

Sims Brothers Plymouth Ltd

340, TAVISTOCK ROAD, PLYMOUTH, PL6 8AL Groundsure<br/>Reference:GS-6264200Your Reference:ScreechReport Date22 Aug 2019

Report Delivery Email - pdf Method:

#### **Enviro Insight**

Address: TWO HOOTS, A388 BETWEEN DIRTY LANE AND JUNCTION SOUTH OF THE CARDINALS HATT, CARKEEL, PL12 6PH

Dear Sir/ Madam,

Thank you for placing your order with Groundsure. Please find enclosed the **Groundsure Enviro 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 Enviroinsight

### Groundsure Enviro Insight LOCATION INTELLIGENCE

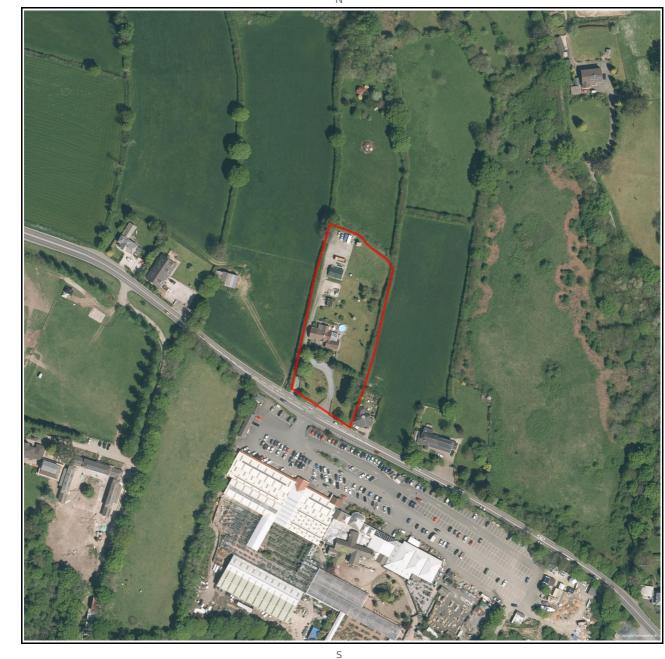
Address:	TWO HOOTS, A388 BETWEEN DIRTY LANE AND JUNCTION SOUTH OF THE CARDINALS HATT, CARKEEL, PL12 6PH
Date:	22 Aug 2019
Reference:	GS-6264200
Client:	Sims Brothers Plymouth Ltd

NW

9

NE

Е



Aerial Photograph Capture date: 15-May-2016 Grid Reference: Site Size: Report Reference: GS-6264200 Client Reference: Screech

240556,060810 0.6110ha

SE



# **Contents Page**

Contents Page	3
Overview of Findings	6
Using this report	10
1. Historical Land Use	11
1. Historical Industrial Sites	12
1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping	
1.2 Additional Information – Historical Tank Database	
1.3 Additional Information – Historical Energy Features Database	
1.4 Additional Information – Historical Petrol and Fuel Site Database	
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	13
1.6 Historical military sites	
1.7 Potentially Infilled Land	13
2. Environmental Permits, Incidents and Registers Map	14
2. Environmental Permits, Incidents and Registers	15
2.1 Industrial Sites Holding Licences and/or Authorisations	
2.1.1 Records of historic IPC Authorisations within 500m of the study site:	
2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:	
2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m	
study site:	
2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:	
2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:	
2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site:	
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:	
2.1.8 Records of Licensed Discharge Consents within 500m of the study site:	
2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of study site:	
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:	
2.2 Dangerous or Hazardous Sites	
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents	
2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:	
2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:	
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	17
3. Landfill and Other Waste Sites Map	18
3. Landfill and Other Waste Sites	19
3.1 Landfill Sites	
3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site:	
3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site	
3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:	20
3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:	20
3.2 Other Waste Sites	
3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:	
3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study	
4. Current Land Use Map	25
4. Current Land Uses	26
4.1 Current Industrial Data	26
4.2 Petrol and Fuel Sites	
4.3 National Grid High Voltage Underground Electricity Transmission Cables	
4.4 National Grid High Pressure Gas Transmission Pipelines	27
Report Reference: GS-6264200	



5.1 Artificial Ground and Made Ground	28 28
5.2 Superficial Ground and Drift Geology	28
5.3 Bedrock and Solid Geology	
6 Hydrogeology and Hydrology	29
6a. Aquifer Within Superficial Geology	29
6b. Aquifer Within Bedrock Geology and Abstraction Licences	30
6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences	31
6d. Hydrogeology – Source Protection Zones within confined aquifer	32
6e. Hydrology – Watercourse Network and River Quality	33
6.Hydrogeology and Hydrology	34
6.1 Aquifer within Superficial Deposits	34
6.2 Aquifer within Bedrock Deposits	34
6.3 Groundwater Abstraction Licences	
6.4 Surface Water Abstraction Licences	
6.5 Potable Water Abstraction Licences 6.6 Source Protection Zones	
6.7 Source Protection Zones within Confined Aquifer	
6.8 Groundwater Vulnerability and Soil Leaching Potential	
6.9 River Quality	
6.9.1 Biological Quality:	
6.9.2 Chemical Quality:	
6.10 Ordnance Survey MasterMap Water Network	
6.11 Surface Water Features	
7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers an	d the sea)
7b Environment Agency/Natural Resources Wales Pisk of Electing from Pivers and the Sea	$(D_{0} \in D_{2} \in C)$
7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea	
Map	44
Map 7 Flooding	44 45
Map 7 Flooding 7.1 River and Coastal Zone 2 Flooding	44 45 45
Map 7 Flooding	44 45 45 45
Map 7 Flooding 7.1 River and Coastal Zone 2 Flooding 7.2 River and Coastal Zone 3 Flooding	44 45 45 45 45
Map 7 Flooding 7.1 River and Coastal Zone 2 Flooding 7.2 River and Coastal Zone 3 Flooding 7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating 7.4 Flood Defences 7.5 Areas benefiting from Flood Defences	44 45 45 45 45 45 45
<ul> <li>Map</li> <li>7 Flooding</li> <li>7.1 River and Coastal Zone 2 Flooding</li></ul>	44 45 45 45 45 45 45 46
Map 7 Flooding 7.1 River and Coastal Zone 2 Flooding 7.2 River and Coastal Zone 3 Flooding 7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating 7.4 Flood Defences 7.5 Areas benefiting from Flood Defences 7.6 Areas benefiting from Flood Storage 7.7 Groundwater Flooding Susceptibility Areas	44 45 45 45 45 45 45 46 46
<ul> <li>Map</li> <li>7 Flooding</li> <li>7.1 River and Coastal Zone 2 Flooding</li></ul>	44 45 45 45 45 45 45 46 46 46
<ul> <li>Map</li> <li>7 Flooding</li> <li>7.1 River and Coastal Zone 2 Flooding</li></ul>	44 45 45 45 45 45 45 46 46 46 46 47
<ul> <li>Map</li> <li>7 Flooding</li> <li>7.1 River and Coastal Zone 2 Flooding</li></ul>	44 45 45 45 45 45 46 46 46 46 47 48
<ul> <li>Map</li> <li>7 Flooding</li> <li>7.1 River and Coastal Zone 2 Flooding</li></ul>	44 45 45 45 45 45 45 46 46 46 46 47 48 48
<ul> <li>Map</li> <li>7 Flooding</li> <li>7.1 River and Coastal Zone 2 Flooding</li></ul>	44 45 45 45 45 45 46 46 46 46 47 48 48
<ul> <li>Map</li> <li>7 Flooding <ul> <li>7.1 River and Coastal Zone 2 Flooding</li></ul></li></ul>	44 45 45 45 45 45 46 46 46 46 47 48 48 48
<ul> <li>Map</li> <li>7 Flooding</li> <li>7.1 River and Coastal Zone 2 Flooding</li></ul>	44 45 45 45 45 45 46 46 46 46 47 48 48 48 48 48
<ul> <li>Map</li> <li>7 Flooding <ul> <li>7.1 River and Coastal Zone 2 Flooding</li></ul></li></ul>	44 45 45 45 45 45 45 46 46 46 46 46 46 48 48 48 48 49 49
<ul> <li>Map</li> <li>7 Flooding <ul> <li>7.1 River and Coastal Zone 2 Flooding</li></ul></li></ul>	44 45 45 45 45 45 46 46 46 46 47 48 48 48 48 48 48 49 49 49 49
<ul> <li>Map</li> <li>7 Flooding</li> <li>7.1 River and Coastal Zone 2 Flooding</li></ul>	44 45 45 45 45 45 46 46 46 46 47 48 48 48 48 48 48 48 49 49 49 49 49
<ul> <li>Map</li> <li>7 Flooding</li> <li>7.1 River and Coastal Zone 2 Flooding</li></ul>	44 45 45 45 45 45 46 46 46 46 46 46 48 48 48 48 48 49 40
<ul> <li>Map</li> <li>7 Flooding</li> <li>7.1 River and Coastal Zone 2 Flooding</li></ul>	44 45 45 45 45 45 46 46 46 46 46 48 48 48 48 48 48 49 49 49 49 49 49 49 49 49 45 46 46 46 46 46 46 46 46 46 46 46 46 46 46 46 46 48 48 48 49
<ul> <li>Map</li> <li>7 Flooding</li> <li>7.1 River and Coastal Zone 2 Flooding</li></ul>	44 45 45 45 45 45 46 46 46 46 46 46 48 48 48 48 48 48 48 49 49 49 49 49 49 49 49 49 49 45 46 48 48 49
<ul> <li>Map</li> <li>7 Flooding</li> <li>7.1 River and Coastal Zone 2 Flooding</li></ul>	44 45 45 45 45 45 46 46 46 46 47 48 48 48 48 48 48 48 48 49 49 49 49 49 49 49 49 49 49 49 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 45 46 48 48 48 49 50 50 50 50 50 50



	LOCATION INTELLIGENCE
8.14 Records of Green Belt land within 2000m of the study site:	
9. Natural Hazards Findings	51
9.1 Detailed BGS GeoSure Data	
9.1.1 Shrink Swell	51
9.1.2 Landslides	51
9.1.3 Soluble Rocks	51
9.1.4 Compressible Ground	
9.1.5 Collapsible Rocks	
9.1.6 Running Sand	
9.2 Radon	
9.2.1 Radon Affected Areas	53
9.2.2 Radon Protection	53
10. Mining	54
10.1 Coal Mining	54
10.2 Non-Coal Mining	54
10.3 Brine Affected Areas	54
Contact Details	55
Standard Terms and Conditions	57



# **Overview of Findings**

For further details on each dataset, please refer to each individual section in the main 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: Historical Industrial Sites	On-site	0-50	51-250	251-500
1.1 Potentially Contaminative Uses identified from 1:10,000 scale mapping	0	0	8	0
1.2 Additional Information - Historical Tank Database	0	0	0	0
1.3 Additional Information – Historical Energy Features Database	0	0	0	0
1.4 Additional Information – Historical Petrol and Fuel Site Database	0	0	0	0
1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database	0	0	0	0
1.6 Historical military sites	0	0	0	0
1.7 Potentially Infilled Land	0	0	9	2
Section 2: Environmental Permits, Incidents and Registers	On-site	0-50m	51-250	251-500
2.1 Industrial Sites Holding Environmental Permits and/or Authorisations				
2.1.1 Records of historic IPC Authorisations	0	0	0	0
2.1.2 Records of Part A(1) and IPPC Authorised Activities	0	0	0	0
2.1.3 Records of Red List Discharge Consents	0	0	0	0
2.1.4 Records of List 1 Dangerous Substances Inventory sites	0	0	0	0
2.1.5 Records of List 2 Dangerous Substances Inventory sites	0	0	0	0
2.1.6 Records of Part A(2) and Part B Activities and Enforcements	0	0	0	0
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0
2.1.8 Records of Licensed Discharge Consents	0	0	0	2
2.1.9 Records of Water Industry Referrals	0	0	0	0
2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site	0	0	0	0
2.2 Records of COMAH and NIHHS sites	0	0	0	0
2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents				
2.3.1 National Incidents Recording System, List 2	0	0	0	0
2.3.2 National Incidents Recording System, List 1	0	0	0	0
2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990	0	0	0	0



Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000- 1500
3.1 Landfill Sites						
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	0	0	0	2	Not searche
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	0	1	0	2	0
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	0	0
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	0	0	0
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	0	Not searched	Not searche
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	0	0	7	11
Section 4: Current Land Use	On-site	e	0-50m	51-25	0 2	51-500
4.1 Current Industrial Sites Data	1		0	1	No	ot searched
4.2 Records of Petrol and Fuel Sites	0		0	0		0
4.3 National Grid Underground Electricity Cables	0		0	0		0
4.4 National Grid Gas Transmission Pipelines	0		0	0		0
the study site	None identified None identified					
5.0. Descende of Superficial Crowned and Drift Coolegy present						
<ul><li>5.2 Records of Superficial Ground and Drift Geology present beneath the study site</li><li>5.3 For records of Bedrock and Solid Geology beneath the study</li></ul>			None io			
beneath the study site			None ic			
beneath the study site5.3 For records of Bedrock and Solid Geology beneath the study						
beneath the study site 5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.			0-5	dentified		
beneath the study site 5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section. Section 6: Hydrogeology and Hydrology 6.1 Records of Strata Classification in the Superficial Geology			0-5 Iden	dentified 00m		
<ul> <li>beneath the study site</li> <li>5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.</li> <li>Section 6: Hydrogeology and Hydrology</li> <li>6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site</li> <li>6.2 Records of Strata Classification in the Bedrock Geology within</li> </ul>	On-site	0-50m	0-5 Iden	dentified 00m tified tified	501-1000	1000-2000
<ul> <li>beneath the study site</li> <li>5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.</li> <li>Section 6: Hydrogeology and Hydrology</li> <li>6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site</li> <li>6.2 Records of Strata Classification in the Bedrock Geology within</li> </ul>	On-site	0-50m	0-5 Iden Iden	dentified 00m tified tified	501-1000	
<ul> <li>beneath the study site</li> <li>5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.</li> <li>Section 6: Hydrogeology and Hydrology</li> <li>6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site</li> <li>6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site</li> <li>6.3 Groundwater Abstraction Licences (within 2000m of the study</li> </ul>			0-5 Iden Iden 51-250	dentified 00m tified tified 251-500		2000
<ul> <li>beneath the study site</li> <li>5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.</li> <li>Section 6: Hydrogeology and Hydrology</li> <li>6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site</li> <li>6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site</li> <li>6.3 Groundwater Abstraction Licences (within 2000m of the study site)</li> <li>6.4 Surface Water Abstraction Licences (within 2000m of the study</li> </ul>	0	0	0-5 Iden Iden 51-250 0	dentified 00m tified 251-500 0	0	2000 11
<ul> <li>beneath the study site</li> <li>5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.</li> <li>Section 6: Hydrogeology and Hydrology</li> <li>6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site</li> <li>6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site</li> <li>6.3 Groundwater Abstraction Licences (within 2000m of the study site)</li> <li>6.4 Surface Water Abstraction Licences (within 2000m of the study site)</li> <li>6.5 Potable Water Abstraction Licences (within 2000m of the study site)</li> </ul>	0	0	0-5 Iden Iden 51-250 0 0	dentified 00m tified tified 251-500 0 0	0	2000 11 0 2
beneath the study site 5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section. Section 6: Hydrogeology and Hydrology 6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site 6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site 6.3 Groundwater Abstraction Licences (within 2000m of the study site) 6.4 Surface Water Abstraction Licences (within 2000m of the study site) 6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0 0 0	0 0 0	0-5 Iden Iden 51-250 0 0	dentified 00m tified 251-500 0 0 0	0 0 0	2000 11 0 2 Not search



Section 6: Hydrogeology and Hydrology	nd Hydrology 0-500m					
	On-site	0-50m	51-250	251-500	501-1000	1000- 1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	No	No
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	0	0	8	32	Not searched	Not searched
6.11 Surface water features within 250m of the study site	No	No	Yes	Not searched	Not searched	Not searched

#### Section 7: Flooding

7.1 Enviroment Agency Zone 2 floodplains within 250m of the study site	None identified
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	None identified
7.3 Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site	Very Low
7.4 Flood Defences within 250m of the study site	None identified
7.5 Areas benefiting from Flood Defences within 250m of the study site	None identified
7.6 Areas used for Flood Storage within 250m of the study site	None identified
7.7 Maximum BGS Groundwater Flooding susceptibility within 50m of the study site	Not Prone
7.8 BGS confidence rating for the Groundwater Flooding susceptibility areas	Not Applicable

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000- 2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	0	0	0	1	1
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	1	2
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	1
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	0	2
8.7 Records of Local Nature Reserves (LNR)	0	0	0	0	0	0
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0



Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000- 2000	
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	1	0	0	0	1	2	
8.11 Records of National Parks	0	0	0	0	0	0	
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0	
8.13 Records of Nitrate Vulnerable Zones	0	0	0	0	0	0	
8.14 Records of Green Belt land	0	0	0	0	0	0	
Section 9: Natural Hazards							
9.1 Maximum risk of natural ground subsidence			Very	/ Low			

9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	Very Low
9.1.2 Maximum Landslides hazard rating identified on the study site	Low
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Negligible
9.1.4 Maximum Compressible Ground hazard rating identified on the study site	Negligible
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Very Low
9.1.6 Maximum Running Sand hazard rating identified on the study site	Negligible
9.2 Radon	
9.2.1 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 site is in a Radon Affected Area, as between 5 and 10% of properties are above the Action Level.
9.2.2 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?	Basic radon protective measures are necessary.
Section 10.	
Section 10: Mining	

10.1 Coal mining areas within 75m of the study site

 $10.2\,$  Non-Coal Mining areas within 50m of the study site boundary

 $10.3\,$  Brine affected areas within 75m of the study site

None identified

Identified

None identified



### Using this report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between Groundsure and the Client. The document contains the following sections:

#### 1. Historical Industrial Sites

Provides information on past land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. Potentially Infilled Land features are also included. This search is conducted using radii of up to 500m.

#### 2. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

#### 3. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

#### 4. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure gas pipelines and underground electricity transmission lines.

#### 5. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

#### 6. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licences, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

#### 7. Flooding

Provides information on river and coastal flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

#### 8. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites and Scheduled Ancient Woodland. These searches are conducted using radii of up to 2000m.

#### 9. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence and radon..

#### 10. Mining

Provides information on areas of coal and non-coal mining and brine affected areas.

#### 11. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, Groundsure provide a free Technical Helpline (08444 159000) for further information and guidance.

#### Note: Maps

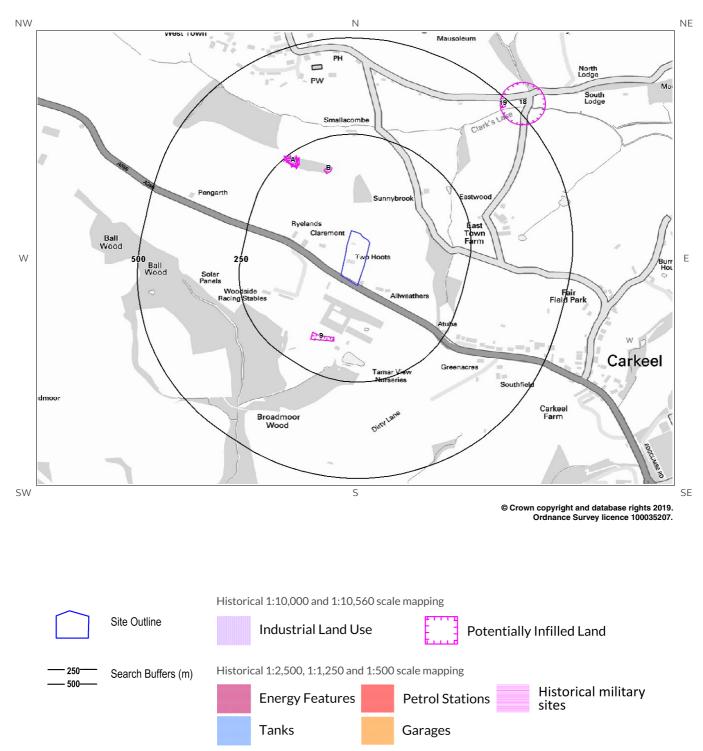
Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier "A" on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.



### 1. Historical Land Use





### **1. Historical Industrial Sites**

#### 1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping

The systematic analysis of data extracted from standard 1:10,560 and 1:10,000 scale historical maps provides the following information:

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 8

ID	Distance [m]	Direction	Use	Date
1B	160	NW	Unspecified Ground Workings	1968
2A	212	NW	Unspecified Old Quarry	1907
3A	213	NW	Unspecified Pit	1991
4A	213	NW	Unspecified Pit	1968
5A	213	NW	Unspecified Pit	1980
6A	216	NW	Unspecified Old Quarry	1912
7A	216	NW	Unspecified Old Quarry	1905
8A	216	NW	Unspecified Old Quarry	1938

#### 1.2 Additional Information – Historical Tank Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical tanks within 500m of the search boundary:

0

Database searched and no data found.

#### 1.3 Additional Information – Historical Energy Features Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical energy features within 500m of the search boundary:

0

Database searched and no data found.

#### 1.4 Additional Information – Historical Petrol and Fuel Site Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.



Records of historical petrol stations and fuel sites within 500m of the search boundary:

 $\cap$ 

Database searched and no data found.

#### 1.5 Additional Information – Historical Garage and Motor Vehicle Repair Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical garage and motor vehicle repair sites within 500m of the search boundary:

0

0

Database searched and no data found.

#### 1.6 Historical military sites

Certain military installations were not noted on historic mapping for security reasons. Whilst not all military land is necessarily of concern, Groundsure has researched and digitised a number of Ordnance Factories and other military industrial features (e.g. Ordnance Depots, Munitions Testing Grounds) which may be of contaminative concern. This research was drawn from a number of different sources, and should not be regarded as a definitive or exhaustive database of potentially contaminative military installations. The boundaries of sites within this database have been estimated from the best evidence available to Groundsure at the time of compilation.

Records of historical military sites within 500m of the search boundary:

Database searched and no data found.

#### 1.7 Potentially Infilled Land

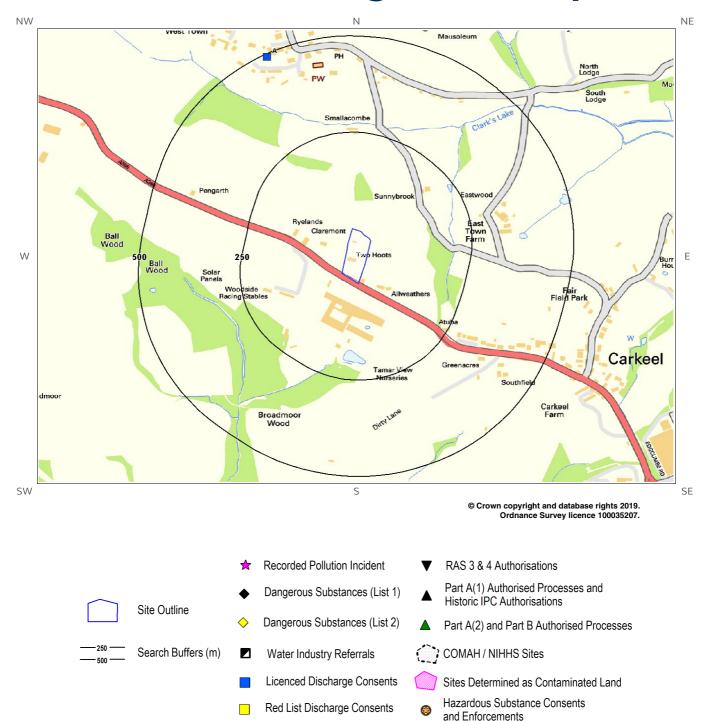
Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 11

provided by Grou	ndsure:			
ID	Distance(m)	Direction	Use	Date
9	146	SW	Pond	1991
10B	160	NW	Unspecified Ground Workings	1968
11A	212	NW	Unspecified Old Quarry	1907
12A	213	NW	Unspecified Pit	1980
13A	213	NW	Unspecified Pit	1991
14A	213	NW	Unspecified Pit	1968
15A	216	NW	Unspecified Old Quarry	1912
16A	216	NW	Unspecified Old Quarry	1905
17A	216	NW	Unspecified Old Quarry	1938
18	465	NE	Lake	1968
19	478	NE	Lake	1980

The following Historical Potentially Infilled Features derived from the Historical Mapping information is provided by Groundsure:



# 2. Environmental Permits, Incidents and Registers Map





### 2. Environmental Permits, Incidents and Registers

#### 2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency/Natural Resources Wales and Local Authorities reveal the following information:

2.1.1 Records of historic IPC Authorisations within 500m of the study site:

Database searched and no data found.

2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:

Database searched and no data found.

2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site:

0

0

0

Database searched and no data found.

2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

0



2.1.6 Records of Part A(2) and Part B Activities and Enforcements within 500m of the study site:

	0
Database searched and no data found.	
2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:	
	0
Database searched and no data found.	
2.1.8 Records of Licensed Discharge Consents within 500m of the study site:	

The following Licensed Discharge Consents records are represented as points on the Environmental

Per	Permits, Incidents and Registers Map:									
ID	Distance (m)	Direction	NGR	Deta	ails					
1A	493	NW	240333 061320	Address: RAMBLERS, BOTUS FLEMING, ., SALTWASH, CORNWALL, PL12 6NJ Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: NPSWQD003481 Permit Version: 1	Receiving Water: GROUNDWATER VIA SOAKAWAY Status: NEW CONSENT (WRA 91, S88 & SCHED 10 AS AMENDED BY ENV ACT 1995) Issue date: 04/09/2008 Effective Date: 04-Sep-2008					

				Permit Version. I	Revocation Date: 16/12/2012
2A	493	NW	240333 061320	Address: RAMBLERS, BOTUS FLEMING, ., SALTWASH, CORNWALL, PL12 6NJ Effluent Type: SEWAGE DISCHARGES - FINAL/TREATED EFFLUENT - NOT WATER COMPANY Permit Number: NPSWQD003481 Permit Version: 2	Receiving Water: GROUNDWATER VIA SOAKAWAY Status: VARIED UNDER EPR 2010 Issue date: 17/12/2012 Effective Date: 17-Dec-2012 Revocation Date: -

2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:

2



0

0

2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:

Database searched and no data found.

2.2 Dangerous or Hazardous Sites
Records of COMAH & NIHHS sites within 500m of the study site:
Database searched and no data found.

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents
2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:
Database searched and no data found.

2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:

0

0

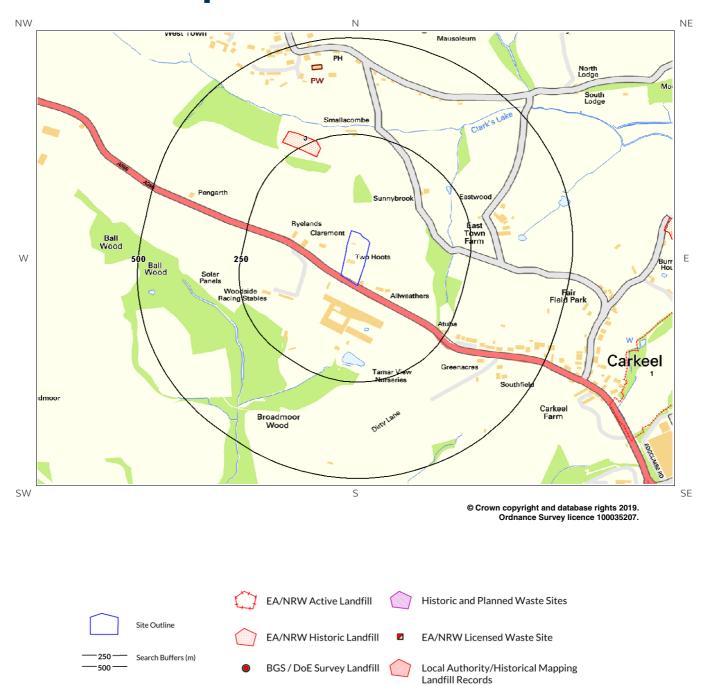
Database searched and no data found.

#### 2.4 Sites Determined as Contaminated Land under Part 2A EPA 1990

Records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site 0



### 3. Landfill and Other Waste Sites Map





# 3. Landfill and Other Waste Sites

#### 3.1 Landfill Sites

3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site:

2

The following Environment Agency/Natural Resources Wales landfill records are represented as polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details				
1	681	E	241000 60000	Address: Land Adjcent To, Tamar View Ind Est, Carkeel, Saltash, Cornwall, PL12 6NR Landfill Reference: 20510.0 Environmental Permitting Regulations (Waste) Reference: TAM002 Landfill Type: A05: Landfill taking Non- Biodegradeable Wastes	Operator: Tamar Valley Projects Limited Status: Transferred IPPC Reference: EPR Reference:			
Not shown	959	W	269300 61490	Address: Land/premises At, Hatt, Saltash, Cornwall, PL12 6PJ Landfill Reference: 210133.0 Environmental Permitting Regulations (Waste) Reference: ROO007 Landfill Type: L05: Inert LF	Operator: Roods Landfill Ltd Status: Issued IPPC Reference: EPR Reference:			

### 3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site:

3

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details			
3	210	NW		Site Address: Sunnybrook, Carkeel, Liskeard Waste Licence: - Site Reference: WM2/1/14/CN, 6/43 Waste Type: Inert, Industrial, Commercial, Household Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -		
4	725	E		Site Address: The Bungalow, The Bungalow, Carkeel, Saltash Waste Licence: - Site Reference: WM2/1/1/CN, 6/40 Waste Type: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: -		



ID	Distance (m)	Direction	NGR	Details		
				Environmental Permitting Regulations (Waste) Reference: -	First Recorded: - Last Recorded: -	
Not shown	831	SE		Site Address: Tamar View Industrial Estate, Latchbrook, Saltash, Cornwall Waste Licence: Yes Site Reference: 2/69 Waste Type: Inert, Industrial Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: 11-Jan-1991 Licence Surrendered: Licence Holder Address: 15 Beeching Park, Kelly Bray, Callington Operator: - Licence Holder: Downderry Construction Limited First Recorded: 11-Dec-1990 Last Recorded: -	

3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

Database searched and no data found.

3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

0

0

Database searched and no data found.

#### **3.2 Other Waste Sites**

3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

0

Database searched and no data found.

3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

18

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details	
Not shown	855	SE	241000 60000	Site Address: Land Adjcent To, Tamar View Ind Est, Carkeel, Saltash, Cornwall, PL12 6NR Type: Landfill taking Non-Biodegradeable Wastes Size: >= 75000 tonnes Environmental Permitting Regulations	Issue Date: 04/07/1991 Effective Date: - Modified: 23/05/2017 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Closure



ID	Distance (m)	Direction	irection NGR	Details			
				(Waste) Licence Number: DOW003 EPR reference: EA/EPR/MP3896HZ/V007 Operator: Downderry Construction (western) Group Waste Management licence No: 20510 Annual Tonnage: 100000.0	Site Name: Eales Farm Landfill Correspondence Address: -		
Not shown	855	SE	241000 60000	Site Address: Land Adjcent To, Tamar View Ind Est, Carkeel, Saltash, Cornwall, PL12 6NR Type: Landfill taking Non-Biodegradeable Wastes Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TAM002 EPR reference: EA/EPR/FB3403XR/T001 Operator: Tamar Valley Projects Limited Waste Management Licence No: 20510 Annual Tonnage: 100000.0	Issue Date: 04/07/1991 Effective Date: 08/09/2017 Modified: 23/05/2017 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Eales Farm Landfill Correspondence Address: -		
Not shown	855	SE	241000 60000	Site Address: Tamar View Industrial Estate, Carkeel, Saltash, Cornwall, PL12 6NR Type: Landfill taking Non-Biodegradeable Wastes Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: DOW003 EPR reference: - Operator: D. J. Venables Waste Management licence No: 20510 Annual Tonnage: 24999.0	Issue Date: 04/07/1991 Effective Date: - Modified: 15/04/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Eales Farm Landfill Correspondence Address: 15, Beeching Park, Kelly Bray, Callington, Cornwall, PL17 8QS		
Not shown	855	SE	241000 60000	Site Address: Tamar View Industrial Estate, Carkeel, Saltash, Cornwall, PL12 6NR Type: Landfill taking Non-Biodegradeable Wastes Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: DOW003 EPR reference: EA/EPR/MP3896HZ/V007 Operator: Downderry Construction (western) Group Waste Management licence No: 20510 Annual Tonnage: 100000.0	Issue Date: 04/07/1991 Effective Date: - Modified: 15/04/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Eales Farm Landfill Correspondence Address: -		
Not shown	855	SE	241000 60000	Site Address: Land Adjcent To, Tamar View Ind Est, Carkeel, Saltash, Cornwall, PL12 6NR Type: Landfill taking Non-Biodegradeable Wastes Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TAM002 EPR reference: EA/EPR/FB3403XR/T001 Operator: Tamar Valley Projects Limited Waste Management licence No: 20510 Annual Tonnage: 100000.0	Issue Date: 04/07/1991 Effective Date: 08/09/2017 Modified: 23/05/2017 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Transferred Site Name: Eales Farm Landfill Correspondence Address: -		
Not shown	855	SE	241000 60000	Site Address: Tamar View Industrial Estate, Carkeel, Saltash, Cornwall, PL12 6NR Type: Landfill taking Non-Biodegradeable Wastes Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: DOW003 EPR reference: - Operator: Downderry Construction Group Waste Management licence No: 20510	Issue Date: 04/07/1991 Effective Date: - Modified: 15/04/2003 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Eales Farm Landfill Correspondence Address: 15, Beeching Park, Kelly Bray, Callington, Cornwall, PL17 8QS		



ID	Distance (m)	Direction	NGR	Details				
				Annual Tonnage: 0.0				
Not shown	994	E	241493 60396	Site Address: Specialist Skip Hire Ltd, Kingsmill Road, Tamar View Industrial Est, Saltash, Cornwall, PL12 6LD Type: Special Waste Transfer Station Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SPE066 EPR reference: EA/EPR/XP3395VS/A001 Operator: Specialist Skip Hire Ltd Waste Management licence No: 102724 Annual Tonnage: 74999.0	Issue Date: 03/02/2012 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Specialist Skip Hire Ltd Correspondence Address: -			
Not shown	1082	SE	241500 60200	Site Address: Plot 2, Tamar View Industrial Estate, Saltash, Cornwall, PL12 6UA Type: Household Waste Amenity Site Size: Unknown Environmental Permitting Regulations (Waste) Licence Number: COU045 EPR reference: - Operator: County Environmental Services Ltd. Waste Management licence No: 20032 Annual Tonnage: 0.0	Issue Date: 12/12/2002 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Tamar View Civic Amenity Site Correspondence Address: United Downs, St. Day, Redruth, Cornwall, TR16 5HU			
Not shown	1082	SE	241500 60200	Site Address: Plot 2, Tamar View Industrial Estate, Saltash, Cornwall, PL12 6UA Type: Special Waste Transfer Station Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COU045 EPR reference: - Operator: County Environmental Services Ltd. Waste Management licence No: 20032 Annual Tonnage: 74999.0	Issue Date: 12/12/2002 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Tamar View Civic Amenity Site Correspondence Address: United Downs, St. Day, Redruth, Cornwall, TR16 5HU			
Not shown	1082	SE	241500 60200	Site Address: Plot 2, Tamar View Industrial Estate, Saltash, Cornwall, PL12 6UA Type: Household Waste Amenity Site Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIT004 EPR reference: EA/EPR/YP3692HZ/V005 Operator: Suez Recycling And Recovery U K Ltd Waste Management licence No: 20032 Annual Tonnage: 24999.0	Issue Date: 12/12/2002 Effective Date: - Modified: 30/06/2016 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Tamar View Civic Amenity Site Correspondence Address: -			
Not shown	1082	SE	241500 60200	Site Address: Plot 2, Tamar View Industrial Estate, Saltash, Cornwall, PL12 6UA Type: Household Waste Amenity Site Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIT004 EPR reference: EA/EPR/YP3692HZ/V003 Operator: Sita U K Ltd Waste Management licence No: 20032 Annual Tonnage: 24999.0	Issue Date: 12/12/2002 Effective Date: - Modified: 06/12/2006 Surrendered Date: 0 Expiry Date: - Cancelled Date: - Status: Modified Site Name: Tamar View Civic Amenity Site Correspondence Address: -			
Not shown	1082	SE	241500 60200	Site Address: Plot 2, Tamar View Industrial Estate, Saltash, Cornwall, PL12 6UA Type: Special Waste Transfer Station Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIT004 EPR reference: - Operator: S I T A U K Ltd Waste Management licence No: 20032 Annual Tonnage: 24999.0	Issue Date: 12/12/2002 Effective Date: - Modified: 06/12/2006 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Tamar View Civic Amenity Site Correspondence Address: Vine Court, Chackpit Lane, Dorking, Surry, RH4 1AJ			

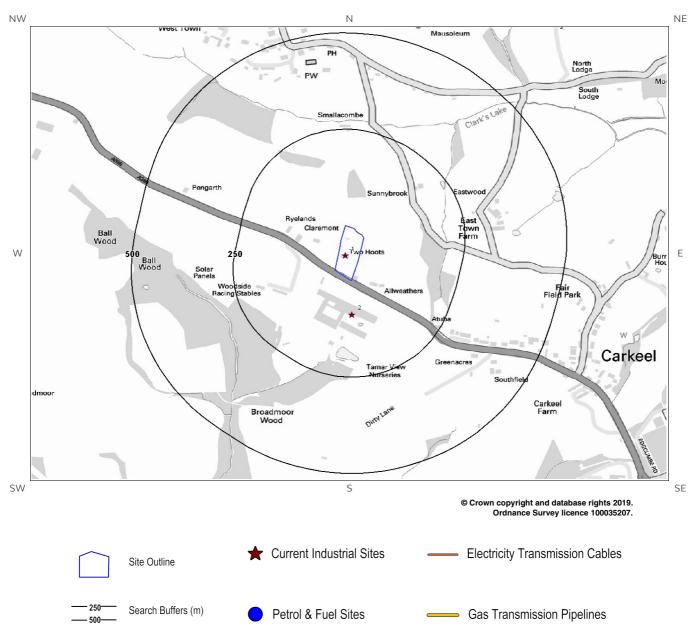


ID	Distance (m)	ils			
Not shown	1082	SE	241500 60200	Site Address: Plot 2, Tamar View Industrial Estate, Saltash, Cornwall, PL12 6UA Type: Household Waste Amenity Site Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: SIT004 EPR reference: EA/EPR/YP3692HZ/V003 Operator: S I T A U K Ltd Waste Management Licence No: 20032 Annual Tonnage: 24999.0	Issue Date: 12/12/2002 Effective Date: - Modified: 06/12/2006 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Tamar View Civic Amenity Site Correspondence Address: -
Not shown	1082	SE	241500 60200	Site Address: Plot 2, Tamar View Industrial Estate, Saltash, Cornwall, PL12 6UA Type: Household Waste Amenity Site Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: COU045 EPR reference: - Operator: County Environmental Services Ltd. Waste Management licence No: 20032 Annual Tonnage: 0.0	Issue Date: 12/12/2002 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Tamar View Civic Amenity Site Correspondence Address: United Downs, St. Day, Redruth, Cornwall, TR16 5HU
Not shown	1217	NW	239500 61500	Site Address: Roodscroft, Hatt, Saltash, Cornwall, PL12 6PJ Type: Household, Commercial & Industrial Waste T Stn Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ROO004 EPR reference: EA/EPR/TP3996HJ/A001 Operator: Roods Environmental Services Ltd Waste Management licence No: 20560 Annual Tonnage: 39000.0	Issue Date: 30/07/1993 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Roodscroft Transfer Station Correspondence Address: -
Not shown	1217	NW	239500 61500	Site Address: Hatt, Saltash, Cornwall, PL12 6PJ Type: Landfill taking other wastes Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEN006 EPR reference: EA/EPR/XP3996HS/A001 Operator: Venables D Waste Management licence No: 20529 Annual Tonnage: 100000.0	Issue Date: 19/11/1993 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC Site Name: Roodscroft Landfill Correspondence Address: -
Not shown	1217	NW	239500 61500	Site Address: Roods Croft, Hatt, Saltash, Cornwall, PL12 6PJ Type: Landfill taking other wastes Size: >= 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: VEN005 EPR reference: EA/EPR/MP3596HG/A001 Operator: Venables D Waste Management licence No: 20508 Annual Tonnage: 52000.0	Issue Date: 21/08/1990 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC Site Name: Roodscroft Landfill Correspondence Address: -
Not shown	1397	SE	241500 59700	Site Address: Environmental Sealand Services, Tamar View Ind Est, Saltash, Cornwall, PL12 6LD Type: Special Waste Transfer Station Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: ENV005 EPR reference: EA/EPR/KP3996HZ/V002 Operator: Environmental Sealand Services Ltd Waste Management licence No: 20550 Annual Tonnage: 74999.0	Issue Date: 01/10/1991 Effective Date: - Modified: 10/03/2004 Surrendered Date: - Expiry Date: 28/02/2001 Cancelled Date: - Status: Revoked Site Name: Environmental Sealand Services Correspondence Address: -





### 4. Current Land Use Map





### 4. Current Land Uses

#### 4.1 Current Industrial Data

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

2

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

ID	Distance (m)	Directio n	Company	NGR	Address	Activity	Category
1	0	On Site	L M Screech Haulage	240542 60797.	Two Hoots, Carkeel, Saltash, Cornwall, PL12 6PH	Construction and Tool Hire	Hire Services
2	87	S	Celtic Heating & Stoves	240558 60644.	Carkeel, Saltash, Cornwall, PL12 6PH	Cookers and Stoves - Non Electrical	Consumer Products

#### 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:

Database searched and no data found.

0



#### 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



# 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

Database searched and no data found.

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

#### 5.3 Bedrock and Solid Geology

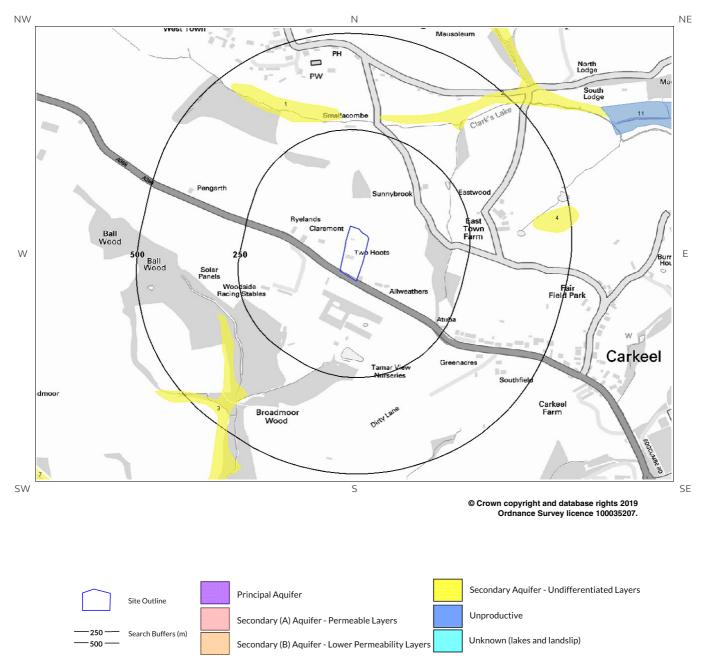
The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
TPT-MDSI	TORPOINT FORMATION	MUDSTONE AND SILTSTONE

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

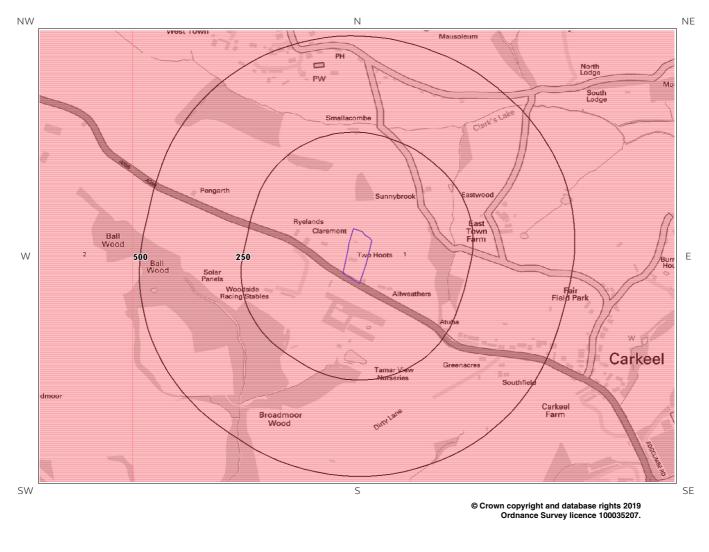


# 6 Hydrogeology and Hydrology 6a. Aquifer Within Superficial Geology





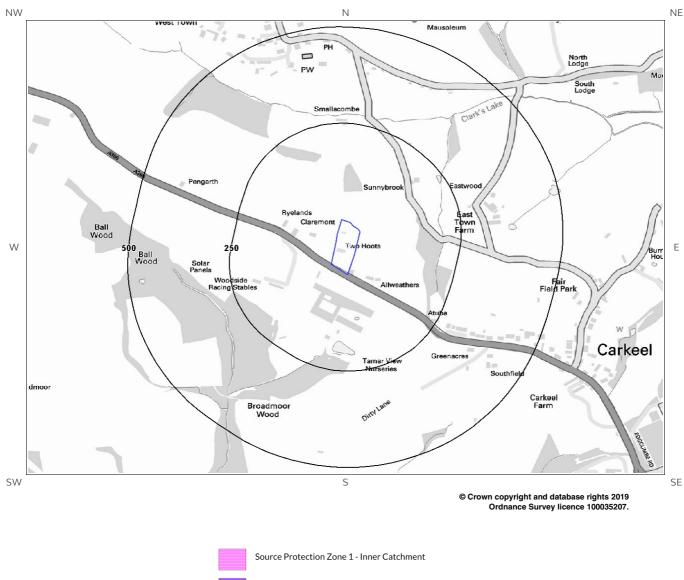
## 6b. Aquifer Within Bedrock Geology and Abstraction Licences







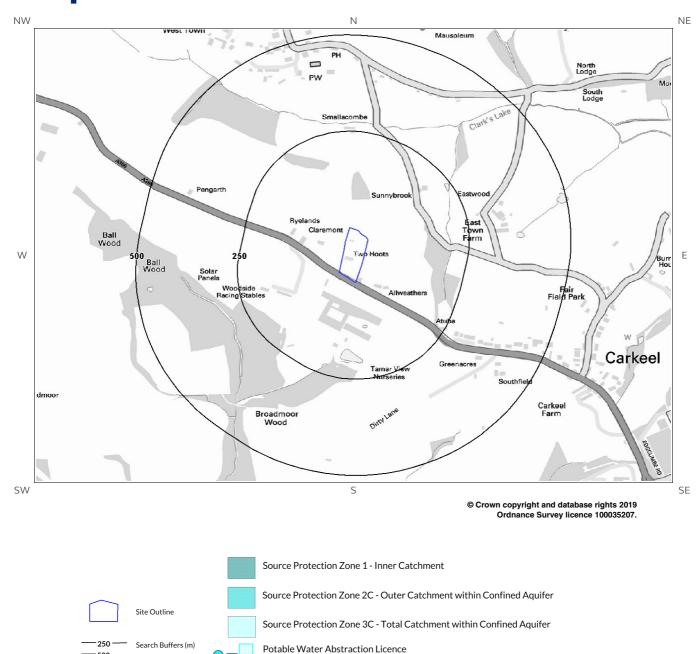
### 6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences







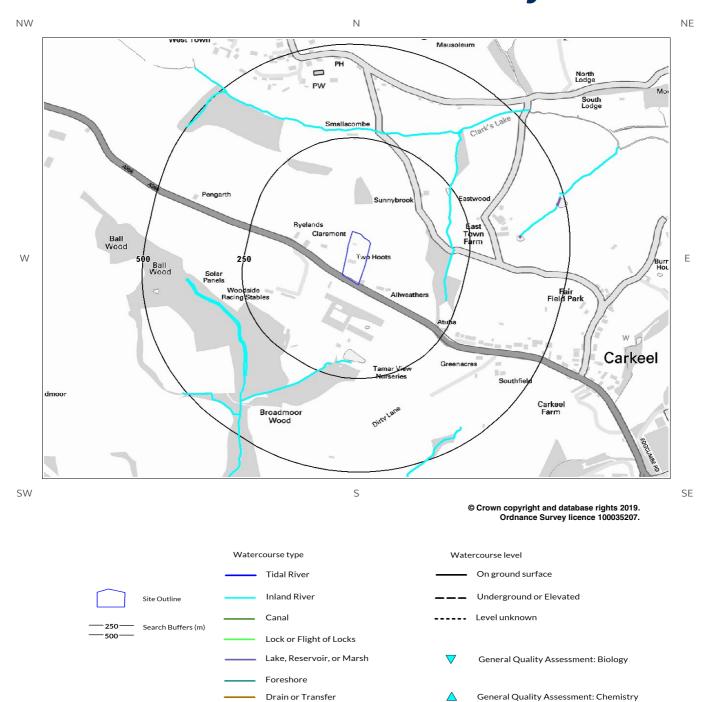
### 6d. Hydrogeology – Source Protection Zones within confined aquifer



- 500



### 6e. Hydrology – Watercourse Network and River Quality





# 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	Distanc e (m)	Direction	Designation	Description		
1	279	Ν	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type		
2	288	Ν	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type		
3	308	SW	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type		
4	406	E	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type		

#### 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	Distanc e (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers



#### 6.3 Groundwater Abstraction Licences

Groundwater Abstraction Licences within 2000m of the study site

Identified

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

ID	Distance (m)	Direction	NGR	Detail	s
Not show n	1014	E	241600 60900	Status: Historical Licence No: 15/47/015/G/015 Details: General Farming & Domestic Direct Source: Ground Water - Fresh Point: BURHILLS FARM, CARKEEL - WELL Data Type: Point Name: Holman & Sons	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 31/03/1966 Version End Date:
Not show n	1014	E	241600 60900	Status: Historical Licence No: 15/47/015/G/015 Details: General Farming & Domestic Direct Source: Ground Water - Fresh Point: "BURHILLS FARM, CARKEEL - WELL" Data Type: Point Name: Holman & Sons	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 31/03/1966 Version End Date:
Not show n	1143	E	241620 60310	Status: Historical Licence No: 15/47/015/G/095 Details: General Farming & Domestic Direct Source: Ground Water - Fresh Point: HOLE FARM, SALTASH - WELL Data Type: Point Name: Plimto Holdings Ltd	Annual Volume (m³): - Max Daily Volume (m³): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 07/09/1998 Version End Date:
Not show n	1143	E	241620 60310	Status: Historical Licence No: 15/47/015/G/095 Details: General Farming & Domestic Direct Source: Ground Water - Fresh Point: "HOLE FARM, SALTASH - WELL" Data Type: Point Name: Plimto Holdings Ltd	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 07/09/1998 Version End Date:
Not show n	1244	NE	241700 61400	Status: Historical Licence No: 15/47/015/G/082 Details: General Farming & Domestic Direct Source: Ground Water - Fresh Point: MODITONHAM, BOTUS FLEMING - WELL Data Type: Point Name: Macmillan	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 07/05/1986 Version End Date:
Not show n	1244	NE	241700 61400	Status: Historical Licence No: 15/47/015/G/082 Details: General Farming & Domestic Direct Source: Ground Water - Fresh Point: "MODITONHAM, BOTUS FLEMING - WELL" Data Type: Point Name: Macmillan	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 07/05/1986 Version End Date:



ID	Distance (m) 1313	E	NGR 241900 60900	Details		
Not show n				Status: Historical Licence No: 15/47/015/G/014 Details: General Farming & Domestic Direct Source: Ground Water - Fresh Point: "BURRHILLS FARM, CARKEEL - WELL" Data Type: Point Name: Holman & Sons	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 31/03/1966 Version End Date:	
Not show n	1313	E	241900 60900	Status: Historical Licence No: 15/47/015/G/014 Details: General Farming & Domestic Direct Source: Ground Water - Fresh Point: BURRHILLS FARM, CARKEEL - WELL Data Type: Point Name: Holman & Sons	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 31/03/1966 Version End Date:	
Not show n	1692	Ν	241080 62480	Status: Historical Licence No: 15/47/015/G/099 Details: General Farming & Domestic Direct Source: Ground Water - Fresh Point: BOREHOLE AT WEST KINGSMILL, LANDULPH Data Type: Point Name: Congdon & Sons	Annual Volume (m <sup>3</sup> ): 7,300 Max Daily Volume (m <sup>3</sup> ): 20 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 27/01/2004 Version End Date:	
Not show n	1767	E	242300 60400	Status: Historical Licence No: 15/47/015/G/087 Details: "Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services" Direct Source: Ground Water - Fresh Point: "THE CHINA FLEET CLUB, SALTASH - BOREHOLE" Data Type: Point Name: China Fleet Country Club	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 17/10/1991 Version End Date:	
Not show n	1767	E	242300 60400	Status: Active Licence No: 15/47/015/G/087 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - Fresh Point: THE CHINA FLEET CLUB, SALTASH - BOREHOLE Data Type: Point Name: China Fleet Country Club Ltd	Annual Volume (m <sup>3</sup> ): 17,528 Max Daily Volume (m <sup>3</sup> ): 54 Original Application No: - Original Start Date: Expiry Date: Issue No: Version Start Date: 17/10/1991 Version End Date:	

#### 6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site

None identified



### 6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site

Identified

The following Potable Water Abstraction Licences records are represented as points, lines and regions on the SPZ and Potable Water Abstraction Licences Map (6c):

ID	Distanc e (m)	Direction	NGR	Details	
Not shown	1767	E	242300 60400	Status: Historical Licence No: 15/47/015/G/087 Details: "Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services" Direct Source: Ground Water - Fresh Point: "THE CHINA FLEET CLUB, SALTASH - BOREHOLE" Data Type: Point Name: China Fleet Country Club	Annual Volume (m <sup>3</sup> ): - Max Daily Volume (m <sup>3</sup> ): - Original Application No: - Original Start Date: 02/11/1989 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:
Not shown	1767	E	242300 60400	Status: Active Licence No: 15/47/015/G/087 Details: Drinking, Cooking, Sanitary, Washing, (Small Garden) - Commercial/Industrial/Public Services Direct Source: Ground Water - Fresh Point: THE CHINA FLEET CLUB, SALTASH - BOREHOLE Data Type: Point Name: China Fleet Country Club Ltd	Annual Volume (m <sup>3</sup> ): 17,528 Max Daily Volume (m <sup>3</sup> ): 54 Original Application No: - Original Start Date: 02/11/1989 Expiry Date: - Issue No: 100 Version Start Date: Version End Date:

# 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
0	On Site	Minor Aquifer/Intermediate Leaching Potential	11	Soils which can possibly transmit a wide range of pollutants.

### 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	194 - E		Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided	
3	194 - E		Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal	



ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
				conditions) Average Width in Watercourse Section (m): Not Provided
2	206 S	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
3	206 S	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
4	206 S	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
5	206 S	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
4	221 S	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
6	221 S	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
5	269 N	Clark's Lake	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
7	269 N	Clark's Lake	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
6	289 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
8	289 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
7	293 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
9	293 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar 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
8	363 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
10	363 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
9	375 E	-	Lake, loch or reservoir.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 14.8
11	375 E	-	Lake, loch or reservoir.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 14.8
10	377 E	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
12	377 E	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
11	378 NE	Clark's Lake	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar 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	378 NE	Clark's Lake	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
12	421 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar 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	421 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar 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	452 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
14	452 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar 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	452	-	Inland river not influenced	Catchment Area: River Tamar



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
Not shown	452 SW	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
15	458 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar 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	458 SE	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
16	478 E	-	Lake, loch or reservoir.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 11.5
Not shown	478 E	-	Lake, loch or reservoir.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 11.5
17	485 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
18	485 NW	Clark's Lake	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar 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	485 NW	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar 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	485 NW	Clark's Lake	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
19	490 E	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	490 E	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
20	492 E	-	Inland river not influenced by normal tidal action.	Catchment Area: River Tamar 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): Not Provided
Not shown	- 492 E		Inland river not influenced by normal tidal action.	Catchment Area: River Tamar Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided

### 6.11 Surface Water Features

Surface water features within 250m of the study site

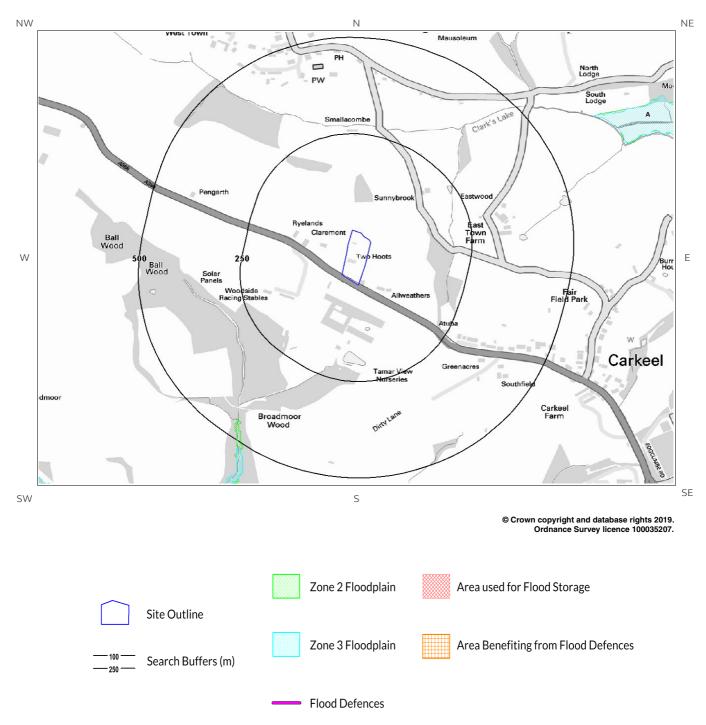
Identified

The following surface water records are not represented on mapping:

Distance (m)	Direction
172	S
194	E
203	E
206	S
221	S



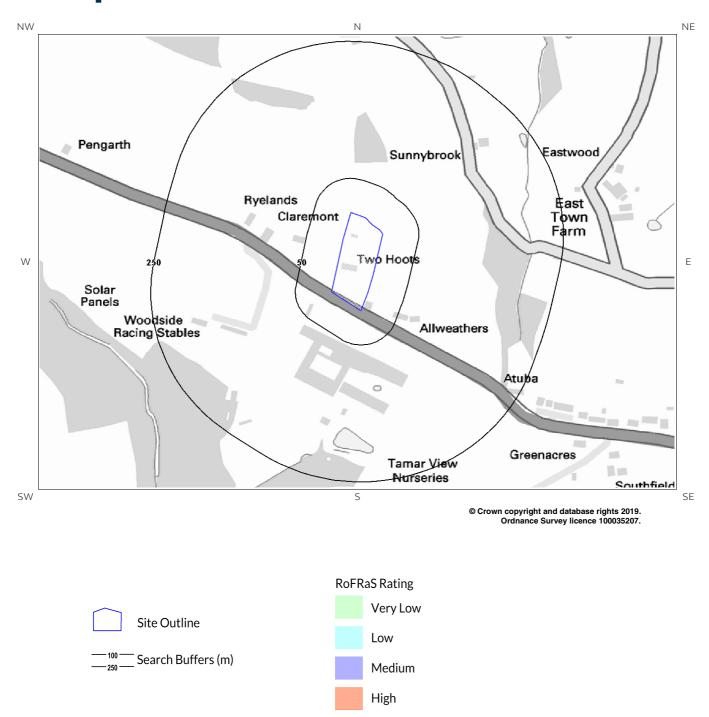
# 7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)



Report Reference: GS-6264200 Client Reference: Screech



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





# 7 Flooding

# 7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m None 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:

Database searched and no data found.

### 7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m None 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.

Database searched and no data found.

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

Highest risk of flooding onsite

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 Very Low (less than 1 in 1000) chance of flooding in any given year.

### 7.4 Flood Defences

Flood Defences within 250m of the study site Database searched and no data found. None identified

Very Low

# 7.5 Areas benefiting from Flood Defences

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

None identified

### 7.6 Areas benefiting from Flood Storage

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

### 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

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

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.

46



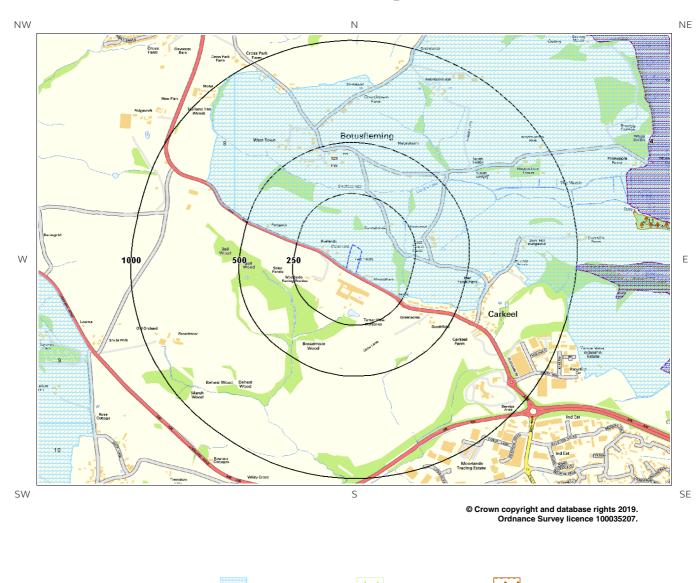
None identified

Not Applicable

Not Prone



# 8. Designated Environmentally Sensitive Sites Map





# 8. Designated Environmentally **Sensitive Sites**

Designated Environmentally Sensitive Sites within 2000m of the study site

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

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
5	997	E	Tamar - Tavy Estuary	Natural England
Not shown	1882	W	Lynher Estuary	Natural England

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

Database searched and no data found.

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

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)	Directio n	SAC Name	Data Source
1	997	E	Plymouth Sound & Estuaries	Natural England
Not shown	1882	W	Plymouth Sound & Estuaries	Natural England
Not shown	1993	W	Plymouth Sound & Estuaries	Natural England

Identified

2



0

3

48



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

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)	Directio n	SPA Name	Data Source
4	1138	E	Tamar Estuaries Complex	Natural England

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

0

1

Database searched and no data found.

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

2

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	1273	E	BURRHILLS WOOD	Ancient and Semi-Natural Woodland
Not shown	1491	NE	UNKNOWN	Ancient and Semi-Natural Woodland

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

Database searched and no data found.

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

0

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:

4

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

ID	Distance (m)	Directio n	AONB/NSA Name	Data Source
7	0	On Site	Tamar Valley	Natural England
8	566	W	Tamar Valley	Natural England
9	1258	W	Tamar Valley	Natural England
10	1401	SW	Tamar Valley	Natural England

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

Database searched and no data found.

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

0

0

Database searched and no data found.

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

Database searched and no data found.

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

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

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

Hazard

Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell clays.

#### 9.1.2 Landslides

Maximum Landslide\* hazard rating identified on the study site

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

Possibility of slope instability problems after major changes in ground conditions. Consideration should be given to stability if changes to drainage or excavations take place. Possible increase in construction cost to reduce potential slope stability problems. Existing property no significant increase in insurance risk due to natural slope instability problems.

Hazard

#### 9.1.3 Soluble Rocks

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

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

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.



Negligible

Very Low

Low

Hazard

### 9.1.4 Compressible Ground

Maximum Compressible Ground\* hazard rating identified on the study site

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

No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

Hazard

#### 9.1.5 Collapsible Rocks

Maximum Collapsible Rocks\* hazard rating identified on the study site

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

Deposits with potential to collapse when loaded and saturated are unlikely to be present. 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

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

No indicators for running sand identified. No special actions required to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

Negligible

52

Negligible

Very Low

Hazard

Hazard

# 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 in a Radon Affected Area, as between 5 and 10% 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? Basic radon protective measures are necessary.



# 10. Mining

# 10.1 Coal Mining

Coal mining areas within 75m of the study site

None identified

Identified

Database searched and no data found.

### 10.2 Non-Coal Mining

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

The following non-coal mining information is provided by the BGS:

Distance (m)	Direction	Name	Commodity	Assessment of likelihood
0.0	On Site	Not available	Vein Mineral	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered

Past underground mine workings may occur. The rock types present in these areas are such that small mineral veins may be present on which it is possible that small scale mining has been undertaken and/or it is possible that limited underground extraction of other materials may have occurred. All such occurrences are likely to be of minor localised extent and infrequent. It should be noted, however, that there is always the possibility of the existence of other sub-surface excavations, such as wells, cess pits, follies, air raid shelters/bunkers and other military structures etc. that could affect surface ground stability but which are outside the scope of this dataset. However, if in a coalfield area you should still consider a Coal Authority mining search for the area of interest.

### **10.3 Brine Affected Areas**

Brine affected areas within 75m of the study site Guidance: No Guidance Required.

None identified



# **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** 

> Environment Agency National Customer Contact Centre, PO Box 544 Rotherham, S60 1BY Tel: 03708 506 506 Web: <u>www.environment-agency.gov.uk</u> Email: enquiries@environment-agency.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 British

Geological Survey





The Coal Authority



Local Authority Authority: Cornwall Council (Unitary) Phone: 0300 1234 121 Web: http://www.cornwall.gov.uk/ Address: County Hall, Treyew Road, Truro, Cornwall, TR1 3AY

> 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.

PointX © Database Right/Copyright, Thomson Directories Limited © Copyright Link Interchange Network Limited © Database Right/Copyright and Ordnance Survey © Crown Copyright and/or Database Right. All Rights Reserved. Licence Number [03421028]. This report has been prepared in accordance with the Groundsure Ltd standard Terms and Conditions of business for work of this nature.



# **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