Ref: GCL-16V-NBZ-2KP-VYV Your ref: 23548

Grid ref: 174645 045785

18 Mining and ground workings



18.1 BritPits

Records within 500m

BritPits (an abbreviation of British Pits) is a database maintained by the British Geological Survey of currently active and closed surface and underground mineral workings. Details of major mineral handling sites, such as wharfs and rail depots are also held in the database.

Features are displayed on the Mining and ground workings map on page 86 >





Ref: GCL-16V-NBZ-2KP-VYV Your ref: 23548 Grid ref: 174645 045785

ID	Location	Details	Description
Α	294m S	Name: Jolly's Bottom Address: Chasewater, REDRUTH, Cornwall Commodity: Sandstone Status: Ceased	Type: A surface mineral working. It may be termed Quarry, Sand Pit, Clay Pit or Opencast Coal Site Status description: Site which, at date of entry, has ceased to extract minerals. May be considered as Closed by operator. May be considered to have Active, Dormant or Expired planning permissions by Mineral Planning Authority

This data is sourced from the British Geological Survey.

18.2 Surface ground workings

Records within 250m 0

Historical land uses identified from Ordnance Survey mapping that involved ground excavation at the surface. These features may or may not have been subsequently backfilled.

This is data is sourced from Ordnance Survey/Groundsure.

18.3 Underground workings

Records within 1000m 33

Historical land uses identified from Ordnance Survey mapping that indicate the presence of underground workings e.g. mine shafts.

Features are displayed on the Mining and ground workings map on page 86 >

ID	Location	Land Use	Year of mapping	Mapping scale
M	654m SE	Unspecified Old Shaft	1879	1:10560
-	722m N	Disused Copper and Tin Mine	1908	1:10560
-	722m N	Disused Copper and Tin Mine	1879	1:10560
-	748m N	Unspecified Disused Mine	1958	1:10560
-	773m S	Unspecified Old Shaft	1908	1:10560
-	773m S	Unspecified Old Shaft	1879	1:10560
-	775m S	Unspecified Old Shaft	1958	1:10560
-	779m N	Unspecified Shafts	1879	1:10560
-	780m N	Unspecified Shafts	1879	1:10560
-	788m N	Unspecified Shaft	1879	1:10560





Ref: GCL-16V-NBZ-2KP-VYV Your ref: 23548

Grid ref: 174645 045785

ID	Location	Land Use	Year of mapping	Mapping scale
-	790m SW	Unspecified Old Shaft	1879	1:10560
-	802m N	Unspecified Shaft	1879	1:10560
-	848m S	Unspecified Old Shaft	1958	1:10560
-	866m S	Disused Tin and Copper	1908	1:10560
-	866m S	Disused Tin and Copper	1879	1:10560
-	870m S	Disused Tin and Copper	1908	1:10560
-	870m S	Disused Tin and Copper	1879	1:10560
-	884m W	Tin, Copper and Lead Mine	1879	1:10560
-	886m S	Unspecified Disused Shafts	1992	1:10000
-	886m S	Unspecified Disused Shafts	1980	1:10000
-	886m S	Unspecified Disused Shafts	1974	1:10000
-	891m S	Unspecified Old Shafts	1958	1:10560
-	896m S	Unspecified Old Shafts	1908	1:10560
-	900m S	Unspecified Disused Shafts	1992	1:10000
-	900m S	Unspecified Old Shafts	1958	1:10560
-	900m S	Unspecified Disused Shafts	1980	1:10000
-	900m S	Unspecified Disused Shafts	1974	1:10000
-	956m SW	Unspecified Shaft	1908	1:10560
-	956m SW	Unspecified Shaft	1879	1:10560
-	958m SW	Unspecified Old Shaft	1958	1:10560
-	981m SW	Unspecified Shaft	1908	1:10560
-	981m SW	Unspecified Shaft	1879	1:10560
-	982m SW	Unspecified Old Shaft	1958	1:10560

This is data is sourced from Ordnance Survey/Groundsure.



Ref: GCL-16V-NBZ-2KP-VYV Your ref: 23548

Grid ref: 23548

18.4 Underground mining extents

Records within 500m

This data identifies underground mine workings that could present a potential risk, including adits and seam workings. These features have been identified from BGS Geological mapping and mine plans sourced from the BGS and various collections and sources.

This data is sourced from Groundsure.

18.5 Historical Mineral Planning Areas

Records within 500m 0

Boundaries of mineral planning permissions for England and Wales. This data was collated between the 1940s (and retrospectively to the 1930s) and the mid 1980s. The data includes permitted, withdrawn and refused permissions.

This data is sourced from the British Geological Survey.

18.6 Non-coal mining

Records within 1000m 21

The potential for historical non-coal mining to have affected an area. The assessment is drawn from expert knowledge and literature in addition to the digital geological map of Britain. Mineral commodities may be divided into seven general categories - vein minerals, chalk, oil shale, building stone, bedded ores, evaporites and 'other' commodities (including ball clay, jet, black marble, graphite and chert).

Features are displayed on the Mining and ground workings map on page 86 >

ID	Location	Name	Commodity	Class	Likelihood
1	On site	South West England	Vein Mineral	С	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.
2	323m E	South West England	Vein Mineral	С	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.
I	571m N	Not available	Vein Mineral	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.





Ref: GCL-16V-NBZ-2KP-VYV Your ref: 23548 Grid ref: 174645 045785

ID	Location	Name	Commodity	Class	Likelihood
-	627m S	Not available	Vein Mineral	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
-	671m N	Not available	Vein Mineral	Е	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
-	693m NE	Not available	Vein Mineral	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
7	722m SW	Not available	Vein Mineral	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
-	727m S	Not available	Vein Mineral	Е	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
-	758m S	Not available	Vein Mineral	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
-	759m S	South West England	Vein Mineral	С	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.
-	761m S	Not available	Vein Mineral	E	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
-	773m SE	Not available	Vein Mineral	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
-	790m S	Not available	Vein Mineral	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.





Ref: GCL-16V-NBZ-2KP-VYV Your ref: 23548

Grid ref: 174645 045785

ID	Location	Name	Commodity	Class	Likelihood
-	822m SW	Not available	Vein Mineral	Е	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
-	838m SE	Not available	Vein Mineral	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
-	855m SW	Not available	Vein Mineral	Е	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
-	865m SE	Not available	Vein Mineral	Е	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
-	873m W	Not available	Vein Mineral	Е	Underground mining is known or considered likely within or very close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.
-	880m E	Not available	Vein Mineral	В	Underground mine workings may have occurred in the past or current mines may be working at significant depth to modern engineering standards. Potential for difficult ground conditions are unlikely and are at a level where they need not be considered.
-	897m SE	South West England	Vein Mineral	С	Underground mine workings may have occurred in the past, or current mines may be operating to modern engineering standards. Potential for difficult ground conditions should be considered.
-	944m SW	Not available	Vein Mineral	D	Underground mining is considered likely to have occurred within or close to the area. The location, extent and nature of mining should be considered in any site investigation. Potential for difficult ground conditions should be considered.

This data is sourced from the British Geological Survey.

18.7 JPB mining areas

Records on site 0

Areas which could be affected by former coal and other mining. This data includes some mine plans unavailable to the Coal Authority.

This data is sourced from Johnson Poole and Bloomer.



01273 257 755

Ref: GCL-16V-NBZ-2KP-VYV Your ref: 23548

Grid ref: 174645 045785

18.8 The Coal Authority non-coal mining

Records within 500m

This data provides an indication of the potential zone of influence of recorded underground non-coal mining workings. Any and all analysis and interpretation of Coal Authority Data in this report is made by Groundsure, and is in no way supported, endorsed or authorised by the Coal Authority. The use of the data is restricted to the terms and provisions contained in this report. Data reproduced in this report may be the copyright of the Coal Authority and permission should be sought from Groundsure prior to any re-use.

This data is sourced from The Coal Authority.

18.9 Researched mining

Records within 500m

This data indicates areas of potential mining identified from alternative or archival sources, including; BGS Geological paper maps, Lidar data, aerial photographs (from World War II onwards), archaeological data services, websites, Tithe maps, and various text/plans from collected books and reports. Some of this data is approximate and Groundsure have interpreted the resultant risk area and, where possible, specific areas of risk have been captured.

This data is sourced from Groundsure.

18.10 Mining record office plans

Records within 500m 4

This dataset is representative of Mining Record Office and/or plan extents held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

Location	Mineral
On site	Copper
On site	Copper
On site	Copper
58m NE	Copper

This data is sourced from Groundsure.



Date: 30 October 2023

0



Ref: GCL-16V-NBZ-2KP-VYV

Your ref: 23548 Grid ref: 174645 045785

1

18.11 BGS mine plans

Records within 500m

This dataset is representative of BGS mine plans held by Groundsure and should be considered approximate. Where possible, plans have been located and any specific areas of risk they depict have been captured.

Location Mineral
On site Copper

This data is sourced from Groundsure.

18.12 Coal mining

Records on site 0

Areas which could be affected by past, current or future coal mining.

This data is sourced from the Coal Authority.

18.13 Brine areas

Records on site 0

The Cheshire Brine Compensation District indicates areas that may be affected by salt and brine extraction in Cheshire and where compensation would be available where damage from this mining has occurred. Damage from salt and brine mining can still occur outside this district, but no compensation will be available.

This data is sourced from the Cheshire Brine Subsidence Compensation Board.

18.14 Gypsum areas

Records on site 0

Generalised areas that may be affected by gypsum extraction.

This data is sourced from British Gypsum.

18.15 Tin mining

Records on site 1

Generalised areas that may be affected by historical tin mining.





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Location Details

On site

The site is within an area where tin mining is reported to have occurred. This does not mean that the site is definitely directly affected but further consideration of tin mining is advised. Further mining searches are available at Groundsure.

This data is sourced from Groundsure.

18.16 Clay mining

Records on site 0

Generalised areas that may be affected by kaolin and ball clay extraction.

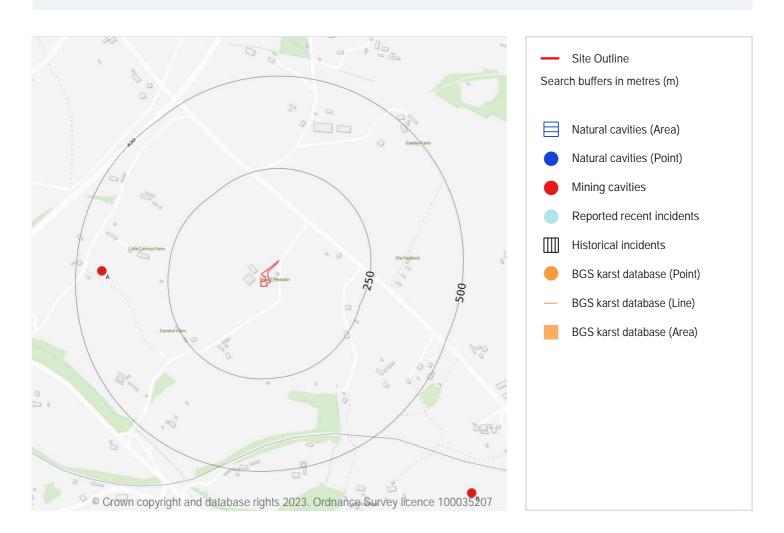
This data is sourced from the Kaolin and Ball Clay Association (UK).



Ref: GCL-16V-NBZ-2KP-VYV Your ref: 23548

Grid ref: 174645 045785

19 Ground cavities and sinkholes



19.1 Natural cavities

Records within 500m 0

Industry recognised national database of natural cavities. Sinkholes and caves are formed by the dissolution of soluble rock, such as chalk and limestone, gulls and fissures by cambering. Ground instability can result from movement of loose material contained within these cavities, often triggered by water.

This data is sourced from Stantec UK Ltd.



Ref: GCL-16V-NBZ-2KP-VYV Your ref: 23548

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19.2 Mining cavities

Records within 1000m

Industry recognised national database of mining cavities. Degraded mines may result in hazardous subsidence (crown holes). Climatic conditions and water escape can also trigger subsidence over mine entrances and workings.

Features are displayed on the Ground cavities and sinkholes map on page 95 >

ID	Location	Mine Address	Mineral	Data source	Publisher
Α	430m W	Carnhot, Blackwater, Cornwall	Unknown	CORNWALL MINES DATABASE	UNPUBLISHED PRIVATE DOCUME NT.
Α	430m W	Killiweris, Blackwater, Cornwall	Unknown	CORNWALL MINES DATABASE	UNPUBLISHED PRIVATE DOCUME NT.
-	773m N	Burra Burra, Blackwater, Cornwall	Lead	MINES AND MINERS OF CORNWALL: INDEX TO VOLUMES 1-16	ST AUSTELL : OLD CORNWALL PUBLICATIONS
В	787m SE	Busy East, Chacewater, Cornwall	Unknown	CORNWALL MINES DATABASE	UNPUBLISHED PRIVATE DOCUME NT.
В	787m SE	Clifford Nth+busy, Chacewater, Cornwall	Unknown	CORNWALL MINES DATABASE	UNPUBLISHED PRIVATE DOCUME NT.
В	787m SE	Howl, Chacewater, Cornwall	Unknown	CORNWALL MINES DATABASE	UNPUBLISHED PRIVATE DOCUME NT.
-	896m S	Daniel, Chacewater, Cornwall	Cassiterite, Tin, Tinstone	CORNISH MINES (METALLIFEROUS AND ASSOCIATED MINERALS 1845-1913)	UNIVERSITY OF EXETER

This data is sourced from Stantec UK Ltd.

19.3 Reported recent incidents

Records within 500m

This data identifies sinkhole information gathered from media reports and Groundsure's own records. This data goes back to 2014 and includes relative accuracy ratings for each event and links to the original data sources. The data is updated on a regular basis and should not be considered a comprehensive catalogue of all sinkhole events. The absence of data in this database does not mean a sinkhole definitely has not occurred during this time.

This data is sourced from Groundsure.





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19.4 Historical incidents

Records within 500m

This dataset comprises an extract of 1:10,560, 1:10,000, 1:2,500 and 1:1,250 scale historical Ordnance Survey maps held by Groundsure, dating back to the 1840s. It shows shakeholes, deneholes and other 'holes' as noted on these maps. Dene holes are medieval chalk extraction pits, usually comprising a narrow shaft with a number of chambers at the base of the shaft. Shakeholes are an alternative name for suffusion sinkholes, most commonly found in the limestone landscapes of North Yorkshire but also extensively noted around the Brecon Beacons National Park.

Not all 'holes' noted on Ordnance Survey mapping will necessarily be present within this dataset.

This data is sourced from Groundsure.

19.5 National karst database

Records within 500m 0

This is a comprehensive database of national karst information gathered from a wide range of sources. BGS have collected data on five main types of karst feature: Sinkholes, stream links, caves, springs, and incidences of associated damage to buildings, roads, bridges and other engineered works.

Since the database was set up in 2002 data covering most of the evaporite karst areas of the UK have now been added, along with data covering about 60% of the Chalk, and 35% of the Carboniferous Limestone outcrops. Many of the classic upland karst areas have yet to be included. Recorded so far are: Over 800 caves, 1300 stream sinks, 5600 springs, 10,000 sinkholes.

The database is not yet complete, and not all records have been verified. The absence of data does not mean that karst features are not present at a site. A reliability rating is included with each record.

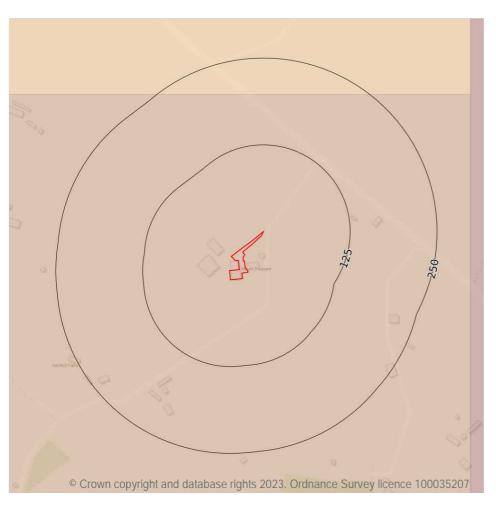
This data is sourced from the British Geological Survey.



Ref: GCL-16V-NBZ-2KP-VYV

Your ref: 23548 Grid ref: 174645 045785

20 Radon



Site Outline
Search buffers in metres (m)

Greater than 30%

Between 10% and 30%

Between 5% and 10%

Between 3% and 5%

Between 1% and 3%

Less than 1%

20.1 Radon

Records on site 1

The Radon Potential data classifies areas based on their likelihood of a property having a radon level at or above the Action Level in Great Britain. The dataset is intended for use at 1:50,000 scale and was derived from both geological assessments and indoor radon measurements (more than 560,000 records). A minimum 50m buffer should be considered when searching the maps, as the smallest detectable feature at this scale is 50m. The findings of this section should supersede any estimations derived from the Indicative Atlas of Radon in Great Britain (1:100,000 scale).

Features are displayed on the Radon map on page 98 >

Location	Estimated properties affected	Radon Protection Measures required
On site	Between 10% and 30%	Full





Ref: GCL-16V-NBZ-2KP-VYV

Your ref: 23548 Grid ref: 174645 045785

This data is sourced from the British Geological Survey and UK Health Security Agency.



Ref: GCL-16V-NBZ-2KP-VYV Your ref: 23548

Grid ref: 174645 045785

1

21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km². In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km²; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	>120 mg/kg	> 18 mg/kg	300 - 600 mg/kg	240 - 360 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m 0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km²).

This data is sourced from the British Geological Survey.

21.3 BGS Measured Urban Soil Chemistry

Records within 50m

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km².

This data is sourced from the British Geological Survey.



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Grid ref: 174645 045785

22 Railway infrastructure and projects

22.1 Underground railways (London)

Records within 250m 0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m 0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m 0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m 0

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m 0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.





Ref: GCL-16V-NBZ-2KP-VYV Your ref: 23548

Grid ref: 174645 045785

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m 0

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m 0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.





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Grid ref: 174645 045785

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference \nearrow .

Terms and conditions

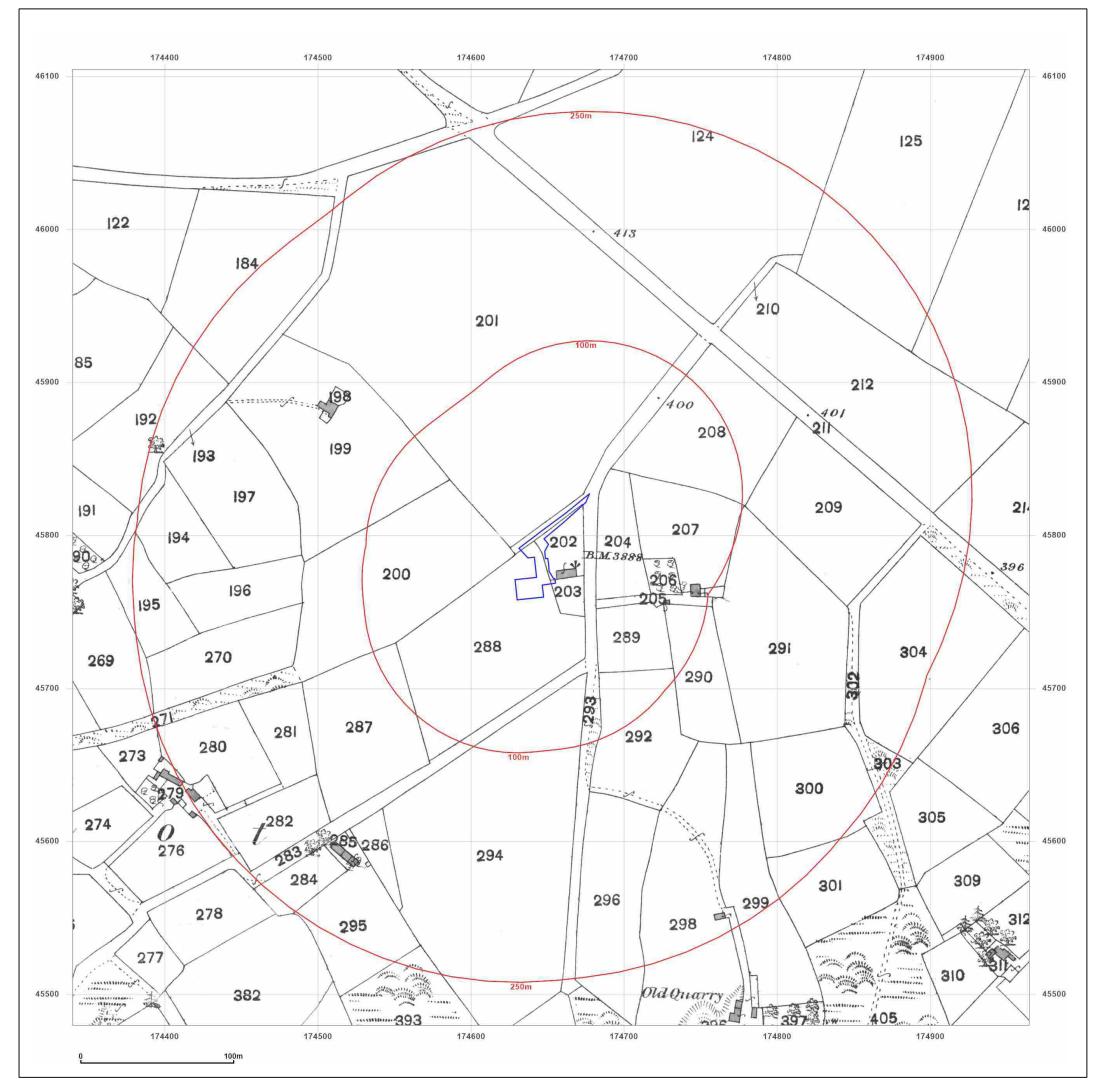
Groundsure's Terms and Conditions can be accessed at this link: $\underline{\text{https://www.groundsure.com/terms-and-conditions-april-2023/}}$.





Appendix C Historical Maps







MOUNT PLEASANT HOUSE, LANE FROM JUNCTION AT FOX HOLLOW TO JUNCTION NORTH OF MOUNT PLEASANT, CARNHOT, CHACEWATER, TR4 8PA

Client Ref: 23548

Report Ref: GCL-SDQ-261-WNI-83E

Grid Ref: 174652, 45792

Map Name: County Series

Map date: **1880**

1:2,500

Printed at: 1:2,500

Scale:

Surveyed 1880 Revised 1880 Edition N/A Copyright N/A Levelled N/A





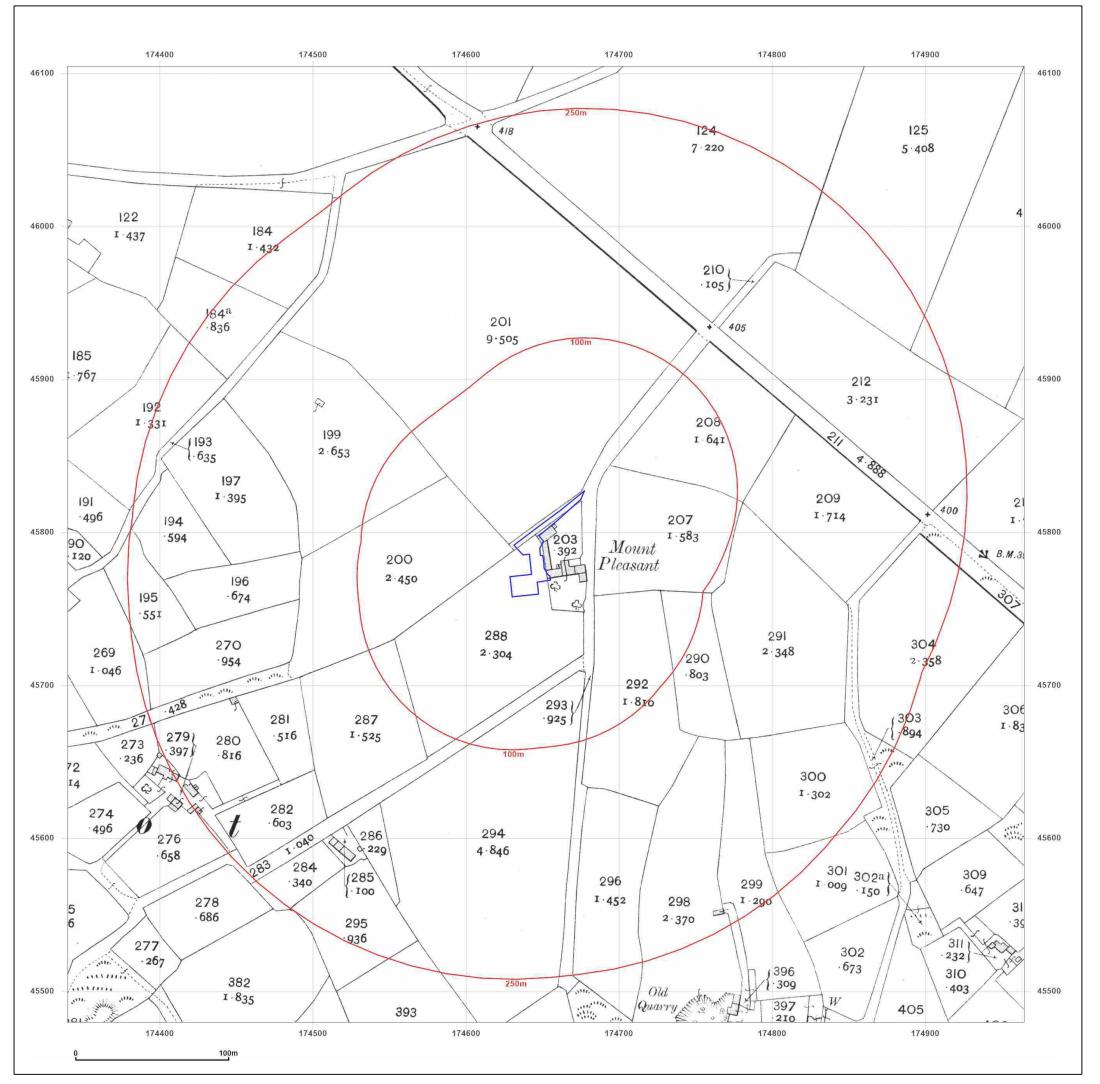
Produced by Groundsure Insights T: 08444 159000 E: info@groundsure.com

W: www.groundsure.com

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Production date: 30 October 2023

Map legend available at:





MOUNT PLEASANT HOUSE, LANE FROM JUNCTION AT FOX HOLLOW TO JUNCTION NORTH OF MOUNT PLEASANT, CARNHOT, CHACEWATER, TR4 8PA

Client Ref: 23548

Col. 23340

Report Ref: GCL-SDQ-261-WNI-83E

Grid Ref: 174652, 45792

Map Name: County Series

Map date: **1907**

Scale: 1:2,500

Printed at: 1:2,500

Surveyed 1907 Revised 1907 Edition N/A Copyright N/A Levelled N/A W





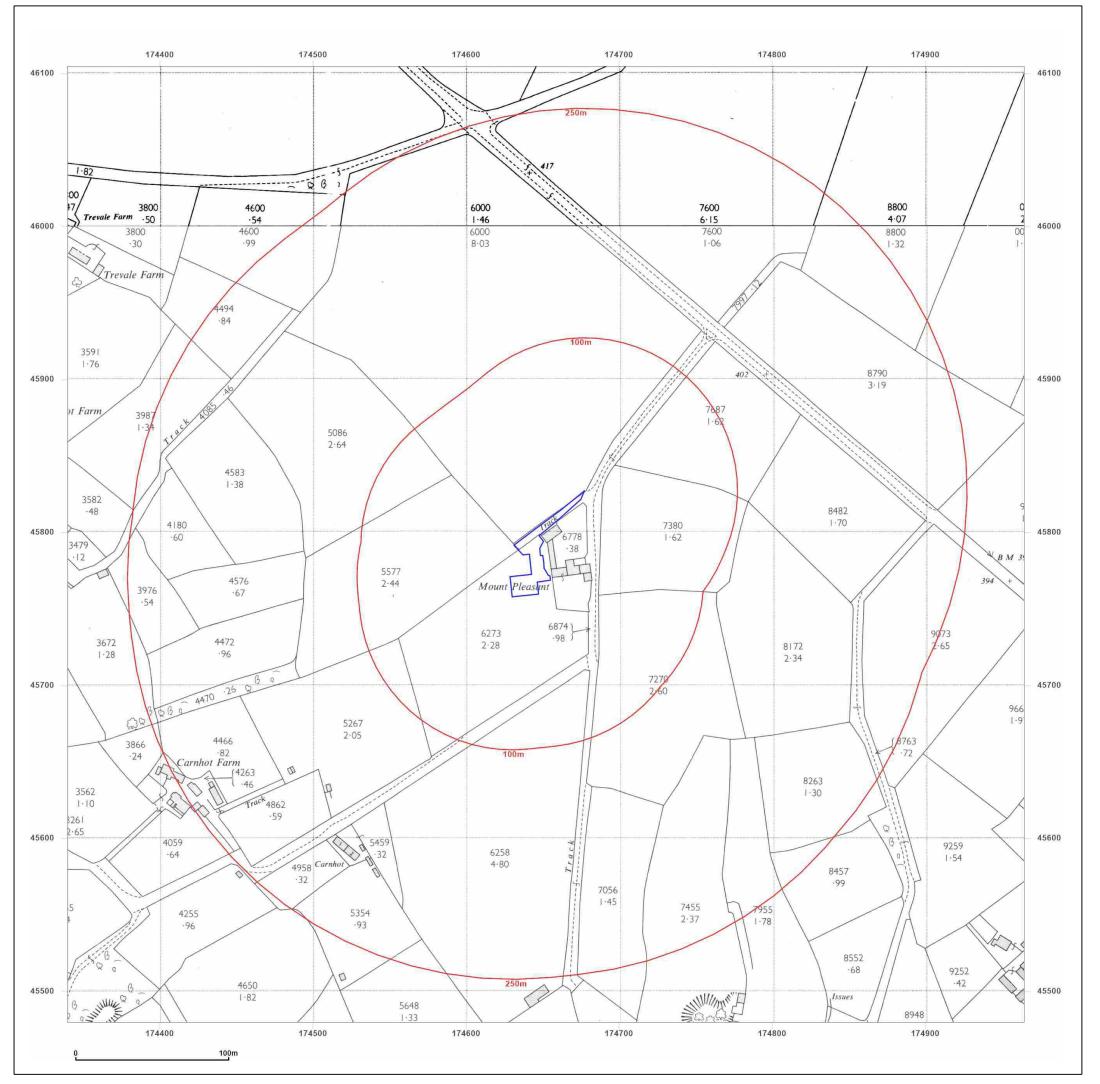
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Production date: 30 October 2023

Map legend available at:





MOUNT PLEASANT HOUSE, LANE FROM JUNCTION AT FOX HOLLOW TO JUNCTION NORTH OF MOUNT PLEASANT, CARNHOT, CHACEWATER, TR4

Client Ref: 23548

Report Ref: GCL-SDQ-261-WNI-83E

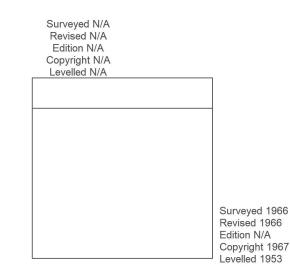
Grid Ref: 174652, 45792

Map Name: National Grid

Map date: 1966-1967

Scale: 1:2,500

Printed at: 1:2,500







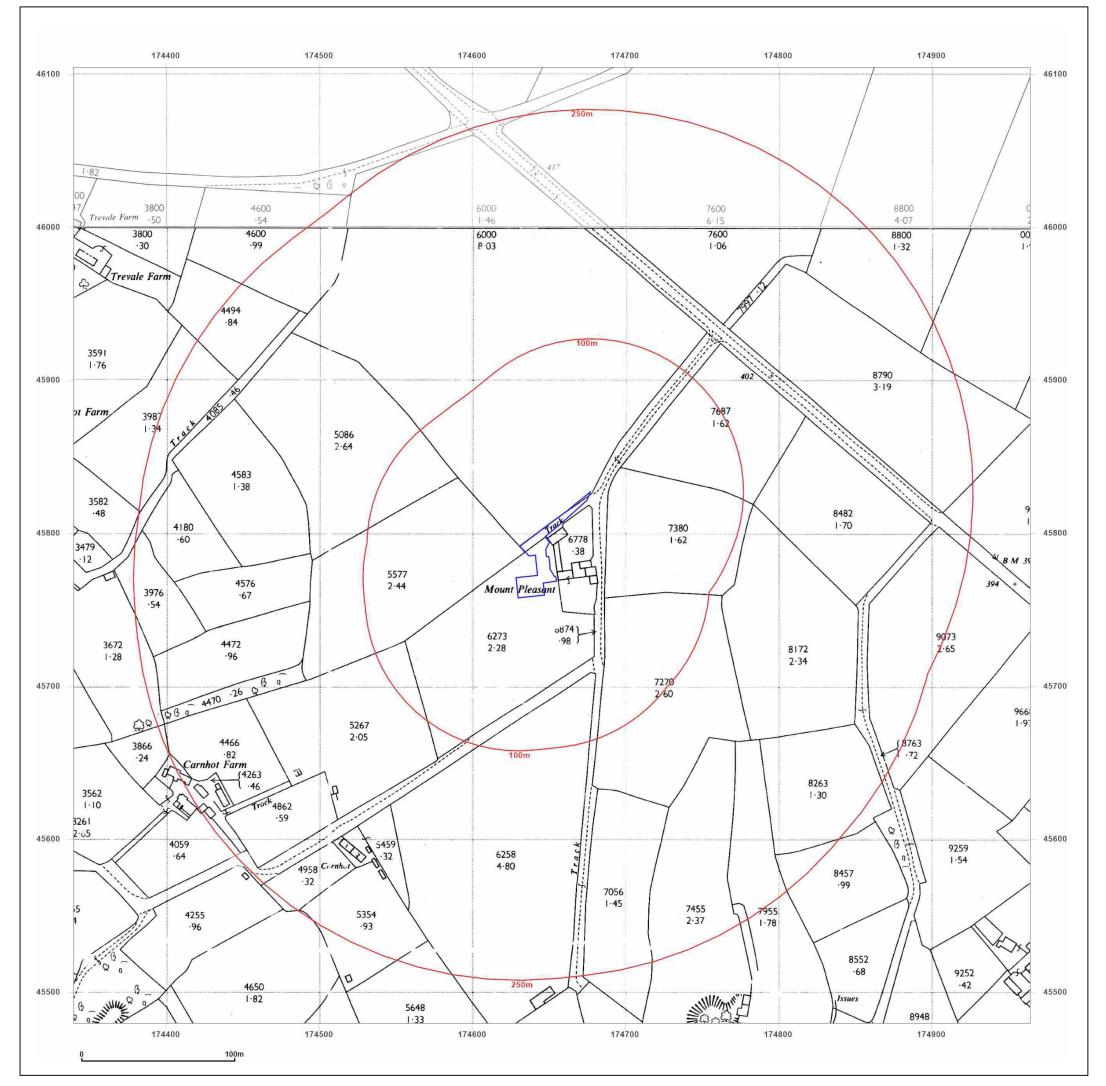
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Production date: 30 October 2023

Map legend available at:





MOUNT PLEASANT HOUSE, LANE FROM JUNCTION AT FOX HOLLOW TO JUNCTION NORTH OF MOUNT PLEASANT, CARNHOT, CHACEWATER, TR4

Client Ref: 23548

Report Ref: GCL-SDQ-261-WNI-83E

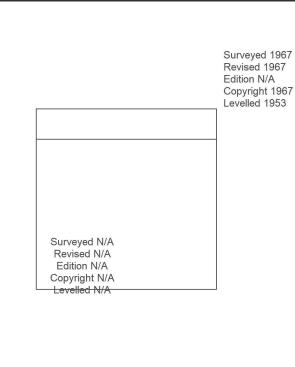
Grid Ref: 174652, 45792

Map Name: National Grid

Map date: 1967

Scale: 1:2,500

Printed at: 1:2,500



W





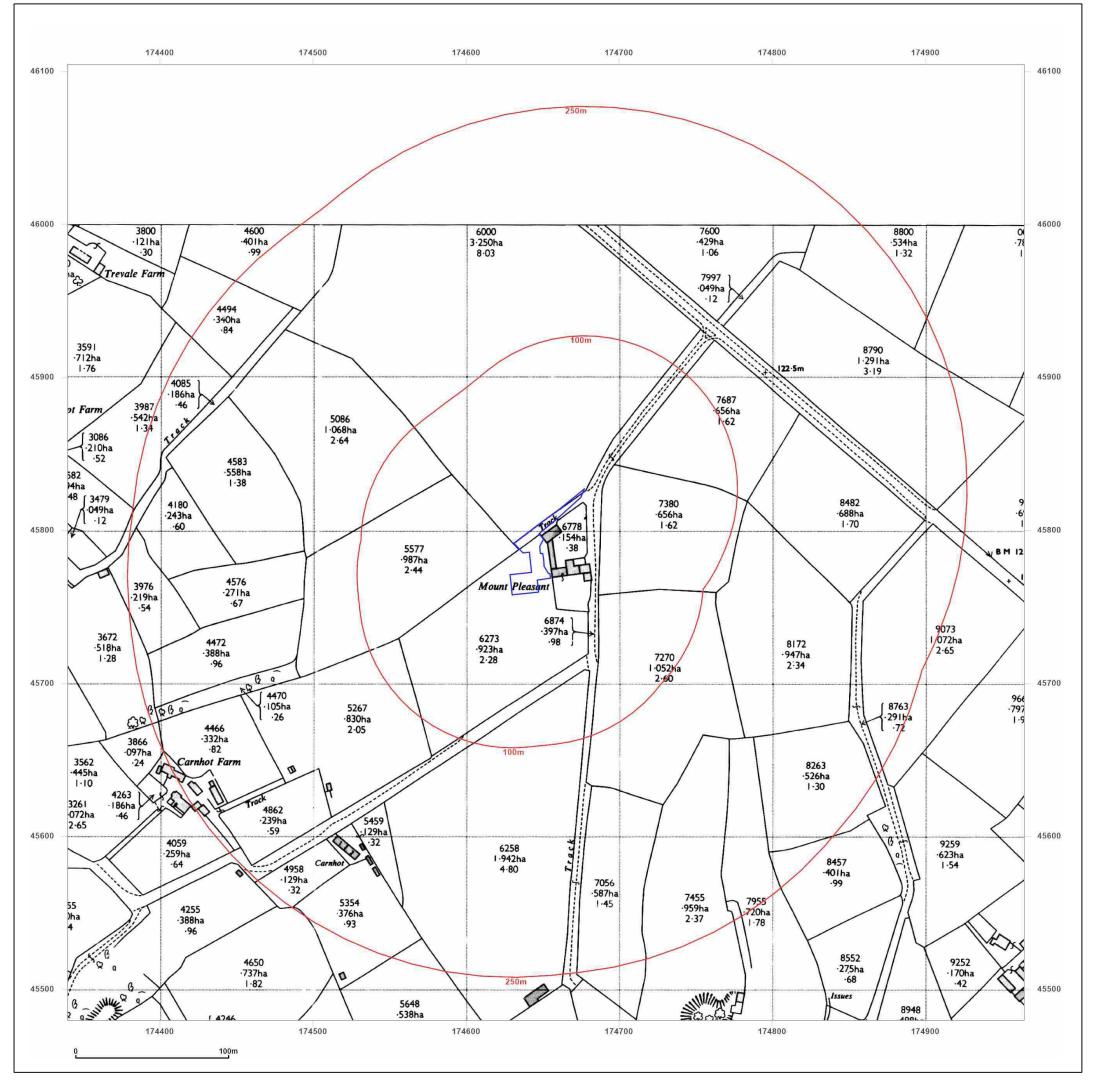
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Production date: 30 October 2023

Map legend available at:





MOUNT PLEASANT HOUSE, LANE FROM JUNCTION AT FOX HOLLOW TO JUNCTION NORTH OF MOUNT PLEASANT, CARNHOT, CHACEWATER, TR4

Client Ref: 23548

Report Ref: GCL-SDQ-261-WNI-83E

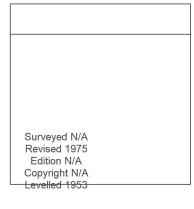
Grid Ref: 174652, 45792

Map Name: National Grid

1975 Map date:

Scale: 1:2,500

Printed at: 1:2,500



W





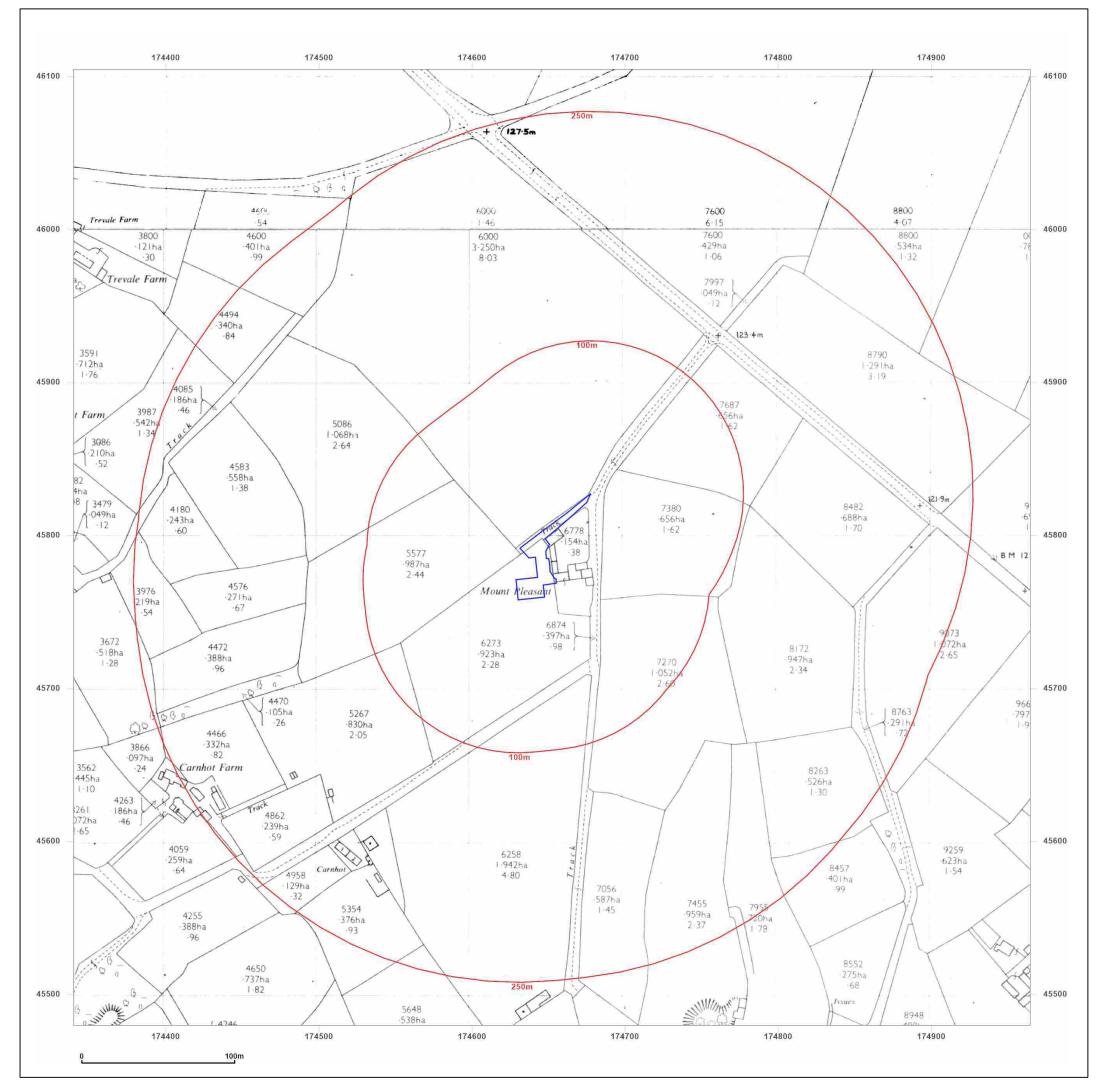
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Production date: 30 October 2023

Map legend available at:





MOUNT PLEASANT HOUSE, LANE FROM JUNCTION AT FOX HOLLOW TO JUNCTION NORTH OF MOUNT PLEASANT, CARNHOT, CHACEWATER, TR4 8PA

Client Ref: 23548

Report Ref: GCL-SDQ-261-WNI-83E

Grid Ref: 174652, 45792

Map Name: National Grid

Map date: 1989-1993

1:2,500

Printed at: 1:2,500

Scale:

Surveyed N/A
Revised 1989
Edition N/A
Copyright 1989
Levelled N/A

Surveyed 1972
Revised 1993
Edition N/A
Copyright 1993
Levelled 1972

W





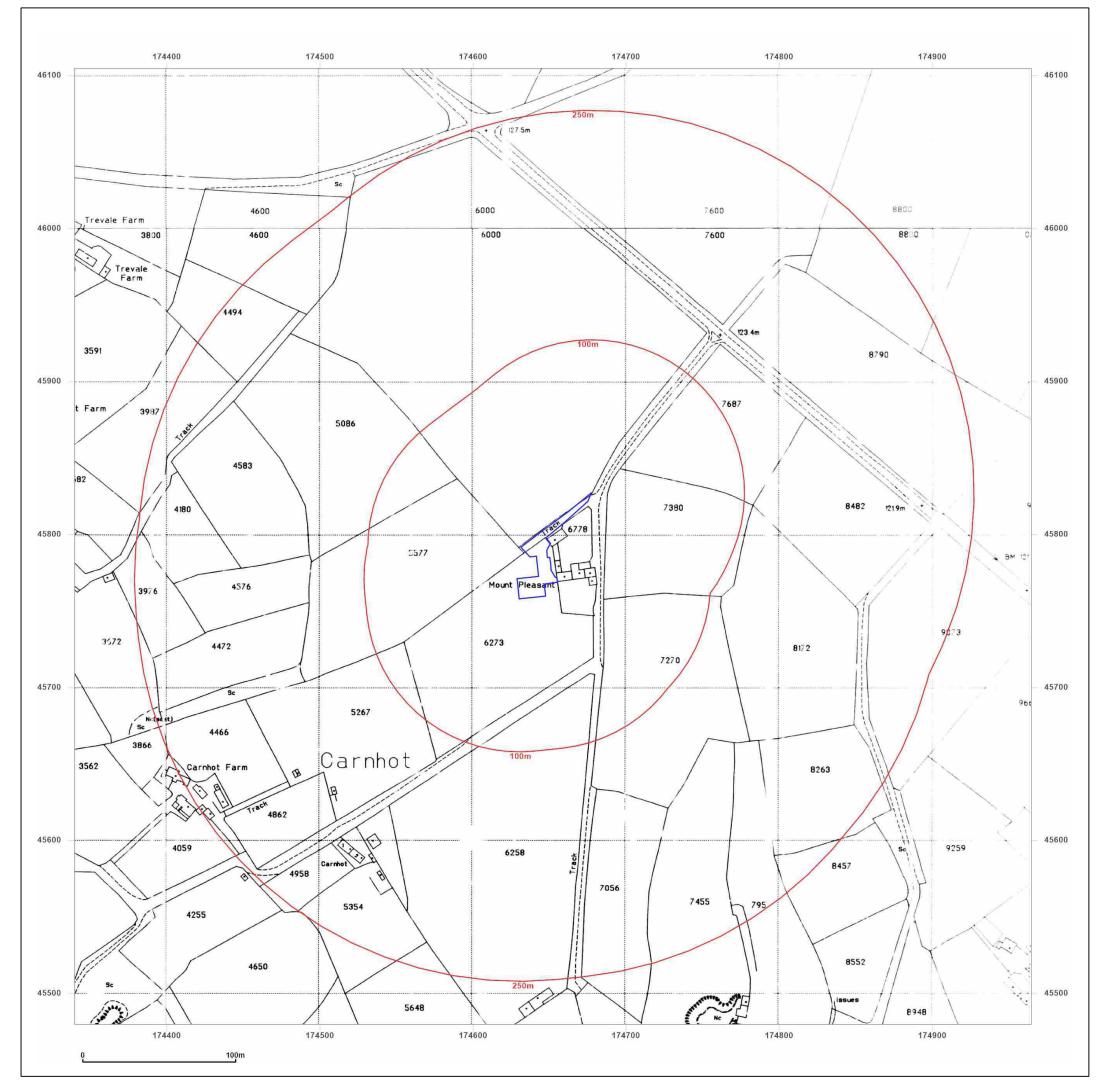
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Production date: 30 October 2023

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Client Ref: 23548

Report Ref: GCL-SDQ-261-WNI-83E

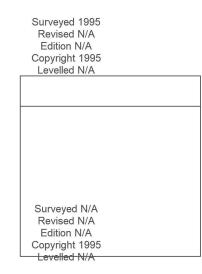
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Map Name: National Grid

Map date: **1995**

Scale: 1:2,500

Printed at: 1:2,500



W





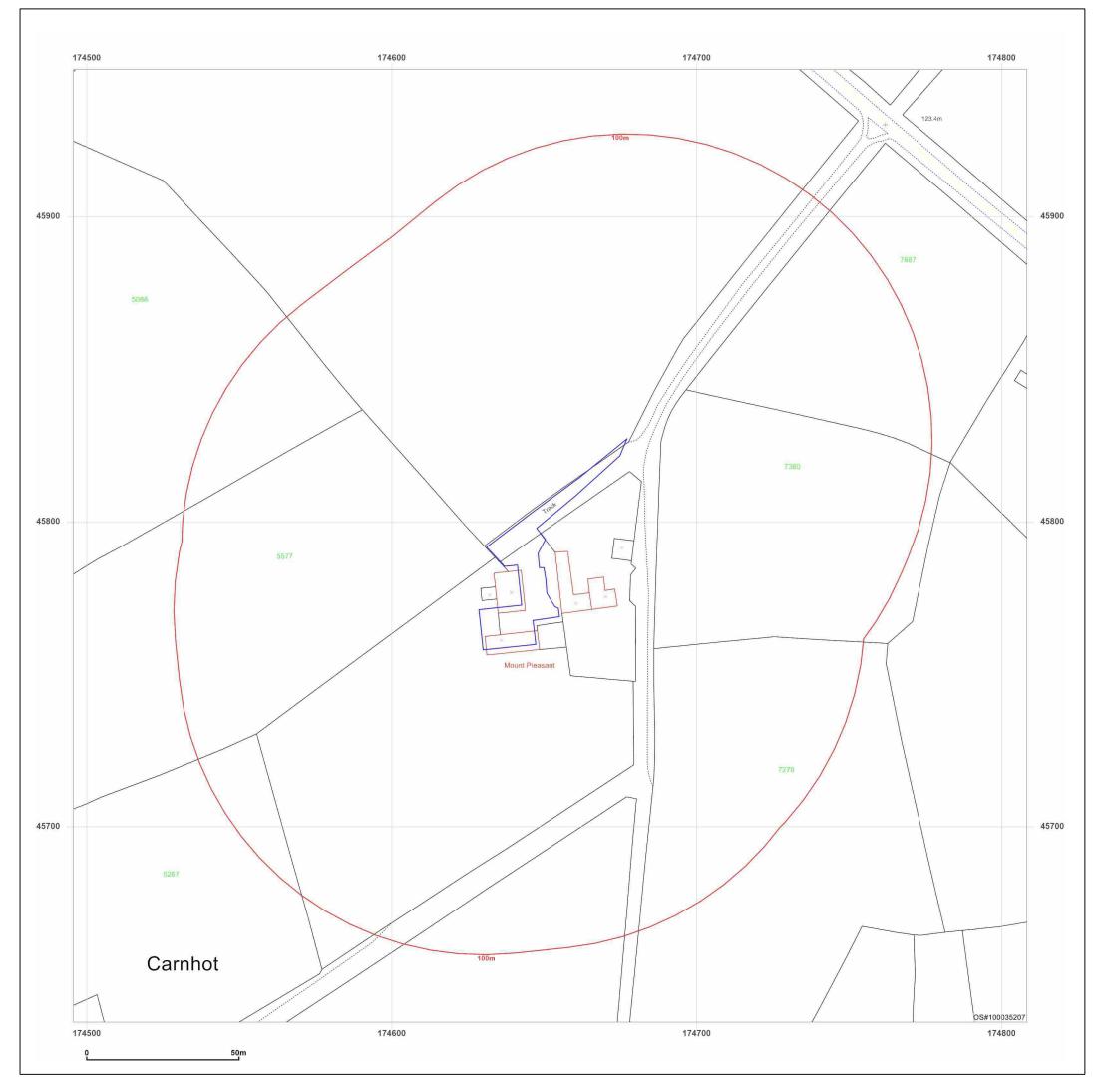
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Production date: 30 October 2023

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MOUNT PLEASANT HOUSE, LANE FROM JUNCTION AT FOX HOLLOW TO JUNCTION NORTH OF MOUNT PLEASANT, CARNHOT, CHACEWATER, TR4 8PA

Client Ref: 23548

Report Ref: GCL-SDQ-261-WNI-83E

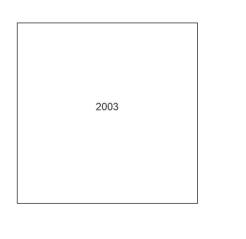
Grid Ref: 174652, 45792

Map Name: LandLine

Map date: 2003

Scale: 1:1,250

Printed at: 1:1,250







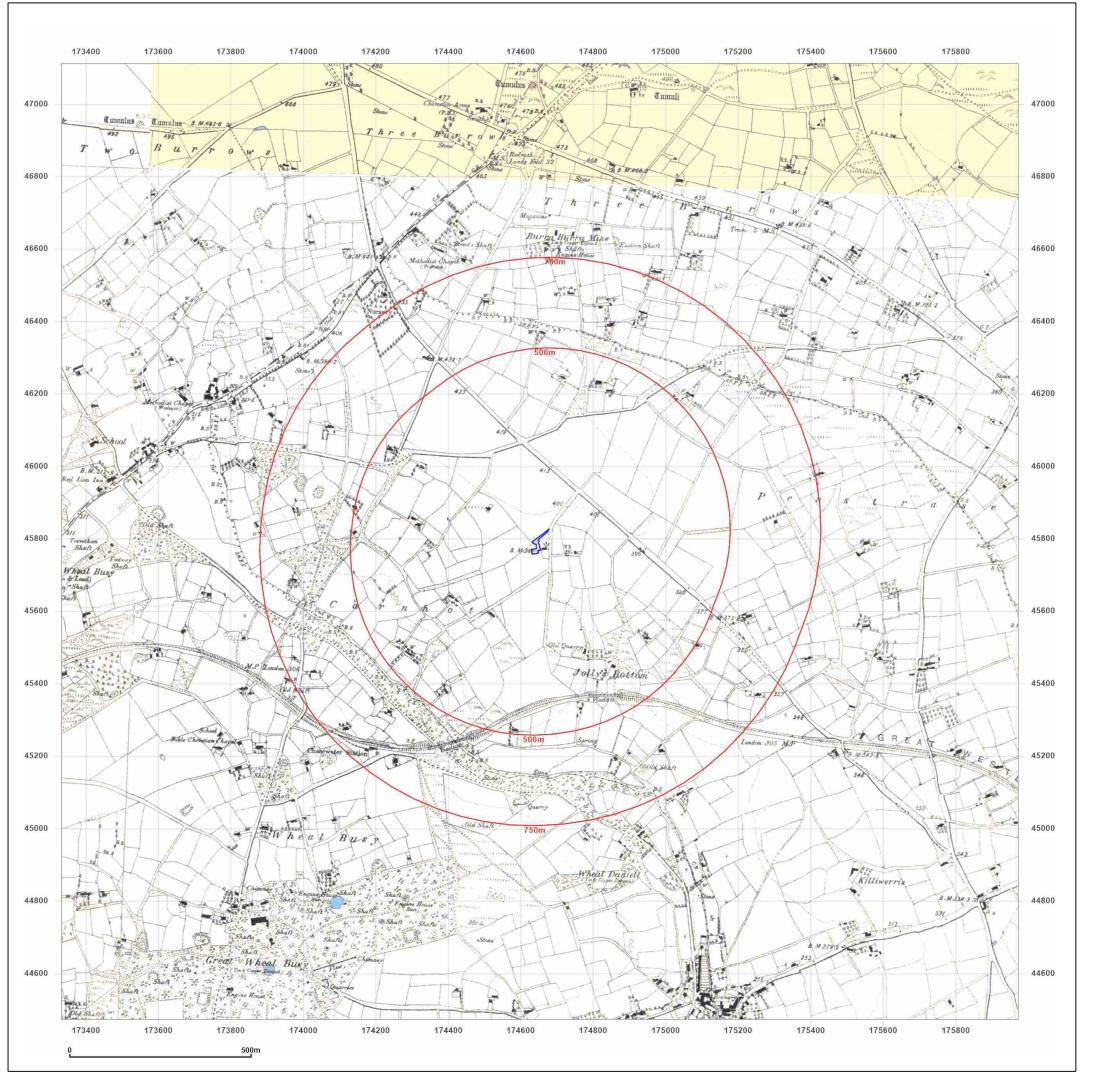
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Production date: 30 October 2023

Map legend available at:





MOUNT PLEASANT HOUSE, LANE FROM JUNCTION AT FOX HOLLOW TO JUNCTION NORTH OF MOUNT PLEASANT, CARNHOT, CHACEWATER, TR4 8PA

Client Ref: 23548

Report Ref: GCL-SDQ-261-WNI-83E

Grid Ref: 174652, 45792

Map Name: County Series

Map date: **1887-1888**

Scale: 1:10,560

Printed at: 1:10,560



Surveyed 1879
Revised N/A
Edition 1888
Copyright N/A
Levelled N/A



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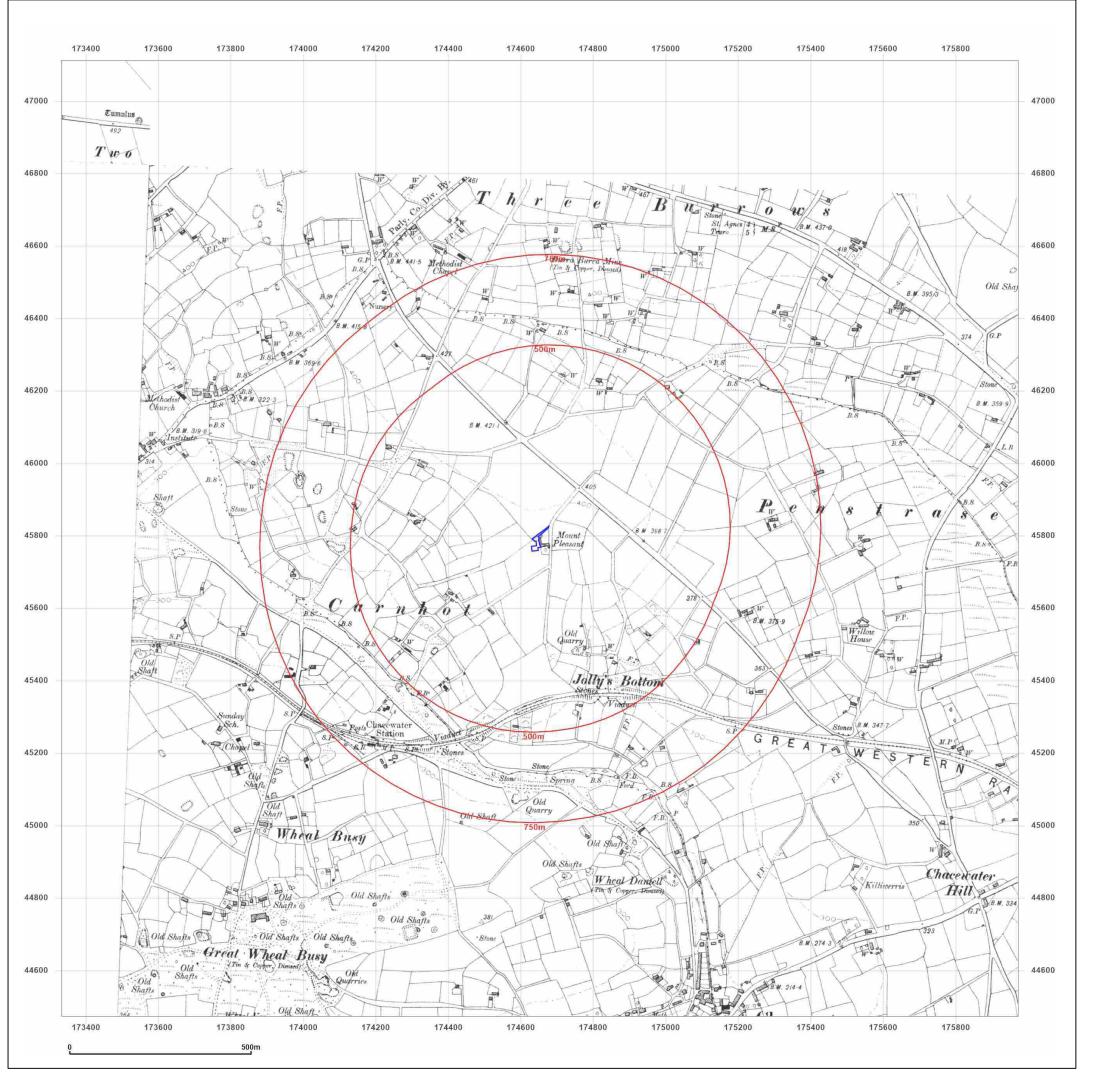
Surveyed 1879 Revised N/A

Edition 1888 Copyright N/A Levelled N/A

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Production date: 30 October 2023

Map legend available at:





MOUNT PLEASANT HOUSE, LANE FROM JUNCTION AT FOX HOLLOW TO JUNCTION NORTH OF MOUNT PLEASANT, CARNHOT, CHACEWATER, TR4 8PA

Client Ref: 23548

Report Ref: GCL-SDQ-261-WNI-83E

Grid Ref: 174652, 45792

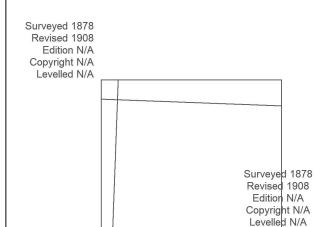
Map Name: County Series

Map date: 1908

Scale:

1:10,560

Printed at: 1:10,560







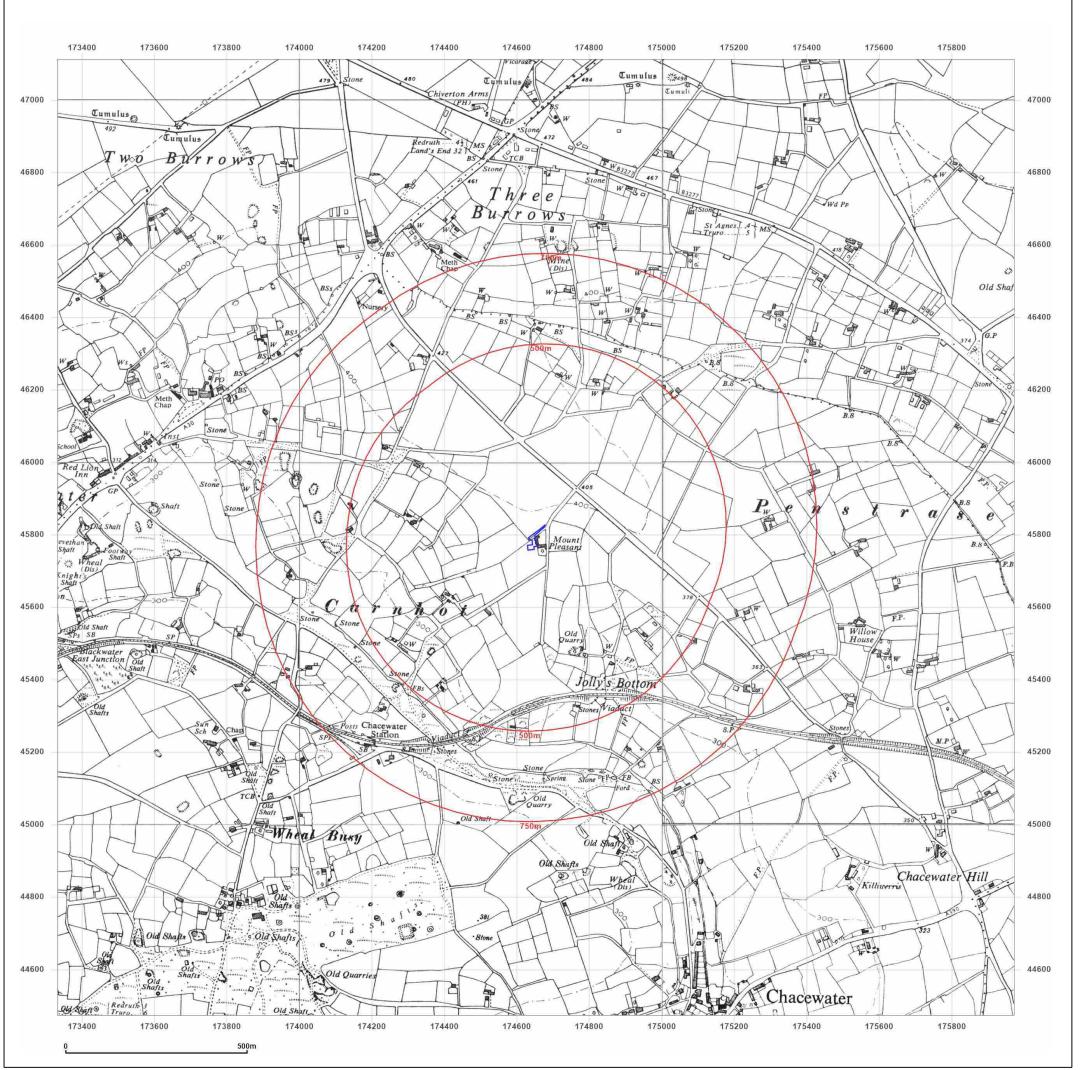
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Production date: 30 October 2023

Map legend available at:





MOUNT PLEASANT HOUSE, LANE FROM JUNCTION AT FOX **HOLLOW TO JUNCTION** NORTH OF MOUNT PLEASANT, CARNHOT, CHACEWATER, TR4

Client Ref: 23548

Report Ref: GCL-SDQ-261-WNI-83E

Grid Ref: 174652, 45792

Map Name: **Provisional**

1958 Map date:

Scale:

Surveyed 1958

Revised 1958

Copyright N/A

Levelled N/A

Edition N/A

1:10,560

Printed at: 1:10,560

Surveyed 1958 Revised 1958 Edition N/A Copyright N/A Levelled N/A

W

Surveyed 1958 Surveyed 1958 Revised 1958 Revised 1958 Edition N/A Edition N/A Copyright N/A Copyright N/A Levelled N/A Levelled N/A





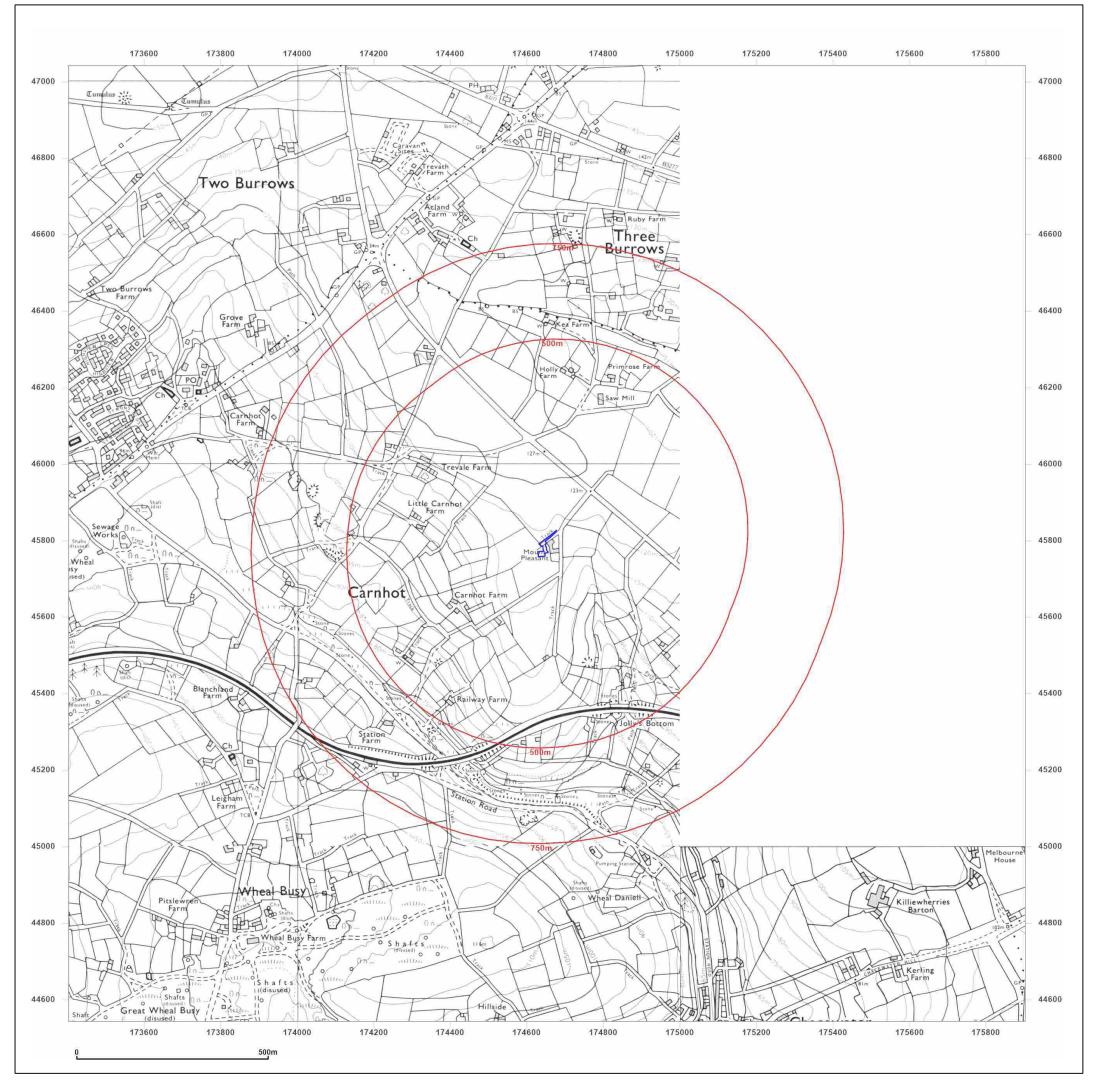
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Production date: 30 October 2023

Map legend available at:





MOUNT PLEASANT HOUSE, LANE FROM JUNCTION AT FOX HOLLOW TO JUNCTION NORTH OF MOUNT PLEASANT, CARNHOT, CHACEWATER, TR4 8PA

Client Ref: 23548

Report Ref: GCL-SDQ-261-WNI-83E

Grid Ref: 174652, 45792

Map Name: National Grid

Map date: **1973-1975**

Scale: 1:10,000

Printed at: 1:10,000

Surveyed 1972 Revised 1974 Edition N/A

Copyright 1975 Levelled N/A

Surveyed 1973
Revised 1974
Edition N/A
Copyright 1974
Levelled N/A

Surveyed 1970 Revised 1973 Edition N/A Copyright 1973 Levelled N/A





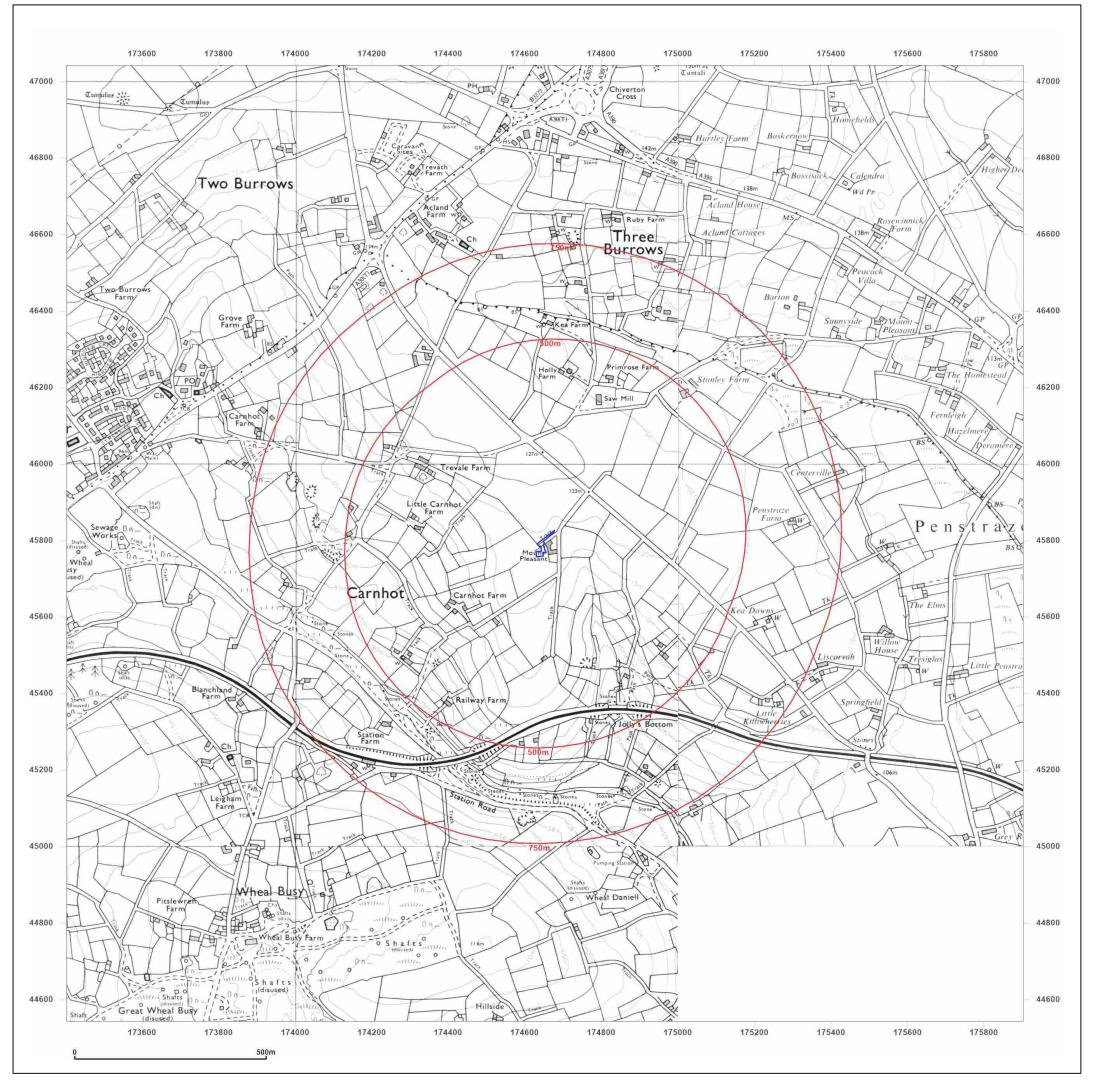
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Production date: 30 October 2023

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MOUNT PLEASANT HOUSE, LANE FROM JUNCTION AT FOX HOLLOW TO JUNCTION NORTH OF MOUNT PLEASANT, CARNHOT, CHACEWATER, TR4 8PA

Client Ref: 23548

Report Ref: GCL-SDQ-261-WNI-83E

Grid Ref: 174652, 45792

Map Name: National Grid

Map date: 1980-1982

Scale: 1:10,000

Printed at: 1:10,000

Surveyed 1972 Revised 1980 Edition N/A Copyright N/A Levelled N/A

Surveyed 1967 Revised 1982 Edition N/A Copyright N/A Levelled N/A

W

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Surveyed 1980 Revised 1980 Edition N/A

Copyright N/A

Levelled N/A



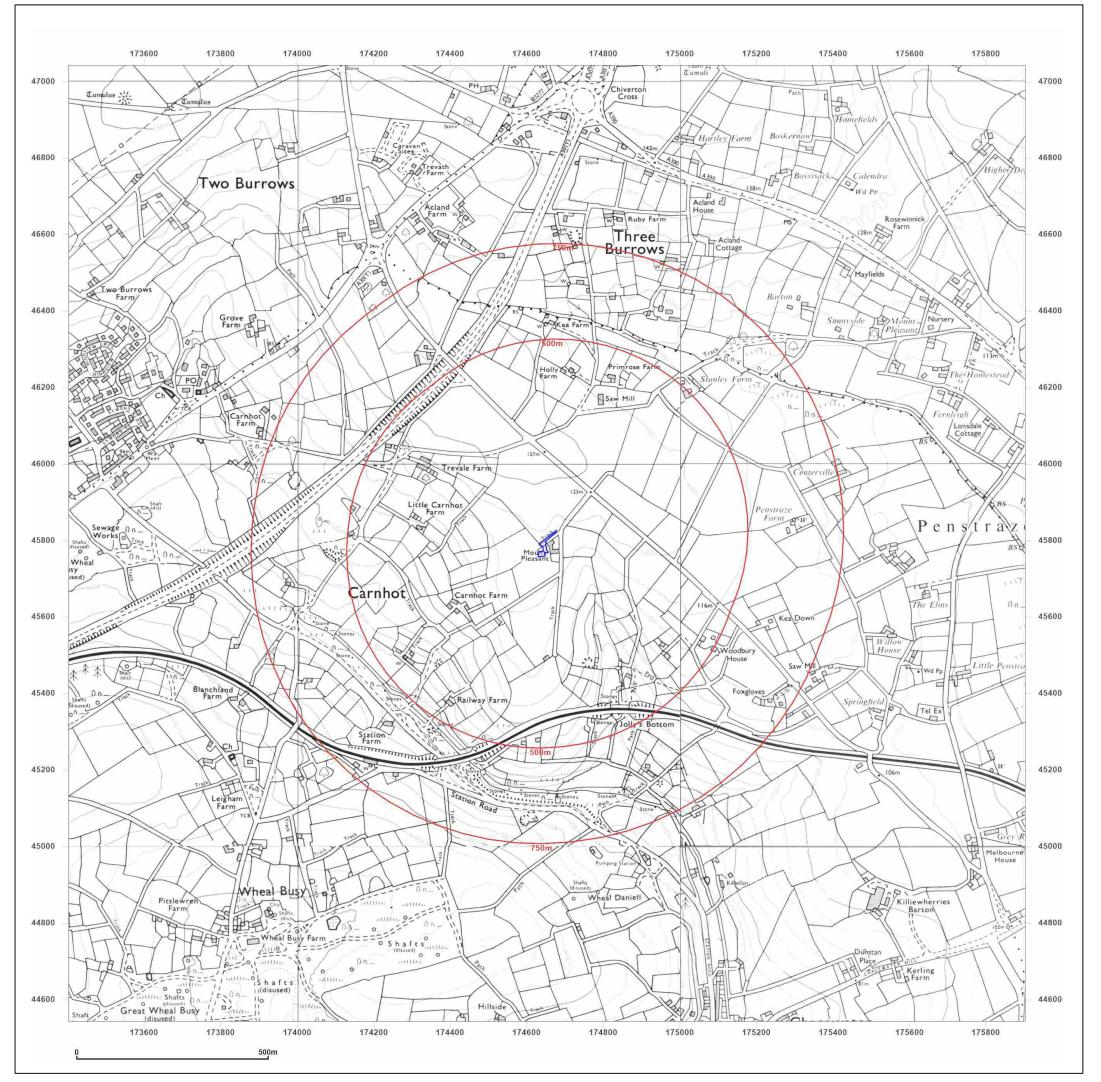
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Production date: 30 October 2023

Map legend available at:





MOUNT PLEASANT HOUSE, LANE FROM JUNCTION AT FOX **HOLLOW TO JUNCTION** NORTH OF MOUNT PLEASANT, CARNHOT, CHACEWATER, TR4

Client Ref: 23548

Report Ref: GCL-SDQ-261-WNI-83E

Grid Ref: 174652, 45792

Map Name: National Grid

Map date: 1988-1992

Scale: 1:10,000

Printed at: 1:10,000

Surveyed 1972 Surveyed 1989 Revised 1988 Revised 1990 Edition N/A Edition N/A Copyright N/A Copyright N/A Levelled N/A Levelled N/A Surveyed 1973 Surveyed 1991 Revised 1992 Revised 1992 Edition N/A Edition N/A Copyright N/A Copyright N/A Levelled N/A Levelled N/A





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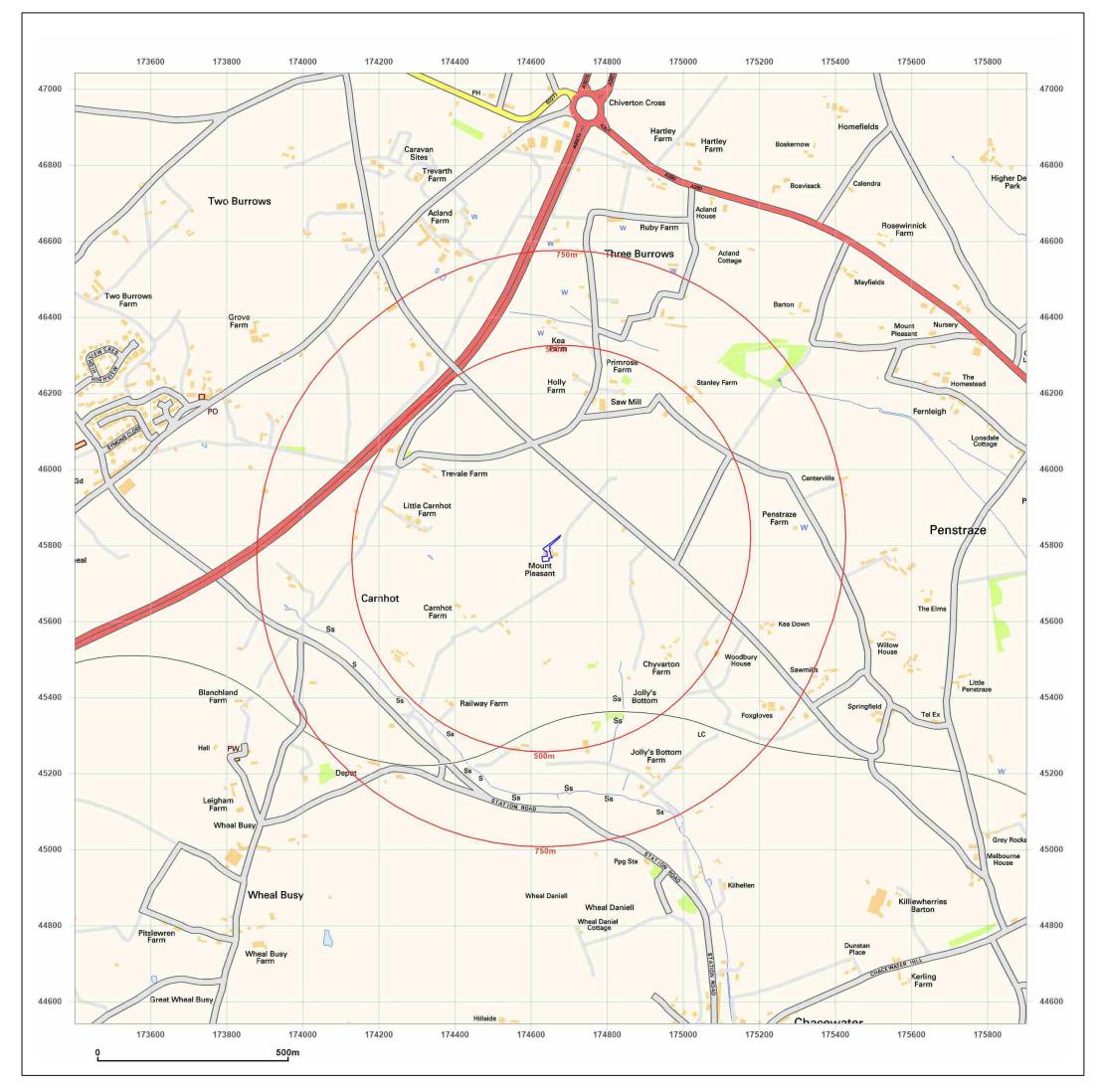
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Client Ref: 23548

Report Ref: GCL-SDQ-261-WNI-83E

Grid Ref: 174652, 45792

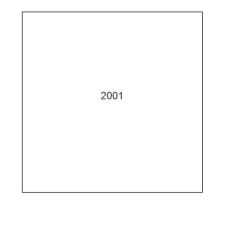
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Map date: 2001

1:10,000

Scale:

Printed at: 1:10,000



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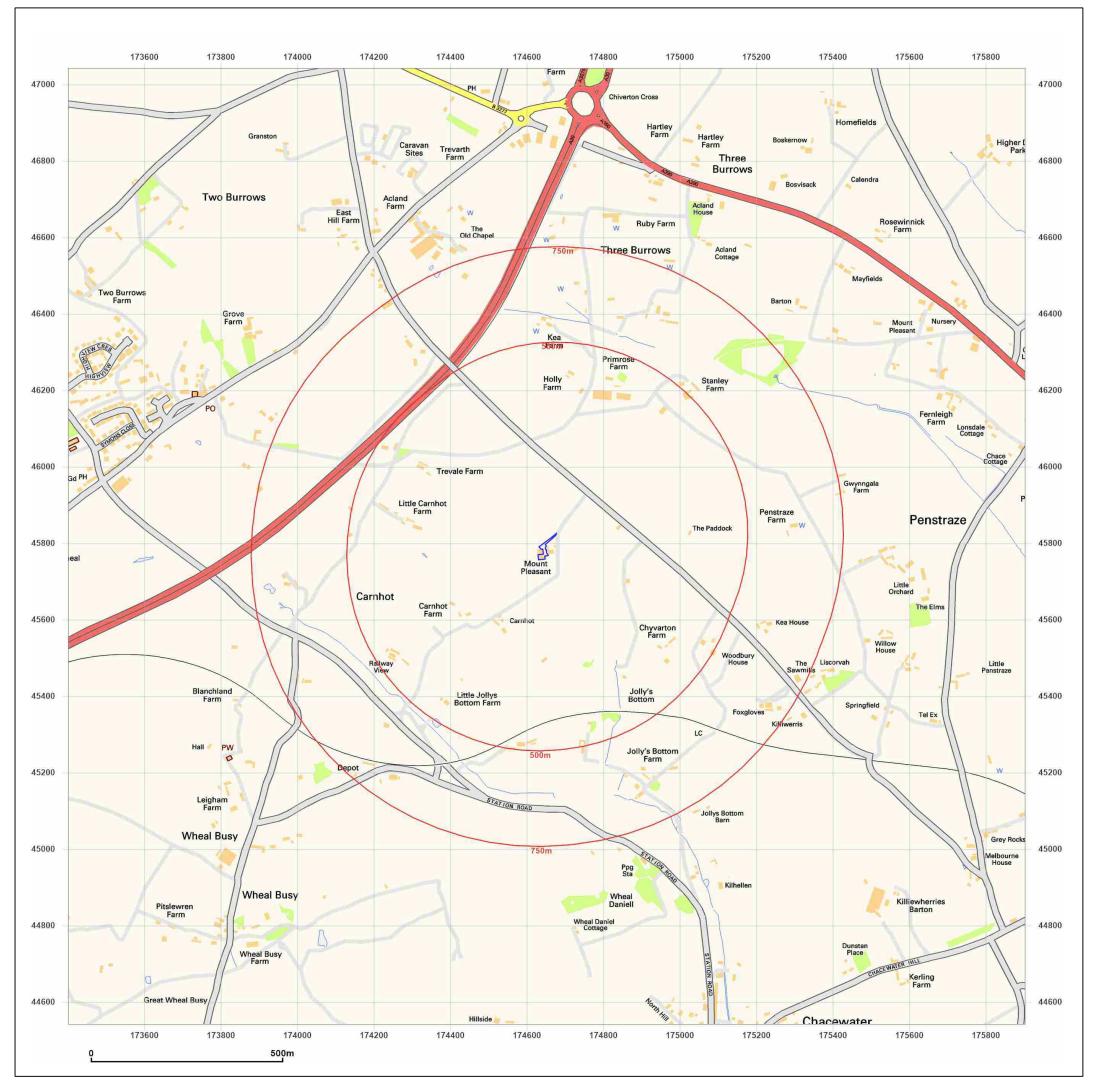
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Production date: 30 October 2023

Map legend available at:





MOUNT PLEASANT HOUSE, LANE FROM JUNCTION AT FOX HOLLOW TO JUNCTION NORTH OF MOUNT PLEASANT, CARNHOT, CHACEWATER, TR4

Client Ref: 23548

Report Ref: GCL-SDQ-261-WNI-83E

Grid Ref: 174652, 45792

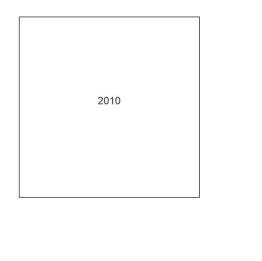
Map Name: National Grid

Map date: 2010

1:10,000

Printed at: 1:10,000

Scale:



W





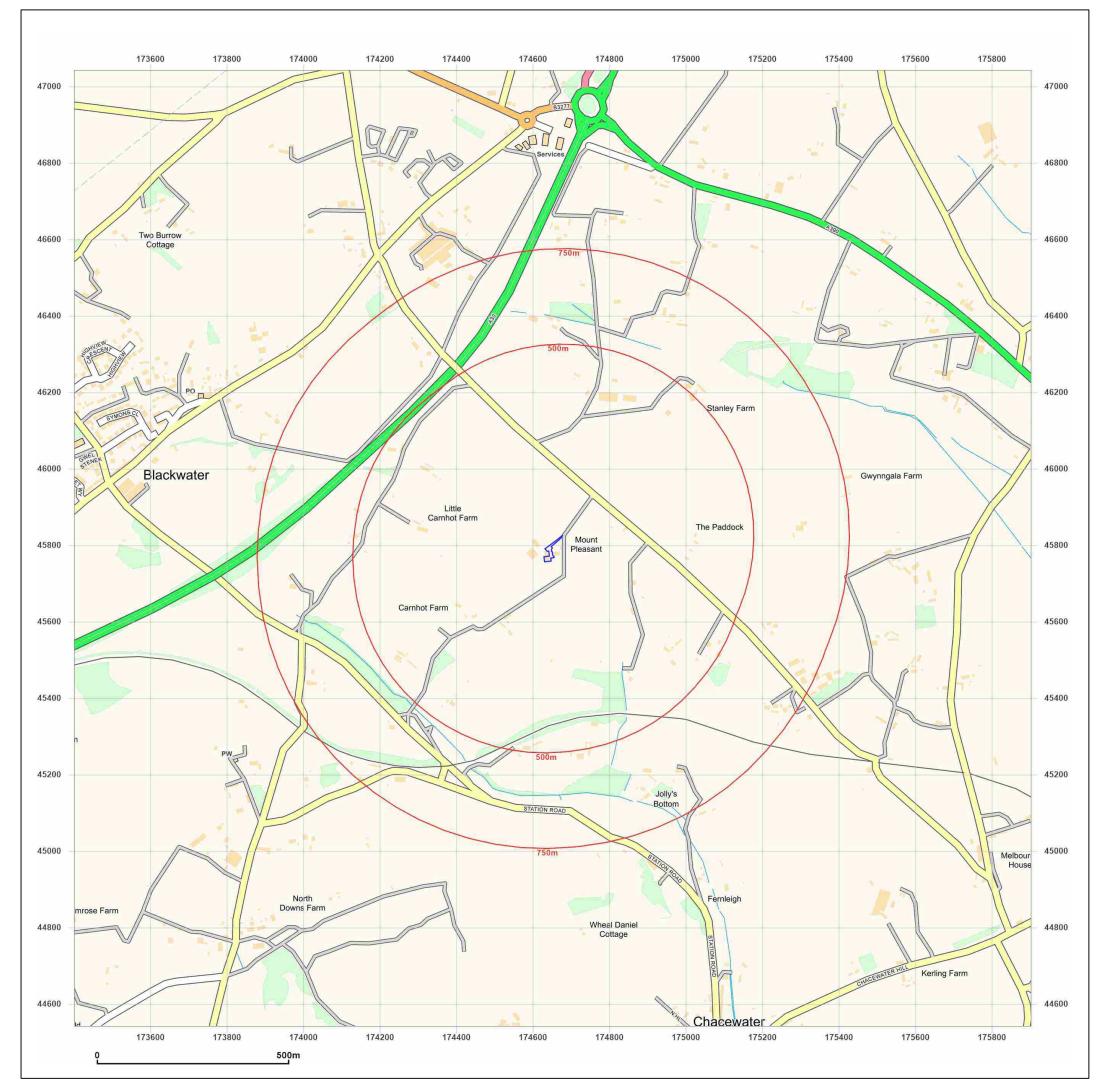
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W: www.groundsure.com

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Production date: 30 October 2023

Map legend available at:





MOUNT PLEASANT HOUSE, LANE FROM JUNCTION AT FOX HOLLOW TO JUNCTION NORTH OF MOUNT PLEASANT, CARNHOT, CHACEWATER, TR4 8PA

Client Ref: 23548

Report Ref: GCL-SDQ-261-WNI-83E

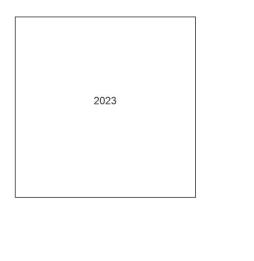
Grid Ref: 174652, 45792

Map Name: National Grid

Map date: 2023

Scale: 1:10,000

Printed at: 1:10,000







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Production date: 30 October 2023

Map legend available at:



Appendix D
UXO Risk Map

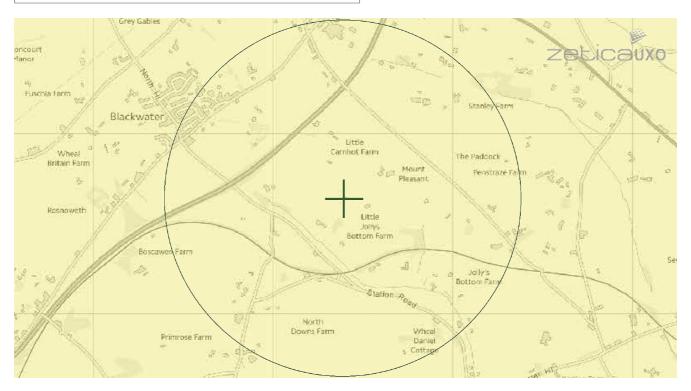


UNEXPLODED BOMB RISK MAP



SITE LOCATION

Location: TR4 8PA, Map Centre: 174403,45644



LEGEND

High: Areas indicated as having a bombing density of 50 bombs per 1000acre

Moderate: Areas indicated as having a bombing density of 15 to 49 bombs per 1000acre.

Low: Areas indicated as having 15 bombs per 1000acre or less.





UXO find





Luftwaffe targets





Bombing decoy other



The map indicates the potential for Unexploded Bombs (UXB) to be present as a result of World War Two (WWII) bombing.

You can incorporate the map into your preliminary risk assessment* for potential Unexploded Ordnance (UXO) for a site. Using this map, you can make an informed decision as to whether more in-depth detailed risk assessment* is necessary.

What do I do if my site is in a moderate or high risk area?

Generally, we recommend that a detailed UXO desk study and risk assessment is undertaken for sites in a moderate or high UXB risk area.

Similarly, if your site is near to a designated Luftwaffe target or bombing decoy then additional detailed research is recommended.

More often than not, this further detailed research will conclude that the potential for a significant UXO hazard to be present on your site is actually low.

Never plan site work or undertake a risk assessment using these maps alone. More detail is required, particularly where there may be a source of UXO from other military operations which are not reflected on these maps.

If my site is in a low risk area, do I need to do anything?

If both the map and other research confirms that there is a low potential for UXO to be present on your site then, subject to your own comfort and risk tolerance, works can proceed with no special precautions.

A low risk really means that there is no greater probability of encountering UXO than anywhere else in the UK.

If you are unsure whether other sources of UXO may be present, you can ask for one of our ${\bf pre-desk}$ study assessments (PDSA)

If I have any questions, who do I contact?

tel: +44 (0) 1993 886682 email: uxo@zetlca.com web: www.zetlcauxo.com

The information in this UXB risk map is derived from a number of sources and should be used in conjunction with the accompanying notes on our website: (https://zeticauxo.com/downloads-and-resources/risk-maps/)

Zetica cannot guarantee the accuracy or completeness of the information or data used and cannot accept any liability for any use of the maps. These maps can be used as part of a technical report or similar publication, subject to acknowledgment. The copyright remains with Zetica Ltd.

It is important to note that this map is not a UXO risk assessment and should not be reported as such when reproduced.

*Preliminary and detailed UXO risk assessments are advocated as good practice by industry guidance such as CIRIA C681 'Unexploded Ordnance (UXO), a guide for the construction industry'.



Appendix E |

Archival Mine Search







Archival (Desktop) Mining Search

Mining Risk: Moderate

Action: See Recommendations

Address:

Mount Pleasant Farm

Carnhot

Chacewater

Truro Cornwall TR4 8PA

Client:

SearchFlow Ltd

42 Kings Hill Avenue

Kings Hill

West Malling ME19 4AJ

Your Ref.:

SF28174167000

Our Ref.:

MS37573

Date:

13 September 2019

Tel: 01872 562008

E-mail (mine search):

dalef@ wheal-jane.co.uk

www.wheal-janeconsultancy.co.uk

Mine Searches

Site Investigations

Environmental Surveys

Mundic Analysis

Soil and Water Analysis

Mineralogical Surveys

Full Professional Indemnity Insurance

ISO9001 Registered Firm

Registered Office WJE Ltd Old Mine Offices Wheal Jane Baldhu,Truro Cornwall, TR3 6EE

Registered in England Number 03676442 VAT number 760 4129 48



Dear Sirs,

Re: Mount Pleasant Farm, Carnhot, Chacewater, Truro, TR4 8PA

We thank you for your recent request.

As instructed, we have carried out a mining search in respect of the above property, as delineated on the plan supplied for the purpose of requesting this search (a copy of which is included with this report).

The purpose of this mine search is to examine and interpret the plans and records in our possession relating to metalliferous mining activity and based upon this information, give a professional opinion in respect of potential risk to the property from such historical mining activity and, if required, make recommendations as may be deemed appropriate.

Where other workings relating to clay, stone or other minerals are noted to be in close proximity to the property mention will be made of them.

It is of a format suitable for conveyancing purposes.

Mining Activity

The property lies on the eastern edge of an area that has seen considerable historical mining activity.

The plans and records that are currently held in our possession, relating to this district, do not indicate the presence of any old shallow/surface metalliferous mine workings or shafts within the boundaries of the property.

We have found no evidence of clay workings or other mineral workings in the immediate vicinity of the property.

Recorded mine workings lie over 400 metres to the west of the property.

An old mining map indicates a series of lodes (mineralised structures) passing near the property in a general east to west direction.

The nearest of these lies just over 40 metres north-west of the property.



Action: See Recommendations

Conclusions & Recommendations

We know of no plans to exploit metallic minerals in the immediate vicinity of the property.

Given the near proximity of a number of mining related features in conjunction with the historic poor recordings of mining activity in the district we would recommend the following two courses of action.

1: It would be prudent that the existing structures on the property be inspected by a qualified, chartered structural engineer with experience of looking for mining related issues to check for any signs of abnormal settlement or distress.

Should any such evidence of abnormal structural movement be identified, further intrusive site investigation work may be warranted to ascertain the cause.

2: If any new building development is planned on the property, we would recommend that any footings trenches should be examined prior to their infill by concrete to check for evidence of any unrecorded or otherwise unknown mining features.

Action: See Recommendations



Scope of Search & Limitations

This search has been carried out with reference to the extensive collection of plans, records and archives that are held in our possession at the time of writing this report and from this material we have endeavoured to give as accurate a report as possible in respect of the property as delineated in the initial request.

However, taking into account that such records may not be wholly complete or accurate, that records may exist of which we do not hold copies, or records exist that are held in private sources which are not available to us and that in Cornwall, Devon and Somerset many ancient shallow workings and shafts exist of which there are no records, we cannot accept liability for any inaccuracies there may be.

This report is concerned solely with the property searched and should not be used in connection with adjacent properties as only relevant mining features have been mentioned and any known features that would not have a direct influence upon the target property may have been omitted for clarity.

The report is based upon the property boundaries as shown on the supplied request plan.

We cannot accept liability for any inaccuracies if the property boundaries, as supplied to us by the client or the client's agent, are subsequently shown to be incorrect, incomplete or if no such request plan has been supplied when the search has been requested.

This report is confidential to the client and the client's legal advisor and the client's mortgage lender and as such may be used by them for conveyancing or related purposes.

We have no liability toward any person or organisation not party to commissioning this report.

This report or any part of it, is not permitted to be reproduced, copied, altered or in any other way distributed by any other person or organisation.

Unless otherwise expressly stated, nothing in this report shall create or confer any rights or other benefits pursuant to the Contracts (Rights of Third Parties) Act 1999 in favour of any person or organisation other than the person/organisation commissioning this report.

This report is not a contaminated land, environmental, geotechnical or archaeological survey and should not be interpreted as such.

No site visit has been made.

Should any abnormal settlement features be observed as part of any surveyors or engineers report on the property, further investigation as to the cause of such may be required.

We trust that this report is to your satisfaction and will be happy to answer any queries with respect to it.

Yours faithfully.

Wheal Jane Consultancy dalef@wheal-jane.co.uk 01872 560200





Mining Glossary

Adit Horizontal mine drainage tunnel driven from low ground into mine workings. The adit tunnel

is the shallowest level shown on mine plans and usually represents the earliest period of workings recorded. Adits have ventilation shafts at regular intervals, which are mostly

unrecorded.

Alluvium Clay, sand and debris deposited by a river. Often streamed for tin.

Burrow A mine waste tip.

Caunter lode A lode which runs in a different direction to the general trend of lodes in the district.

Coffin/Koffen Trench-like openwork at surface.

Costean Pit A small surface pit excavated to locate and/or sample a lode.

Crosscourse Geological features which run at right-angles to the principal lodes of a district, and are

vertical or sub-vertical faults. Mostly barren of payable minerals, but can carry values of iron ore, cobalt and other metallic minerals. Also known as 'guides' or 'trawns' in the St Just and

St Ives mining districts respectively.

Crosscut Tunnel driven underground, usually at right-angles to the lodes.

DriveAngle of inclination of a lode from the horizontal.

Tunnel driven along the course of a lode.

Elvan Igneous rock (quartz-porphyry) occurring as a vein or dyke. Can be extremely hard.

Exploited by quarrying.

Granite Igneous rock. Crystalline mixture of quartz, feldspar and mica. **Greenstone** Igneous rock also called 'blue elvan'. Generally extremely hard.

Gunnis Open stope at surface or underground.

Kaolinisation Alterations or weathering of granite to clay and sand from solid rock.

Killas Generic term given to sedimentary rock in Cornwall.

Leat A man-made watercourse.

Level Horizon underground where ore movement and communications are maintained. Levels

consist of lode drives and crosscut tunnels: i.e. 12 fathom level; the system of tunnels driven

at 12 fathoms below adit horizon.

Lode A mineralised structure or vein. Most lodes run from surface vertically or sub-vertically, and

can vary from a few inches to several metres in width.

Mundic Iron pyrite, arsenic and sulphur - arsenopyrite.

Openwork A surface working, which has usually left a pit or backfilled excavation.

Outcrop The part of the lode which breaks surface. Worked-out voids and backfilled areas are

outcrop features.

Rab Weathered zone of mixed rock and soil (natural profile)

Sett An area of land leased for mining.

Shaft Holes in the ground, which can vary from 0.5m x 1m up to shafts 7m across. Engine shafts

tends to be large (typically 3m x 2m) and adit shafts are smaller (typically 1.2m x 1.8m).

Depths vary down to 700m.

Stockwork Mass of narrow veins or lodes running parallel and sub-parallel.

Stope Ground where lode has been removed leaving void. Sometimes open to surface. **Tailings** Residual sands and slimes from ore dressing. Usually heavily contaminated.



Action: See Recommendations

Mining References (generic listing)

H G Dines - The Metalliferous Mining Region of South West England (2 Vols)

A K Hamilton Jenkin - Mines & Miners of Cornwall (16 Vols)

A K Hamilton Jenkin - Mines of Devon (2 Vols)

A K Hamilton Jenkin - Wendron

Thomas Spargo - Tin Mines of Cornwall (6 Vols)

J H Collins - Observations of West of England Mining Region

Sellwood, Durrance & Bristow - Geology of Cornwall

Durrance & Laming - Geology of Devon

Burt, Waite & Burnley - Cornish Mines

MRO Plans (CRO)

MRO Copies (SC Archive)

MRO Microfiche (SC)

South Crofty Archive

Tehidy Minerals Archive

JMS/JAB/JHB Archive

Wheal Jane Collection

Wheal Pendarves Collection

Geevor Collection

Thyssen Review & Plans

A K H Jenkin, Annotated 6" Plans

Geological 6" Plans

Richard Thomas Plans

Robert & Brenton Symons Plans

Nicholas Whitley Plans

K Bennet Annotated Plans

R Lyon Annotated Plans

Ordnance Survey 1880, 1906, etc Maps

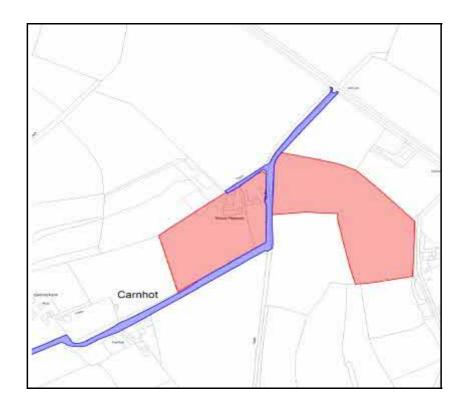
H G Dines Composites





Search Request Plan

Copy of the request plan provided to Wheal Jane Consultancy to identify the property for search purposes:





- Mine search reports, using the most extensive privately-owned mine plan archive in the region
- Mining Site Investigations by drilling or trenching
- · Mundic analysis
- Phase 1 Environmental surveys
- Laboratory testing of soils and water
- Mineralogical surveys and reports

Accuracy, quick turnaround times, competitive prices, fully qualified and experienced staff, full professional indemnity insurance cover.

Cornwall's first ISO certified mine search and site investigation specialists





Mine Search - What Next?

