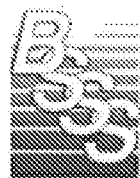


CONTAMINATIONCONSULTANTS LTD

FLOOD RISK ASSESSMENT

Planning and Property Consultants

**Chalcroft Nurseries
Bognor Regis**



Contamination Consultants Ltd
April 2009

Our Ref: CC/PPC/CN/1#2

Date: 8th April 2009

Client:
Planning and Property Consultants Ltd
Forum House
Stirling Road
PO19 7DN

FLOOD RISK ASSESSMENT

**Chalcroft Nurseries
Bognor Regis**

A report prepared on behalf of **Contamination Consultants** by:



Amy Wolstencroft BSc, MSc Environmental Geosciences
Environmental Consultant

Checked by:



Dr Robin S Davies BSc PhD MScSci CSci PGC *Contaminated Land Management*
Chartered Scientist

Date: 8th April 2009



INSTITUTE OF PROFESSIONAL SOIL SCIENTISTS

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CONTAMINATION CONSULTANTS LTD

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DRAWING CSM/1 **Current site location**

APPENDIX A **Flood Screening Report**

APPENDIX B **Environmental Data**

APPENDIX C **Strategic Flood Risk Assessment,
Arun District Council, Volume IV
Assessment of sites of search. February 2008**

1. INTRODUCTION AND OBJECTIVES

The purpose of this assessment is to examine specifically the current and potential risks to people, property, infrastructure, habitats and statutory sites associated with possible flooding of the site located at:

Chalcroft Nurseries and Garden Centre
Chalcroft Lane
Bognor Regis
West Sussex
PO21 5TS

Grid Ref: 491770, 100530

The site is to be developed as residential properties.

This flood risk assessment has been designed in line with:

Planning Policy Statement 25: Development and Flood Risk (2008)

And

Strategic Flood Risk Assessment, Arun District Council, Volume IV Assessment of sites of search, February 2008 (Appendix C).

Evaluation of the flood risks are given.

2. SITE CHARACTERISATION

Current setting and condition

The site assessed for this investigation currently comprises a garden centre and aquatics shop with disused land to the rear. The disused land comprises partially dismantled polytunnels, areas of bracken and piles of builder's waste rubble/bricks (Photo 1). There were ditches surrounding the site which were approximately 1 m lower than the site and contained water in places (Photo 2).

Photo 1 See Drawing CSM/1 for location



Photo 2 See Drawing CSM/1 for location



Soils, geology and hydrology

Drift geology of the area consists of Quaternary age Aeolian deposits of silts and gravels overlying the Palaeocene age Reading Formation which consists of mottled clays and localised sand.

The site walkover revealed very fine sandy CLAY soils.

The impermeable nature of the clay at depth indicates that water is unlikely to pass quickly to the groundwater. Surface water may pass through service channels and the silts and gravels to the local watercourses including the drains surrounding the site.

Previous reports and environmental data

Environmental data (Appendix B) indicates the following:

The site is in a variably permeable minor aquifer zone

The site is not in a groundwater source protection zone

Strategic Flood Risk Assessment, Arun District Council, Volume IV Assessment of sites of search. February 2008 (Appendix C) indicates that the site has a low risk of flooding from rivers, the sea and artificial sources, a low/medium risk from sewers, a medium risk from land flooding and a high risk from groundwater flooding. The high probability of groundwater flooding for the Northwest Bognor Regis area indicates that the 'Exception Test' is required and is performed in Section 3.

4. RISK ASSESSMENT

4.1 Sources of flooding

Rivers and streams

The closest watercourse is the Aldingbourne Rife 1.1 km north east of the site. The chance of flooding from river and stream sources is low as there is a less than 1 in 1000 annual probability of flooding from river and stream sources (See Appendix A). The drain north of the site is fed by runoff from the land and drains to the north west.

Sea

The closest marine waters are the Eastern English Channel 1.3 km south of the site. The chance of flooding marine sources is low as there is a less than 1 in 1000 annual probability of flooding from marine sources (See Appendix A).

Land and groundwater (Pluvial)

Pluvial flooding may occur due to rises in the groundwater table above surface level or saturation of the clay soils and the creation of perched water. The chance of flooding from pluvial sources is high on the south east corner of the site as there is a greater than 1 in 75 annual probability of flooding from pluvial sources (See Appendix A). The chance of flooding from pluvial sources is low on the north east, north west and south west of the site as there is a less than 1 in 1000 annual probability of flooding from pluvial sources (See Appendix A).

Sewers

Surface water runoff is to be maintained at the existing rates due to the historical flooding information indicating that the sewer system in Bognor Regis is unlikely to have any spare capacity (*Strategic Flood Risk Assessment, Arun District Council, Volume IV Assessment of sites of search, February 2008, page 3-4*) (See Appendix C).

4.2 Receptors

- People
- Property
- Infrastructure
- Habitats
- Statutory sites

4.3 Existing risk to the site

There is considered to be a low risk from flooding of the site at Chalcroft Nurseries, Bognor Regis. This assessment is concluded on the basis of the 75 yr flood return maps (Appendix A) showing a risk from pluvial flooding.

There is considered to be no significant risk of flooding from river or marine sources because the site has a less than 1 in 1000 annual probability of river or seas flooding in any year (<0.1%) (See Appendix A).

4.4 Possible risk from site development

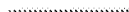
Development on the site is considered to pose no increase in risk provided that correct drainage to the mains sewer located adjacent to Chalcroft Lane is installed provided that there is 'spare capacity' to cope with run-off from any buildings and hard-standing surfaces. If there is not 'spare capacity' in the sewers it is recommended that storage systems are installed to manage runoff.

6. CONCLUSIONS

Given the historical flood data and the Strategic Flood Risk Assessment and based on this information, the south east corner of the site can be considered to have a high risk of flooding from off-site sources. The north east, south west and north west of the site can be considered to have a low risk of flooding from off-site sources.

Current site location

DRAWING CSM/1

NOTES: Site boundary Possible surface
water flow**Contamination Consultants**

Flood Risk Assessment

Tel.: 0191 243 0678

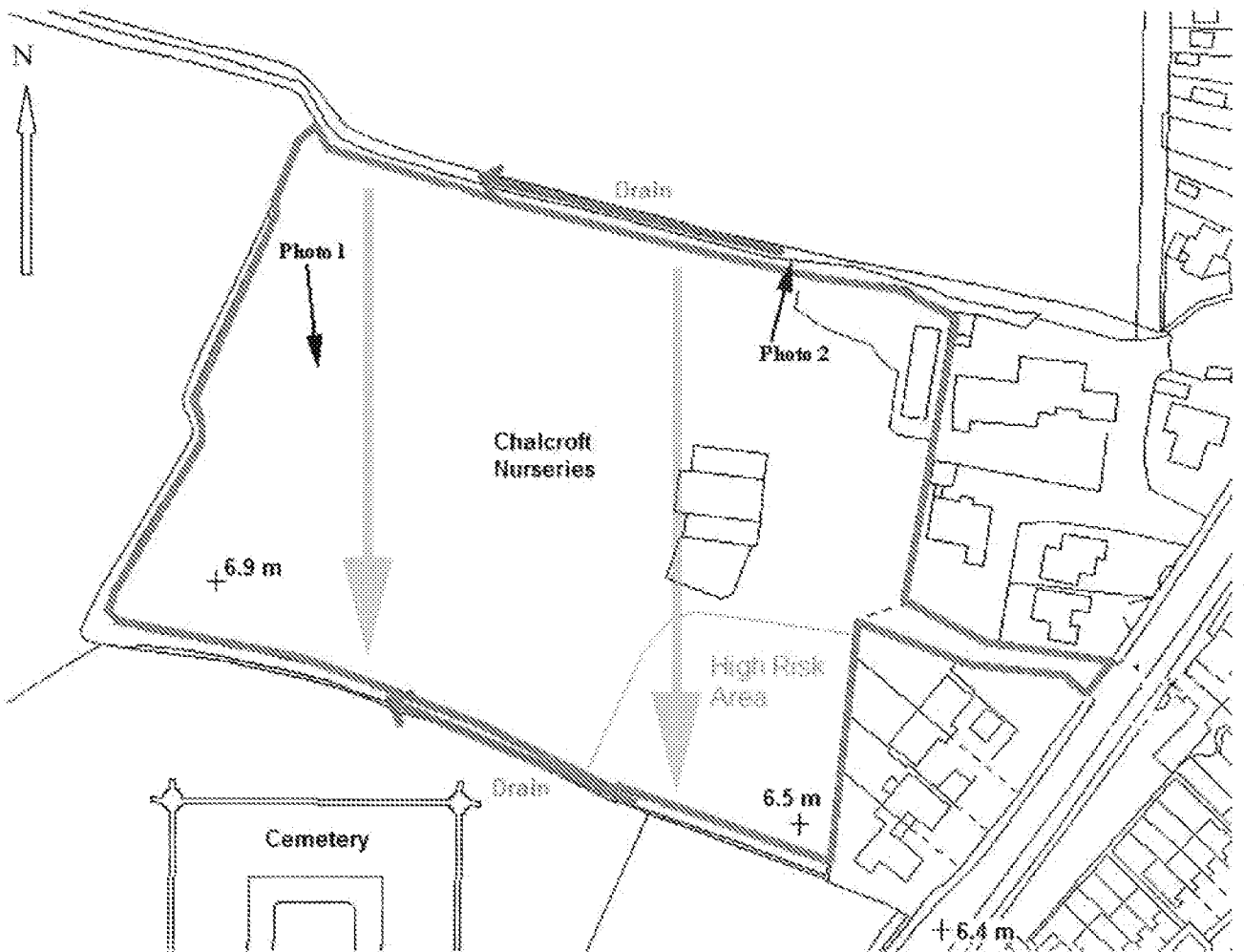
www.contamination-consultants.co.uk

Drawing Title: Current Site Location

Drawing No.: CSM/1

Client: Planning and Property
Consultants LtdProject: Chalcroft Nurseries and Garden
Centre, Chalcroft Lane, Bognor Regis

Scale: 1: 1667

Date: 8th April 2009

Envirocheck[®] Report:

Flood Screening Report Datasheet

Order Details:

Order Number:

27405365_1_1

Customer Reference:

CC/PPC/CN/030309

National Grid Reference:

491770, 100530

Slice:

A

Site Area (Ha):

2.37

Search Buffer (m):

1000

Site Details:

Chalcroft Nurseries & Garden Centre

Chalcroft Lane

BOGNOR REGIS

West Sussex

PO21 5TS

Client Details:

Dr R Davies

Soil Environment Services Ltd

The Nanotechnology Centre

Kings Road

Newcastle upon Tyne

NE1 7RU

Report Section and Details	Page Number
Summary	-
The Summary section provides an overview of the data contained within the report, detailing the number of data set features or the existence of a data set in relation to the buffer(s) selected. For ease of reference, the report is broken down into five sections of data.	
EA / CEH Flood Data	1
This section details data from the Environment Agency and the Centre for Ecology and Hydrology. The EA data is reported to a distance of 250m from the edge of the site polygon and details both Zone 2 (extreme) and Zone 3 flood extents, as well as flood defences, flood water storage areas and areas benefiting from flood defences. The CEH data is reported to a distance of 250m from the edge of the site polygon and covers flood data for Scotland, divided into levels based on the frequency and magnitude of a predicted 100 year term. All data sets within this section are plotted and feature on the EA / CEH Flood Data (1:10,000) map. For added value, OS Contour data is also plotted, detailing contours, spot heights and air heights.	
RMS Flood Data	2
This section contains the Risk Management Solutions flood data. The data is based upon the likelihood of a flood occurrence for 3 flood return periods; these being 75 years, 100 years and 1000 years. Each return period is depicted on a separate 1:10,000 scale map and reports features to a distance of 250m from the edge of the site polygon. Each return period can detail both defended and/or undefended flood features, with each feature also reporting an associated flood depth. In addition pluvial flood features are also detailed where applicable, but tidal flooding is not included. For added value, OS Contour data is also plotted, detailing contours, spot heights and air heights.	
BGS Flood Data	3
This section contains two BGS data sets; namely Geological Indicators of Flooding and Groundwater Flooding Susceptibility, both of which report features out to a possible 1000m, with coverage in England and Wales. Only the BGS Geological Indicators of Flooding data set is plotted on the accompanying BGS Flood Data (1:50,000) map.	
EA Detailed River Network Data	4
This section details 3 sources of data that depict and detail the river network of England and Wales, captured primarily from the water features theme of Ordnance Survey's OS MasterMap Topography Layer. The DRN Lines data set details all the types of rivers, drains and streams which can be found in England and Wales. The DRN Nodes data set details the river, drain and stream node intersections which divide the detailed river network data. All nodes are defined as being one of the following: A source, sink, junction, or pseudo node, interactions or not assigned. The DRN Offline Drainage dataset details water features from OS MasterMap that do not connect into the river network and are generally limited in length. All data sets within this section are plotted and feature on the EA Detailed River Network (1:10,000) map. For added value, OS Contour data is also plotted, detailing contours, spot heights and air heights.	
Flood Insurance Risk Data	11
This section contains two sources of flood risk data from Norwich Union and Crawford and Company. Neither data sets are plotted on any of the associated Flood maps. Norwich Union has generated a detailed flood risk assessment to accurately evaluate the flood risk for individual customers. The information from this assessment has been used to define a risk model detailing 5 levels of flood risk, based on the individual properties rather than the postcode. The flood risk assessment undertaken by Norwich Union is for river flooding and coastal flooding only, and does not include groundwater, flash or sewerage flooding. Only the worst case flood risk is reported for the site. Crawford & Co have generated an Insurance Claims rating for Flood Risk. The risk is determined by comparing the number of flood insurance claims made to the number of properties in the postcode sector. The data will also include flood claims from domestic accidents or blocked drains, as well as flooding from river or tidal events. Flood insurance claim ratings are reported for the site only.	
Data Currency	12
Data Suppliers	13
Useful Contacts	14

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m
EA / CEH Flood Data					
Extreme Flooding from Rivers or Sea without Defences	pg 1		1	n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
RMS Flood Data					
RMS 75 year Flood Return	pg 2	2	4	n/a	n/a
RMS 100 year Flood Return	pg 2	1	5	n/a	n/a
RMS 1000 year Flood Return	pg 2	1	5	n/a	n/a
BGS Flood Data					
BGS Geological Indicators of Flooding	pg 3				1
BGS Groundwater Flooding Susceptibility	pg 3	1	5	5	4
EA Detailed River Network Data					
Detailed River Network Lines	pg 4				22
Detailed River Network Nodes	pg 7				18
Detailed River Network Offline Drainage	pg 8	3	6	9	29
Flood Insurance Risk Data					
Property-based Flood Risk	pg 11	1	n/a	n/a	n/a
Postcode Sector Flood Insurance Claim Ratings	pg 11	1	n/a	n/a	n/a

Report Version v36.0

Map ID	Details	Quadrant Reference (Compass)	Estimated Distance From Site	Contact	NGR
	Extreme Flooding from Rivers or Sea without Defences Flood Plain Type: Tidal Boundary Accuracy: As Supplied	A13NE (N)	197	1	491810 100795
	Flooding from Rivers or Sea without Defences None				
	Areas Benefiting from Flood Defences None				
	Flood Water Storage Areas None				
	Flood Defences None				

Map ID	Details	Quadrant Reference (Compass)	Estimated Distance From Site	Contact	NGR
	RMS 75 year Flood Return Flood Type/Depth: 75 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13SW (S)	0	2	491767 100465
	RMS 75 year Flood Return Flood Type/Depth: 75 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13SE (SE)	0	2	491823 100466
	RMS 75 year Flood Return Flood Type/Depth: 75 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13SW (W)	75	2	491576 100461
	RMS 75 year Flood Return Flood Type/Depth: 75 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13SE (SE)	135	2	491931 100356
	RMS 75 year Flood Return Flood Type/Depth: 75 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13SW (W)	174	2	491469 100521
	RMS 75 year Flood Return Flood Type/Depth: 75 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13SW (W)	227	2	491436 100403
	RMS 100 year Flood Return Flood Type/Depth: 100 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13SE (E)	0	2	491822 100521
	RMS 100 year Flood Return Flood Type/Depth: 100 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13SW (W)	75	2	491576 100461
	RMS 100 year Flood Return Flood Type/Depth: 100 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13SE (SE)	135	2	491931 100356
	RMS 100 year Flood Return Flood Type/Depth: 100 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13NE (NE)	182	2	491995 100691
	RMS 100 year Flood Return Flood Type/Depth: 100 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13SW (W)	227	2	491436 100403
	RMS 100 year Flood Return Flood Type/Depth: 100 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13NW (NW)	248	2	491605 100851
	RMS 1000 year Flood Return Flood Type/Depth: 1000 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13SE (E)	0	2	491822 100521
	RMS 1000 year Flood Return Flood Type/Depth: 1000 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13SW (SW)	88	2	491648 100407
	RMS 1000 year Flood Return Flood Type/Depth: 1000 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13NW (N)	182	2	491761 100798
	RMS 1000 year Flood Return Flood Type/Depth: 1000 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13SW (S)	183	2	491685 100296
	RMS 1000 year Flood Return Flood Type/Depth: 1000 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13SE (SE)	217	2	492002 100302
	RMS 1000 year Flood Return Flood Type/Depth: 1000 year pluvial flood, depth is not applicable Flood Hazard: Pluvial Flood Risk	A13SW (S)	249	2	491651 100240

Map ID	Details	Quadrant Reference (Compass)	Estimated Distance From Site	Contact	NGR
	BGS Geological Indicators of Flooding Flooding Type: Coastal Flooding	A18SE (N)	567	3	491903 101151
	BGS Groundwater Flooding Susceptibility Flooding Type: Moderately High Susceptibility to Groundwater Flooding	A13NW (N)	0	3	491765 100700
	BGS Groundwater Flooding Susceptibility Flooding Type: High Susceptibility to Groundwater Flooding	A13NW (N)	93	3	491765 100700
	BGS Groundwater Flooding Susceptibility Flooding Type: High Susceptibility to Groundwater Flooding	A13SW (SW)	106	3	491600 100400
	BGS Groundwater Flooding Susceptibility Flooding Type: Negligible Susceptibility to Groundwater Flooding	A13NE (NE)	117	3	491850 100700
	BGS Groundwater Flooding Susceptibility Flooding Type: High Susceptibility to Groundwater Flooding	A13NW (NW)	137	3	491650 100750
	BGS Groundwater Flooding Susceptibility Flooding Type: Low Susceptibility to Groundwater Flooding	A13NW (N)	178	3	491765 100800
	BGS Groundwater Flooding Susceptibility Flooding Type: Moderately High Susceptibility to Groundwater Flooding	A12SE (W)	292	3	491350 100500
	BGS Groundwater Flooding Susceptibility Flooding Type: Moderate Susceptibility to Groundwater Flooding	A18SW (N)	342	3	491600 100950
	BGS Groundwater Flooding Susceptibility Flooding Type: High Susceptibility to Groundwater Flooding	A14NW (E)	412	3	492300 100550
	BGS Groundwater Flooding Susceptibility Flooding Type: Moderately High Susceptibility to Groundwater Flooding	A18SW (NW)	427	3	491500 101000
	BGS Groundwater Flooding Susceptibility Flooding Type: High Susceptibility to Groundwater Flooding	A8NW (S)	438	3	491765 100000
	BGS Groundwater Flooding Susceptibility Flooding Type: High Susceptibility to Groundwater Flooding	A18SW (N)	548	3	491550 101150
	BGS Groundwater Flooding Susceptibility Flooding Type: Low Susceptibility to Groundwater Flooding	A14NE (E)	661	3	492500 100750
	BGS Groundwater Flooding Susceptibility Flooding Type: Low Susceptibility to Groundwater Flooding	A14NE (E)	772	3	492600 100800
	BGS Groundwater Flooding Susceptibility Flooding Type: Moderate Susceptibility to Groundwater Flooding	A18NE (N)	844	3	492050 101400

Map ID	Details	Quadrant Reference (Compass)	Estimated Distance From Site	Contact	NGR
1	Detailed River Network Lines River Type: Tertiary River River Name: Not Supplied Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A18SE (N)	553	1	491916 101130
2	Detailed River Network Lines River Type: Secondary River River Name: Not Supplied Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A18NE (N)	605	1	491805 101218
3	Detailed River Network Lines River Type: Tertiary River River Name: Drain Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Drain (ditch, Reen, Rhyne, Drain) Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A17SE (NW)	639	1	491251 101077
4	Detailed River Network Lines River Type: Secondary River River Name: Not Supplied Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A18NE (N)	656	1	491952 101230
5	Detailed River Network Lines River Type: Secondary River River Name: Drain Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Drain (ditch, Reen, Rhyne, Drain) Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A18NE (N)	656	1	491952 101230
6	Detailed River Network Lines River Type: Tertiary River River Name: Drain Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Drain (ditch, Reen, Rhyne, Drain) Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A17SE (NW)	694	1	491253 101154

Map ID	Details	Quadrant Reference (Compass)	Estimated Distance From Site	Contact	NGR
7	Detailed River Network Lines River Type: Tertiary River River Name: Drain Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Drain (ditch, Reen, Rhyne, Drain) Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A17SE (NW)	694	1	491253 101154
8	Detailed River Network Lines River Type: Tertiary River River Name: Drain Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Currently Undefined Flood Risk: Other Rivers Management Status: Water Course Name: North Bersted Ditch Water Course: N414 Reference:	A19SE (NE)	774	1	492460 101057
9	Detailed River Network Lines River Type: Primary River River Name: Drain Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Currently Undefined Flood Risk: Other Rivers Management Status: Water Course Name: North Bersted Ditch Water Course: N414 Reference:	A19SW (NE)	783	1	492406 101131
10	Detailed River Network Lines River Type: Primary River River Name: Drain Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Currently Undefined Flood Risk: Other Rivers Management Status: Water Course Name: North Bersted Ditch Water Course: N414 Reference:	A19SE (NE)	793	1	492543 100968
11	Detailed River Network Lines River Type: Secondary River River Name: Not Supplied Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A18NW (N)	805	1	491446 101387
12	Detailed River Network Lines River Type: Secondary River River Name: Drain Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Drain (ditch, Reen, Rhyne, Drain) Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A17NE (NW)	828	1	491350 101373

Map ID	Details	Quadrant Reference (Compass)	Estimated Distance From Site	Contact	NGR
13	Detailed River Network Lines River Type: Tertiary River River Name: Drain Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Drain (ditch, Reen, Rhyne, Drain) Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A17NE (NW)	828	1	491350 101373
14	Detailed River Network Lines River Type: Secondary River River Name: Drain Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Drain (ditch, Reen, Rhyne, Drain) Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A18NW (N)	853	1	491520 101457
15	Detailed River Network Lines River Type: Secondary River River Name: Drain Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Drain (ditch, Reen, Rhyne, Drain) Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A18NW (N)	853	1	491520 101457
16	Detailed River Network Lines River Type: Secondary River River Name: Not Supplied Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A17NE (NW)	857	1	491225 101337
17	Detailed River Network Lines River Type: Tertiary River River Name: Drain Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Drain (ditch, Reen, Rhyne, Drain) Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A17NE (NW)	857	1	491225 101337
18	Detailed River Network Lines River Type: Secondary River River Name: Not Supplied Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A17NE (NW)	895	1	491144 101325

Map ID	Details	Quadrant Reference (Compass)	Estimated Distance From Site	Contact	NGR
19	Detailed River Network Lines River Type: Secondary River River Name: Drain Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Drain (ditch, Reen, Rhyne, Drain) Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A19NW (N)	933	1	492139 101467
20	Detailed River Network Lines River Type: Secondary River River Name: Drain Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Drain (ditch, Reen, Rhyne, Drain) Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A19NW (N)	933	1	492139 101467
21	Detailed River Network Lines River Type: Secondary River River Name: Drain Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Drain (ditch, Reen, Rhyne, Drain) Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A19NW (NE)	991	1	492315 101454
22	Detailed River Network Lines River Type: Secondary River River Name: Not Supplied Hydrographic Area: D007 River Flow Type: Primary Flow Path River Surface Level: Surface Drain Feature: Not a Drain Flood Risk: Other Rivers Management Status: Water Course Name: Not Supplied Water Course: Not Supplied Reference:	A19NW (NE)	991	1	492315 101454
23	Detailed River Network Nodes River Node Type: Source Hydrographic Area: D007	A18SE (N)	553	1	491916 101130
24	Detailed River Network Nodes River Node Type: Source Hydrographic Area: D007	A18NE (N)	605	1	491805 101218
25	Detailed River Network Nodes River Node Type: Source Hydrographic Area: D007	A17SE (NW)	654	1	491167 101002
26	Detailed River Network Nodes River Node Type: Junction Hydrographic Area: D007	A18NE (N)	656	1	491952 101230
27	Detailed River Network Nodes River Node Type: Junction Hydrographic Area: D007	A17SE (NW)	694	1	491253 101154
28	Detailed River Network Nodes River Node Type: Source Hydrographic Area: D007	A18NE (N)	709	1	491895 101304
29	Detailed River Network Nodes River Node Type: Pseudo (OS MasterMap polygon boundary) Hydrographic Area: D007	A19SW (NE)	783	1	492406 101131
30	Detailed River Network Nodes River Node Type: Pseudo (OS MasterMap polygon boundary) Hydrographic Area: D007	A19SE (NE)	793	1	492543 100968

Map ID	Details	Quadrant Reference (Compass)	Estimated Distance From Site	Contact	NGR
31	Detailed River Network Nodes River Node Type: Junction Hydrographic Area: D007	A17NE (NW)	828	1	491350 101373
32	Detailed River Network Nodes River Node Type: Source Hydrographic Area: D007	A17SW (NW)	850	1	491025 101140
33	Detailed River Network Nodes River Node Type: Junction Hydrographic Area: D007	A18NW (N)	853	1	491520 101457
34	Detailed River Network Nodes River Node Type: Junction Hydrographic Area: D007	A17NE (NW)	857	1	491225 101337
35	Detailed River Network Nodes River Node Type: Source Hydrographic Area: D007	A19NE (NE)	888	1	492455 101229
36	Detailed River Network Nodes River Node Type: Junction Hydrographic Area: D007	A17NE (NW)	895	1	491144 101325
37	Detailed River Network Nodes River Node Type: Source Hydrographic Area: D007	A18NW (N)	906	1	491609 101524
38	Detailed River Network Nodes River Node Type: Source Hydrographic Area: D007	A17NE (NW)	912	1	491193 101381
39	Detailed River Network Nodes River Node Type: Junction Hydrographic Area: D007	A19NW (N)	933	1	492139 101467
40	Detailed River Network Nodes River Node Type: Junction Hydrographic Area: D007	A19NW (NE)	991	1	492315 101454
41	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A13NE (N)	0	1	491782 100595
42	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A13NW (W)	0	1	491670 100546
43	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A13SW (SW)	0	1	491740 100474
44	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A13SW (W)	1	1	491647 100495
45	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A13SE (E)	79	1	491969 100508
46	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A13SW (SW)	96	1	491661 100366
47	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A13SW (SW)	103	1	491567 100427
48	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A13SW (SW)	126	1	491549 100409
49	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A13NW (N)	188	1	491732 100807
50	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A18SW (NW)	312	1	491517 100876
51	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A18SW (NW)	327	1	491543 100909

Map ID	Details	Quadrant Reference (Compass)	Estimated Distance From Site	Contact	NGR
52	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A18SW (NW)	327	1	491543 100909
53	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A18SW (NW)	329	1	491581 100929
54	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A13NW (NW)	334	1	491435 100826
55	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A12NE (NW)	337	1	491402 100783
56	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A12NE (NW)	350	1	491375 100760
57	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A18SW (N)	359	1	491707 100982
58	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A12NE (NW)	370	1	491340 100730
59	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A17SE (NW)	551	1	491410 101091
60	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A17SE (NW)	551	1	491410 101091
61	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A18SW (NW)	553	1	491432 101106
62	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A17SE (NW)	576	1	491263 100997
63	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A18NW (N)	613	1	491568 101221
64	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A18NW (N)	631	1	491552 101236
65	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A18NW (N)	655	1	491531 101256
66	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A12NW (W)	684	1	491000 100732
67	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A18NW (N)	746	1	491704 101368
68	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A18NW (N)	755	1	491718 101377
69	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A18NW (N)	755	1	491718 101377
70	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A18NW (N)	758	1	491696 101381
71	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A18NW (N)	766	1	491745 101386
72	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A12SW (W)	796	1	490853 100394

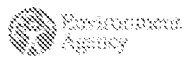
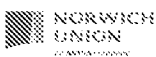
Map ID	Details	Quadrant Reference (Compass)	Estimated Distance From Site	Contact	NGR
73	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A7NW (SW)	823	1	491036 99940
74	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A7NW (SW)	840	1	491008 99946
75	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A12SW (W)	848	1	490799 100409
76	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A12SW (W)	848	1	490799 100409
77	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A12SW (W)	854	1	490797 100373
78	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A12SW (W)	854	1	490798 100372
79	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A12SW (W)	858	1	490799 100343
80	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A12SW (W)	868	1	490775 100527
81	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A12NW (W)	888	1	490779 100704
82	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A18NW (N)	917	1	491627 101536
83	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A23SW (N)	926	1	491643 101547
84	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A11SE (W)	949	1	490698 100402
85	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A11SE (W)	953	1	490702 100348
86	Detailed River Network Offline Drainage River Type: Secondary River Hydrographic Area: D007	A7NW (SW)	964	1	490863 99930
87	Detailed River Network Offline Drainage River Type: Tertiary River Hydrographic Area: D007	A11SE (W)	987	1	490663 100375

Flood Insurance Risk Data

Map ID	Details	Quadrant Reference (Compass)	Estimated Distance From Site	Contact	NGR
	Property-based Flood Risk Flood Risk Rating: Negligible Flood Risk Rating	A13SE (E)	0	2	491788 100523
	Postcode Sector Flood Insurance Claim Ratings Insurance Rating: Very Low Flood Insurance Claim Rating - No Recorded Claims Postcode Sector: PO21 5	A14NW (E)	0	2	492237 100712

EA / CEH Flood Data	Version	Update Cycle
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	January 2009	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	January 2009	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	January 2009	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	January 2009	Quarterly
Flood Defences Environment Agency - Head Office	January 2009	Quarterly
RMS Flood Data	Version	Update Cycle
RMS 75 year Flood Return Risk Management Solutions - South East Catchment	December 2008	As notified
RMS 100 year Flood Return Risk Management Solutions - South East Catchment	December 2008	As notified
RMS 1000 year Flood Return Risk Management Solutions - South East Catchment	December 2008	As notified
BGS Flood Data	Version	Update Cycle
BGS Geological Indicators of Flooding British Geological Survey - National Geoscience Information Service	June 2007	Annually
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	August 2007	Annually
EA Detailed River Network Data	Version	Update Cycle
Detailed River Network Lines Environment Agency - Head Office	September 2008	As notified
Detailed River Network Nodes Environment Agency - Head Office	September 2008	As notified
Detailed River Network Offline Drainage Environment Agency - Head Office	September 2008	As notified
Flood Insurance Risk Data	Version	Update Cycle
Property-based Flood Risk Norwich Union - Dataservice	July 2008	Annually
Postcode Sector Flood Insurance Claim Ratings Crawford and Company	December 2008	Quarterly

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	 Ordnance Survey [®] Licensed Partner
Environment Agency	 Environment Agency
Centre for Ecology and Hydrology	 Centre for Ecology & Hydrology NATURAL ENVIRONMENT RESEARCH COUNCIL
British Geological Survey	 British Geological Survey NATURAL ENVIRONMENT RESEARCH COUNCIL
Norwich Union	 NORWICH UNION Life. Better. Protected.
Risk Management Solutions	 R M S [®]

Contact	Name and Address	Contact Details
1	Environment Agency - National Customer Contact Centre (NCCC) PO Box 544, Templeborough, Rotherham, S60 1BY	Telephone: 08708 506 506 Email: enquiries@environment-agency.gov.uk
2	Landmark Information Group Limited 5 - 7 Abbey Court, Eagle Way, Sowton, Exeter, Devon, EX2 7HY	Telephone: 01392 441761 Fax: 01392 441709 Email: cssupport@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk
3	British Geological Survey - Enquiry Service British Geological Survey, Kingsley Dunham Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
-	Landmark Information Group Limited The Smith Centre, Henley On Thames, Oxfordshire, RG9 6AB	Telephone: 0844 844 9952 Fax: 0844 844 9951 Email: customerservices@landmarkinfo.co.uk Website: www.landmarkinfo.co.uk

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BGS Flood Data (1:50,000)

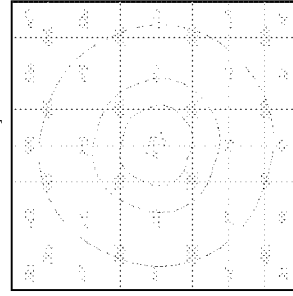
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Site
- Map ID

BGS Geological Indicators of Flooding

- Inland
- ▨ Coastal

BGS Flood Data Map - Slice A

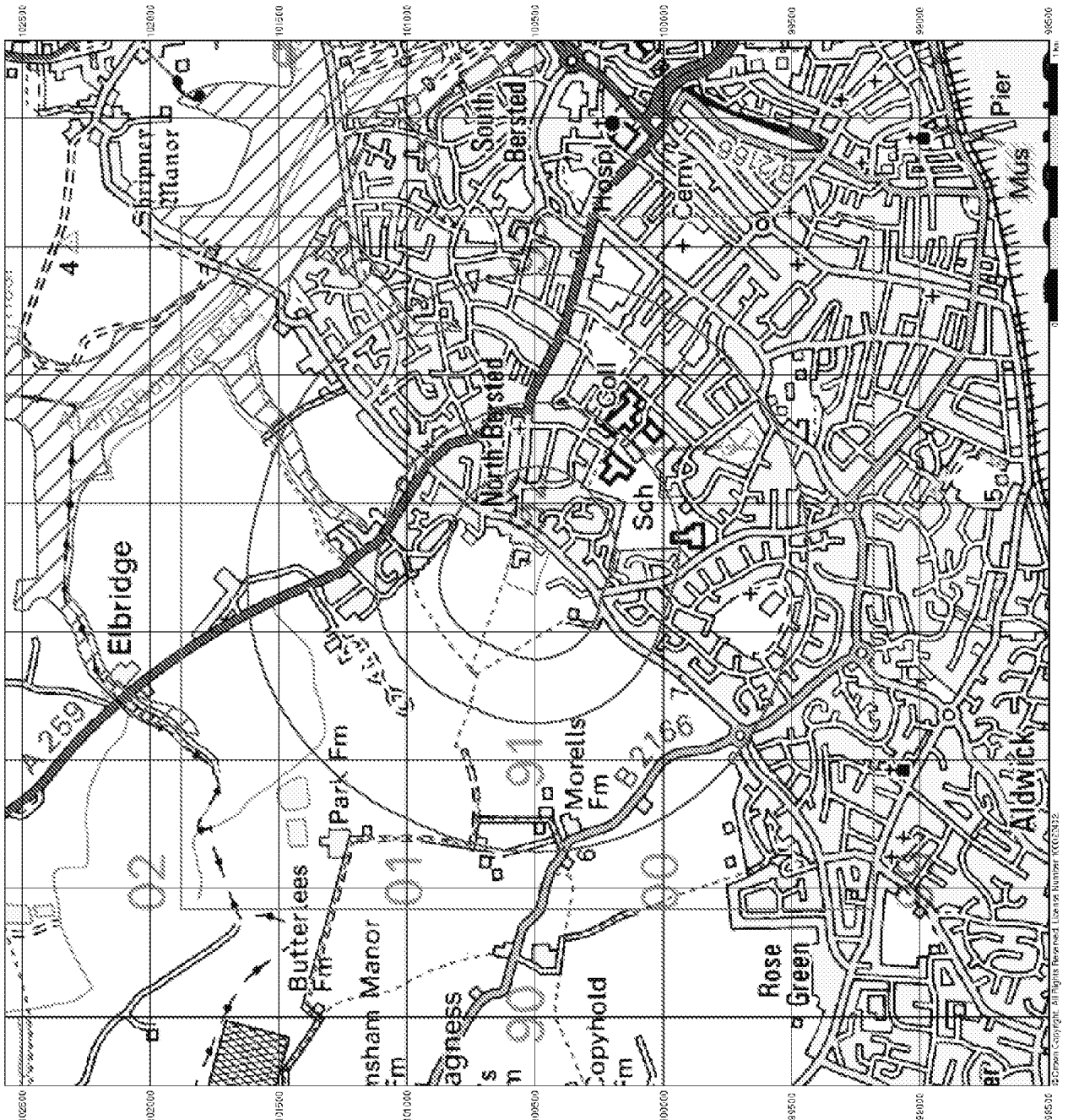


Order Details

Order Number: 27405365.1.1
Customer Ref: CC/PPC/CN/030309
National Grid Reference: 491770, 100530
Site: A
Site Area (Ha): 2.37
Search Buffer (m): 1000

Site Details

Chalcraft Nurseries & Garden Centre, Chalcraft Lane, BOGNOR
REGIS, West Sussex, PO21 5TS



General

- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point

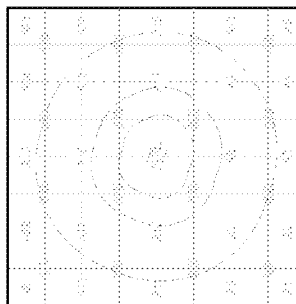
Environment Agency Flood Data

- Extreme Flooding from Rivers or Sea without Defences (Zone 2)
- Flooding from Rivers or Sea without Defences (Zone 3)
- Area Benefiting from Flood Defence
- Flood Water Storage Areas
- Flood Defence

Contours (Height in metres)

- Standard Contour 1m 2.5 Spot Height
- Index Contour 1m 5.0 Air Height

EA Flood Data Map - Slice A

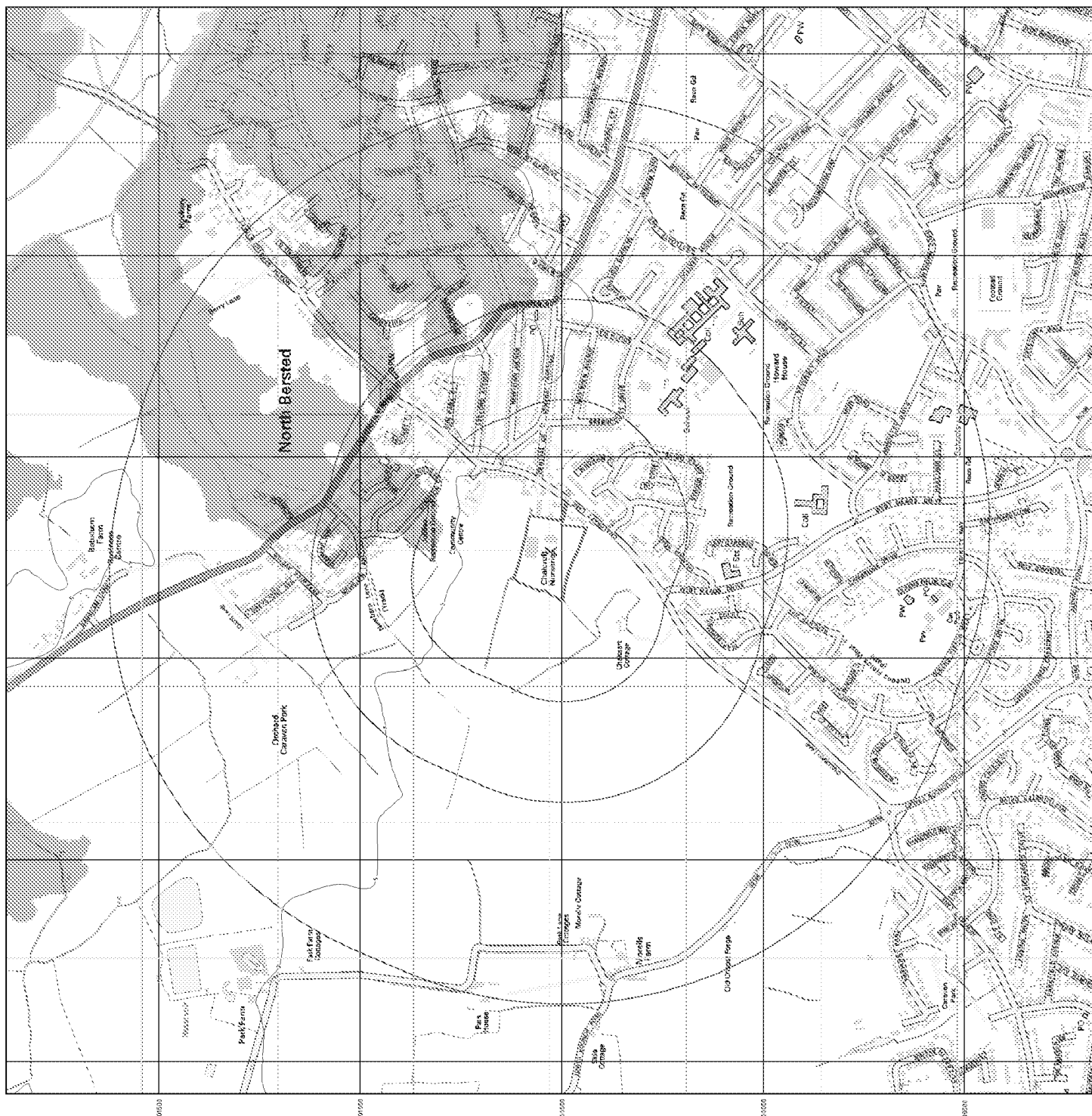


Order Details

Order Number: 27405365 1.1
Customer Ref: CC/PP/CN/030309
National Grid Reference: 491770, 100530
Slice: A
Site Area (Ha): 2.37
Search Buffer (m): 1000

Site Details

Chalcraft Nurseries & Garden Centre, Chalcraft Lane,
BOGNOR REGIS, West Sussex, PO21 5TS



General

- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point

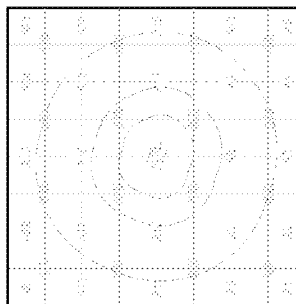
RMS 75 year Return Flood Data

Flood Depth (mm)	Flood Type	
	Defended Flood	Undefended Flood
0 - 200		
201 - 500		
501 - 2000		
2001 +		

Contours (Height in metres)

Standard Contour — 45m Spot Height
Index Contour — 45m Air Height

RMS 75 year Return Flood Map - Slice A



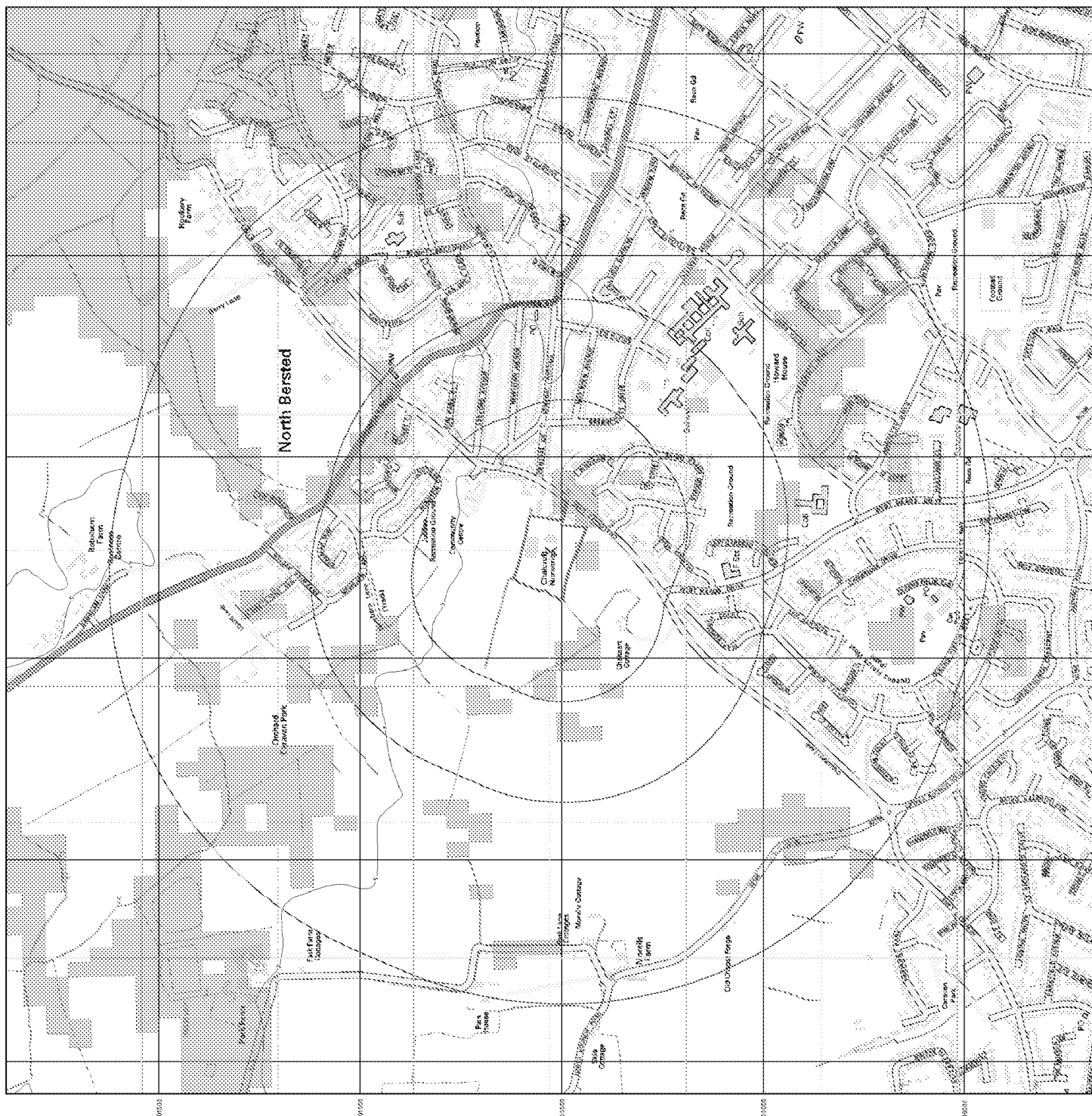
Order Details

Order Number: 27405365 1.1
Customer Ref: CC/PP/CN/030309
National Grid Reference: 491770, 100530

Slice: A
Site Area (Ha): 2.37
Search Buffer (m): 1000

Site Details

Chalcroft Nurseries & Garden Centre, Chalcraft Lane,
BOGNOR REGIS, West Sussex, PO21 5TS



General

- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point

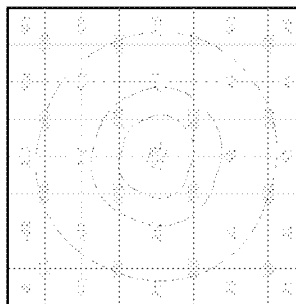
RMS 100 year Return Flood Data

Flood Depth (mm)	Flood Type	
	Defended Flood	Undefended Flood
0 - 200		
201 - 500		
501 - 2000		
2001 +		

Contours (Height in metres)

Standard Contour — 45m Spot Height
Index Contour — 45m Air Height

RMS 100 year Return Flood Map - Slice A



Order Details

Order Number: 27405365 1.1
Customer Ref: CC/PP/CN/030309
National Grid Reference: 491770, 100530

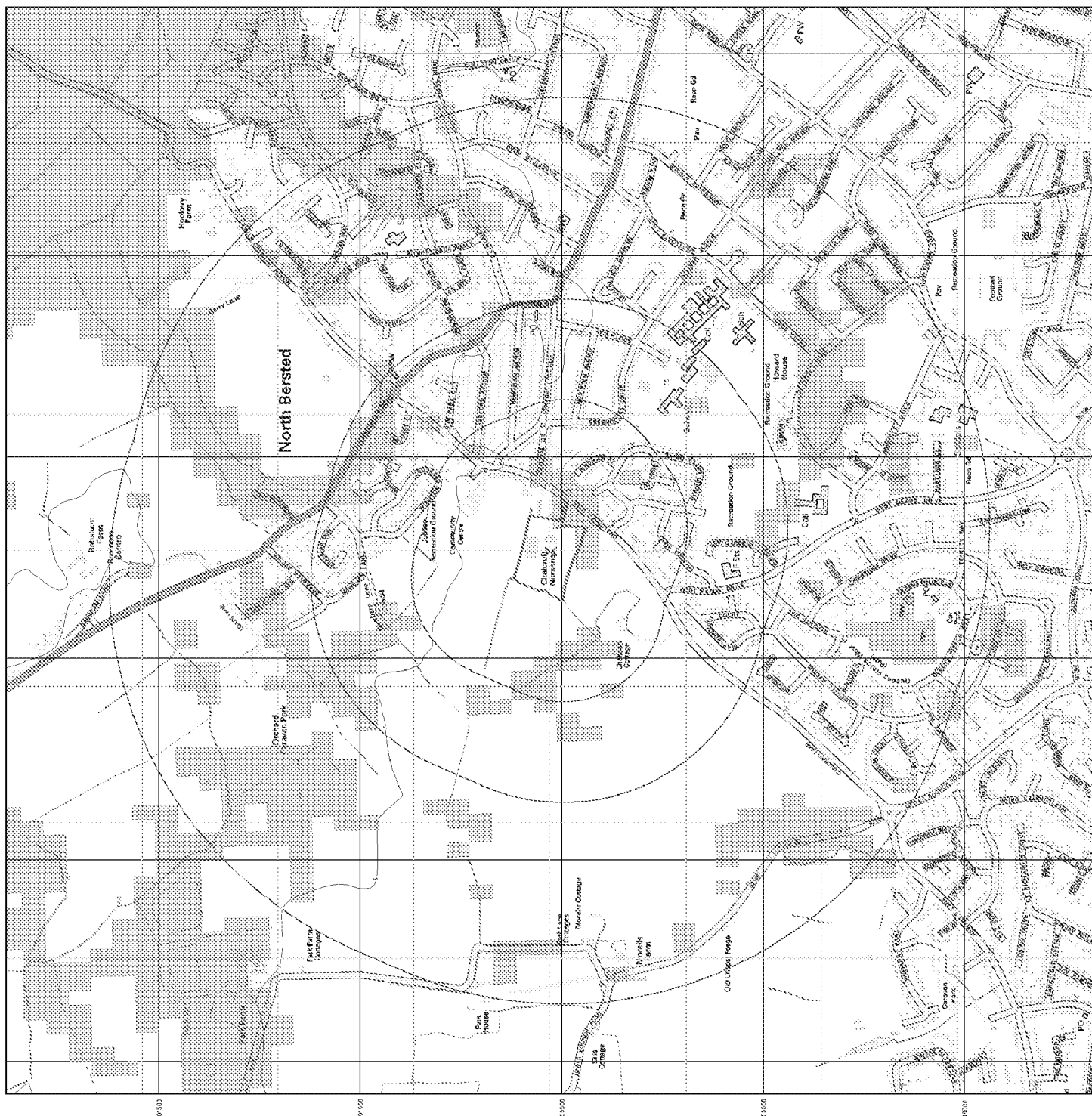
Slice: A

Site Area (Ha): 2.37

Search Buffer (m): 1000

Site Details

Chalcroft Nurseries & Garden Centre, Chalcroft Lane,
BOGNOR REGIS, West Sussex, PO21 5TS



General

- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point

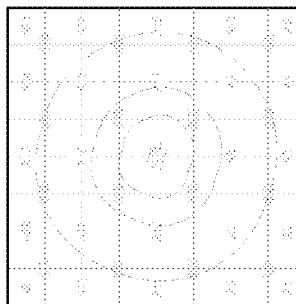
RMS 1000 year Return Flood Data

Flood Depth (mm)	Flood Type	
	Defended Flood	Undefended Flood
0 - 200		
201 - 500		
501 - 2000		
2001 +		

Contours (Height in metres)

Standard Contour — 45m Spot Height
Index Contour — 45m Air Height

RMS 1000 year Return Flood Map - Slice A



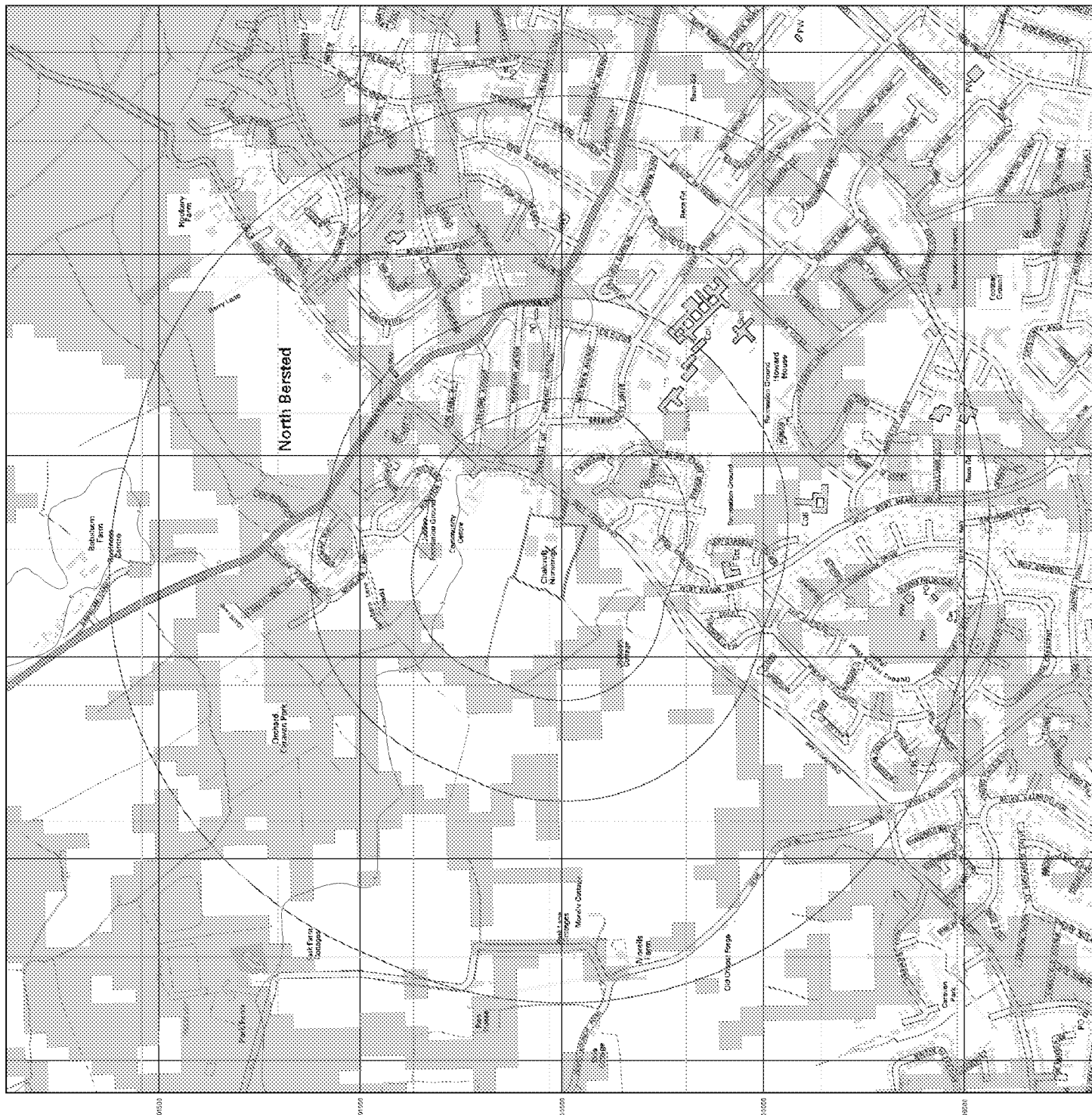
Order Details

Order Number: 27405365 1.1
Customer Ref: CC/PPC/CN/030309
National Grid Reference: 491770, 100530

Slice: A
Site Area (Ha): 2.37
Search Buffer (m): 1000

Site Details

Chalcroft Nurseries & Garden Centre, Chalcraft Lane,
BOGNOR REGIS, West Sussex, PO21 5TS



General

- Specified Site
- Specified Buffer(s)
- X Bearing Reference Point
- Map ID

EA Detailed River Network Data

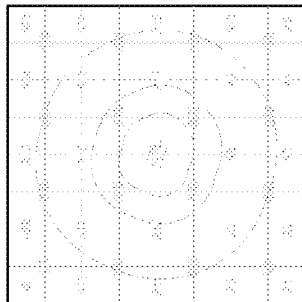
- Primary River
- Secondary River
- Tertiary River
- Canal
- Canal Tunnel
- Undefined River
- Lake/Reservoir
- Extended Culvert (greater than 50m)
- Underground River (inferred)
- Underground River (local knowledge)
- Downstream of High Water Mark
- Downstream of Seaward Extension
- Not assigned River feature

- Not assigned River feature
- Pseudo Node (general)
- Pseudo Node (High Water Mark)
- Pseudo Node (OS MasterMap polygon boundary)
- Source
- Junction
- Silt
- Non-interactive Node
- Offline Drainage Feature

Contours (Height to nearest)

- Standard Contour
- Index Contour
- Spot Height
- Air Height

EA Detailed River Network Map - Slice A

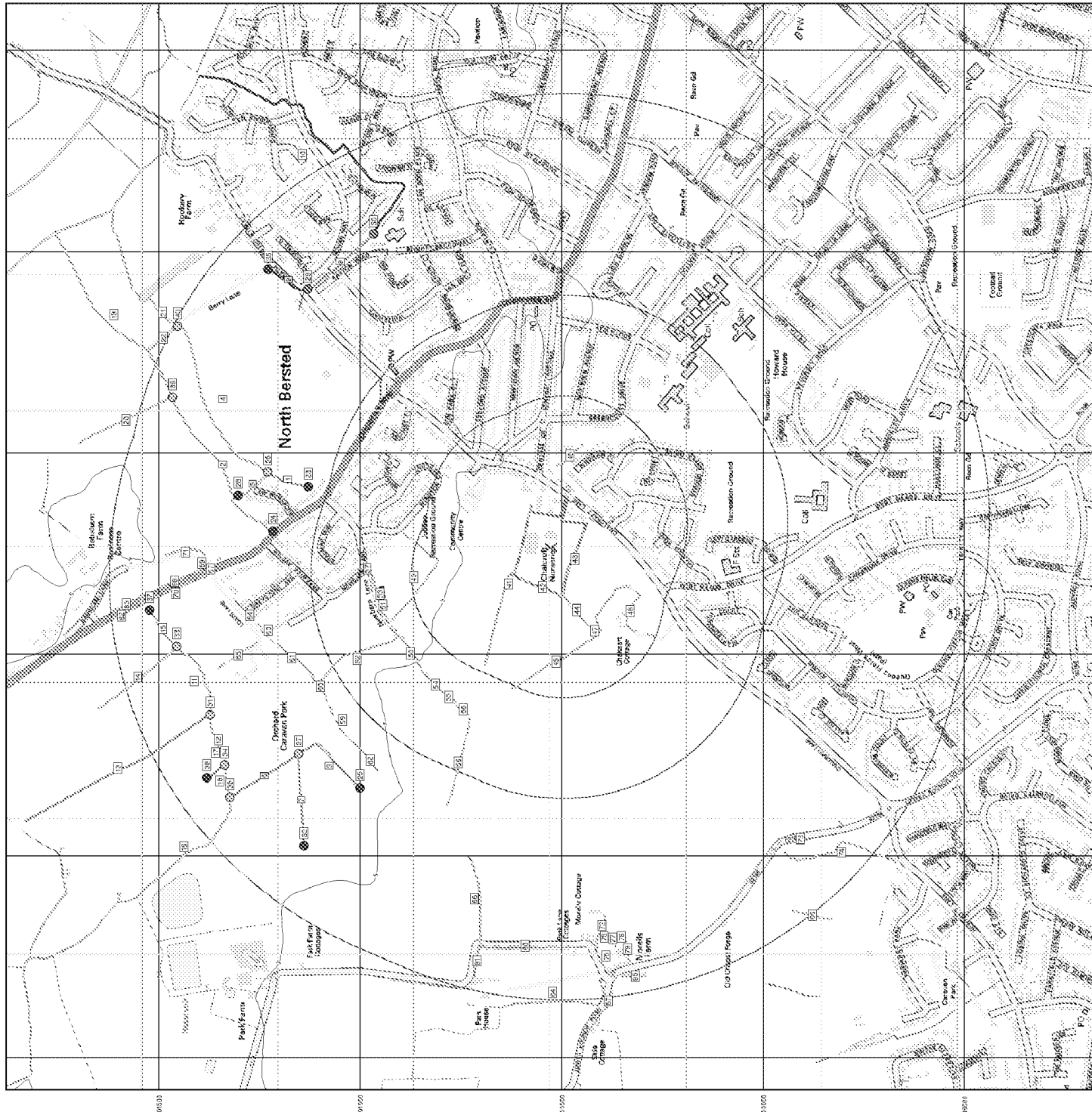


Order Details

Order Number: 27405365 1.1
Customer Ref: CC/PP/CN/030309
National Grid Reference: 491770, 100530
Slice: A
Site Area (Ha): 2.37
Search Buffer (m): 1000

Site Details

Chalcroft Nurseries & Garden Centre, Chalcroft Lane,
BOGNOR REGIS, West Sussex, PO21 5TS



Index Map

For ease of identification, your site and buffer have been split into Slices, Segments and Quadrants. These are illustrated on the Index Map opposite and explained further below.

Slice

Each slice represents a 110,000 plot area (2.7km x 2.7km) for your site and buffer. A large site and buffer may be made up of several slices (represented by a red outline), that are referenced by letters of the alphabet, starting from the bottom left corner of the slice grid. This grid does not relate to National Grid lines but is designed to give best fit over the site and buffer.

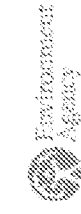
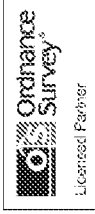
Segment

A segment represents a 12,500 plot area. Segments that have plot files associated with them are shown in dark green, others in light blue. These are numbered from the bottom left hand corner within each slice.

Quadrant

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

A selection of organisations who provide data within this report:



Envirocheck reports are compiled from 136 different sources of data.

Prepared For

PPC
Planning & Property Consultants Ltd
3 Chapel Street
Chichester
West Sussex
PO19 1BU

Client Details

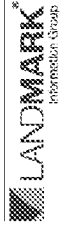
Dr R Davies, Soil Environment Services Ltd, The
Nanotechnology Centre, Kings Road, Newcastle upon
Tyne, NE1 7RU

Order Details

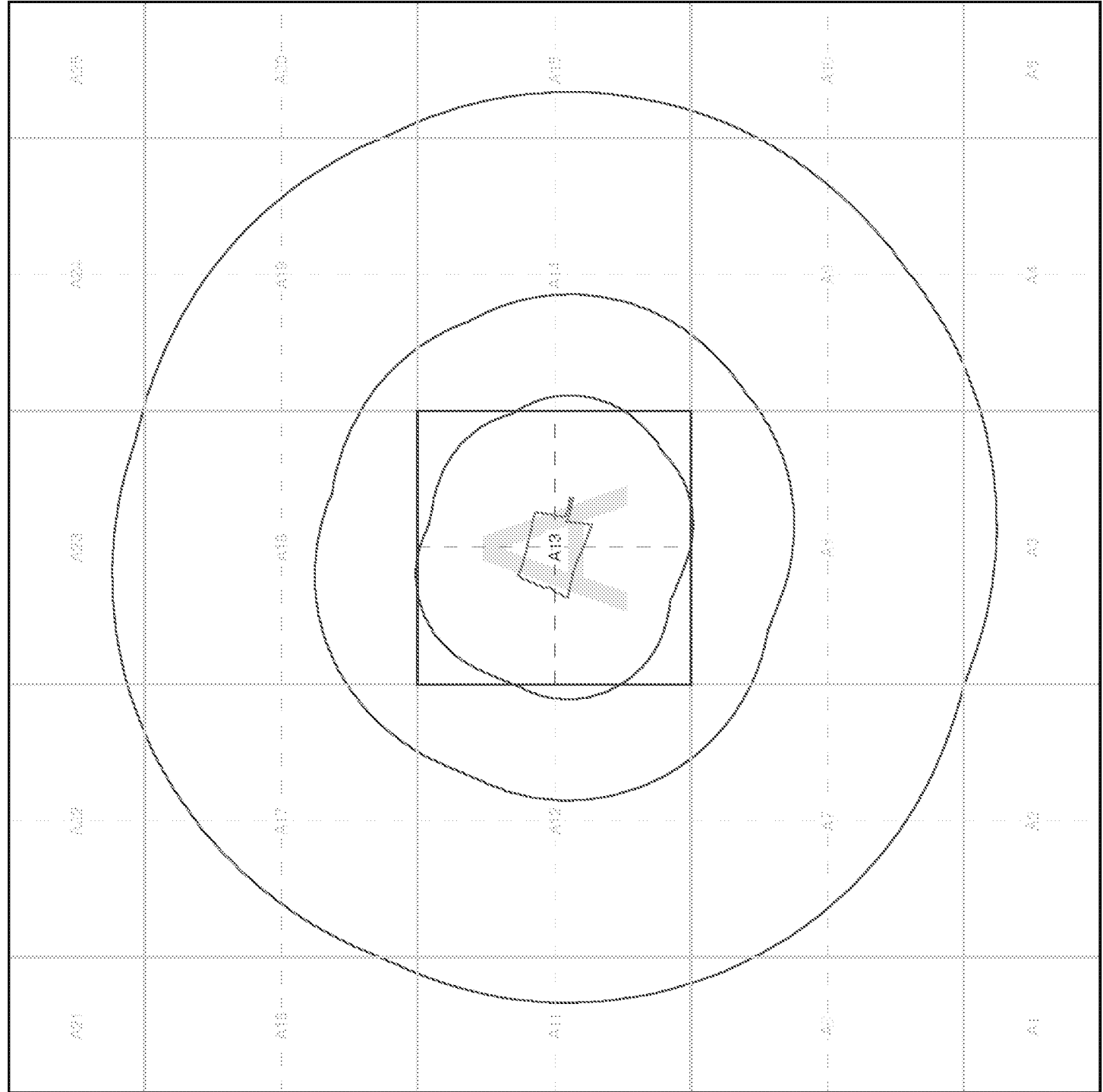
Order Number: 27405365 1.1
Customer Ref: CC/PPC/CN/030309
National Grid Reference: 491760, 100530
Site Area (Ha): 2.37
Search Buffer (m): 1000

Site Details

Chalcroft Nurseries & Garden Centre, Chalcroft Lane,
BOGNOR REGIS, West Sussex, PO21 5TS



Tel: 0844 344 3932
Fax: 0844 344 3951
Web: www.envirocheck.co.uk



Environmental Search

Site Description

Chalcroft Nurseries
Chalcroft Lane
Bognor Regis
West Sussex
PO21 5TS

Grid Reference: 491750, 100537

Client Reference

Soil Environment Services
The Nanotechnology Centre
Herschel Building
Kings Road
Newcastle upon Tyne
NE1 7RU

Date: 5th March 2009
PO Number: SES_PO21 5TS



Contents

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Groundwater Vulnerability	4
Groundwater Source Protection Zone	6
Landfill	7
Industrial Pollution	8
Pollution Incidents	9
Radon Risk	9
Fuel Sites	10
Disclaimer	11

Data Set	0-250m
AEA Technology	
Air Quality	n/a
British Geological Survey	
1:50,000 Solid Geology	n/a
Borehole Index	n/a
Mines, Quarries and Shallow mining	n/a
Natural Subsidence	n/a
Radon Protection Measures	see notes
Coal Authority	
Coal Fields	n/a
Conservation Sites	
National Parks	n/a
Areas of Outstanding Natural Beauty	n/a
National Nature Reserves	n/a
RAMSAR Sites	n/a
Sites of Special Scientific Interest	n/a
DEFRA	
Nitrate Vulnerable Zones	n/a
Nitrate Sensitive Areas	n/a
Environmentally Sensitive Areas	n/a
Environment Agency	
Abstractions Licences	n/a
Discharge Consents	n/a
Hazardous Waste	n/a
Radioactive Consents	n/a
IPC Authorisations	n/a
Pollution Inventory	0
Pollution Incidents	0
Prosecutions & Enforcements	n/a
River Quality Assessment	n/a
Flood Risk	n/a
Groundwater Vulnerability	✓
Waste Treatment Sites	0
Waste Carrier & Broker	n/a
Landfill	0
National Radiological Protection Board	
Radon Risk	0-3%
Radiocommunication Agency	
Mobile Phone Base Stations	n/a
Other	
Fuel Sites	0

Major Aquifer (Highly permeable) – pink and purple shading

These are highly permeable formations usually with a known or probable presence of significant fracturing. They may be highly productive and able to support large abstractions for public supply and other purposes.

Soil Classification

“Soils of high leaching potential” (purple and dark brown shading) – these soils have little ability to attenuate diffuse source pollutants and in which non-adsorbed diffuse source pollutants and liquid discharges have the potential to move rapidly to underlying strata or to shallow groundwater.

Subclass 1 - Soils which readily transmit liquid discharges because they are either shallow, or susceptible to rapid flow directly to rock, gravel or groundwater.

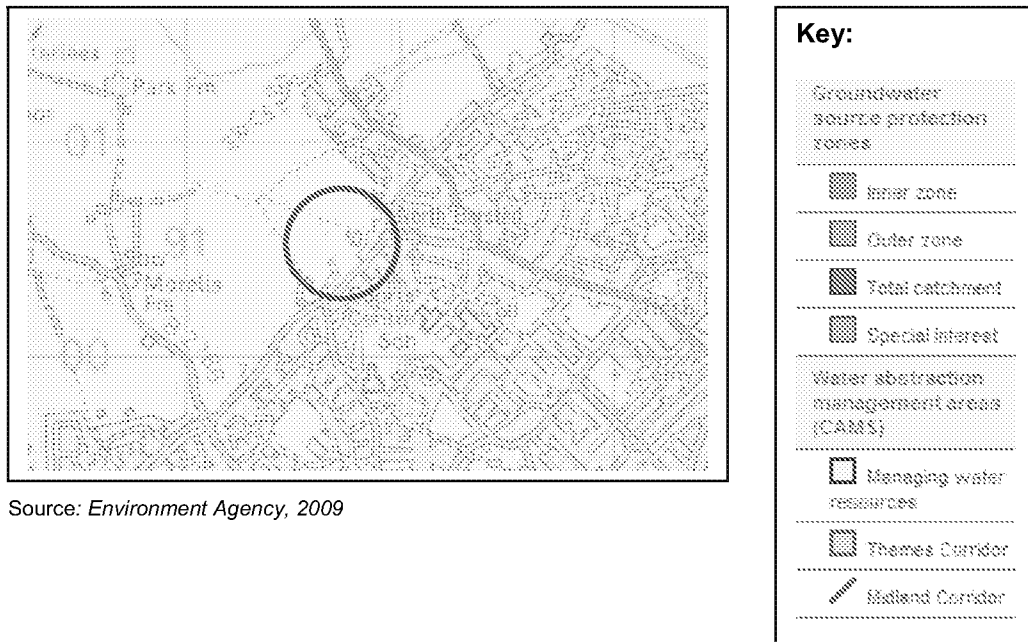
NB. Soil information for urban areas and restored mineral workings is based on fewer observations than elsewhere. A worst case vulnerability classification (high / H) is therefore assumed for these areas and for current mineral workings. All are given a designation HU until proved otherwise.

“Soils of intermediate leaching potential” (pink and mid-brown shading) – these soils have a moderate ability to attenuate diffuse source pollutants or in which it is possible that some non-adsorbed diffuse source pollutants and liquid discharges could penetrate the soil layer.

Subclass 1 - Soils which can possibly transmit a wide range of pollutants

Groundwater (Source Protection Zones)

Records within 0 – 250m



Source: Environment Agency, 2009

NB. The Environment Agency does not restrict activities that may pollute water supplies in this area.

Explanation of Zones

The shape and size of a zone depends on the condition of the ground, how the groundwater is removed, and other environmental factors.

Inner Protection Zone:

Any pollution that can travel to the borehole within 50 days from any point within the zone is classified as being inside this zone. This applies at and below the water table. This zone also has a minimum 50m protection radius around the borehole. These criteria are designed to protect against the transmission of toxic chemicals and water-borne disease.

Outer Protection Zone:

The outer zone covers pollution that takes up to 400 days to travel to the borehole or 25% of the total catchment area, whichever area is the biggest. This travel time is the minimum amount of time that the Environment Agency estimate pollutants need to be diluted, reduced in strength or delayed by the time they reach the borehole.

Total Catchment:

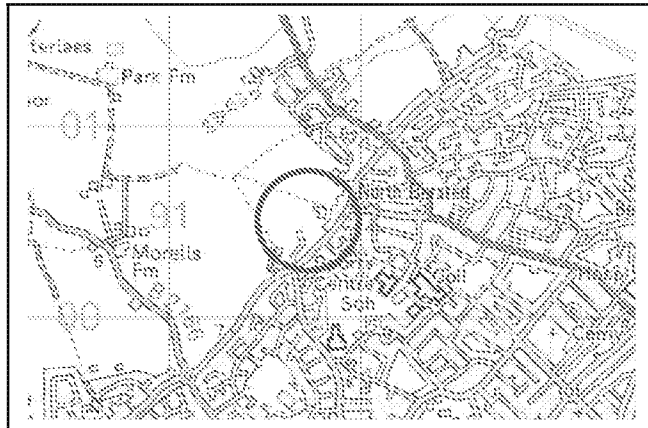
The total catchment is the total area needed support removal of water from the borehole and to support any discharge from the borehole.

Zone of special interest:

This is usually where local conditions mean that industrial sites and other polluters could affect the groundwater source even though they are outside the normal catchment area.

Active and Historical Landfill

Records within 0 – 250m



Source: Environment Agency, 2009

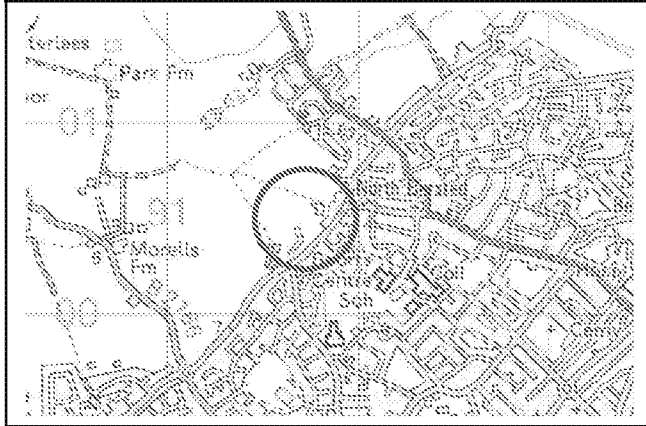
Please Note

The data in this report is based on information currently supplied to Environmental Data Analytics by its data providers. Environmental Data Analytics cannot guarantee the accuracy or the completeness of any information supplied to it by its data providers. If there are any queries regarding the information provided, please contact the data provider cited in each section for more detail or clarification.

NB. According to Environment Agency data, there are no landfill sites within 250m.

Industrial Pollution

Records within 0 – 250m



Source: Environment Agency, 2009

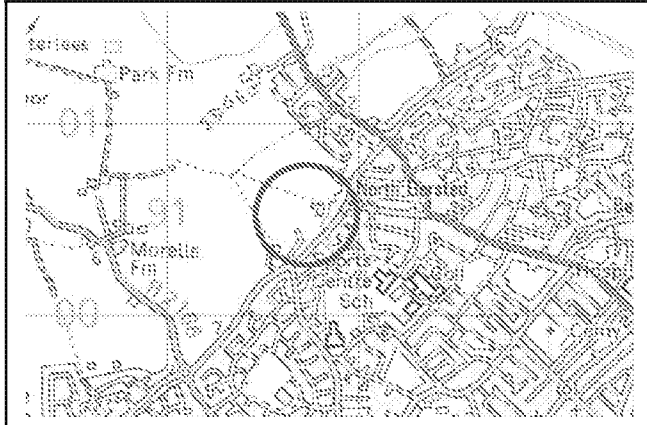
Please Note

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NB. According to Environment Agency data, there are no pollution inventory or waste treatment sites within 250m.

Pollution Incidents

Records within 0 – 250m



Source: Environment Agency, 2009

NB. According to Environment Agency data, there have been no pollution incidents within 250m of the site.

National Radiological Protection Board

Records within 0 – 250m

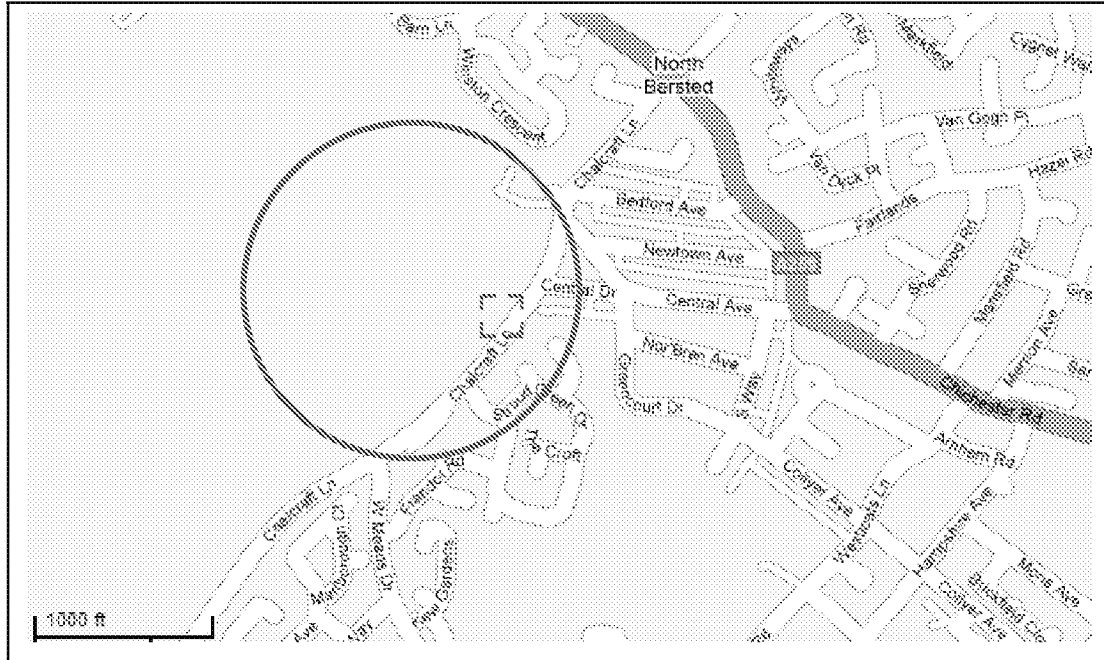
0-3% of homes above the action level of 200 becquerels per cubic metre (Bq m^{-3}), consideration should be given to geological data and whether basic protection might be necessary.

For further advice, please contact the Health Protection Agency:

Telephone 01235 831600
Fax 01235 833891
Email rpd@hpa-rp.org.uk

Fuel Sites

Records within 0 – 250m



NB. According to Experian Catalyst data, there are no fuel sites within 250m.

Disclaimer for report

Whilst Environmental Data Analytics will use reasonable care and skill in providing data, the following should be acknowledged:

1. The report is based on the address and or grid reference supplied at the time of ordering. The grid reference shown on the cover represents the centre of the search area.
2. The information in the report is supplied under licence to Environmental Data Analytics from various sources including: Environment Agency and British Geological Survey.
3. This report is a search of statutory and non-statutory sources of information which does not include any on-site survey or inspection of the property or its environs. Accordingly, the report cannot in any way provide information as to the actual state of the property or land.
4. The data in this report is based on information currently supplied to Environmental Data Analytics by its data providers and or derived from publicly available records. Environmental Data Analytics cannot guarantee the accuracy or the completeness of any information supplied to it by its data providers.
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Environment Agency

1. Enforcement and Prosecution Data – The information is primarily for Agency internal use only and there are concerns over compliance with the Data Protection Act. It is hoped that this issue will be resolved by the Agency in the near future.
2. While most information may be available, there are instances where the site operator considers the information to be commercially confidential. This only occurs when the Agency agrees the information can be classified as commercially confidential.
3. All intellectual property right in the data and information are owned by the Environment Agency.

Groundwater Vulnerability Maps

All maps involve a compromise between the representation of natural complexity and ease of interpretation of the map. Such compromises place limitations on the resolution and precision of map information. In this case, the variety of soils, geological strata and potential contaminants that have to be covered is wide, and the classification used is, of necessity, generalised.

Individual sites and circumstances will always require further and more detailed assessments to determine the specific impact on groundwater resources. The maps only represent conditions at the surface and therefore where the soil and/or underlying formations have been disturbed or removed, for example during mineral extraction, the vulnerability class may have been changed. Hence, where there is evidence of disturbance there will be a need to determine groundwater vulnerability using more site-specific data.