

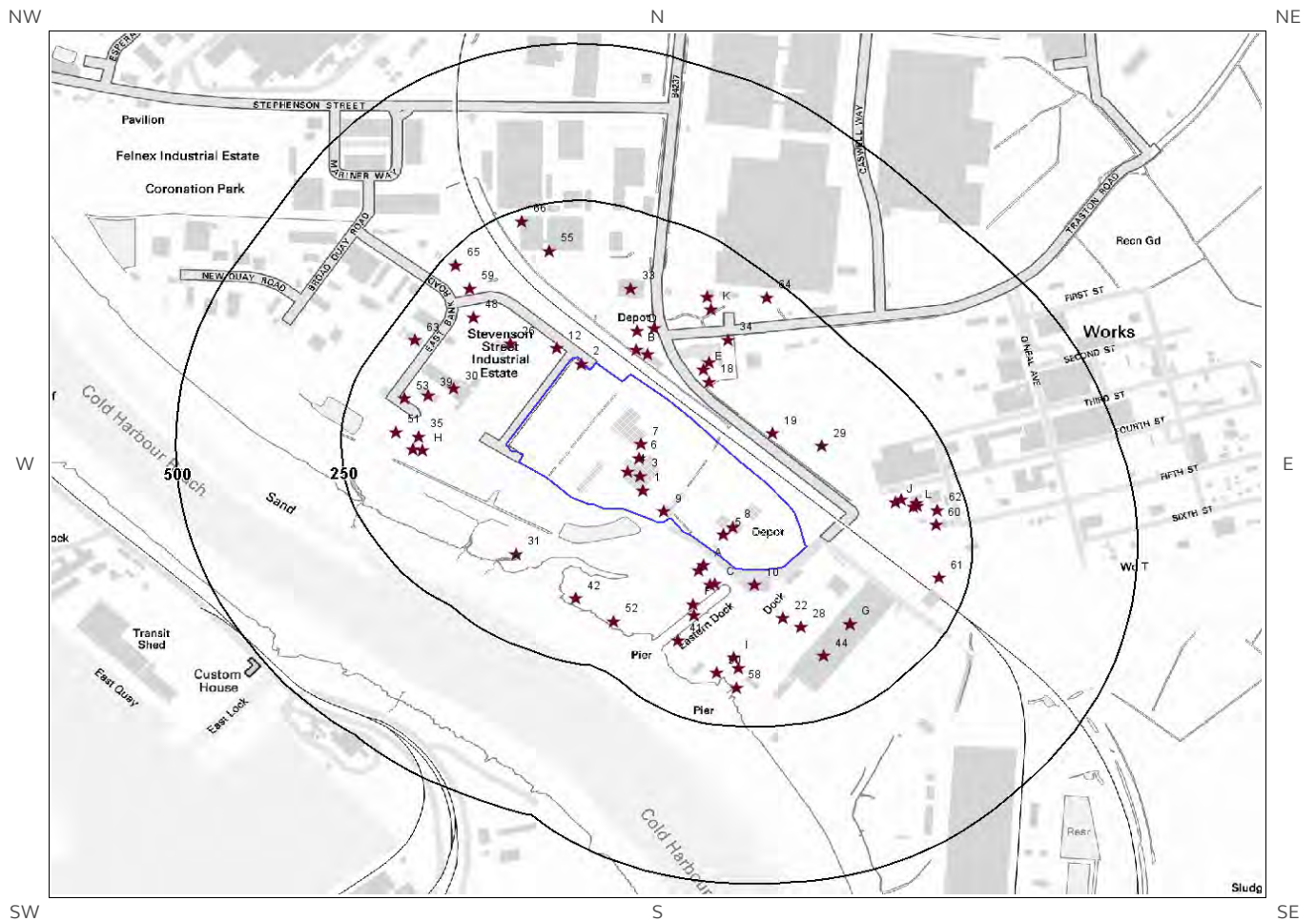
ID	Distance (m)	Direction	NGR	Details
				Type: Household, Commercial & Industrial Waste T Stn Size: - Environmental Permitting Regulations (Waste) Licence Number: KP3595FB EPR reference: - Operator: Volehurst Ltd Waste Management licence No: 30258 Annual Tonnage: 15500.0 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	1206	NW	332025 186674	Site Address: Volehurst Ltd, Old Esso Depot, Usk Way, , Newport, Gwent, NP20 2BU Type: Household, Commercial & Industrial Waste T Stn Size: - Environmental Permitting Regulations (Waste) Licence Number: KP3595FB EPR reference: - Operator: Volehurst Ltd Waste Management licence No: 30258 Annual Tonnage: 15500.0 Issue Date: 13/02/2003 Effective Date: 13/02/2003 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	1206	NW	332025 186674	Site Address: Volehurst Ltd, Old Esso Depot, Usk Way, Gwent, Newport, Newport, NP20 2BU Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: KP3595FB EPR reference: - Operator: Volehurst Ltd Waste Management licence No: 30258 Annual Tonnage: 15500.0 Issue Date: 13/02/2003 Effective Date: 13/02/2003 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	1206	NW	332026 186675	Site Address: Volehurst Ltd, Old Esso Depot, Usk Way, Newport, Gwent, NP20 2BU Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VOL004 EPR reference: KP3595FB/A001 Operator: Volehurst Ltd Waste Management licence No: 30258 Annual Tonnage: 15500.0 Issue Date: 13/02/2003 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Issued Site Name: Volehurst Ltd Correspondence Address: -
Not shown	1247	E	334312 185694	Site Address: Nash Mead Transfer Station, Queensway Meadows Ind Est, Newport, Gwent, NP19 4SU Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ABL002 EPR reference: - Operator: Able Skip Hire Ltd Waste Management licence No: 30340 Annual Tonnage: 24999.0 Issue Date: 22/09/2004 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Able Skip Hire Limited Correspondence Address: Nash Mead, Queensway Meadows Industrial Estate, Newport, Gwent, NP19 4SU
Not shown	1276	NE	334216 186043	Site Address: Unit 31, Leeway Industrial Estate, , , Newport, , NP19 4SL Type: Asbestos Waste Transfer Station Size: - Environmental Permitting Regulations (Waste) Licence Number: AB3596FZ EPR reference: - Operator: Environmental Waste Services Ltd Waste Management licence No: 0 Issue Date: 19/12/2017 Effective Date: 19/12/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -

ID	Distance (m)	Direction	NGR	Details	
Annual Tonnage: 3650.0					
Not shown	1276	NE	334216 186043	Site Address: Unit 31, Leeway Industrial Estate, , , Newport, , NP19 4SL Type: Asbestos Waste Transfer Station Size: - Environmental Permitting Regulations (Waste) Licence Number: AB3596FZ EPR reference: - Operator: Environmental Waste Services Ltd Waste Management licence No: 0 Annual Tonnage: 3650.0	Issue Date: 19/12/2017 Effective Date: 19/12/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	1276	NE	334216 186043	Site Address: Unit 31, Leeway Industrial Estate, Newport, Newport, NP19 4SL Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: AB3596FZ EPR reference: - Operator: Environmental Waste Services Ltd Waste Management licence No: 0 Annual Tonnage: 3650.0	Issue Date: 19/12/2017 Effective Date: 19/12/2017 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Effective Site Name: - Correspondence Address: -
Not shown	1285	E	334352 185690	Site Address: Able Skip Hire Limited, Newport, Newport, NP19 4SU Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: EP3895FB EPR reference: - Operator: Able Skip Hire Ltd Waste Management licence No: 0 Annual Tonnage: 24999.0	Issue Date: 22/09/2004 Effective Date: 22/09/2004 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked Site Name: - Correspondence Address: -
Not shown	1285	E	334352 185690	Site Address: Able Skip Hire Limited, , , , Newport, Gwent, NP19 4SU Type: Household, Commercial & Industrial Waste T Stn Size: - Environmental Permitting Regulations (Waste) Licence Number: EP3895FB EPR reference: - Operator: Able Skip Hire Ltd Waste Management licence No: 30340 Annual Tonnage: 24999.0	Issue Date: 22/09/2004 Effective Date: 22/09/2004 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked Site Name: - Correspondence Address: -
Not shown	1285	E	334352 185690	Site Address: Able Skip Hire Limited, Gwent, Newport, Newport, NP19 4SU Type: - Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: EP3895FB EPR reference: - Operator: Able Skip Hire Ltd Waste Management licence No: 30340 Annual Tonnage: 24999.0	Issue Date: 22/09/2004 Effective Date: 22/09/2004 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked Site Name: - Correspondence Address: -
Not shown	1285	E	334352 185690	Site Address: Able Skip Hire Limited, Newport, Gwent, NP19 4SU Type: Household, Commercial & Industrial Waste T Stn Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: EP3895FB EPR reference: - Operator: - Waste Management licence No: 30340 Annual Tonnage: 24999.0	Issue Date: 22/09/2004 Effective Date: 22/09/2004 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked Site Name: - Correspondence Address: -

ID	Distance (m)	Direction	NGR	Details
Not shown	1285	E	334352 185690	Site Address: Able Skip Hire Limited, , , , Newport, Gwent, NP19 4SU Type: Household, Commercial & Industrial Waste T Stn Size: - Environmental Permitting Regulations (Waste) Licence Number: EP3895FB EPR reference: - Operator: Able Skip Hire Ltd Waste Management licence No: 30340 Annual Tonnage: 24999.0 Issue Date: 22/09/2004 Effective Date: 22/09/2004 Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Revoked Site Name: - Correspondence Address: -
Not shown	1286	E	334353 185691	Site Address: Nash Mead Transfer Station, Queensway Meadows Ind Est, Newport, Gwent, NP19 4SU Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ABL002 EPR reference: EP3895FB/A001 Operator: Able Skip Hire Ltd Waste Management licence No: 30340 Annual Tonnage: 24999.0 Issue Date: 22/09/2004 Effective Date: - Modified: - Surrendered Date: 0 Expiry Date: 0 Cancelled Date: 0 Status: Revoked Site Name: Able Skip Hire Limited Correspondence Address: -
Not shown	1336	N	332734 187044	Site Address: Orb Works Landfill, Corporation Road, Newport, Gwent, NP9 OXT Type: Industrial Waste Landfill (Factory curtilage) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ORB001 EPR reference: - Operator: Corus U K Ltd Waste Management licence No: 30012 Annual Tonnage: 840.0 Issue Date: 02/01/1986 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Orb Works Correspondence Address: Orb Works, Po Box 30, Newport, Gwent, NP19 OXT
Not shown	1371	N	332655 187076	Site Address: Corporation Road, Newport, Gwent, NP19 4XE Type: Industrial Waste Landfill (Factory curtilage) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ORB001 EPR reference: EA/EPR/AP3691SJ/S001 Operator: Corus U K Ltd Waste Management licence No: 30012 Annual Tonnage: 0.0 Issue Date: 02/01/1986 Effective Date: - Modified: - Surrendered Date: 29/08/2008 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Orb Works Landfill Correspondence Address: -
Not shown	1371	N	332655 187076	Site Address: Corporation Road, Newport, Gwent, NP19 4XE Type: Industrial Waste Landfill (Factory curtilage) Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ORB001 EPR reference: - Operator: Corus U K Ltd Waste Management licence No: 30012 Annual Tonnage: 4999.0 Issue Date: 02/01/1986 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Orb Works Landfill Correspondence Address: Orb Works, Po Box 30, Corporation Road, Newport, Gwent, NP19 OXT
Not shown	1372	N	332656 187077	Site Address: Corporation Road, Newport, Gwent, NP19 4XE Type: Industrial Waste Landfill (Factory curtilage) Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: ORB001 EPR reference: AP3691SJ/S001 Operator: Corus U K Ltd Issue Date: 02/01/1986 Effective Date: - Modified: - Surrendered Date: 2.00808e+016 Expiry Date: 0 Cancelled Date: 0 Status: Surrendered Site Name: Orb Works Landfill Correspondence Address: -

ID	Distance (m)	Direction	NGR	Details
				Waste Management licence No: 30012 Annual Tonnage: 0.0
Not shown	1492	E	334500 185922	Site Address: Fingal Recycling Transfer Station, Unit 1, Nashmead, Queensway Meadow Ind Est, Newport, Gwent, NP19 4SU Type: Material Recycling Treatment Facility Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: FIN001 EPR reference: EA/EPR/RP3595FK/S002 Operator: Fingal D & D Ltd Waste Management licence No: 30384 Annual Tonnage: 0.0 Issue Date: 18/05/2006 Effective Date: - Modified: - Surrendered Date: 09/12/2011 Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Fingal Recycling Waste Trasfer Station Correspondence Address: -
Not shown	1493	E	334501 185923	Site Address: Fingal Recycling Transfer Station, Unit 1, Nashmead, Queensway Meadow Ind Est, Newport, Gwent, NP19 4SU Type: Material Recycling Treatment Facility Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: FIN001 EPR reference: RP3595FK/S002 Operator: Fingal D & D Ltd Waste Management licence No: 30384 Annual Tonnage: 0.0 Issue Date: 18/05/2006 Effective Date: - Modified: - Surrendered Date: 2.01112e+016 Expiry Date: 0 Cancelled Date: 0 Status: Surrendered Site Name: Fingal Recycling Waste Trasfer Station Correspondence Address: -

4. Current Land Use Map



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4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site:

66

The following records are represented as points on the Current Land Uses map.

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
1	0	On Site	Works	332851 185497	Gwent, NP19	Unspecified Works Or Factories	Industrial Features
2	0	On Site	Electricity Sub Station	332759 185699	Gwent, NP19	Electrical Features	Infrastructure and Facilities
3	0	On Site	Works	332847 185520	Gwent, NP19	Unspecified Works Or Factories	Industrial Features
4	0	On Site	Chimney	332828 185527	Gwent, NP19	Chimneys	Industrial Features
5	0	On Site	Depot	332972 185427	Gwent, NP19	Container and Storage	Transport, Storage and Delivery
6	0	On Site	Hoppers	332846 185549	Gwent, NP19	Hoppers and Silos	Farming
7	0	On Site	Electricity Sub Station	332849 185571	Gwent, NP19	Electrical Features	Infrastructure and Facilities
8	0	On Site	Newport Container Valet Ltd	332986 185438	Eastern Dry Dock, Corporation Road, Newport, Gwent, NP19 4RE	Industrial Coatings and Finishings	Industrial Products
9	0	On Site	Marshall's Plc	332883 185463	Eastern Dry Dock, Corporation Road, Newport, Gwent, NP19 4RE	Concrete Products	Industrial Products
10	23	S	Warehouse	333020 185347	Gwent, NP19	Container and Storage	Transport, Storage and Delivery
11A	27	SW	Electricity Sub Station	332942 185378	Gwent, NP19	Electrical Features	Infrastructure and Facilities
12	29	NW	Pylon	332721 185724	Gwent, NP19	Electrical Features	Infrastructure and Facilities
13A	37	SW	Tank	332936 185370	Gwent, NP19	Tanks (Generic)	Industrial Features
14C	40	SW	Metal Waste & Recycle	332959 185347	Portacabin Eastern Dry Dock, Corporation Road, Newport, Gwent, NP19 4RE	Scrap Metal Merchants	Recycling Services
15B	40	N	Tank	332841 185721	Gwent, NP19	Tanks (Generic)	Industrial Features
16B	41	NE	Euro Commercial	332858 185714	Corporation Road, Newport, Gwent, NP19 4RD	Vehicle Repair, Testing and Servicing	Repair and Servicing
17C	44	SW	Cemex UK	332952 185347	Eastern Dry Dock, Corporation Road,	Concrete Products	Industrial Products

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
Newport, Gwent, NP19 4RE							
18	62	NE	Pylon	332951 185670	Gwent, NP18	Electrical Features	Infrastructure and Facilities
19	67	NE	Pylon	333047 185588	Gwent, NP19	Electrical Features	Infrastructure and Facilities
20D	70	N	Depot	332843 185751	Gwent, NP19	Container and Storage	Transport, Storage and Delivery
21E	72	NE	Pylon	332943 185690	Gwent, NP18	Electrical Features	Infrastructure and Facilities
22	78	S	Dock	333062 185294	Gwent, NP19	Marine Equipment Including Boats and Ships	Industrial Products
23D	81	NE	Electricity Sub Station	332868 185755	Gwent, NP19	Electrical Features	Infrastructure and Facilities
24F	85	SW	Travelling Crane	332927 185316	Gwent, NP19	Travelling Cranes and Gantries	Industrial Features
25E	85	NE	Electricity Distribution Site	332951 185701	Gwent, NP18	Electrical Features	Infrastructure and Facilities
26	89	NW	Stevenson Street Industrial Estate	332651 185731	Gwent, NP19	Business Parks and Industrial Estates	Industrial Features
27F	97	SW	Eastern Dock	332928 185299	Gwent, NP19	Marine Equipment Including Boats and Ships	Industrial Products
28	98	S	Travelling Crane	333090 185280	Gwent, NP19	Travelling Cranes and Gantries	Industrial Features
29	102	NE	Pylon	333121 185568	Gwent, NP19	Electrical Features	Infrastructure and Facilities
30	118	NW	Aquaspira Ltd	332565 185659	Unit 28 East Bank Road, Felnax Industrial Estate, Newport, Gwent, NP19 4PP	General Construction Supplies	Industrial Products
31	123	SW	Outfall	332660 185396	Gwent, NP19	Waste Storage, Processing and Disposal	Infrastructure and Facilities
32H	128	W	Hopper	332519 185561	Gwent, NP19	Hoppers and Silos	Farming
33	131	NE	XPO Logistics	332833 185819	Traston House, Corporation Road, Newport, Gwent, NP19 4RD	Distribution and Haulage	Transport, Storage and Delivery
34	132	NE	Pylon	332980 185737	Gwent, NP18	Electrical Features	Infrastructure and Facilities
35	134	W	Hopper	332513 185583	Gwent, NP19	Hoppers and Silos	Farming
36G	134	SE	Birdport	333164 185284	Eastern Dry Dock, Corporation Road, Newport, Gwent, NP19 4RE	Moorings and Unloading Facilities	Water
37G	134	SE	Ryan Transport	333163 185284	Eastern Dry Dock, Corporation Road, Newport, Gwent, NP19 4RE	Distribution and Haulage	Transport, Storage and Delivery
38I	141	S	Travelling Crane	332988 185231	Gwent, NP19	Travelling Cranes and Gantries	Industrial Features
39	142	NW	K D K Metals	332527	East Bank Road, Felnax	Scrap Metal Merchants	Recycling Services

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
			Ltd	185648	Industrial Estate, Newport, Gwent, NP19 4PP		
40H	143	W	Tank	332504 185562	Gwent, NP19	Tanks (Generic)	Industrial Features
41	144	SW	Tank	332904 185258	Gwent, NP19	Tanks (Generic)	Industrial Features
42	148	S	Jetty (Disused)	332750 185325	Gwent, NP19	Moorings and Unloading Facilities	Water
43J	150	E	Tank	333233 185479	Gwent, NP18	Tanks (Generic)	Industrial Features
44	153	SE	Cargo Services UK	333124 185234	Corporation Road, Newport, Gwent, NP19 4RE	Distribution and Haulage	Transport, Storage and Delivery
45K	155	NE	Pylon	332954 185786	Gwent, NP19	Electrical Features	Infrastructure and Facilities
46I	157	S	Dock	332995 185214	Gwent, NP19	Marine Equipment Including Boats and Ships	Industrial Products
47J	158	E	Tank	333241 185482	Gwent, NP18	Tanks (Generic)	Industrial Features
48	159	NW	Pylon	332595 185773	Gwent, NP19	Electrical Features	Infrastructure and Facilities
49K	167	NE	P Tanner Body Repairs	332947 185805	Traston Road, Newport, Gwent, NP19 4RQ	Vehicle Repair, Testing and Servicing	Repair and Servicing
50	167	S	Crane	332963 185207	Gwent, NP19	Travelling Cranes and Gantries	Industrial Features
51	169	W	Depot	332478 185590	Gwent, NP19	Container and Storage	Transport, Storage and Delivery
52	171	SW	Jetty (Disused)	332807 185289	Gwent, NP19	Moorings and Unloading Facilities	Water
53	172	NW	Electricity Sub Station	332491 185644	Gwent, NP19	Electrical Features	Infrastructure and Facilities
54L	173	E	Tank	333260 185471	Gwent, NP18	Tanks (Generic)	Industrial Features
55	176	N	Electricity Sub Station	332710 185879	Gwent, NP19	Electrical Features	Infrastructure and Facilities
56L	179	E	Tank	333265 185473	Gwent, NP18	Tanks (Generic)	Industrial Features
57L	179	E	Tank	333264 185477	Gwent, NP18	Tanks (Generic)	Industrial Features
58	188	S	Crane	332992 185183	Gwent, NP19	Travelling Cranes and Gantries	Industrial Features
59	190	NW	Pylon	332590 185819	Gwent, NP19	Electrical Features	Infrastructure and Facilities
60	198	E	Tank	333294 185442	Gwent, NP18	Tanks (Generic)	Industrial Features
61	205	E	Pylon	333298 185358	Gwent, NP18	Electrical Features	Infrastructure and Facilities
62	206	E	Tank	333296 185466	Gwent, NP18	Tanks (Generic)	Industrial Features
63	209	NW	G D Environmental	332507 185736	Unit 19 East Bank Road, Felnax Industrial Estate, Newport, Gwent, NP19 4PP	Construction and Tool Hire	Hire Services
64	221	NE	Jayem	333038	Traston Road, Newport,	General Construction	Industrial Products

ID	Distance (m)	Direction	Company	NGR	Address	Activity	Category
			Joinery Ltd	185804	Gwent, NP19 4RQ	Supplies	
65	231	NW	Tank	332568 185856	Gwent, NP19	Tanks (Generic)	Industrial Features
66	233	N	Electricity Sub Station	332668 185926	Gwent, NP19	Electrical Features	Infrastructure and Facilities

4.2 Petrol and Fuel Sites

Records of petrol or fuel sites within 500m of the study site:

0

Database searched and no data found.

4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site:

0

Database searched and no data found.

4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site:

0

Database searched and no data found.

5. Geology

5.1 Artificial Ground and Made Ground

Database searched and no data found.

The database has been searched on site, including a 50m buffer.

5.2 Superficial Ground and Drift Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT
TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT

5.3 Bedrock and Solid Geology

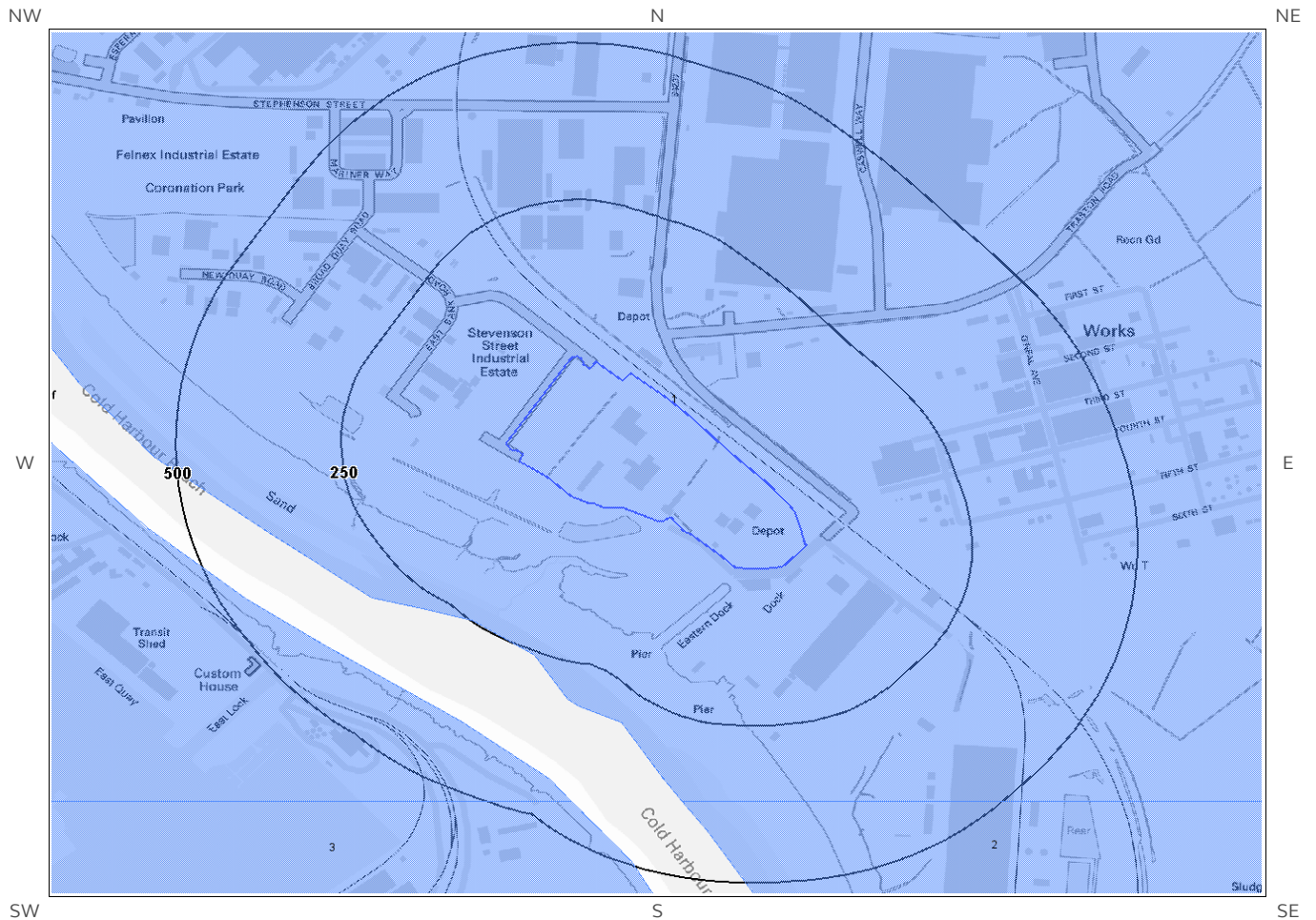
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
MMG-MDST	MERCIA MUDSTONE GROUP	MUDSTONE

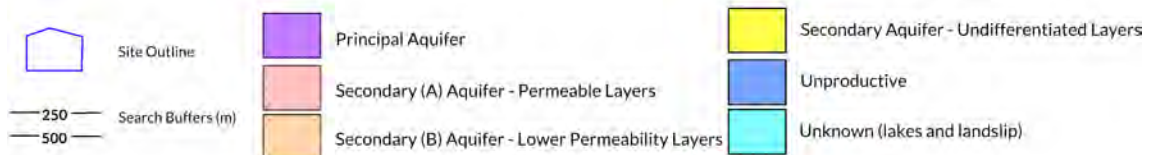
(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)

6 Hydrogeology and Hydrology

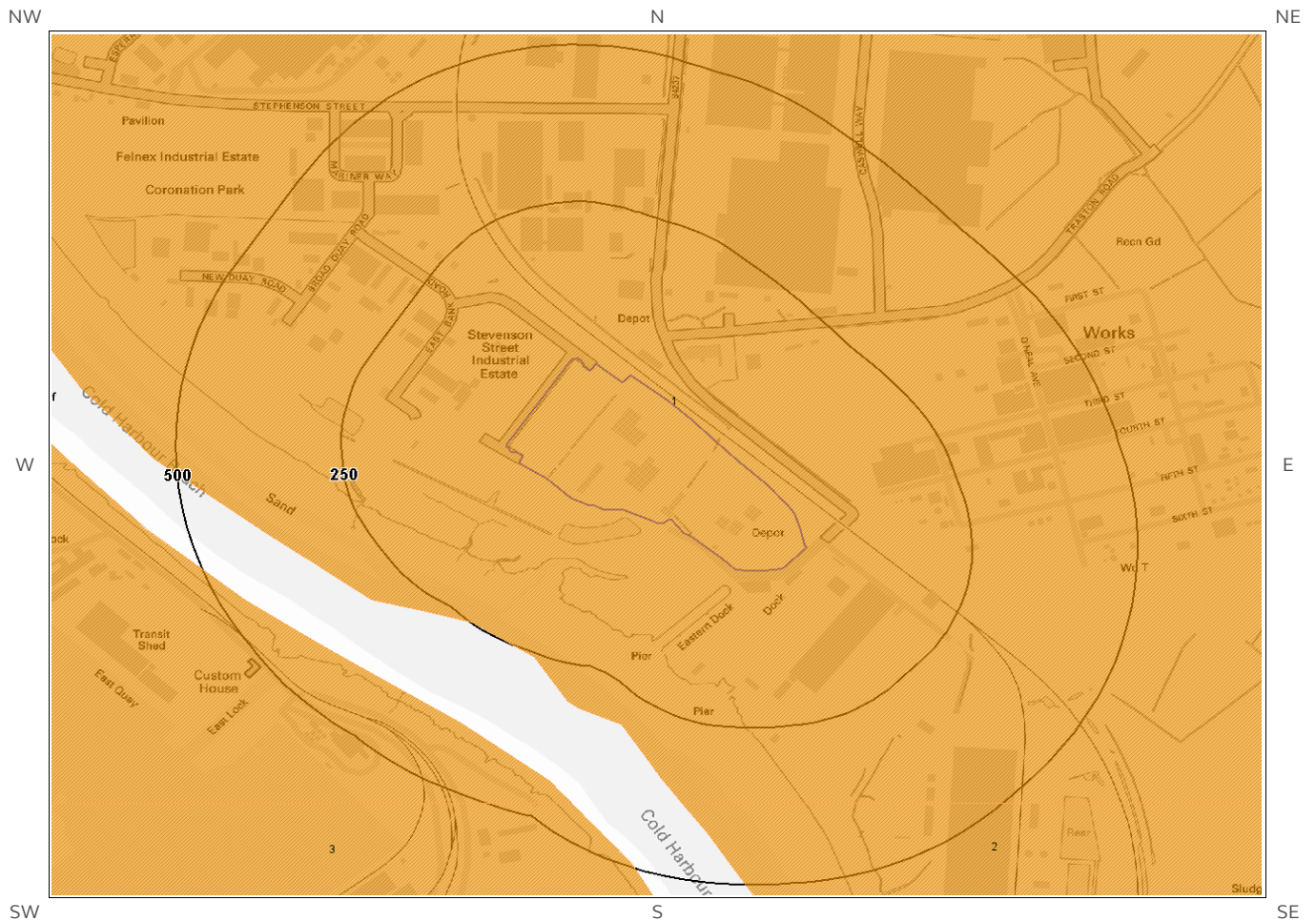
6a. Aquifer Within Superficial Geology



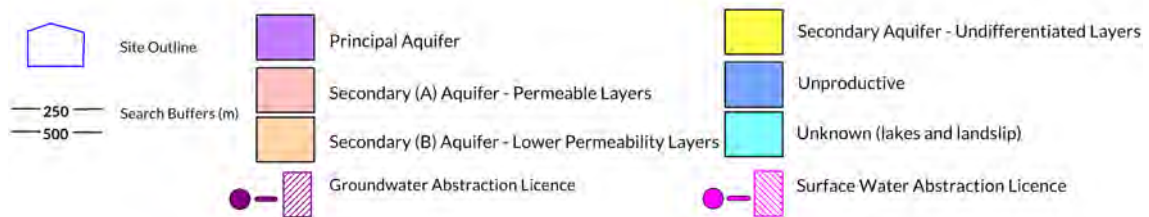
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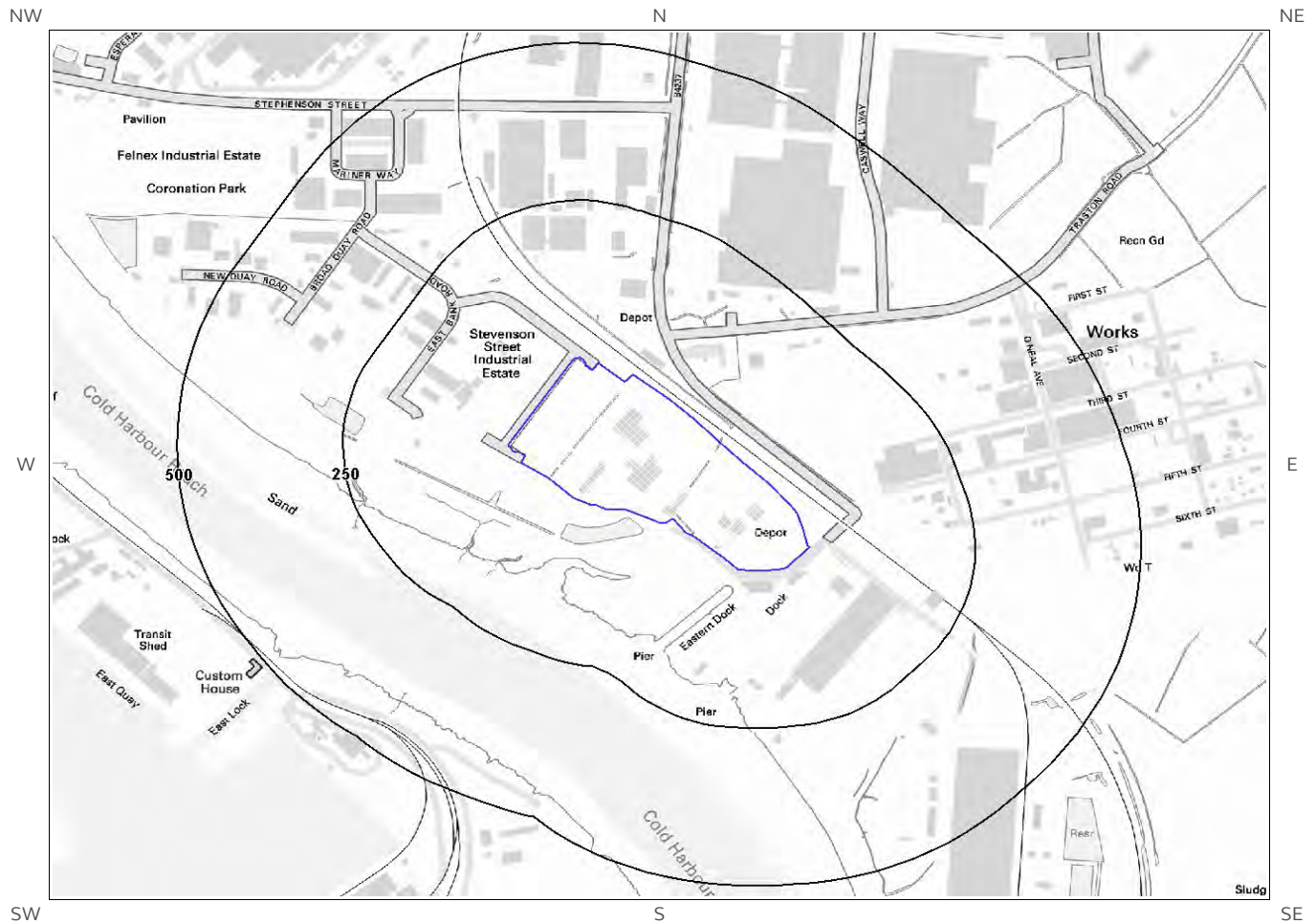
6b. Aquifer Within Bedrock Geology and Abstraction Licences



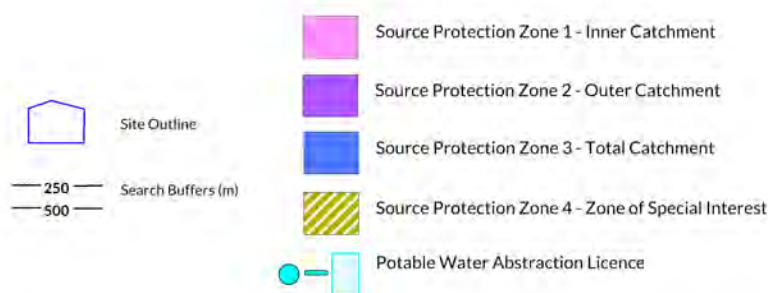
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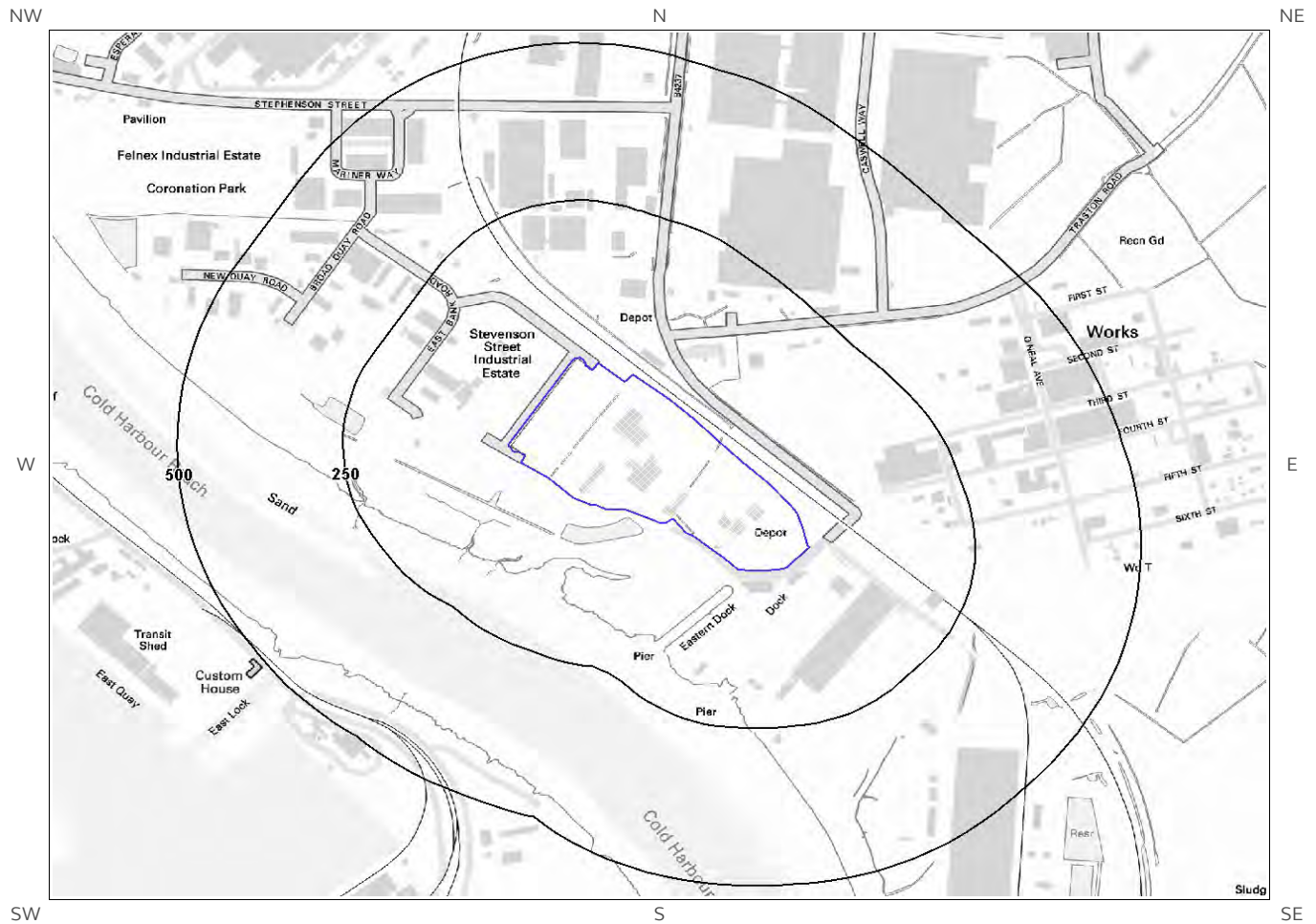
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences



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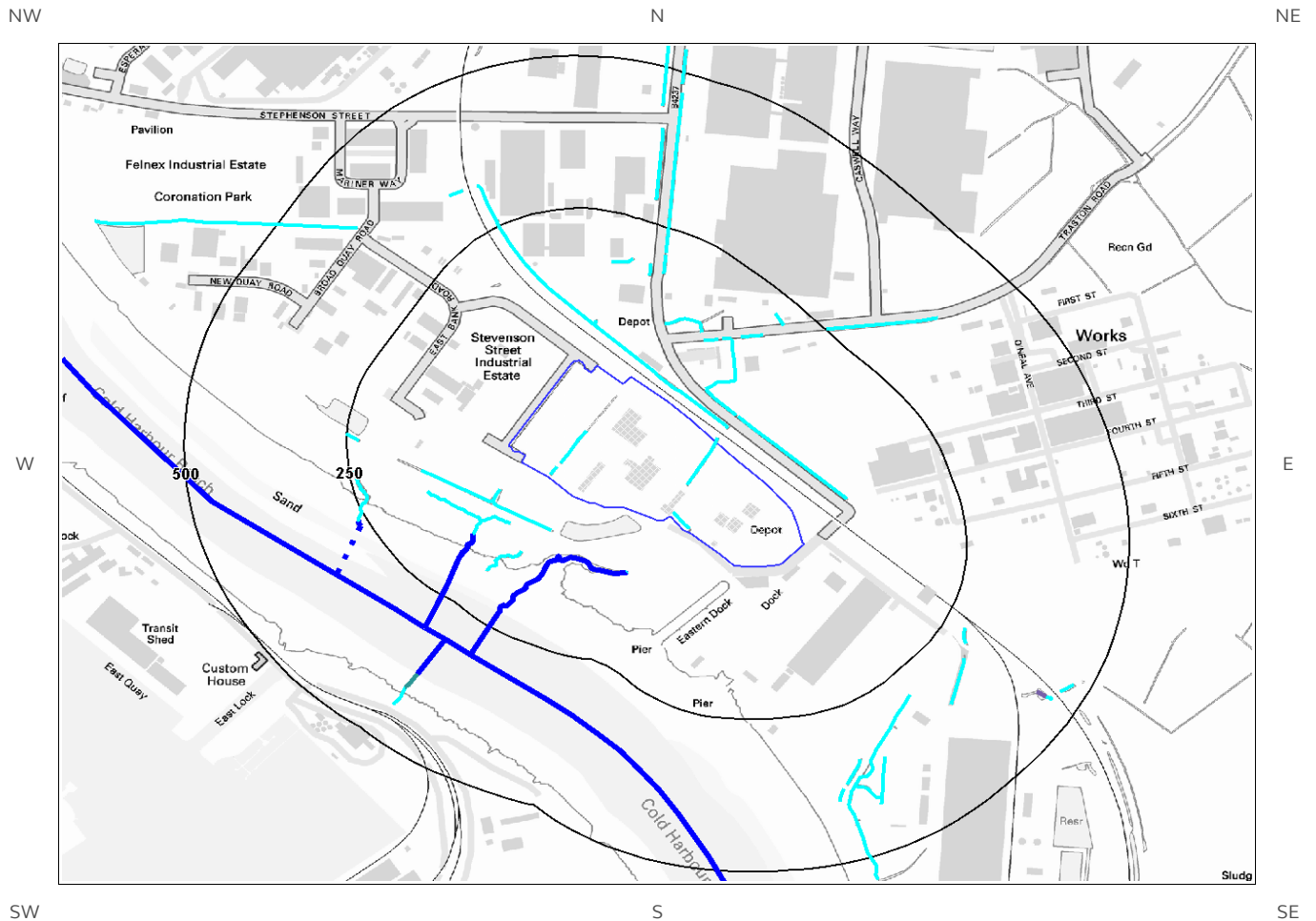
6d. Hydrogeology – Source Protection Zones within confined aquifer



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6e. Hydrology – Watercourse Network and River Quality



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6. Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Records of strata classification within the superficial geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (6a):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
2	370	S	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow
3	447	SW	Unproductive	These are rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow

6.2 Aquifer within Bedrock Deposits

Records of strata classification within the bedrock geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	Designation	Description
1	0	On Site	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers
2	370	S	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers
3	447	SW	Secondary B	Predominantly lower permeability layers which may store/yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering. These are generally the water-bearing parts of the former non-aquifers

6.3 Groundwater Abstraction Licences

Groundwater Abstraction Licences within 2000m of the study site

None identified

Database searched and no data found.

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site

Identified

The following Surface Water Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details
Not shown	857	SE	333650 184750	Status: Historical Licence No: 20/56/72/0040 Details: Evaporative Cooling Direct Source: EAW Surface Water Point: LAGOON AT ALPHASTEEL Data Type: Point Name: Alphasteel Limited Annual Volume (m³): 20000 Max Daily Volume (m³): 320 Application No: - Original Start Date: 26/04/1995 Expiry Date: - Issue No: 100 Version Start Date: 25/11/1999 Version End Date:
Not shown	1921	W	330800 186100	Status: Historical Licence No: 20/56/11/0013 Details: General use relating to Secondary Category (Medium Loss) Direct Source: EAW Surface Water Point: DOCK FEEDER AT PILLGWENLLY TO WHITEHEAD Data Type: Point Name: Corus UK Ltd Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 22/10/1973 Expiry Date: - Issue No: 102 Version Start Date: 17/04/2000 Version End Date:

6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site

None identified

Database searched and no data found.

6.6 Source Protection Zones

Source Protection Zones within 500m of the study site

None identified

Database searched and no data found.

6.7 Source Protection Zones within Confined Aquifer

Source Protection Zones within the Confined Aquifer within 500m of the study site None identified

Historically, Source Protection Zone maps have been focused on regulation of activities which occur at or near the ground surface, such as prevention of point source pollution and bacterial contamination of water supplies. Sources in confined aquifers were often considered to be protected from these surface pressures due to the presence of a low permeability confining layer (e.g. glacial till, clay). The increased interest in subsurface activities such as onshore oil and gas exploration, ground source heating and cooling requires protection zones for confined sources to be marked on SPZ maps where this has not already been done.

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

Environment Agency/Natural Resources Wales information on groundwater vulnerability and soil leaching potential within 500m of the study site Identified

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
42	SW	Minor Aquifer/High Leaching Potential	HU	Soil information for urban areas and restored mineral workings. These soils are therefore assumed to be highly permeable in the absence of site-specific information.
482	SW	Minor Aquifer/High Leaching Potential	H1	Soils which readily transmit liquid discharges because they are shallow or susceptible to rapid flow directly to rock, gravel or groundwater.

6.9 River Quality

Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site None identified

6.9.1 Biological Quality:

Database searched and no data found.

6.9.2 Chemical Quality:

Database searched and no data found.

6.10 Ordnance Survey MasterMap Water Network

Ordnance Survey MasterMap Water Network entries within 500m of the study site

This watercourse information is provided by Ordnance Survey MasterMap Water Network. The data provides a detailed centre line following the curve of the waterway precisely, so all distances provided in the report should be understood as measurements to the centreline rather than a measurement to the nearest point of the watercourse. Underground watercourses are inferred from entry and exit points so caution is advised in using these to indicate precise locations of underground watercourses when planning site investigation and development.

The following Ordnance Survey MasterMap Water Network records are represented on the Hydrology Map (6e):

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
1	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyl Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7
2	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyl Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
3	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyl Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
4	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyl Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7
5	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyl Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
6	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyl Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
7	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyl Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
8	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyl Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
17	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyl Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
18	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
19	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
20	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7
21	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
22	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
23	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
24	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
9	23 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
25	23 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
10	51 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
26	51 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.9
11	53 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
27	53	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	NE			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
12	54 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
28	54 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
13	55 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.4
29	55 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.4
14	58 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.3
30	58 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.3
15	63 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
16	63 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
31	63 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
32	63 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
17	65 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.4
33	65 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions)

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				Average Width in Watercourse Section (m): 3.4
18	78 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.6
34	78 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 3.6
19	93 S	-	Tidal river or stream.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 204.7
35	93 S	-	Tidal river or stream.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 204.7
20	96 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.3
21	96 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
36	96 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.3
37	96 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
22	100 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
38	100 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
23	102 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.3
39	102 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.3

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
24	112 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
40	112 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
25	114 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.2
41	114 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.2
26	116 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
42	116 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
27	121 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
43	121 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
28	128 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
44	128 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
29	132 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.3
45	132 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.3
30	139	-	Tidal river or stream.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	SW			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
46	139 SW	-	Tidal river or stream.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
31	153 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.3
47	153 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.3
32	167 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
48	167 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
33	169 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
49	169 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
34	176 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7
50	176 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7
35	207 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
51	207 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
36	211 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions)

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				Average Width in Watercourse Section (m): 2.3
52	211 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.3
37	231 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
53	231 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
38	232 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.4
54	232 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.4
39	234 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
55	234 W	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
40	251 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.5
56	251 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.5
41	263 SW	-	Tidal river or stream.	Catchment Area: Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
57	263 SW	-	Tidal river or stream.	Catchment Area: Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
42	264 SW	-	Tidal river or stream.	Catchment Area: Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
58	264 SW	-	Tidal river or stream.	Catchment Area: Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
43	283 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.5
59	283 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.5
44	287 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.9
Not shown	287 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.9
45	292 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7
61	292 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.7
46	304 SW	Afon Wysg Alternative Name: River Usk	Tidal river or stream.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
47	304 SW	Afon Wysg Alternative Name: River Usk	Tidal river or stream.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
62	304 SW	Afon Wysg Alternative Name: River Usk	Tidal river or stream.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
63	304 SW	Afon Wysg Alternative Name: River Usk	Tidal river or stream.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
48	307 SW	Afon Wysg Alternative Name: River Usk	Tidal river or stream.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
49	307	-	Tidal river or stream.	Catchment Area: Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	SW			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
64	307 SW	Afon Wysg Alternative Name: River Usk	Tidal river or stream.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
65	307 SW	-	Tidal river or stream.	Catchment Area: Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
50	308 SW	Afon Wysg Alternative Name: River Usk	Tidal river or stream.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
66	308 SW	Afon Wysg Alternative Name: River Usk	Tidal river or stream.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
51	309 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.1
67	309 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.1
52	329 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.0
Not shown	329 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.0
53	338 SW	Afon Wysg Alternative Name: River Usk	Tidal river or stream.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
69	338 SW	Afon Wysg Alternative Name: River Usk	Tidal river or stream.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
54	342 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.2
Not shown	342 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions)

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				Average Width in Watercourse Section (m): 1.2
55	354 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	354 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
56	377 SW	-	Foreshore. Watercourse flows over the foreshore between mean high water and mean low water.	Catchment Area: Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
72	377 SW	-	Foreshore. Watercourse flows over the foreshore between mean high water and mean low water.	Catchment Area: Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
57	380 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.3
58	380 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
59	380 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
Not shown	380 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.3
Not shown	380 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
Not shown	380 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
60	395 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
76	395 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
61	406 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
77	406 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
62	408 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
78	408 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
63	413 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	413 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
64	431 SE	-	Lake, loch or reservoir.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	431 SE	-	Lake, loch or reservoir.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
65	435 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
66	435 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.2
Not shown	435 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
Not shown	435 S	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.2
67	437	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	N			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
Not shown	437 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.8
68	449 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	449 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
69	455 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
70	455 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	455 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	455 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
71	461 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.2
Not shown	461 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.2
72	466 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.2
Not shown	466 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 4.2
73	480 N	-	Inland river not influenced by normal tidal action.	Catchment Area: Usk and Llwyd Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions)

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
Not shown	480 N	-	Inland river not influenced by normal tidal action.	Average Width in Watercourse Section (m): 2.8
				Catchment Area: Usk and Llwyd
				Relationship to Ground Level: On ground surface
				Permanence: Watercourse contains water year round (in normal conditions)
				Average Width in Watercourse Section (m): 2.8

6.11 Surface Water Features

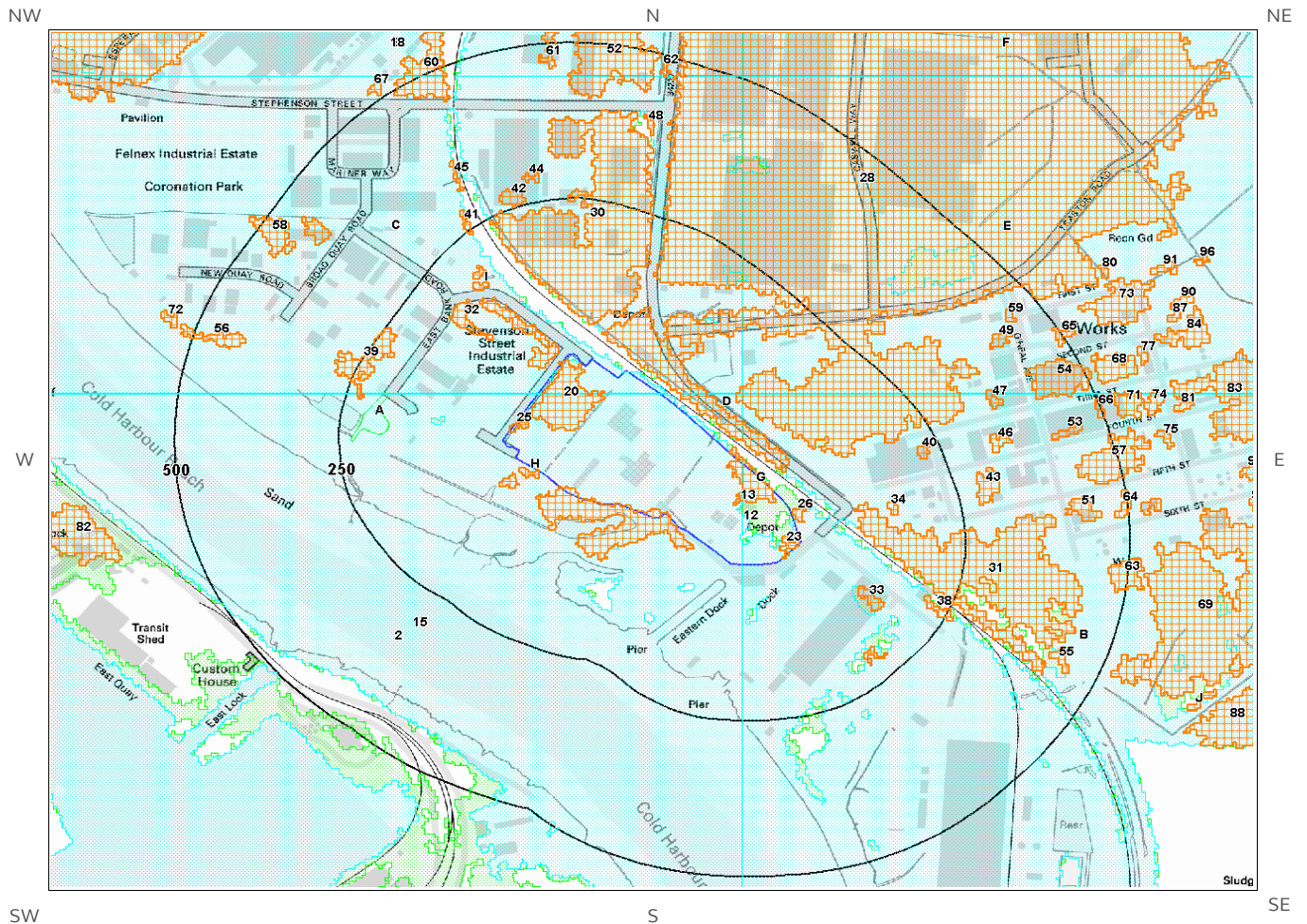
Surface water features within 250m of the study site

Identified

The following surface water records are not represented on mapping:

Distance (m)	Direction
35	SW
10	S
24	NE
50	NE
53	NE
54	NE
54	SW
96	SW
112	SW
116	SW
221	W
231	N

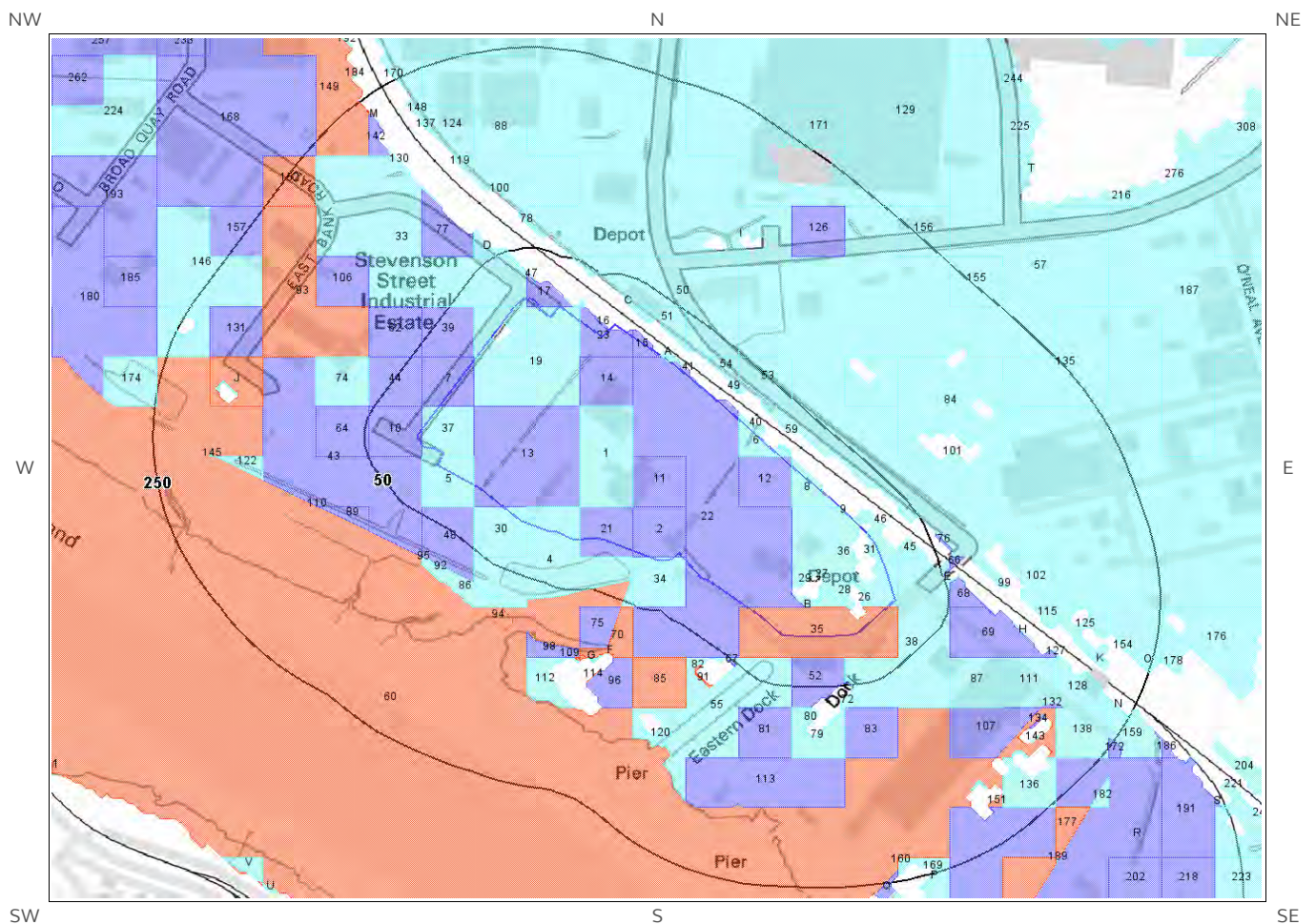
7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)



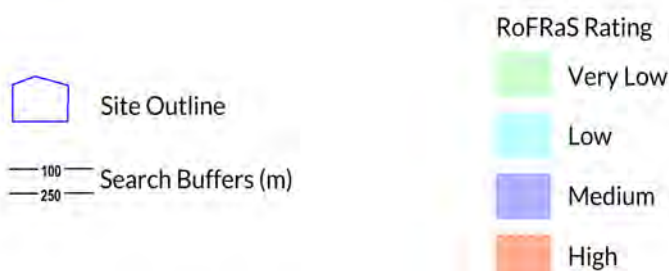
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7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map



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7 Flooding

7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m

Identified

Environment Agency/Natural Resources Wales Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea. Any relevant data is represented on Map 7a – Flood Map for Planning:

ID	Distance (m)	Direction	Update	Type
1B	0	On Site	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
2	0	On Site	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
3C	0	On Site	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
4D	13	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
5E	83	NE	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
6A	176	W	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)
7A	176	W	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)

7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m

Identified

Zone 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year. Any relevant data is represented on Map 7a – Flood Map for Planning.

ID	Distance (m)	Direction	Update	Type
1B	0	On Site	20-Jun-2019	Zone 3 - (Fluvial Models)
2	0	On Site	20-Jun-2019	Zone 3 - (Fluvial Models)
3C	0	On Site	20-Jun-2019	Zone 3 - (Fluvial Models)
4D	0	On Site	20-Jun-2019	Zone 3 - (Fluvial Models)
5E	0	On Site	20-Jun-2019	Zone 3 - (Fluvial Models)
6A	0	On Site	20-Jun-2019	Zone 3 - (Fluvial Models)

7A	13	NE	20-Jun-2019	Zone 3 - (Fluvial Models)
	83	NE	20-Jun-2019	Zone 3 - (Fluvial Models)

7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating

Highest risk of flooding onsite

High

The Environment Agency/Natural Resources Wales RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection.

RoFRaS data for the study site indicates the property is in an area with a High (1 in 30 or greater) chance of flooding in any given year.

Any relevant data within 250m is represented on the RoFRaS Flood map. Data to 50m is reported in the table below.

ID	Distance (m)	Direction	RoFRaS flood Risk
1	0.0	On Site	Low
2	0.0	On Site	Medium
3A	0.0	On Site	Low
4	0.0	On Site	Low
5	0.0	On Site	Low
6	0.0	On Site	Low
7	0.0	On Site	Medium
8	0.0	On Site	Low
9	0.0	On Site	Low
10	0.0	On Site	Medium
11	0.0	On Site	Medium
12	0.0	On Site	Medium
13	0.0	On Site	Medium
14	0.0	On Site	Medium
15	0.0	On Site	Medium
16	0.0	On Site	Medium
17	0.0	On Site	Medium
18A	0.0	On Site	Low
19	0.0	On Site	Low
20	0.0	On Site	Low
21	0.0	On Site	Medium
22	0.0	On Site	Medium
23	0.0	On Site	Medium
24B	0.0	On Site	Medium
25B	0.0	On Site	Low
26	0.0	On Site	Low
27	0.0	On Site	Low

28	0.0	On Site	Low
29	0.0	On Site	Low
30	0.0	On Site	Low
31	0.0	On Site	Low
32	0.0	On Site	Low
33	0.0	On Site	Low
34	0.0	On Site	Low
35	0.0	On Site	High
36	0.0	On Site	Low
37	0.0	On Site	Low
38	1.0	E	Low
39	2.0	NW	Medium
40	3.0	NE	Low
41	3.0	NE	Medium
42	7.0	NE	Low
43	10.0	S	Medium
44	14.0	NW	Medium
45	15.0	E	Low
46	16.0	NE	Low
47	17.0	N	Low
48	17.0	SW	Medium
49	18.0	NE	Low
50	18.0	NE	Low
51	19.0	NE	Low
52	20.0	S	Medium
53	20.0	NE	Low
54	20.0	NE	Low
55	21.0	S	Low
56C	22.0	NE	Low
57	23.0	NE	Low
58C	24.0	NE	High
59	25.0	NE	Low
60	28.0	S	High
61	37.0	NE	Low
62	43.0	NW	Medium
63D	45.0	N	Low
64	46.0	W	Medium
65E	50.0	NE	Low

7.4 Flood Defences

Flood Defences within 250m of the study site

Database searched and no data found.

None identified

7.5 Areas benefiting from Flood Defences

Areas benefiting from Flood Defences within 250m of the study site

Identified

7.6 Areas benefiting from Flood Storage

Areas used for Flood Storage within 250m of the study site

None identified

7.7 Groundwater Flooding Susceptibility Areas

7.7.1 British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site

None identified

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

7.7.2 Highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions

Not Prone

The area is not considered to be prone to groundwater flooding based on rock type.

7.8 Groundwater Flooding Confidence Areas

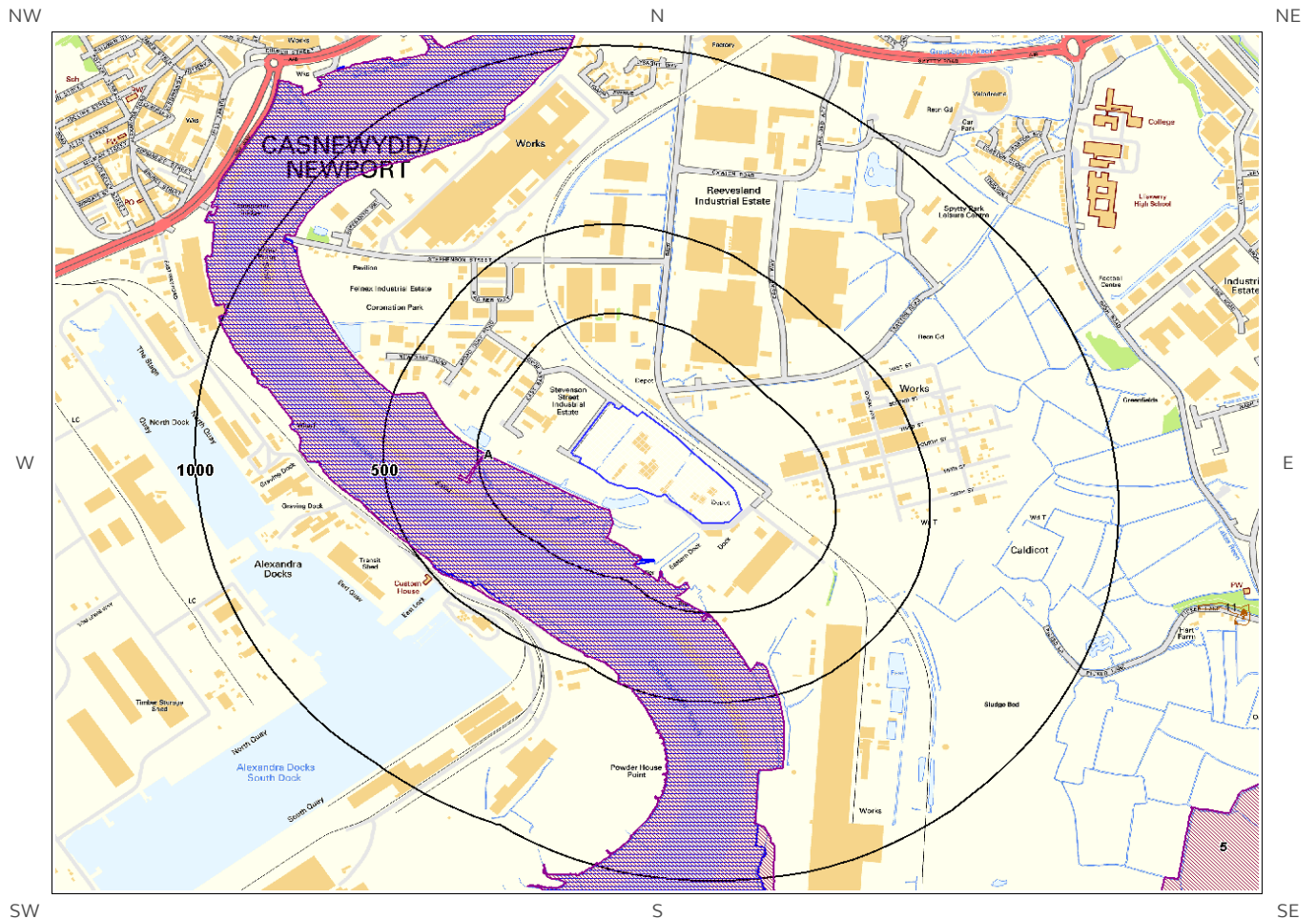
British Geological Survey confidence rating in this result

Not Applicable

Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.

8. Designated Environmentally Sensitive Sites Map



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8. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites within 2000m of the study site

Identified

8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:

4

The following Site of Special Scientific Interest (SSSI) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	SSSI Name	Data Source
4A	72	S	RIVER USK (LOWER USK)/AFON WYSG (WYSG ISAF)	Natural Resources Wales
5	1433	E	GWENT LEVELS - NASH AND GOLDCLIFF	Natural Resources Wales
Not shown	1700	SW	SEVERN ESTUARY	Natural Resources Wales
Not shown	1771	S	GWLYPTIROEDD CASNEWEDD / NEWPORT WETLANDS	Natural Resources Wales

8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:

1

The following National Nature Reserve (NNR) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	NNR Name	Data Source
Not shown	1659	SW	NEWPORT WETLANDS	Natural Resources Wales

8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:

2

The following Special Area of Conservation (SAC) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	SAC Name	Data Source
1A	72	S	River Usk / Afon Wysg	Natural Resources Wales

ID	Distance (m)	Direction	SAC Name	Data Source
Not shown	1700	SW	Severn Estuary (Wales)	Natural Resources Wales

8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:

1

The following Special Protection Area (SPA) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	SPA Name	Data Source
Not shown	1700	SW	Severn Estuary (Wales)	Natural Resources Wales

8.5 Records of Ramsar sites within 2000m of the study site:

2

The following Ramsar records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	Ramsar Site Name	Ramsar Site Status	Data Source
Not shown	1700	SW	Severn Estuary (Wales)	Listed	Natural Resources Wales
Not shown	1915	SW	Severn Estuary (Wales)	Listed	Natural Resources Wales

8.6 Records of Ancient Woodland within 2000m of the study site:

1

The following records of Designated Ancient Woodland provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	Ancient Woodland Name	Data Source
11	1239	E	UNKNOWN	Ancient and Semi-Natural Woodland

8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:

0

Database searched and no data found.

8.8 Records of World Heritage Sites within 2000m of the study site:

0

Database searched and no data found.

8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.10 Records of Areas of Outstanding Natural Beauty (AONB) within 2000m of the study site:

0

Database searched and no data found.

8.11 Records of National Parks (NP) within 2000m of the study site:

0

Database searched and no data found.

8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

0

Database searched and no data found.

8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:

0

Database searched and no data found.

8.14 Records of Green Belt land within 2000m of the study site:

0

Database searched and no data found.

9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a **Groundsure Geo Insight**, available from our **website**. The following information has been found:

9.1.1 Shrink Swell

Maximum Shrink-Swell** hazard rating identified on the study site Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Ground conditions predominantly medium plasticity. Do not plant trees with high soil moisture demands near to buildings. For new build, consideration should be given to advice published by the National House Building Council (NHBC) and the Building Research Establishment (BRE). There is a possible increase in construction cost to reduce potential shrink-swell problems. For existing property, there is a possible increase in insurance risk, especially during droughts or where vegetation with high moisture demands is present.

9.1.2 Landslides

Maximum Landslide* hazard rating identified on the study site Very Low

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Slope instability problems are unlikely to be present. No special actions required to avoid problems due to landslides. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with landslides.

9.1.3 Soluble Rocks

Maximum Soluble Rocks* hazard rating identified on the study site Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Soluble rocks are present, but unlikely to cause problems except under exceptional conditions. No special actions required to avoid problems due to soluble rocks. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with soluble rocks.

* This indicates an automatically generated 50m buffer and site.

9.1.4 Compressible Ground

Maximum Compressible Ground* hazard rating identified on the study site

Moderate

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Significant potential for compressibility problems. Avoid large differential loadings of ground. Do not drain or de-water ground near the property without technical advice. For new build consider possibility of compressible ground in ground investigation, construction and building design. Consider effects of groundwater changes. Extra construction costs are likely. For existing property possible increase in insurance risk from compressibility, especially if water conditions or loading of the ground change significantly.

9.1.5 Collapsible Rocks

Maximum Collapsible Rocks* hazard rating identified on the study site

Negligible

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
No indicators for collapsible deposits identified. No actions required to avoid problems due to collapsible deposits. No special ground investigation required, or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

9.1.6 Running Sand

Maximum Running Sand** hazard rating identified on the study site

Moderate

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard
Significant potential for running sand problems with relatively small changes in ground conditions. Avoid large amounts of water entering the ground (for example through pipe leakage or soak-aways). Do not dig (deep) holes into saturated ground near the property without technical advice. For new build consider the consequences of soil and groundwater conditions during and after construction. For existing property possible increase in insurance risk from running sand, for example, due to water leakage, high rainfall events or flooding.

* This indicates an automatically generated 50m buffer and site.

9.2 Radon

9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The site is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

9.2.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary.

10. Mining

10.1 Coal Mining

Coal mining areas within 75m of the study site

None identified

Database searched and no data found.

10.2 Non-Coal Mining

Non-Coal Mining areas within 50m of the study site boundary

None identified

Database searched and no data found.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site

None identified

Guidance: No Guidance Required.

Contact Details

Groundsure Helpline
Telephone: 08444 159 000
info@groundsure.com

British Geological Survey Enquiries

Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG
Tel: 0115 936 3143.
Fax: 0115 936 3276.
Email:

Web: www.bgs.ac.uk

BGS Geological Hazards Reports and general geological enquiries:
enquiries@bgs.ac.uk

Natural Resources Wales

Ty Cambria
29 Newport Road
Cardiff
CF24 0TP
Tel: 0300 065 3000
Email: enquiries@naturalresourceswales.gov.uk

Public Health England

Public information access office
Public Health England, Wellington House
133-155 Waterloo Road, London, SE1 8UG
www.gov.uk/phe
Email: enquiries@phe.gov.uk
Main switchboard: 020 7654 8000

The Coal Authority

200 Lichfield Lane
Mansfield
Notts NG18 4RG
Tel: 0345 7626 848
DX 716176 Mansfield 5
www.coal.gov.uk

Ordnance Survey

Adanac Drive, Southampton
SO16 0AS
Tel: 08456 050505

Local Authority

Authority: Casnewydd - Newport City Council
Phone: 01633 656 656
Web: <http://www.newport.gov.uk>
Address: Civic Centre, Godfrey Road, Newport, NP20 4UR



Gemapping PLC
Virginia Villas, High Street, Hartley Witney,
Hampshire RG27 8NW
Tel: 01252 845444



Acknowledgements: Site of Special Scientific Interest, National Nature Reserve, Ramsar Site, Special Protection Area, Special Area of Conservation data is provided by, and used with the permission of, Natural England/Natural Resources Wales who retain the Copyright and Intellectual Property Rights for the data.

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Standard Terms and Conditions

Groundsure's Terms and Conditions can be viewed online at this link:

<https://www.groundsure.com/terms-and-conditions-feb11-2019>



APPENDIX C - GROUNDSURE GEOINSIGHT REPORT



WYG Environment Planning Transport Limited
Arndale Court, OTLEY ROAD HEADINGLEY,
LEEDS, LS6 2UJ

Groundsure
Reference:

GS-6201610

Your Reference: LE19390

Report Date 26 Jul 2019

Report Delivery Method: Email - pdf

Geo Insight

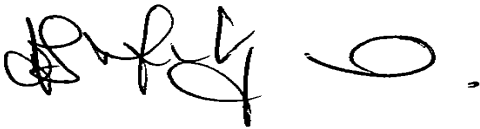
Address: NEWPORT CONTAINER VALET, EASTERN DRY DOCK, CORPORATION ROAD, NEWPORT,
NP19 4RE

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Geo Insight** as requested.

If you need any further assistance, please do not hesitate to contact our helpline on 08444 159000 quoting the above Groundsure reference number.

Yours faithfully,



Managing Director
Groundsure Limited

Enc.
Groundsure Geo Insight

Address: NEWPORT CONTAINER VALET, EASTERN DRY DOCK,
CORPORATION ROAD, NEWPORT, NP19 4RE

Date: 26 Jul 2019

Reference: GS-6201610

Client: WYG Environment Planning Transport Limited

NW N NE



SW S SE

Aerial Photograph Capture date: 25-May-2017
Grid Reference: 332934,185546
Site Size: 7.3560ha

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Overview of Findings

The Groundsure Geo Insight provides high quality geo-environmental information that allows geo-environmental professionals and their clients to make informed decisions and be forewarned of potential ground instability problems that may affect the ground investigation, foundation design and possibly remediation options that could lead to possible additional costs.

The report is based on the BGS 1:50,000 and 1:10,000 Digital Geological Map of Great Britain, BGS Geosure data; BRITPITS database; Non-coal mining data and Borehole Records, Coal Authority data including brine extraction areas, PBA non-coal mining and natural cavities database, Johnson Poole and Bloomer mining data and Groundsure's unique database including historical surface ground and underground workings.

For further details on each dataset, please refer to each individual section in the report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Section 1: Geology 1:10,000 Scale

1.1 Artificial Ground	1.1 Is there any Artificial Ground/ Made Ground present beneath the study site at 1:10,000 scale?	No
1.2 Superficial Geology and Landslips	1.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site at 1:10,000 scale?*	Yes
	1.2.2 Are there any records of landslide within 500m of the study site boundary at 1:10,000 scale?	No
1.3 Bedrock, Solid Geology and linear features	1.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.	
	1.3.2 Are there any records of linear features within 500m of the study site boundary at 1:10,000 scale?	No

Section 2: Geology 1:50,000 Scale

2.1 Artificial Ground	2.1.1 Is there any Artificial Ground/ Made Ground present beneath the study site?	No
	2.1.2 Are there any records relating to permeability of artificial ground within the study site*boundary?	No
2.2 Superficial Geology and Landslips	2.2.1 Is there any Superficial Ground/Drift Geology present beneath the study site?*	Yes
	2.2.2 Are there any records of permeability of superficial ground within 500m of the study site?	Yes
	2.2.3 Are there any records of landslide within 500m of the study site boundary?	No
	2.2.4 Are there any records relating to permeability of landslips within the study site* boundary?	No

Section 2: Geology 1:50,000 Scale

2.3 Bedrock, Solid Geology and linear features

2.3.1 For records of Bedrock and Solid Geology beneath the study site* see the detailed findings section.

2.3.2 Are there any records relating to permeability of bedrock ground within the study site boundary?

Yes

2.3.3 Are there any records of linear features within 500m of the study site boundary?

No

Section 3: Radon

3. Radon

3.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?

The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

3.2 Radon Protection

No radon protective measures are necessary.

Section 4: Ground Workings

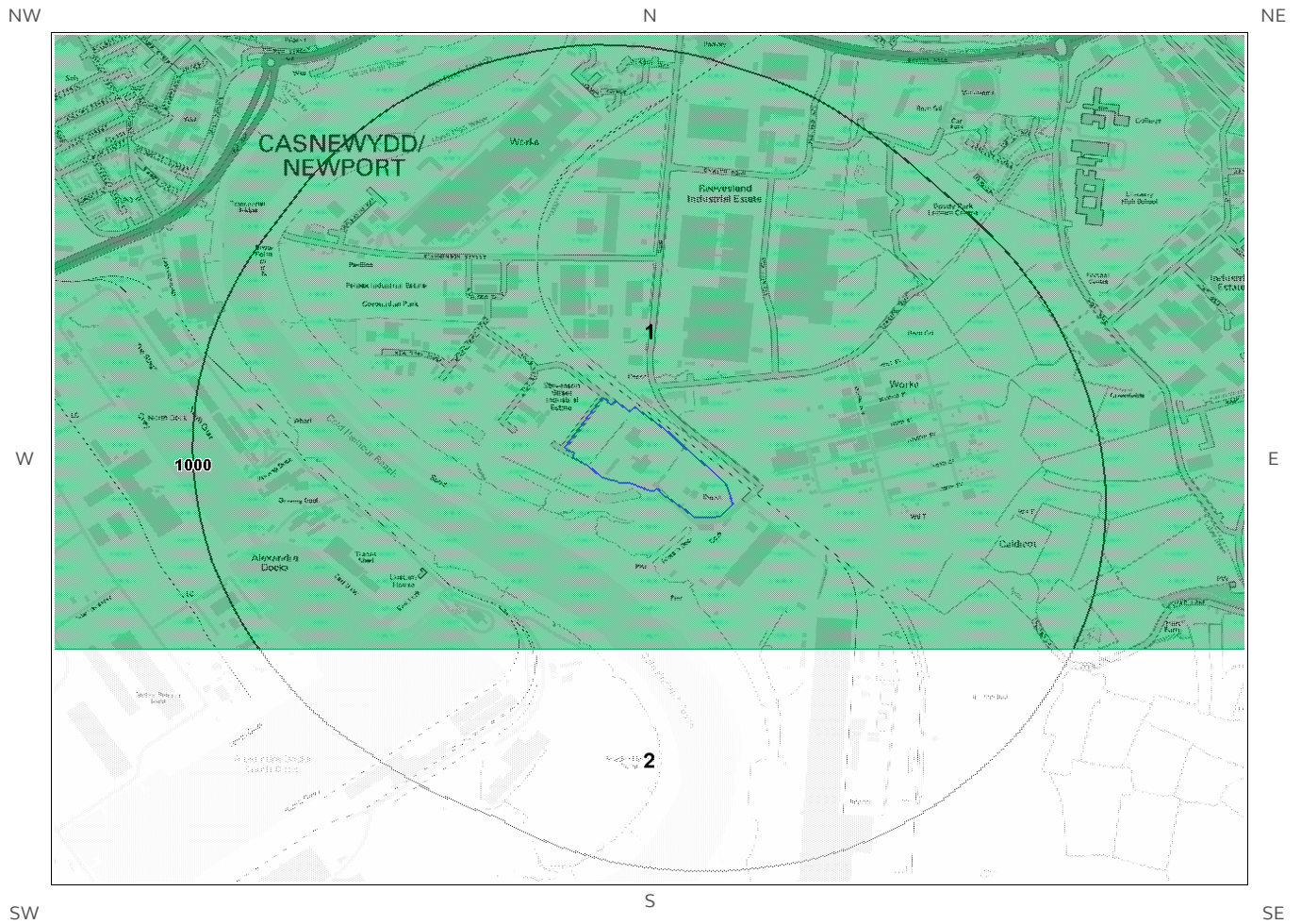
	On-site	0-50m	51-250	251-500	501-1000
4.1 Historical Surface Ground Working Features from Small Scale Mapping	16	21	8	Not Searched	Not Searched
4.2 Historical Underground Workings from Small Scale Mapping	0	0	0	0	4
4.3 Current Ground Workings	0	0	1	2	0

Section 5: Mining, Extraction & Natural Cavities

	On-site	0-50m	51-250	251-500	501-1000
5.1 Historical Mining	0	0	0	0	1
5.2 Coal Mining	0	0	0	0	0
5.3 Johnson Poole and Bloomer Mining Area	0	0	0	0	0
5.4 Non-Coal Mining*	0	0	0	0	0
5.5 Non-Coal Mining Cavities	0	0	0	0	0
5.5 Natural Cavities	0	0	0	0	0

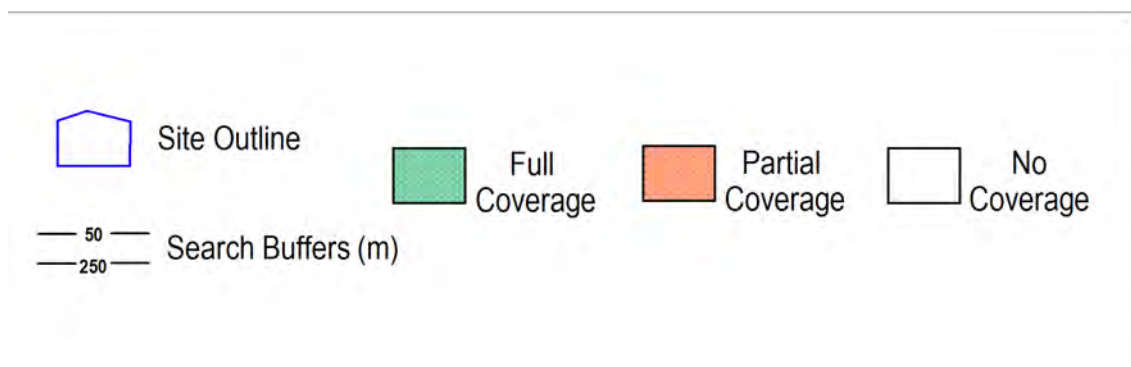
Section 5: Mining, Extraction & Natural Cavities	On-site	0-50m	51-250	251-500	501-1000
5.6 Brine Extraction	0	0	0	0	0
5.7 Gypsum Extraction	0	0	0	0	0
5.8 Cornwall and Devon Metalliferous Mining	0	0	0	0	0
5.9 Clay Mining	0	0	0	0	0
Section 6: Natural Ground Subsidence	On-site				
6.1 Shrink-Swell Clay	Low				
6.2 Landslides	Very Low				
6.3 Ground Dissolution of Soluble Rocks	Negligible				
6.4 Compressible Deposits	Moderate				
6.5 Collapsible Deposits	Negligible				
6.5 Running Sand	Moderate				
Section 7: Borehole Records	On-site	0-50m	51-250		
7 BGS Recorded Boreholes	0	0	2		
Section 8: Estimated Background Soil Chemistry	On-site	0-50m	51-250		
8 Records of Background Soil Chemistry	6	1	0		
Section 9: Railways and Tunnels	On-site	0-50m	51-250	250-500	
9.1 Tunnels	0	0	0	Not Searched	
9.2 Historical Railway and Tunnel Features	13	16	40	Not Searched	
9.3 Historical Railways	0	0	2	Not Searched	
9.4 Active Railways	0	4	0	Not Searched	
9.5 Railway Projects	0	0	0	0	

1:10,000 Scale Availability



1_10,000 Availability Legend

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Availability of 1:10,000 Scale Geology Mapping

The following information represents the availability of the key components of the 1:10,000 scale geological data.

ID	Distance	Artificial Coverage	Superficial Coverage	Bedrock Coverage	Mass Movement Coverage
1	0.0	No deposits are mapped	Full	Full	No coverage
2	370.0	No deposits are mapped	No coverage	No coverage	No coverage
N3	1901.0	No deposits are mapped	Full	Full	No coverage

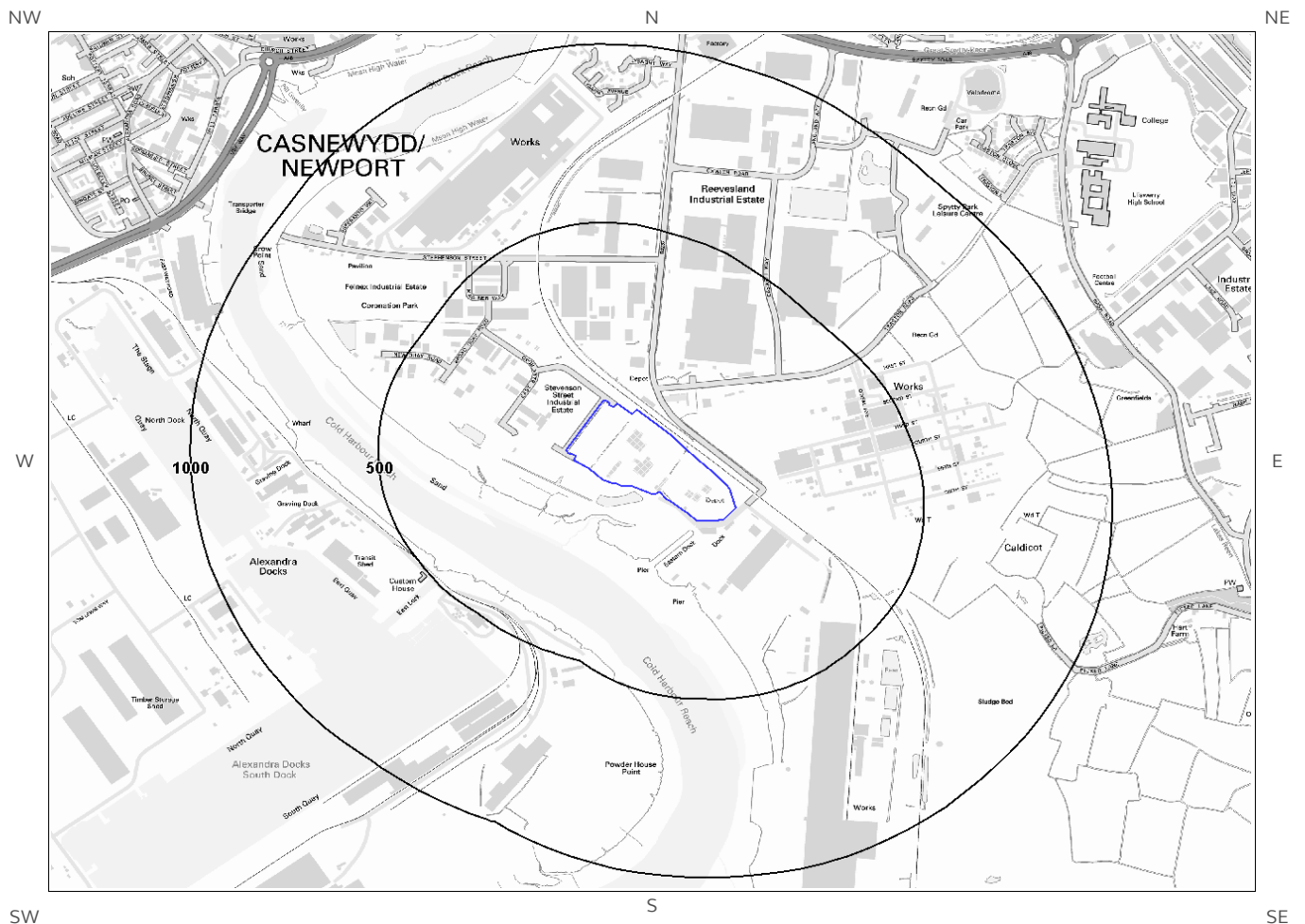
Guidance: The 1:10,000 scale geological interpretation is the most detailed generally available from BGS and is the scale at which most geological surveying is carried out in the field. The database is presented as four types of geology (artificial, mass movement, superficial and bedrock), although not all themes are mapped or available on every map sheet. Therefore a coverage layer showing the availability of the four themes is presented above.

The definitions of coverage are as follows:

Geology	Full Coverage	Partial Coverage	No Coverage
Bedrock	The whole tile has been mapped	Some but not all the tile has been mapped	No coverage
Superficial	The whole tile has been mapped	Some but not all of the tile has been mapped	No coverage
Artificial	Some deposits are mapped on this tile	-	No deposits are mapped
Mass Movement	Some deposits are mapped on this tile	-	No coverage

1 Geology (1:10,000 scale).

1.1 Artificial Ground map (1:10,000 scale)



Artificial Ground Legend

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1. Geology 1:10,000 scale

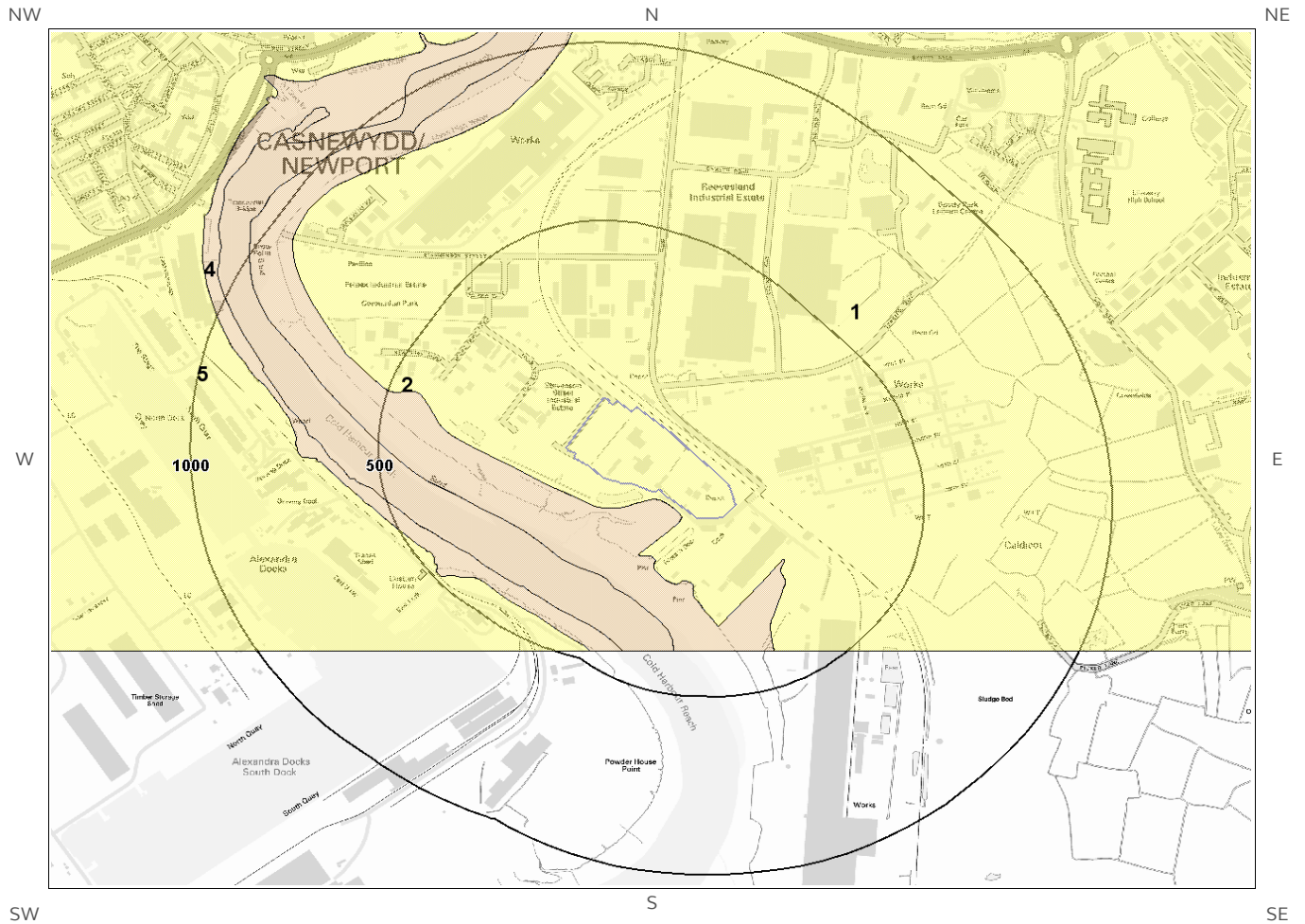
1.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

Are there any records of Artificial/ Made Ground within 500m of the study site boundary at 1:10,000 scale? No

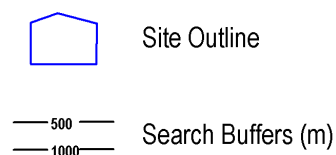
Database searched and no data found.

1.2 Superficial Deposits and Landslips map (1:10,000 scale)



Artificial Ground Legend

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1.2 Superficial Deposits and Landslips

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping

1.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary at 1:10,000 scale? Yes

ID	Distance (m)	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	TFD-CZ	Tidal Flat Deposits - Clay, Silty (unlithified Deposits Coding Scheme)	Clay, Silty
2	14.0	SW	BCHD-XCSV	Beach Deposits - Clay, Sand And Gravel	Clay, Sand And Gravel
3	245.0	SW	BCHD-XCSV	Beach Deposits - Clay, Sand And Gravel	Clay, Sand And Gravel
4	371.0	SW	BCHD-XCSV	Beach Deposits - Clay, Sand And Gravel	Clay, Sand And Gravel
5	423.0	SW	TFD-CZ	Tidal Flat Deposits - Clay, Silty (unlithified Deposits Coding Scheme)	Clay, Silty

1.2.2 Landslip

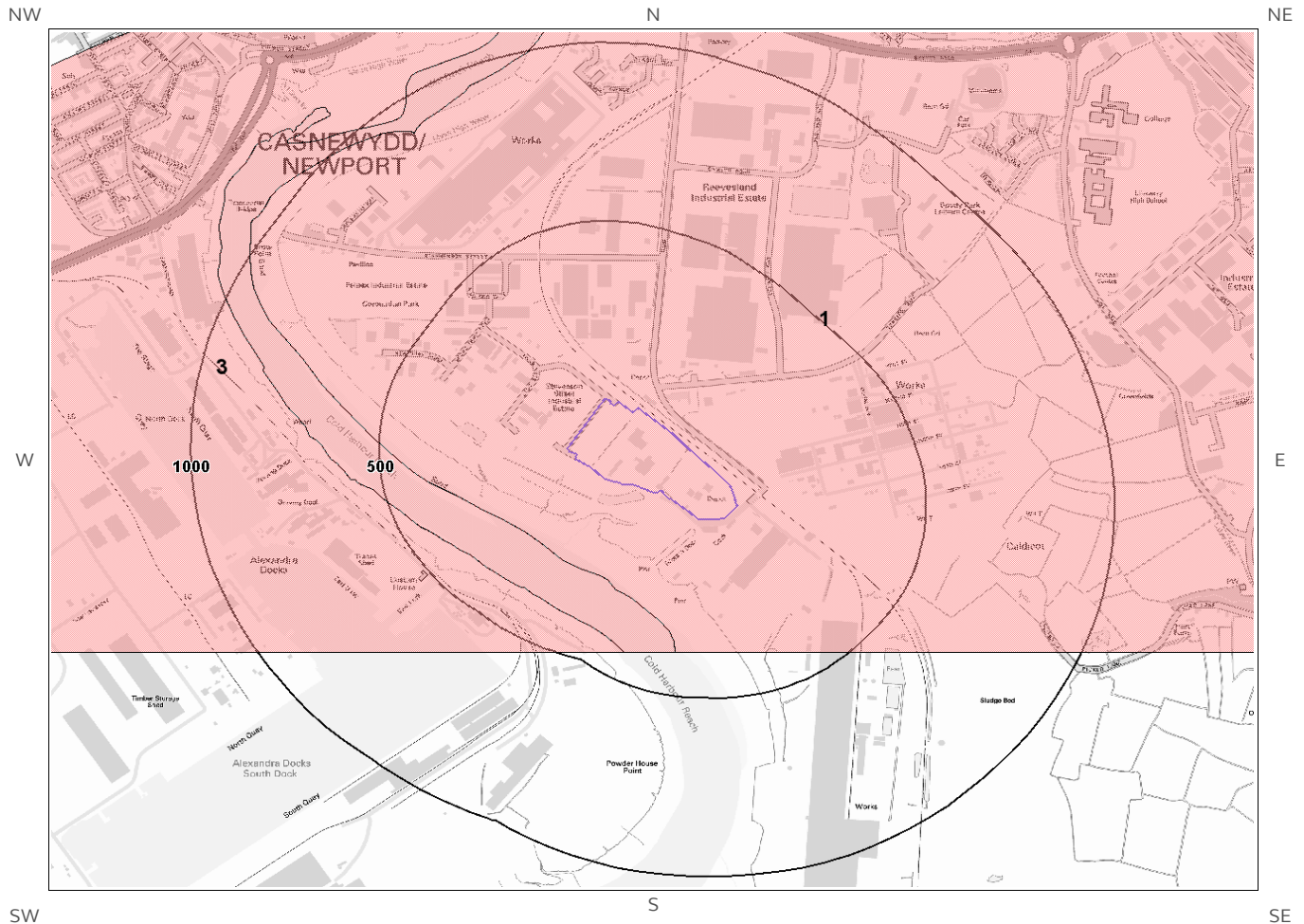
Are there any records of Landslip within 500m of the study site boundary at 1:10,000 scale? No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:10,000 scale

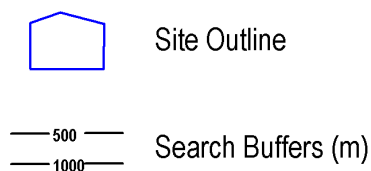
This Geology shows the main components as discrete layers, these are: Artificial / Made Ground, Superficial / Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

1.3 Bedrock and linear features map (1:10,000 scale)



Bedrock and linear features Legend

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1.3 Bedrock and linear features

The following geological information represented on the mapping is derived from 1:10,000 scale BGS Geological mapping.

1.3.1 Bedrock/ Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary at 1:10,000 scale.

ID	Distance (m)	Direction	LEX Code	Description	Rock Age
1	0.0	On Site	MMG-MDST	Mercia Mudstone Group - Mudstone	Rhaetian Age - Early Triassic Epoch
2	245.0	SW	MMG-MDST	Mercia Mudstone Group - Mudstone	Rhaetian Age - Early Triassic Epoch
3	371.0	SW	MMG-MDST	Mercia Mudstone Group - Mudstone	Rhaetian Age - Early Triassic Epoch

1.3.2 Linear features

Are there any records of linear features within 500m of the study site boundary at 1:10,000 scale? No

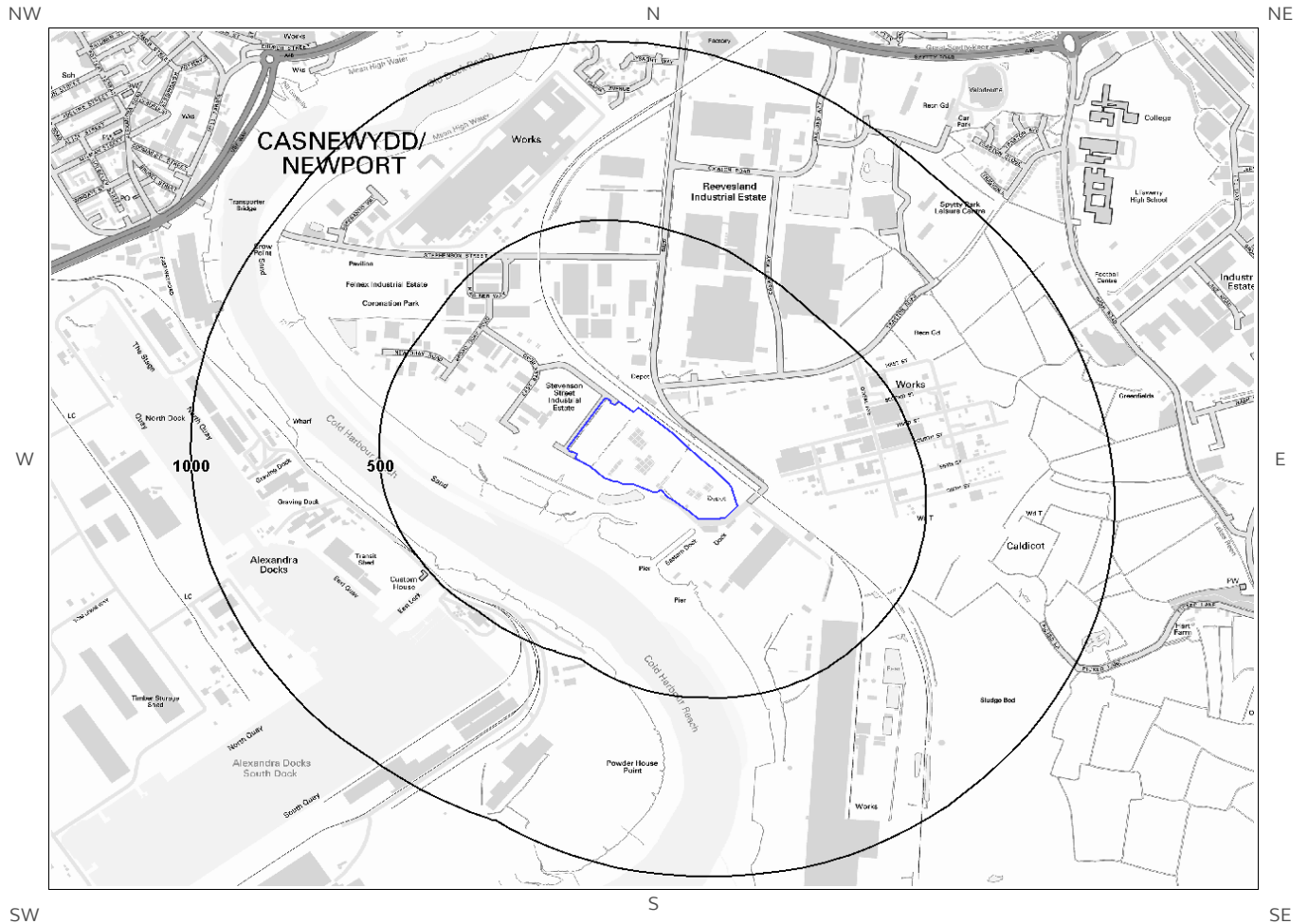
Database searched and no data found at this scale.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of great Britain at 1:10,000 scale.

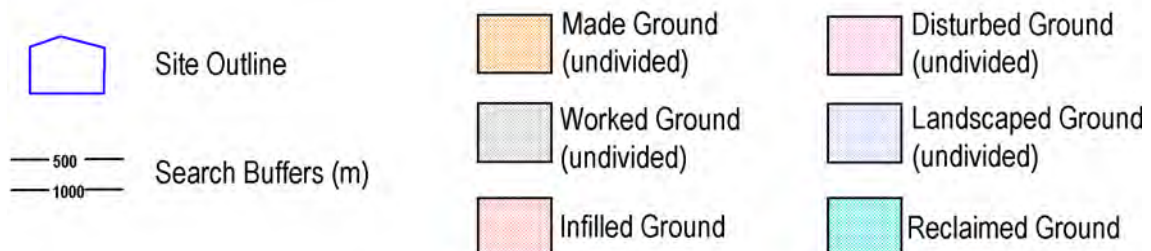
This Geology shows the main components as discrete layers, these are: Bedrock/ Solid Geology and linear features such as faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

2 Geology 1:50,000 Scale

2.1 Artificial Ground map



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2. Geology 1:50,000 scale

2.1 Artificial Ground

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 249

2.1.1 Artificial/ Made Ground

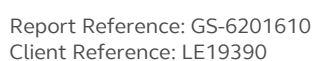
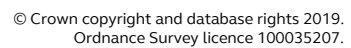
Are there any records of Artificial/ Made Ground within 500m of the study site boundary? No

Database searched and no data found.

2.1.2 Permeability of Artificial Ground

Are there any records relating to permeability of artificial ground within the study site boundary? No

Database searched and no data found.



2.2 Superficial Deposits and Landslips

2.2.1 Superficial Deposits/ Drift Geology

Are there any records of Superficial Deposits/ Drift Geology within 500m of the study site boundary? Yes

ID	Distance	Direction	LEX Code	Description	Rock Description
1	0.0	On Site	TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT
2	27.0	SW	TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT
3	435.0	SW	TFD-XCZ	TIDAL FLAT DEPOSITS	CLAY AND SILT

2.2.2 Permeability of Superficial Ground

Are there any records relating to permeability of superficial ground within the study site boundary? Yes

Distance (m)	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Intergranular	Low	Very Low

2.2.3 Landslip

Are there any records of Landslip within 500m of the study site boundary? No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

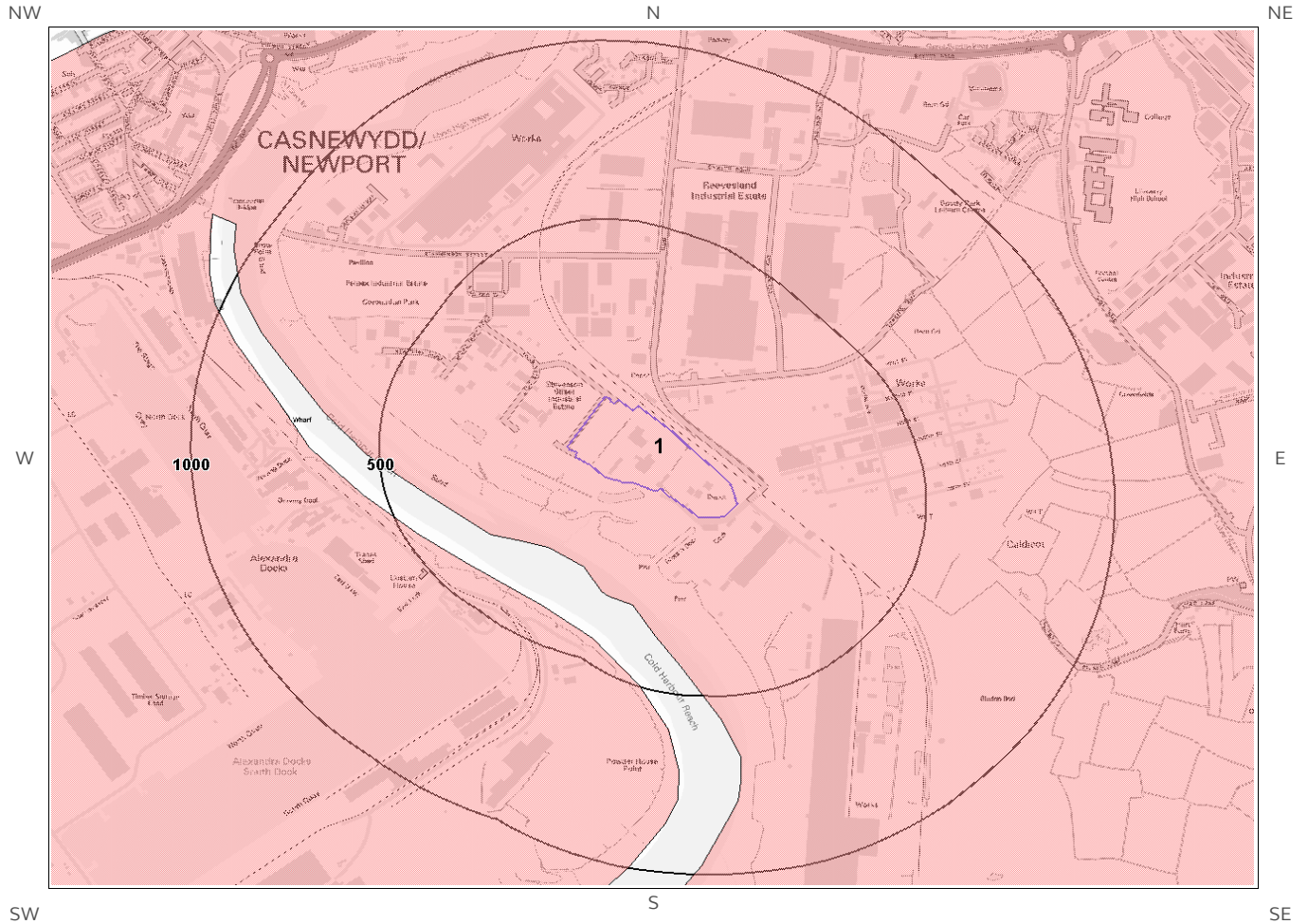
This Geology shows the main components as discrete layers, there are: Artificial/ Made Ground, Superficial/ Drift Geology and Landslips. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nationwide coverage.

2.2.4 Landslip Permeability

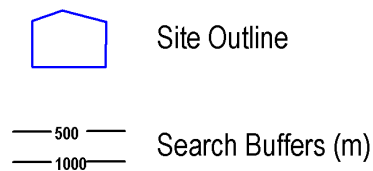
Are there any records relating to permeability of landslips within the study site boundary? No

Database searched and no data found.

2.3 Bedrock and linear features map (1:50,000 scale)



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2.3 Bedrock, Solid Geology & linear features

The following geological information represented on the mapping is derived from 1:50,000 scale BGS Geological mapping, Sheet No: 249

2.3.1 Bedrock/Solid Geology

Records of Bedrock/Solid Geology within 500m of the study site boundary:

ID	Distance	Direction	LEX Code	Rock Description	Rock Age
1	0.0	On Site	MMG-MDST	MERCIA MUDSTONE GROUP - MUDSTONE	-

2.3.2 Permeability of Bedrock Ground

Are there any records relating to permeability of bedrock ground within the study site boundary? Yes

Distance	Direction	Flow Type	Maximum Permeability	Minimum Permeability
0.0	On Site	Fracture	Low	Low

2.3.3 Linear features

Are there any records of linear features within 500m of the study site boundary? No

Database searched and no data found.

The geology map for the site and surrounding area are extracted from the BGS Digital Geological Map of Great Britain at 1:50,000 scale.

This Geology shows the main components as discrete layers, these are: Bedrock/Solid Geology and linear features such as faults. These are all displayed with the BGS Lexicon code for the rock unit and BGS sheet number. Not all of the main geological components have nation wide coverage.

3 Radon Data

3.1 Radon Affected Areas

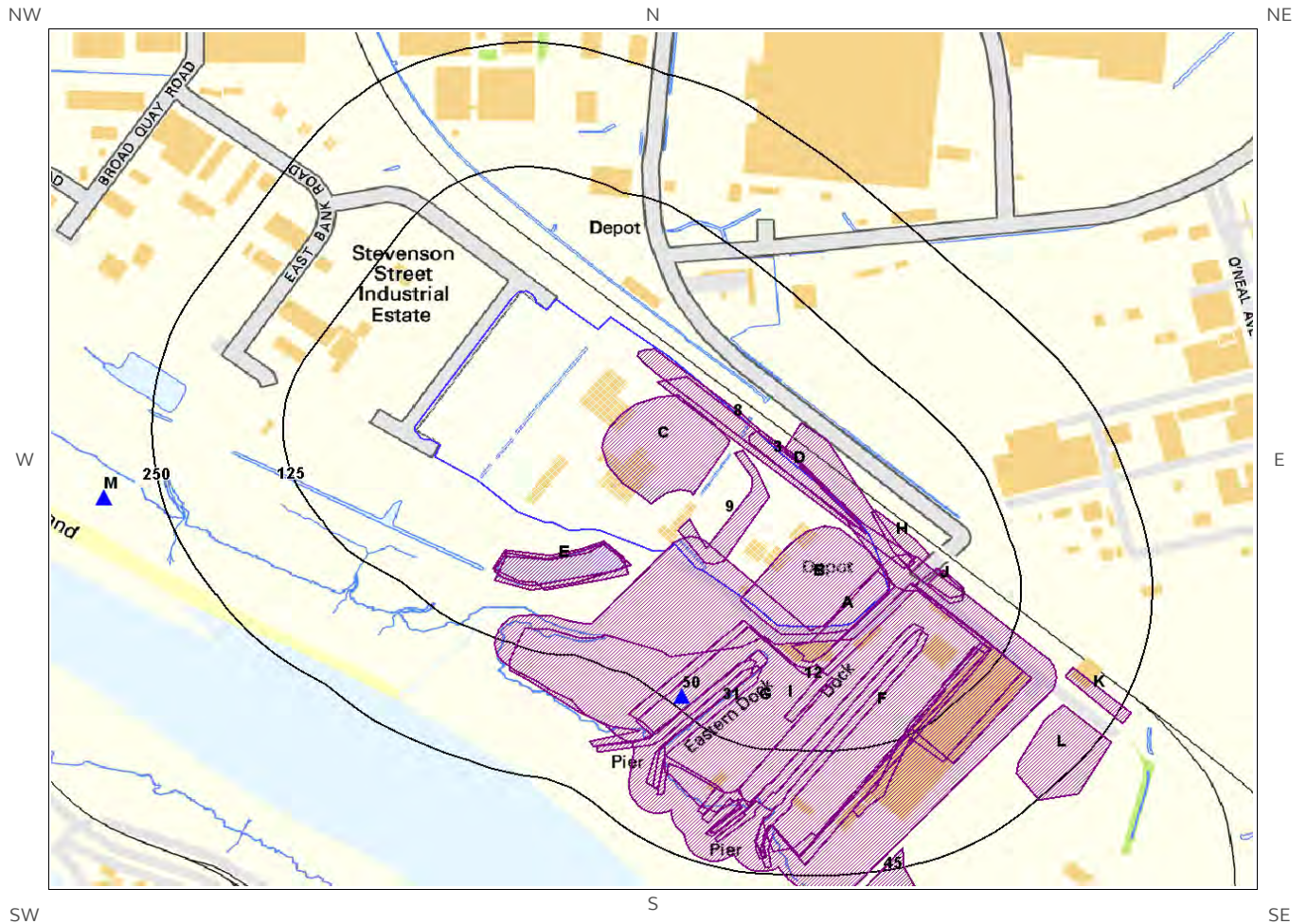
Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The property is not in a Radon Affected Area, as less than 1% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

3.2 Radon Protection

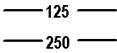
Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment? No radon protective measures are necessary.

4 Ground Workings map



Ground Workings Legend

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- | | | | |
|---|--------------------|---|----------------------------------|
|  | Site Outline |  | Historic Surface Ground Workings |
|  | Search Buffers (m) |  | Historic Underground Workings |
| | |  | Current Ground Workings |

4 Ground Workings

4.1 Historical Surface Ground Working Features derived from Historical Mapping

This dataset is based on Groundsure's unique Historical Land Use Database derived from 1:10,560 and 1:10,000 scale historical mapping

Are there any Historical Surface Ground Working Features within 250m of the study site boundary? Yes

ID	Distance (m)	Direction	NGR	Use	Date
1D	0.0	On Site	333019 185519	Pond	1963
2A	0.0	On Site	333050 185384	Pond	1922
3	0.0	On Site	333000 185525	Pond	1900
4A	0.0	On Site	333050 185384	Pond	1920
5B	0.0	On Site	333027 185417	Refuse Heap	1981
6B	0.0	On Site	333027 185417	Refuse Heap	1973
7B	0.0	On Site	333027 185417	Refuse Heap	1985
8	0.0	On Site	332968 185557	Pond	1920
9	0.0	On Site	332966 185490	Unspecified Ground Workings	1963
10C	0.0	On Site	332885 185548	Refuse Heap	1973
11C	0.0	On Site	332885 185548	Refuse Heap	1981
12	0.0	On Site	332959 185356	Dry Dock	1920
13D	0.0	On Site	333019 185519	Pond	1981
14D	0.0	On Site	333019 185519	Pond	1973
15A	0.0	On Site	333050 185384	Pond	1949
16I	0.0	On Site	332990 185276	Dry Docks	1900
17E	8.0	S	332786 185432	Pond	1963
18E	9.0	S	332787 185431	Pond	1900
19F	9.0	SE	333077 185275	Dry Dock	1949
20F	9.0	SE	333094 185275	Dry Dock	1920
21G	10.0	SE	332964 185275	Dock	1981

ID	Distance (m)	Direction	NGR	Use	Date
22G	10.0	SE	332964 185275	Dock	1973
23G	10.0	SE	332964 185275	Dock	1985
24E	11.0	S	332784 185433	Pond	1981
25E	11.0	S	332784 185433	Pond	1973
26E	11.0	S	332784 185433	Pond	1985
27H	13.0	NE	333109 185457	Unspecified Pit	1985
28H	13.0	NE	333109 185457	Unspecified Pit	1963
29H	13.0	NE	333109 185457	Unspecified Pit	1973
30H	13.0	NE	333109 185457	Unspecified Pit	1981
31	17.0	SW	332948 185290	Dry Dock	1949
32I	17.0	SE	333026 185269	Dry Dock	1922
33J	31.0	E	333150 185411	Pond	1900
34J	37.0	E	333152 185413	Pond	1981
35J	37.0	E	333152 185413	Pond	1963
36J	37.0	E	333152 185413	Pond	1973
37J	37.0	E	333152 185413	Pond	1985
38	101.0	SE	333119 185266	Unspecified Ground Workings	1900
39K	189.0	SE	333297 185301	Pond	1981
40K	189.0	SE	333297 185301	Pond	1963
41K	189.0	SE	333297 185301	Pond	1973
42L	197.0	SE	333265 185244	Pond	1981
43L	197.0	SE	333265 185244	Pond	1963
44L	197.0	SE	333265 185244	Pond	1973
45	231.0	S	333099 185101	Refuse Heap	1985

4.2 Historical Underground Working Features derived from Historical Mapping

This data is derived from the Groundsure unique Historical Land Use Database. It contains data derived from 1:10,000 and 1:10,560 historical Ordnance Survey Mapping and includes some natural topographical features (Shake Holes for example) as well as manmade features that may have implications for ground stability. Underground and mining features have been identified from surface features such as shafts. The distance that these extend underground is not shown.

Are there any Historical Underground Working Features within 1000m of the study site boundary? Yes

The following Historical Underground Working Features are provided by Groundsure:

ID	Distance (m)	Direction	NGR	Use	Date
Not shown	970.0	NW	331790 186213	Tunnel	1985
Not shown	970.0	NW	331790 186213	Tunnel	1949
Not shown	970.0	NW	331790 186213	Tunnel	1973
Not shown	970.0	NW	331790 186213	Tunnel	1981

4.3 Current Ground Workings

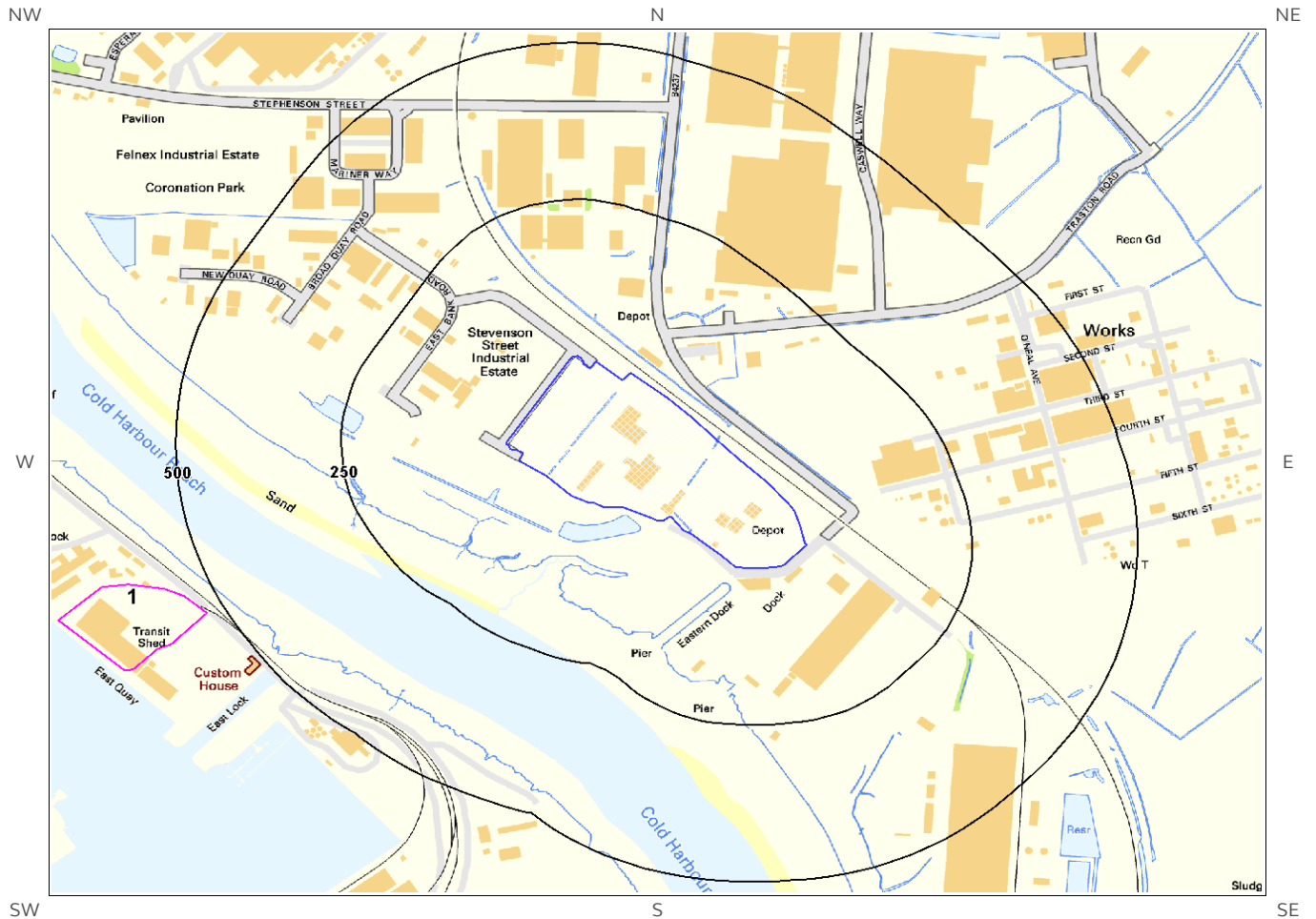
This dataset is derived from the BGS BRITPITS database covering active; inactive mines; quarries; oil wells; gas wells and mineral wharves; and rail deposits throughout the British Isles.

Are there any BGS Current Ground Workings within 1000m of the study site boundary? Yes

The following Current Ground Workings information is provided by British Geological Survey:

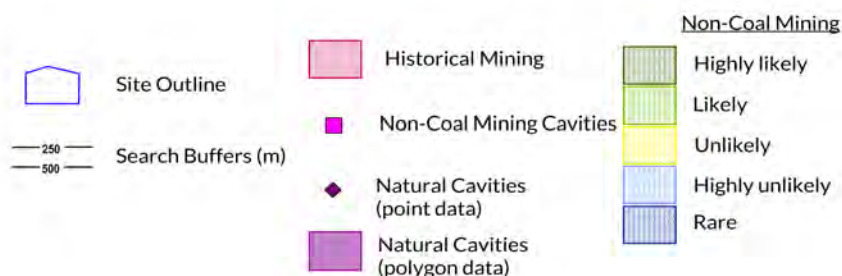
ID	Distance (m)	Direction	NGR	Commodity Produced	Pit Name	Type of working	Status
50	115.0	SW	332900 185300	Marine Sand & Gravel	Eastern Wharf	Sea, river or canal wharf where mineral commodities are unloaded and stored	Active
51M	304.0	W	332350 185500	Marine Sand & Gravel	Newport Wharf	Sea, river or canal wharf where mineral commodities are unloaded and stored	Ceased
52M	304.0	W	332350 185500	Marine Sand & Gravel	Newport Wharf	Sea, river or canal wharf where mineral commodities are unloaded and stored	Active

5 Mining, Extraction & Natural Cavities map



Mining, Extraction and Natural Cavities Legend

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5 Mining, Extraction & Natural Cavities

5.1 Historical Mining

This dataset is derived from Groundsure unique Historical Land-use Database that are indicative of mining or extraction activities.

Are there any Historical Mining areas within 1000m of the study site boundary? Yes

The following Historical Mining information is provided by Groundsure:

ID	Distance (m)	Direction	NGR	Details	Date
1	528.0	SW	332081 185276	Coal Dump	1985

5.2 Coal Mining

This dataset provides information as to whether the study site lies within a known coal mining affected area as defined by the coal authority.

Are there any Coal Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

5.3 Johnson Poole and Bloomer

This dataset provides information as to whether the study site lies within an area where JPB hold information relating to mining.

Are there any JPB Mining areas within 1000m of the study site boundary? No

The following information provided by JPB is not represented on mapping: Database searched and no data found.

5.4 Non-Coal Mining

This dataset provides information as to whether the study site lies within an area which may have been subject to non-coal historic mining.

Are there any Non-Coal Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

5.5 Non-Coal Mining Cavities

This dataset provides information from the Peter Brett Associates (PBA) mining cavities database (compiled for the national study entitled “Review of mining instability in Great Britain, 1990” PBA has also continued adding to this database) on mineral extraction by mining.

Are there any Non-Coal Mining cavities within 1000m of the study site boundary? No

Database searched and no data found.

5.6 Natural Cavities

This dataset provides information based on the Peter Brett Associates natural cavities database. The dataset is made up of points and polygons. Where polygons are used these represent an area in which it is expected the cavities could be found. It does not indicate that cavities are present everywhere within the polygon, and caution should be used in the interpretation of this data.

Are there any Natural Cavities within 1000m of the study site boundary? No

Database searched and no data found.

5.7 Brine Extraction

This data provides information from the Cheshire Brine Subsidence Compensation Board.

Are there any Brine Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

5.8 Gypsum Extraction

This dataset provides information on Gypsum extraction from British Gypsum records.

Are there any Gypsum Extraction areas within 1000m of the study site boundary? No

Database searched and no data found.

5.9 Cornwall and Devon Metalliferous Mining

This dataset provides information on metalliferous mining areas in Cornwall/Devon and is derived from records held by Mining Searches UK.

Are there any Cornwall and Devon Metalliferous Mining areas within 1000m of the study site boundary? No

Database searched and no data found.

5.10 Clay Mining

This dataset provides information on Kaolin and Ball Clay mining from relevant mining records.

Are there any Clay Mining areas within 1000m of the study site boundary?

No

Database searched and no data found.
