Allie

From: Clive Pink <Clive.Pink@eastsuffolk.gov.uk>

**Sent:** 30 November 2016 13:22

To: Aisha Allie

**Subject:** RE: 10391 - Adastral Park, Ipswich - Contaminated land information

Attachments: Former Landfill site Waldringfield Quarry.jpg

#### Dear Aisha

I refer to your request for information and our telephone conversation regarding; potential hazardous landfill waste, contaminated land, petroleum or can storage and any other historic uses within the Adastral Park site at Martlesham Heath.

I can confirm that Waldringfield Quarry which is within this proposed development area, is listed as a 'Former Landfill Site which predates 1974' but that we hold no records of the extent of the pit area or the type of refuse which it contains. Assuming the land fill operation incorporated the disposal of domestic waste, then the pit area would contain a large quantity of contaminants and have potential to emit ground gas. However as we have no detail of the depth, extent or content of the pit we can only advise that intensive investigation is undertaken to establish these facts prior to any future development of the site.

With regard to the remainder of the Adastral Park site, I can confirm that we hold no records of any other landfill, contaminated land, petroleum or can storage and any other historic uses which may be of interest to you. We are aware that much of the site has been used by BT and recommend that you approach them for further information together with the other current land owners.

Regards

Clive Pink

#### Clive Pink MCIEH CEnvH

**Environmental Health Officer** 

**Environmental Protection** 

Suffolk Coastal and Waveney District Councils

Tel: 01394 444349

mailto: clive.pink@eastsuffolk.gov.uk

Suffolk Coastal and Waveney District Councils are working as a partnership and all emails received from us will use the @eastsuffolk.gov.uk email address

www.eastsuffolk.gov.uk

www.twitter.com/eastsuffolk | www.facebook.com/eastsuffolkcouncils

From: Aisha Allie [mailto:Aisha.Allie@brookbanks.com]

**Sent:** 24 November 2016 16:19

**To:** Environment **Cc:** Clive Pink

Subject: FW: 10391 - Adastral Park, Ipswich - Contaminated land information

**Importance:** High

Afternoon,

I have not been able to get through to anyone on the Environmental Health Team today and I am not sure whether Clive is the appropriate person to deal with my enquiry below. Please could you direct my email to the correct person/ department and let me know if I should be in contact with someone else.

I hope you will be able to assist with our enquiries, thank you.

#### Kind Regards

**Aisha Allie** BSc (Hons) MSc Project Consultant

### **Brookbanks**

Brookbanks Consulting Ltd 6150 Knights Court Solihull Parkway Birmingham Business Park Birmingham B37 7WY

**Office:** 0121 329 4330 **Direct:** 0121 329 4335

**Email:** Aisha.Allie@brookbanks.com **Web:** www.brookbanks.com



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Project Finance & Cost Managers
Civil, Structural & Environmental Consultants

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From: Aisha Allie

**Sent:** 23 November 2016 16:43

**To:** Clive Pink < <u>Clive.Pink@eastsuffolk.gov.uk</u>>

Subject: 10391 - Adastral Park, Ipswich - Contaminated land information

Importance: High

Good Afternoon Clive

I believe my colleague Matthew Moss has been in touch with yourself earlier this year with regards to noise monitoring at our Client's proposed development on land at Adastral Park in Martlesham Heath, Ipswich.

Following an initial enquiry made below with Suffolk County Council, we were advised to contact yourselves. Are you able to please provide us with further information on Point 3 (highlighted below) or any further details with regards to potential hazardous landfill waste, contaminated land or historic uses on or within close proximity of our Client's proposed development site (as detailed within the attached email) that our Client should be aware of?

Unfortunately, we require this information as a matter of urgency, to include within our Geo-environmental Desk Study report. We would really appreciate any assistance you are able to provide.

If you would like to discuss this further please give me a call, thank you.

From: Nigel Howlett [mailto:Nigel.Howlett@suffolk.gov.uk]

**Sent:** 05 August 2016 10:31

To: Adam Melia <Adam.Melia@brookbanks.com>

Subject: RE: 10391 - Adastral Park, Ipswich - Preliminary Advice

#### Hi Adam

Apologies for the delay in getting back to you, I have picked this up from colleagues who are now one leave. As my colleague explained Trading Standards, only licence Petroleum storage, I have checked our historical files and it appears that there were underground storage tanks use for the storage of Petrol at three locations,

- 1. Sheepdrift Farm, Brightwell (750 gallon) which was decommissioned by filling with water in 1989 unfortunately, I cannot offer any further information on the location of the tank or whether it is still in situ.
- 2. There were also tanks sited at the gravel pits previously owned by Wilding & Smith, Brightwell. They were licenced in 1978 for 18,000 litre of petrol, but there is no record of what happened to this tank. However the new owners (Brett Aggregates) were licenced until July 2004 to store 10,000 litres of petroleum (in 2 @ 5000 litres) underground tanks which were made safe in 2007 (along with a further 22,500 litre underground tank presumably used for diesel or other fuel other than petrol), these tanks were made safe using resin based hard form.
- 3. Finally, on the BT Adastral Park site, there was at one time a can store, however the records were sent to the local Suffolk Coastal District Council in 2003 as they took over responsibility under DSEAR.

I trust that the above information is of assistance.

Regards

Nigel Howlett | Petroleum Lead | Trading Standards

Suffolk County Council, Landmark House, 4 Egerton Road, Ipswich, Suffolk, IP1 5PF

Office: 01473 264859Direct Dial: 01473 260652

✓ General: <a href="mailto:nigel.howlett@suffolk.gov.uk">nigel.howlett@suffolk.gov.uk</a>✓ Secure: <a href="mailto:nigel.howlett@suffolk.gosx.gov.uk">nigel.howlett@suffolk.gosx.gov.uk</a>

Petroleum Enquiries: <a href="mailto:petroleum@suffolk.gov.uk">petroleum@suffolk.gov.uk</a>

From: Adam Melia [mailto:Adam.Melia@brookbanks.com]

**Sent:** 08 July 2016 16:52

To: TRADING STANDARDS ENQUIRIES

Subject: RE: 10391 - Adastral Park, Ipswich - Preliminary Advice

**Importance:** High

Good Afternoon,

Thank you for your response, it is very helpful.

Do you own any petroleum waste records on the potential land?

Thank you.

Kind Regards

Adam Melia BSc (Hons) Assistant Consultant

### **Brookbanks**

Brookbanks Consulting Ltd 6150 Knights Court Solihull Parkway Birmingham Business Park Birmingham B37 7WY Office:0121 329 4330
Direct:0121 329 4338
Email:Adam.Melia@brookbanks.com
Web:www.brookbanks.com



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From: TRADING STANDARDS ENQUIRIES [mailto:TradingStandards@suffolk.gov.uk]

Sent: 08 July 2016 14:52

To: Adam Melia

Subject: RE: 10391 - Adastral Park, Ipswich - Preliminary Advice

Good afternoon

Thank you for your enquiry,

Trading Standards are responsible for Petroleum however Hazardous Waste in not within our remit, you would need to contact the Health and Safety Executive.

Regards,

#### **Ryan Adams**

Acting Operational Support Officer Suffolk Trading Standards

From: Adam Melia [mailto:Adam.Melia@brookbanks.com]

Sent: 07 July 2016 17:05

To: TRADING STANDARDS ENQUIRIES

**Subject:** 10391 - Adastral Park, Ipswich - Preliminary Advice

Importance: High

Dear Sir/Madam,

I am writing in regards to whether you are able to help or provide some preliminary guidance on Land with development potential at Adastral Park, Ipswich (Nearest Postcode: IP5 3QU; Nearest Grid Reference: 625362, 244957). Please find attached a Red Line Boundary for a likely development outline for your reference (*Please use this in the strictest of confidence*).

This is still currently at a very early stage, and it is not ready to be considered for the planning stage. We are therefore enquiring for some preliminary advice.

• We believe that on the land previously, there would have been some waste oils which were used. I am therefore enquiring as to whether you have any **Hazardous Waste Register** for the land. Is this something that you are able to provide us with, and if not are you able to advise me on how we would go about obtaining this information?

If you are able to provide us with the requested information, this would be gratefully appreciated.

I hope my e-mail is self-explanatory, if you need any more information, please do not hesitate to contact myself.

Thank you in advance for your help on this matter.

I look forward to your response.

Adam Melia BSc (Hons) Assistant Consultant

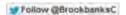
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Office: 0121 329 4330 Direct: 0121 329 4338

Email: Adam. Melia@brookbanks.com

Web:www.brookbanks.com



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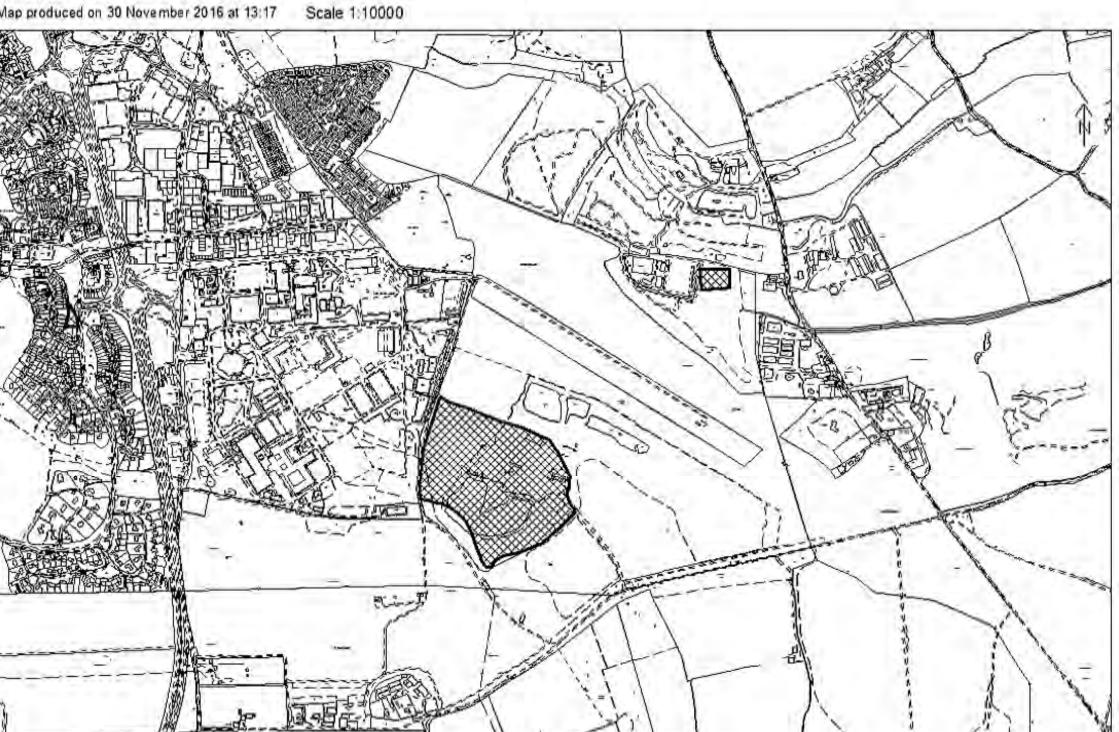
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#### **Adam Melia**

From: Nigel Howlett <Nigel.Howlett@suffolk.gov.uk>

**Sent:** 05 August 2016 10:31

To: Adam Melia

**Subject:** RE: 10391 - Adastral Park, Ipswich - Preliminary Advice

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I trust that the above information is of assistance.

Regards

Nigel Howlett | Petroleum Lead | Trading Standards

Suffolk County Council, Landmark House, 4 Egerton Road, Ipswich, Suffolk, IP1 5PF

Office: 01473 264859
Direct Dial: 01473 260652

☑ General: nigel.howlett@suffolk.gov.uk☑ Secure: nigel.howlett@suffolk.gcsx.gov.uk

Petroleum Enquiries: petroleum@suffolk.gov.uk

From: Adam Melia [mailto:Adam.Melia@brookbanks.com]

**Sent:** 08 July 2016 16:52

To: TRADING STANDARDS ENQUIRIES

**Subject:** RE: 10391 - Adastral Park, Ipswich - Preliminary Advice

Importance: High

Good Afternoon,

Thank you for your response, it is very helpful.

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Thank you.

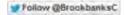
#### Kind Regards

Adam Melia BSc (Hons) Assistant Consultant

# **Brookbanks**

Brookbanks Consulting Ltd 6150 Knights Court Solihull Parkway Birmingham Business Park Birmingham B37 7WY

Office:0121 329 4330 Direct:0121 329 4338 Email:Adam.Melia@brookbanks.com Web:www.brookbanks.com



Project Managers
Project Finance & Cost Managers
Civil, Structural & Environmental Consultants

#### An RIBA and IStructE awards winning consultancy

From: TRADING STANDARDS ENQUIRIES [mailto:TradingStandards@suffolk.gov.uk]

**Sent:** 08 July 2016 14:52

To: Adam Melia

Subject: RE: 10391 - Adastral Park, Ipswich - Preliminary Advice

Good afternoon

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Trading Standards are responsible for Petroleum however Hazardous Waste in not within our remit, you would need to contact the Health and Safety Executive.

Regards,

#### **Ryan Adams**

Acting Operational Support Officer Suffolk Trading Standards

From: Adam Melia [mailto:Adam.Melia@brookbanks.com]

Sent: 07 July 2016 17:05

To: TRADING STANDARDS ENQUIRIES

Subject: 10391 - Adastral Park, Ipswich - Preliminary Advice

Importance: High

Dear Sir/Madam,

I am writing in regards to whether you are able to help or provide some preliminary guidance on Land with development potential at Adastral Park, Ipswich (Nearest Postcode: IP5 3QU; Nearest Grid Reference: 625362, 244957). Please find attached a Red Line Boundary for a likely development outline for your reference (*Please use this in the strictest of confidence*).

This is still currently at a very early stage, and it is not ready to be considered for the planning stage. We are therefore enquiring for some preliminary advice.

• We believe that on the land previously, there would have been some waste oils which were used. I am therefore enquiring as to whether you have any **Hazardous Waste Register** for the land. Is this something that you are able to provide us with, and if not are you able to advise me on how we would go about obtaining this information?

If you are able to provide us with the requested information, this would be gratefully appreciated.

I hope my e-mail is self-explanatory, if you need any more information, please do not hesitate to contact myself.

Thank you in advance for your help on this matter.

I look forward to your response.

Kind Regards

Adam Melia BSc (Hons) Assistant Consultant

#### **Brookbanks**

Brookbanks Consulting Ltd 6150 Knights Court Solihull Parkway Birmingham Business Park Birmingham B37 7WY

Office: 0121 329 4330 Direct: 0121 329 4338

Email: Adam. Melia@brookbanks.com

Web:www.brookbanks.com

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Project Managers
Project Finance & Cost Managers
Civil, Structural & Environmental Consultants

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#### Aisha Allie

From: ENS, Enquiries <ensenquiries@environment-agency.gov.uk>

**Sent:** 03 August 2016 11:28

To: Adam Melia

**Subject:** ENS/2016/17899 - Response to your enquiry

Attachments: Brett Aggregates Ltd - 70723.pdf; The Swale - EAHLD01372.pdf; Quarry -

103156.pdf; Quarry 70723.pdf; Recycling Facility - 104224.pdf; Waldringfield on

Adrastral Park.pdf

#### Dear Mr Melia

Thank you for your enquiry which we received on 7 July.

We respond to requests under the Freedom of Information Act 2000 and Environmental Information Regulations 2004.

I have attached the details of one historic landfill and one current landfill and 3 Waste activities that cover some of the area as requested.

Additional information which you may find useful is that we commented on a planning application at this site in 2008. All our comments and associated documentation (including an environmental impact assessment) can be found by contacting Suffolk Coastal District Council and quoting planning reference C/08/1725. The planning application is also online but the document associated with this application are not available for download. We recommend that you contact the council for further information. <a href="http://planningpublicaccess.waveney.gov.uk/online-">http://planningpublicaccess.waveney.gov.uk/online-</a>

applications/applicationDetails.do?activeTab=externalDocuments&keyVal=ZZZWJKPOXC872

Please refer to the Open Government Licence available here:

http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/ which explains the permitted use of this information.

Please get in touch if you have any further queries or contact us within two months if you would like us to review the information we have sent.

Please do contact me if I can be of further help.

Kind regards Mareth

Mrs Mareth Bassett RFCC Secretariat Support Officer Anglian (Eastern) RFCC Customers and Engagement Officer East Anglia Area (Essex, Norfolk & Suffolk team)

Address: Iceni House, Cobham Road, Ipswich, IP3 9JD

Jabber internal: 58443

Team Phone number: 0203 0255472 Personal Phone number: 0203 0258443

Email: mareth.bassett@environment-agency.gov.uk

Awarded to Essex, Norfolk and Suffolk Area

# DO YOU KNOW WHAT TO DO?



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#### **Coordinate Position**

NGR: TM2610744674 Copy

#### **Authorised Landfill Sites**

EA Area Code: AZ-Licence Number: WIL001 Waste Management Licence: 70723 Customer Number: 387 Status: Issued Licence Type: A05

Licence Holders Name: Brett Aggregates Ltd Correspondance Build: Waldringfield Quarry

Correspondance Area: Brightwell
Correspondance Town: Ipswich
Correspondance County: Suffolk
Correspondance Postcode: IP10 OBL

Facility Name: Waldringfield Quarry
Site Build: Waldringfield Quarry

Site Area: Brightwell
Site Town: Ipswich
Site County: Suffolk
Site Postcode: IP10 9BL

Licence Type Description: Landfill taking Non-Biodegradeable Wastes

National Grid Reference: TM260447
Centroid X: 626000
Centroid Y: 244700
Date Issue: 10-Mar-1995

Lic Epr: EAEPR\EA/EPR/CP3195NW/A001

#### **Coordinate Position**

NGR: TM2587344777 Copy

#### **REGIS Waste Licences**

View business reports for this feature

Lic Aref: 17598 Lic Nmbr: BRE066 Lic WmI: 103156 Lic Ltype: S0908

Site Add Build: Waldringfield Quarry

Site Add Area: Brightwell Site Add Town: Ipswich Site Add County: Suffolk Site Add Postcode: IP10 OBL Site Add Tel: 01227 829 043 Lic Name: Brett Aggregates Ltd Lic Site: Waldringfield Quarry NGR: TM2587744776

625877 Easting: Northing: 244776

Corr Add Build: Robert Brett House Corr Add Street: Ashford Road Corr Add Town: Canterbury Corr Add County: Kent Corr Add Postcode: CT4 7PP 01227 829 034

Corr Add Tel:

Stat Sdesc: Issued Lic Tard: 18-Nov-2011 Lic Detd: 23-Aug-2011 23-Aug-2011 Lic Issd: Lic Subd: 24-Aug-2011 Lic Amnd: 05-Sep-2011

Lic Tons: 0

EA Area: Essex Norfolk and Suffolk

Sizing: Small

EA/EPR/BB3032AT/A001 Lic Epr:

#### **Coordinate Position**

NGR: TM2600744688 Copy

#### **REGIS Waste Licences**

View business reports for this feature

Lic Aref: 1157 Lic Nmbr: WIL001

Lic Othid: SFK/LS/133/01

Lic Wml: 70723 Lic Ltype: A05

Site Add Build: Waldringfield Quarry

Site Add Area: Brightwell
Site Add Town: Ipswich
Site Add County: Suffolk
Site Add Postcode: IP10 9BL
Site Add Tel: 01473 736441
Site Add Fax: 01473 736446

Site Add Email: oliver.brown@brett.co.uk
Lic Name: Brett Aggregates Ltd
Lic Site: Waldringfield Quarry

NGR: TM260447 Easting: 626000 Northing: 244700

Corr Add Build: Waldringfield Quarry

Corr Add Area: Brightwell
Corr Add Town: Ipswich
Corr Add County: Suffolk
Corr Add Postcode: IP10 OBL
Corr Add Tel: 01473 811900
Corr Add Fax: 01473 736721

Corr Add Email: oliver.brown@brett.co.uk

 Stat Sdesc:
 Issued

 Lic Issd:
 10-Mar-1995

 Lic Subd:
 11-Mar-1995

 Lic Amnd:
 05-Jun-2014

 Lic Tons:
 75000

EA Area: Essex Norfolk and Suffolk

Sizing: Large

Lic Epr: EA/EPR/CP3195NW/A001

#### **Coordinate Position**

NGR: TM2610544792 Copy

#### **REGIS Waste Licences**

View business reports for this feature

Lic Aref: 18792 Lic Nmbr: BAL150 Lic Wml: 104224 Lic Ltype: A16

Site Add Build: Waldringfield Recycling Facility

Site Add Street: Waldringfield Road

Site Add Area: Brightwell
Site Add Town: Ipswich
Site Add County: Surrey
Site Add Postcode: IP10 OBL

Lic Name: Brett Aggregates Ltd

Lic Site: Waldringfield Recycling Facility

NGR: TM261448
Easting: 626100
Northing: 244800
Corr Add Build: Brett House
Corr Add Street: Bysing Wood Road

Corr Add Town: Faversham
Corr Add County: Kent
Corr Add Postcode: ME13 7UD
Corr Add Tel: 01227 829 054

Corr Add Email: karen.myers@brett.co.uk

Stat Sdesc: Issued

Lic Tard: 03-Aug-2012
Lic Detd: 10-Jul-2012
Lic Issd: 10-Jul-2012
Lic Subd: 11-Jul-2012
Lic Amnd: 27-Jul-2012
Lic Tons: 150000

EA Area: Essex Norfolk and Suffolk

Sizing: Large

Lic Epr: EA/EPR/GB3932RB/A001

#### **Coordinate Position**

NGR: TM2563244817 Copy

#### **Historic Landfill Sites**

HLD Reference: EAHLD01372 Site Name: The Swale

Site Address: The Swale, Brightwell

EA WMLR: 0

WRC Reference: 3500/0504

907/01/16/20, FSSC101, WD 28, SFK/LS/088/01 Site Reference:

Wilding and Smith Licence Holder:

Licence Holder Address: Brightwell, Ipswich, Suffolk Site Operator Name: Wilding and Smith

Site Operator Address: Brightwell, Ipswich, Suffolk

OS Prefix: TM Easting: 625600 Northing: 244700 EA Region: ΑN EA Area: Eastern AN

10-Jul-1980 Licence Issue Date: First Input: 31-Dec-1980 Last Input: 31-Dec-1996

Inert: Yes Licenced: Yes

## Waldringfield



# Legend REGIS Waste Licences Authorised Landfill Sites Historic Landfill Sites Martlesham Heath Martlesham Caravan Site Waldringfield Recycling Facility Waldringfield Quarry Waldringfield Landfill Waldringfield Quarry The Swale Wald am Heath Waldringfield Quarry Brightwell Heath The Swale Brightwell Heath Foxburrow Plantation © Environment Agency copyright and / or database rights 2014. All rights reserved. © Crown Copyright and database right 2014. Ordnance Survey licence number 100024198.

#### **Coordinate Position**

NGR: TM2563244817 Copy

#### **Historic Landfill Sites**

HLD Reference: EAHLD01372 Site Name: The Swale

Site Address: The Swale, Brightwell

EA WMLR: 0

WRC Reference: 3500/0504

907/01/16/20, FSSC101, WD 28, SFK/LS/088/01 Site Reference:

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Licence Holder Address: Brightwell, Ipswich, Suffolk Site Operator Name: Wilding and Smith

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OS Prefix: TM Easting: 625600 Northing: 244700 EA Region: ΑN EA Area: Eastern AN

10-Jul-1980 Licence Issue Date: First Input: 31-Dec-1980 Last Input: 31-Dec-1996

Inert: Yes Licenced: Yes

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NGR: TM2610544792 Copy

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Site Add Build: Waldringfield Recycling Facility

Site Add Street: Waldringfield Road

Site Add Area: Brightwell
Site Add Town: Ipswich
Site Add County: Surrey
Site Add Postcode: IP10 OBL

Lic Name: Brett Aggregates Ltd

Lic Site: Waldringfield Recycling Facility

NGR: TM261448
Easting: 626100
Northing: 244800
Corr Add Build: Brett House
Corr Add Street: Bysing Wood Road

Corr Add Town: Faversham
Corr Add County: Kent
Corr Add Postcode: ME13 7UD
Corr Add Tel: 01227 829 054

Corr Add Email: karen.myers@brett.co.uk

Stat Sdesc: Issued

Lic Tard: 03-Aug-2012
Lic Detd: 10-Jul-2012
Lic Issd: 10-Jul-2012
Lic Subd: 11-Jul-2012
Lic Amnd: 27-Jul-2012
Lic Tons: 150000

EA Area: Essex Norfolk and Suffolk

Sizing: Large

Lic Epr: EA/EPR/GB3932RB/A001

#### **Coordinate Position**

NGR: TM2600744688 Copy

#### **REGIS Waste Licences**

View business reports for this feature

Lic Aref: 1157 Lic Nmbr: WIL001

Lic Othid: SFK/LS/133/01

Lic Wml: 70723 Lic Ltype: A05

Site Add Build: Waldringfield Quarry

Site Add Area: Brightwell
Site Add Town: Ipswich
Site Add County: Suffolk
Site Add Postcode: IP10 9BL
Site Add Tel: 01473 736441
Site Add Fax: 01473 736446

Site Add Email: oliver.brown@brett.co.uk
Lic Name: Brett Aggregates Ltd
Lic Site: Waldringfield Quarry

NGR: TM260447 Easting: 626000 Northing: 244700

Corr Add Build: Waldringfield Quarry

Corr Add Area: Brightwell
Corr Add Town: Ipswich
Corr Add County: Suffolk
Corr Add Postcode: IP10 OBL
Corr Add Tel: 01473 811900
Corr Add Fax: 01473 736721

Corr Add Email: oliver.brown@brett.co.uk

 Stat Sdesc:
 Issued

 Lic Issd:
 10-Mar-1995

 Lic Subd:
 11-Mar-1995

 Lic Amnd:
 05-Jun-2014

 Lic Tons:
 75000

EA Area: Essex Norfolk and Suffolk

Sizing: Large

Lic Epr: EA/EPR/CP3195NW/A001

#### **Coordinate Position**

NGR: TM2587344777 Copy

#### **REGIS Waste Licences**

View business reports for this feature

Lic Aref: 17598 Lic Nmbr: BRE066 Lic WmI: 103156 Lic Ltype: S0908

Site Add Build: Waldringfield Quarry

Site Add Area: Brightwell Site Add Town: Ipswich Site Add County: Suffolk Site Add Postcode: IP10 OBL Site Add Tel: 01227 829 043 Lic Name: Brett Aggregates Ltd Lic Site: Waldringfield Quarry NGR: TM2587744776

625877 Easting: Northing: 244776

Corr Add Build: Robert Brett House Corr Add Street: Ashford Road Corr Add Town: Canterbury Corr Add County: Kent Corr Add Postcode: CT4 7PP 01227 829 034

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Lic Tons: 0

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Sizing: Small

EA/EPR/BB3032AT/A001 Lic Epr:

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Facility Name: Waldringfield Quarry
Site Build: Waldringfield Quarry

Site Area: Brightwell
Site Town: Ipswich
Site County: Suffolk
Site Postcode: IP10 9BL

Licence Type Description: Landfill taking Non-Biodegradeable Wastes

National Grid Reference: TM260447
Centroid X: 626000
Centroid Y: 244700
Date Issue: 10-Mar-1995

Lic Epr: EAEPR\EA/EPR/CP3195NW/A001

#### Aisha Allie

**From:** Adam Melia **Sent:** 07 July 2016 17:04

**To:** enquiries@naturalengland.org.uk

**Subject:** 10391 - Adastral Park - Preliminary Advice

**Attachments:** Site Location Plan.pdf

**Importance:** High

Dear Sir/Madam,

I am writing in regards to whether you are able to help or provide some preliminary guidance on Land with development potential at Adastral Park, Ipswich (Nearest Postcode: IP5 3QU; Nearest Grid Reference: 625362, 244957). Please find attached a Red Line Boundary for a likely development outline for your reference (*Please use this in the strictest of confidence*).

This is still currently at a very early stage, and it is not ready to be considered for the planning stage. We are therefore enquiring for some preliminary advice.

We are looking to further understand the ecology at the Site, especially in assessing the existing Fauna and Flora, along with any information on any ponds on the land.

I have noted from your website (using the interactive designation map) that the following are identified:

- Area of Woodland
- Historic Statutory Monuments

Are you able to provide any further information as to the above on land. (For example: the type of Woodland)?

I would also appreciate if you are able to advise us on any further Fauna and Flora on Site which we may have missed, and any information on this.

Further to this, we are aware that the Waldringfield Pit SSSI is located on the land. Are you able to:

- Confirm that the Waldringfield Pit SSSI has been designated a SSSI for its Geology (Quaternary deposits)?
- Can you advise as to whether the Waldringfield Pit SSSI has been designated a SSSI for any Fauna and Flora in the area, or is this just solely designated for the geology?
- Are you able to provide any information on the SSSI in terms of the area it covers and when it was designated a SSSI.
- Are you able to confirm whether this SSSI has any developmental easements, which restricts development?

If you are able to provide us with the requested information, it would be gratefully appreciated.

I hope my e-mail is self-explanatory, if you need any more information, please do not hesitate to contact myself.

Thank you in advance for your help on this matter.

I look forward to your response.

#### Aisha Allie

**From:** Consultations (NE) <consultations@naturalengland.org.uk>

**Sent:** 19 July 2016 15:14 **To:** Adam Melia

**Subject:** Consultation Response 190458 - 10391 - Adastral Park, Preliminary Advice

**Attachments:** 190458NE Letter S.pdf; Feedback Form.pdf

Please find Natural England's response in relation to the above mentioned consultation attached herewith.

**Yours Sincerely** 

David Allcock
Natural England
Consultations Team
Hornbeam House
Crewe Business Park
Electra Way,
Crewe
Cheshire, CW1 6GJ

Tel: 02080 268 342 – Internal Tel: 68343 Email: consultations@naturalengland.org.uk

#### www.gov.uk/natural-england

We are here to secure a healthy natural environment for people to enjoy, where wildlife is protected and England's traditional landscapes are safeguarded for future generations.

In an effort to reduce Natural England's carbon footprint I will, wherever possible, avoid travelling to meetings and attend via audio, video or web conferencing.

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Date: 19 July 2016 Our ref: 190458

Your ref: 10391 - Adastral Park



Mr Adam Melia Brookbanks Consulting Ltd 6150 Knights Court Solihull Parkway Birmingham Business Park Birmingham B37 7WY Hornbeam House
Crewe Business Park
Electra Way
Crewe
Cheshire
CW1 6GJ

T 0300 060 3900

#### BY EMAIL ONLY

Dear Mr Melia

Planning consultation: Preliminary Advice - development potential at Adastral Park

Location: Adastral Park, Ipswich, IP5 3QU

Thank you for your consultation dated and received by Natural England on 07 July 2016.

Your questions are answered below:

#### Type of Woodland on site

The Priority Habitat in your area of search is considered Deciduous Woodland. Natural England only has information on habitats that are considered Priority Habitat, other habitats may be present. Please contact your Local Records Centre (See below for details).

#### **Historic Statutory Monuments**

These are not in Natural England's remit, please consult Historic England.

#### Fauna and Flora on site

Natural England does not routinely hold detailed information on the distribution of species and habitats but forwards data it has to the appropriate Local Records Centre (LRC). We advise that you direct this query and other similar queries in the future to the LRC, who will have the most comprehensive data records for the area.

For Local Records Centre (LRC) in Suffolk Coastal District please contact:

Suffolk Biodiversity Information Service

Ipswich Museum, High Street, Ipswich, Suffolk. IP1 3QH Tel: 01473 433547 e-mail: <a href="martin.sandford@suffolk.gov.uk">martin.sandford@suffolk.gov.uk</a>

#### Waldringfield Pit SSSI

- I can confirm that Waldringfield Pit is a purely geological SSSI.
- No fauna or flora are designated features of this SSSI (although this does not mean that there are no Protected Species in the SSSI).
- The Waldringfield Pit SSSI was designated on 05 December 1991 and covers an area of 0.17 hectares.
- Based on the information provided, I am unable to confirm if there are any developmental easements (which restrict development); further information would be required to determine this. Please submit a Discretionary Advice Request (DAS) for more detailed advice.

#### Deben Estuary SSSI, SPA and Ramsar

Please Note your proposed development site is within a sensitive area with regard to Deben Estuary SSSI, SPA and Ramsar. Please see our Impact Risk Zones on the <u>MAGIC</u> mapping system for additional information.

You may wish to submit a Discretionary Advice Request (DAS) for more detailed advice. Further information on the Discretionary Advice Service see <a href="here">here</a>. (scroll down to the "Pay for advice" section, DAS form is named "charged service request form")

#### Discretionary Advice Service (DAS) & Pre-submission Screening Service (PSS)

Natural England offers two chargeable services - the Discretionary Advice Service, which provides preapplication and post-consent advice on planning/licensing proposals to developers and consultants, and the Pre-submission Screening Service for European Protected Species mitigation licence applications. These services help applicants take appropriate account of environmental considerations at an early stage of project development, reduce uncertainty, the risk of delay and added cost at a later stage, whilst securing good results for the natural environment.

Natural England has published **Standing Advice** on protected species.

I hope this information will help you complete your search and we would encourage you to forward biological records you have to the appropriate Local Records Centre, so that they might be included in the data sets to enhance future information requests.

Yours sincerely

David Allcock Consultations Team

#### Aisha Allie

From: Enquiries, Unit <enquiries@environment-agency.gov.uk>

**Sent:** 13 July 2016 11:33 **To:** Adam Melia

**Subject:** 160713/RML10 - 10391 - Adastral Park - Preliminary Advice

**Attachments:** Site Location Plan.pdf

**Importance:** High

Dear Adam,

I have passed your enquiry to our customer team for the Ipswich area and they will be in touch with you shortly.

The Freedom of Information Act and Environmental Information Regulations state that a public authority must respond to requests for information within 20 working days, but we aim to respond to all enquiries as quickly as we can.

You can find more information about our service commitment by clicking on the link below:

https://www.gov.uk/government/publications/environment-agency-customer-service-commitment

Should you wish to contact the customer team directly, please use the contact details below. Please quote your Enquiry Reference 160713/RML10 in any correspondence with us regarding this matter.

Customers and Engagement
Environment Planning & Engagement
Environment Agency
Essex, Norfolk and Suffolk Area
Iceni House
Cobham Road
IPSWICH
IP3 9JD

Tel: 03708 506506

Rosalind McGarrie-Lound Customer Service Adviser National Customer Contact Centre - Part of National Operations Services

Tel: 03708 506 506

■ Web Site: www.gov.uk/environment-agency

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http://www.smartsurvey.co.uk/s/NCCCcustomer/

From: Adam Melia [mailto:Adam.Melia@brookbanks.com]

Sent: 07 July 2016 17:04 To: Enquiries, Unit

Subject: 10391 - Adastral Park - Preliminary Advice

Importance: High

Dear Sir/Madam,

I am writing in regards to whether you are able to help or provide some preliminary guidance on Land with development potential at Adastral Park, Ipswich (Nearest Postcode: IP5 3QU; Nearest Grid Reference: 625362, 244957). Please find attached a Red Line Boundary for a likely development outline for your reference (*Please use this in the strictest of confidence*).

This is still currently at a very early stage, and it is not ready to be considered for the planning stage. We are therefore enquiring for some preliminary advice.

- We are just enquiring as to whether you are able to provide me with some detailed information in regards to your **Landfill Register** for the land (outlined in red on the attached plan)? Is this something that you are able to provide me with, and if not could you please advise me how we would go about obtaining this information.
- Also, we believe that on Site previously, there would have been some waste oils which were used. We are therefore looking to obtain any Hazardous Waste Register for the potential land? Again, is this something that you are able to provide us with, and if not are you able to please advise me on how we would go about obtaining this information?

If you are able to provide us with the requested information, this would be gratefully appreciated.

I hope my e-mail is self-explanatory, if you need any more information, please do not hesitate to contact myself.

Thank you in advance for your help on this matter.

I look forward to your response.

**Kind Regards** 

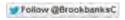
Adam Melia BSc (Hons) Assistant Consultant

# **Brookbanks**

Brookbanks Consulting Ltd 6150 Knights Court Solihull Parkway Birmingham Business Park Birmingham B37 7WY

Office: 0121 329 4330 Direct: 0121 329 4338

Email: Adam.Melia@brookbanks.com
Web: www.brookbanks.com



Project Managers
Project Finance & Cost Managers
Civil, Structural & Environmental Consultants

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