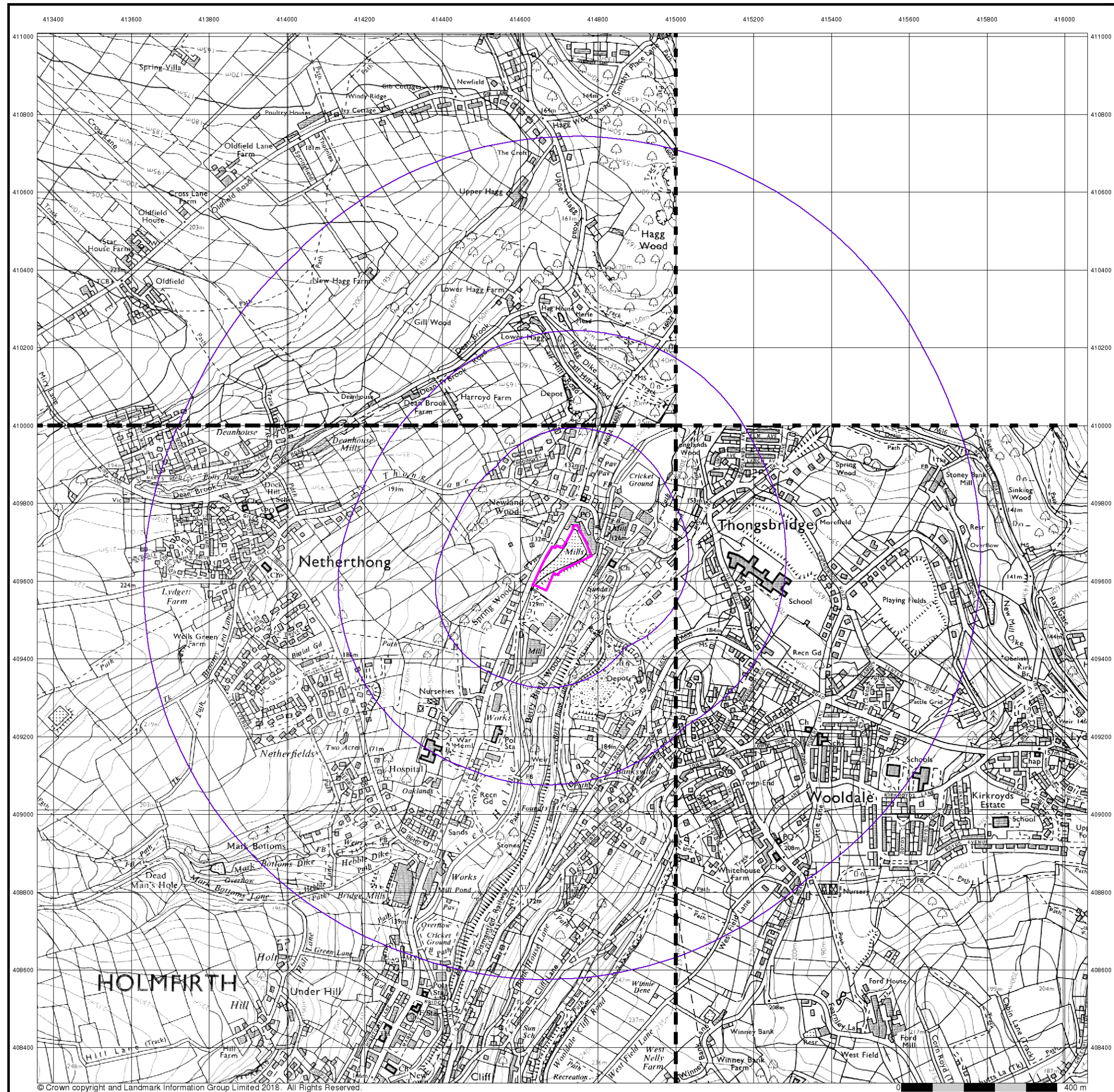




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## Ordnance Survey Plan

### Published 1982 - 1984

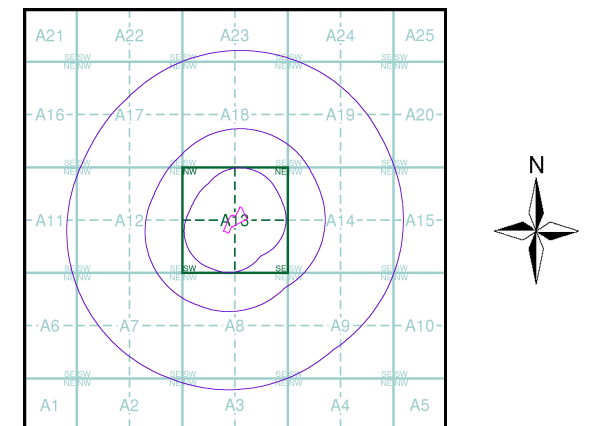
### Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

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

|        |      |          |
|--------|------|----------|
| SE11SW | 1984 | 1:10,000 |
| SE10NW | 1982 | 1:10,000 |
| SE10NE | 1982 | 1:10,000 |

### Historical Map - Slice A

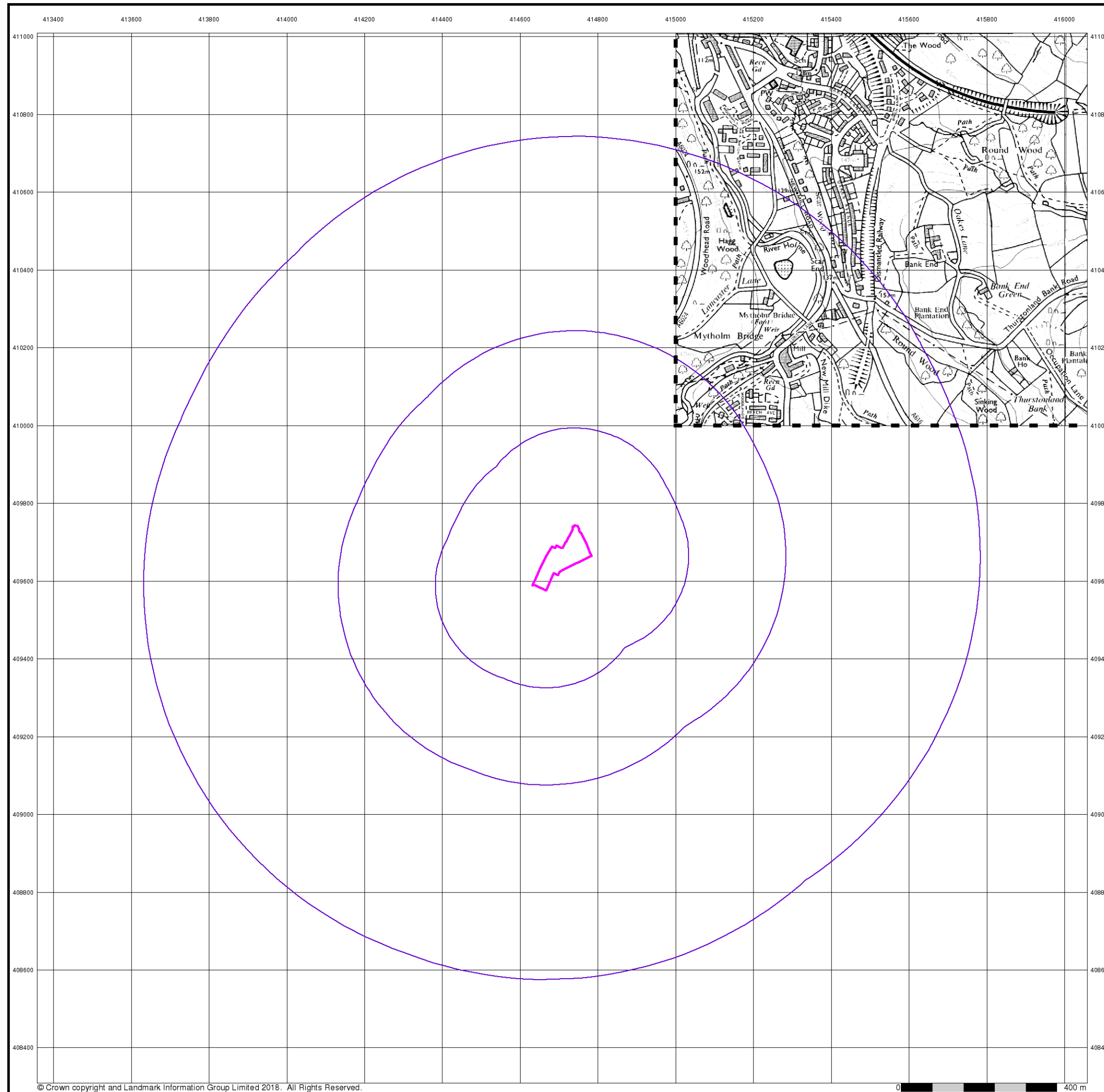


### Order Details

Order Number: 175761950\_1\_1  
Customer Ref: MSD/01  
National Grid Reference: 414710, 409650  
Slice: A  
Site Area (Ha): 0.95  
Search Buffer (m): 1000

### Site Details

Thongsbridge Mills, Thongsbridge, HOLMFIRTH, HD9 7RW



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0 400 m



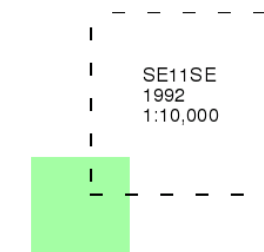
## Ordnance Survey Plan

### Published 1992

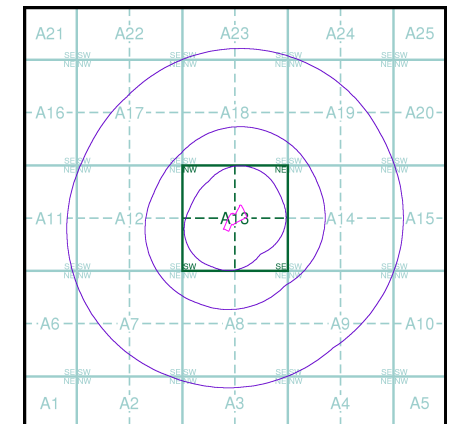
### Source map scale - 1:10,000

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas; these maps were used to update the 1:10,560 maps. The published date given therefore is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas. In the late 1940's, a Provisional Edition was produced, which updated the 1:10,560 mapping from a number of sources. The maps appear unfinished - with all military camps and other strategic sites removed. These maps were initially overprinted with the National Grid. In 1970, the first 1:10,000 maps were produced using the Transverse Mercator Projection. The revision process continued until recently, with new editions appearing every 10 years or so for urban areas.

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



### Historical Map - Slice A



### Order Details

Order Number: 175761950\_1\_1  
Customer Ref: MSD/01  
National Grid Reference: 414710, 409650  
Slice: A  
Site Area (Ha): 0.95  
Search Buffer (m): 1000

### Site Details

Thongsbridge Mills, Thongsbridge, HOLMFIRTH, HD9 7RW



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Fax: 0844 844 9951  
Web: www.envirocheck.co.uk



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## 10k Raster Mapping

### Published 2000

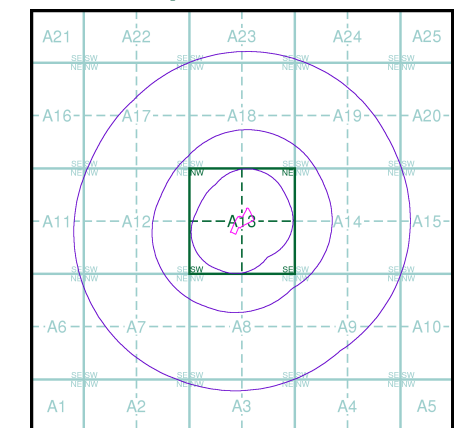
### Source map scale - 1:10,000

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

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

|          |          |
|----------|----------|
| SE11SW   | SE11SE   |
| 2000     | 2000     |
| 1:10,000 | 1:10,000 |
| SE10NW   | SE10NE   |
| 2000     | 2000     |
| 1:10,000 | 1:10,000 |

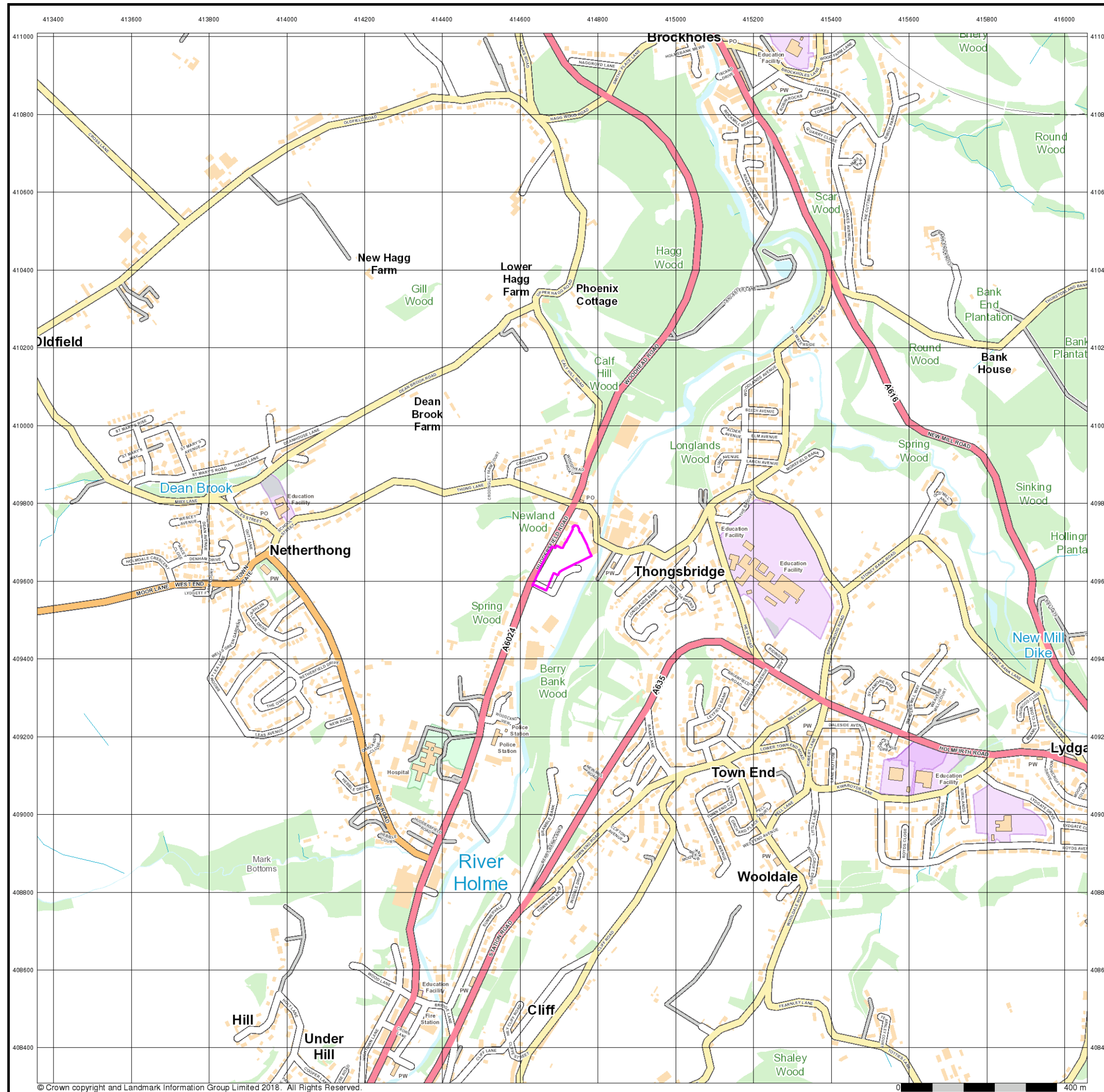
### Historical Map - Slice A



**Order Details**  
Order Number: 175761950\_1\_1  
Customer Ref: MSD/01  
National Grid Reference: 414710, 409650  
Slice: A  
Site Area (Ha): 0.95  
Search Buffer (m): 1000

**Site Details**  
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## Street View

Published 2018

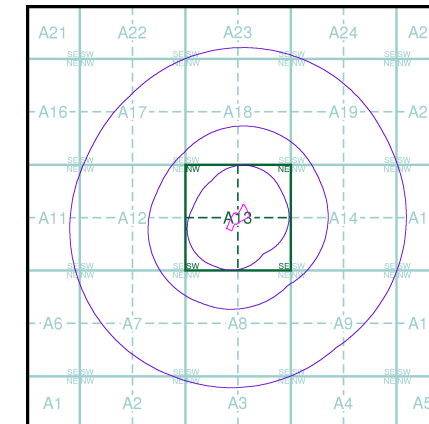
Source map scale - 1:10,000

Street View is a street-level map for the whole of Great Britain produced by the Ordnance Survey. These maps are provided at a nominal scale of 1:10,000

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



## Street View Map - Slice A



## Order Details

Order Number: 175761950\_1\_1  
Customer Ref: MSD/01  
National Grid Reference: 414710, 409650  
Slice: A  
Site Area (Ha): 0.95  
Search Buffer (m): 1000

## Site Details

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## **APPENDIX D**

### **LANDMARK GEOLOGY MAPS**

## Geology 1:50,000 Maps Legends

### Artificial Ground and Landslip

| Map Colour | Lex Code | Rock Name                 | Rock Type                  | Min and Max Age           |
|------------|----------|---------------------------|----------------------------|---------------------------|
|            | MGR      | Made Ground (Undivided)   | Artificial Deposit         | Not Supplied - Holocene   |
|            | WGR      | Worked Ground (Undivided) | Void                       | Not Supplied - Holocene   |
|            | WMGR     | Infilled Ground           | Artificial Deposit         | Not Supplied - Holocene   |
|            | SLIP     | Landslide Deposit         | Unknown/Unclassified Entry | Not Supplied - Quaternary |

### Superficial Geology

| Map Colour | Lex Code | Rock Name                 | Rock Type                   | Min and Max Age           |
|------------|----------|---------------------------|-----------------------------|---------------------------|
|            | ALV      | Alluvium                  | Clay, Silt, Sand and Gravel | Not Supplied - Holocene   |
|            | ALV      | Alluvium                  | Clay and Silt               | Not Supplied - Holocene   |
|            | RTD1     | River Terrace Deposits, 1 | Sand and Gravel             | Not Supplied - Quaternary |

### Bedrock and Faults

| Map Colour | Lex Code | Rock Name                             | Rock Type                         | Min and Max Age            |
|------------|----------|---------------------------------------|-----------------------------------|----------------------------|
|            | PLCM     | Pennine Lower Coal Measures Formation | Mudstone and Siltstone            | Not Supplied - Westphalian |
|            | PLCM     | Pennine Lower Coal Measures Formation | Mudstone, Siltstone and Sandstone | Not Supplied - Westphalian |
|            | SBF      | Soft Bed Flags                        | Sandstone                         | Not Supplied - Westphalian |
|            | STNR     | Stanningley Rock                      | Sandstone                         | Not Supplied - Westphalian |
|            | MBR      | Middle Band Rock                      | Sandstone                         | Not Supplied - Westphalian |
|            | FEYR     | 48 Yard Rock                          | Sandstone                         | Not Supplied - Westphalian |
|            | EYR      | 80 Yard Rock                          | Sandstone                         | Not Supplied - Westphalian |
|            | GM       | Greenmoor Rock                        | Sandstone                         | Not Supplied - Westphalian |
|            | SR       | Silkstone Rock                        | Sandstone                         | Not Supplied - Westphalian |
|            | PLCM     | Pennine Lower Coal Measures Formation | Sandstone                         | Not Supplied - Westphalian |
|            | GR       | Grenoside Sandstone                   | Sandstone                         | Not Supplied - Westphalian |

| Map Colour | Lex Code | Rock Name               | Rock Type              | Min and Max Age         |
|------------|----------|-------------------------|------------------------|-------------------------|
|            | ROSSE    | Rossendale Formation    | Mudstone and Siltstone | Not Supplied - Namurian |
|            | RR       | Rough Rock              | Sandstone              | Not Supplied - Namurian |
|            | RF       | Rough Rock Flags        | Sandstone              | Not Supplied - Namurian |
|            | HDW      | Huddersfield White Rock | Sandstone              | Not Supplied - Namurian |
|            | MARSD    | Marsden Formation       | Mudstone and Siltstone | Not Supplied - Namurian |
|            | GSYG     | Guiseley Grit           | Sandstone              | Not Supplied - Namurian |
|            | MGG      | Midgley Grit            | Sandstone              | Not Supplied - Namurian |
|            | RDG      | Readycon Dean Flags     | Sandstone              | Not Supplied - Namurian |
|            |          | Faults                  |                        |                         |
|            |          | Rock Segments           |                        |                         |

### Geology 1:50,000 Maps

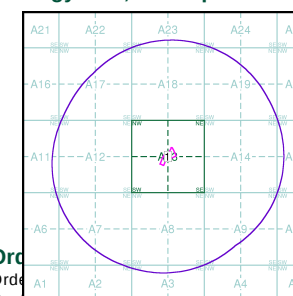
This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps.

The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

### Geology 1:50,000 Maps Coverage

|                      |              |
|----------------------|--------------|
| Map ID:              | 1            |
| Map Sheet No:        | 086          |
| Map Name:            | Glossop      |
| Map Date:            | 2012         |
| Bedrock Geology:     | Available    |
| Superficial Geology: | Available    |
| Artificial Geology:  | Available    |
| Faults:              | Not Supplied |
| Landslip:            | Available    |
| Rock Segments:       | Not Supplied |

### Geology 1:50,000 Maps - Slice A

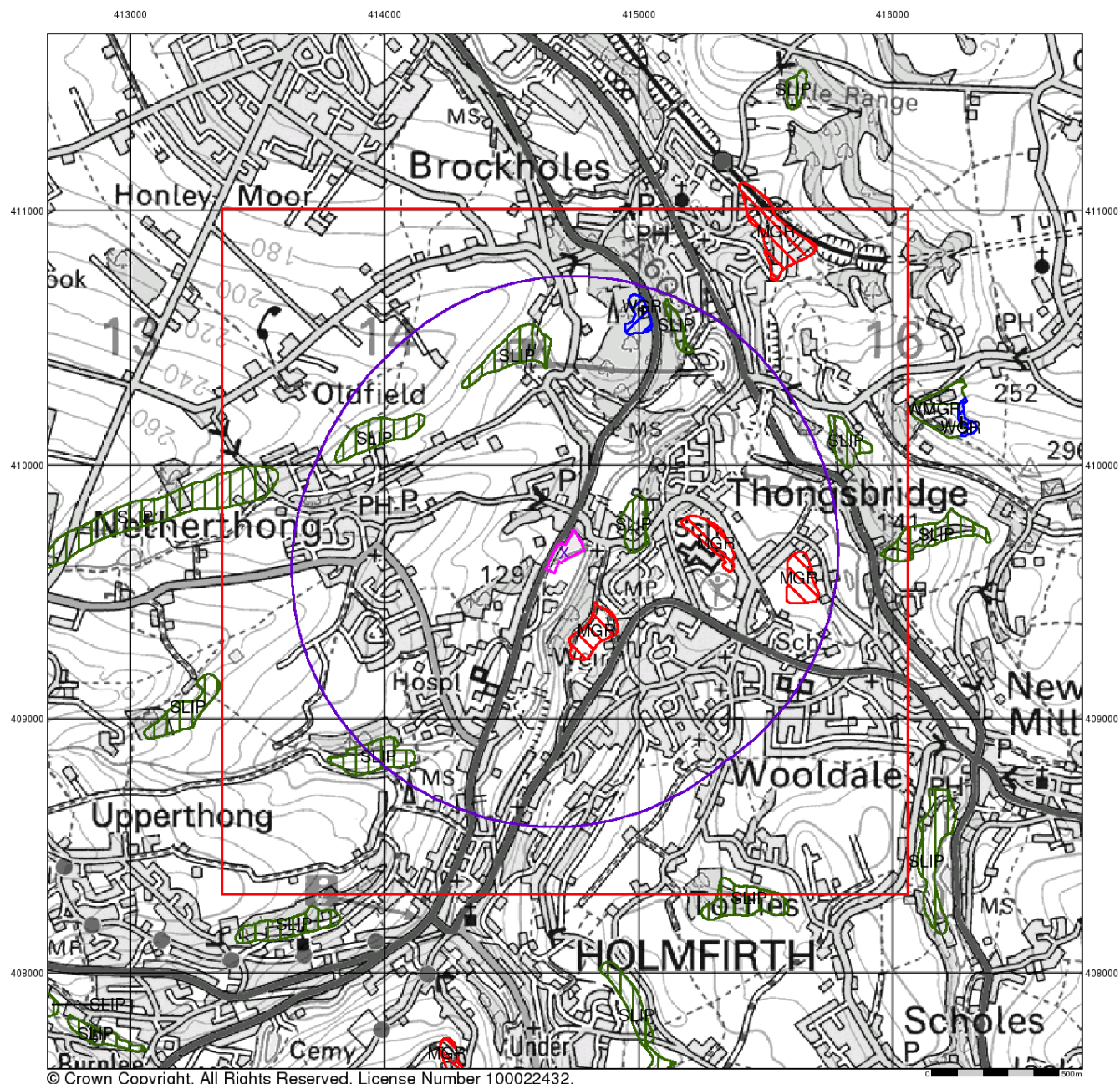


### Order

Order Reference: **MEB02**  
National Grid Reference: **414710, 409650**  
Slice: **A**  
Site Area (Ha): **0.95**  
Search Buffer (m): **1000**

### Site Details:

Thongsbridge Mills, Thongsbridge, HOLMFIRTH, HD9 7RW



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### Artificial Ground and Landslip

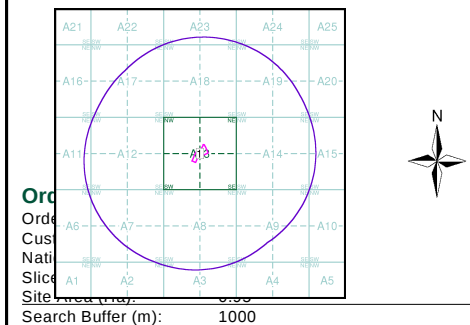
Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often associated with potentially contaminated material, unpredictable engineering conditions and unstable ground.

Artificial ground includes:

- Made ground - man-made deposits such as embankments and spoil heaps on the natural ground surface.
- Worked ground - areas where the ground has been cut away such as quarries and road cuttings.
- Infilled ground - areas where the ground has been cut away then wholly or partially backfilled.
- Landscaped ground - areas where the surface has been reshaped.
- Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

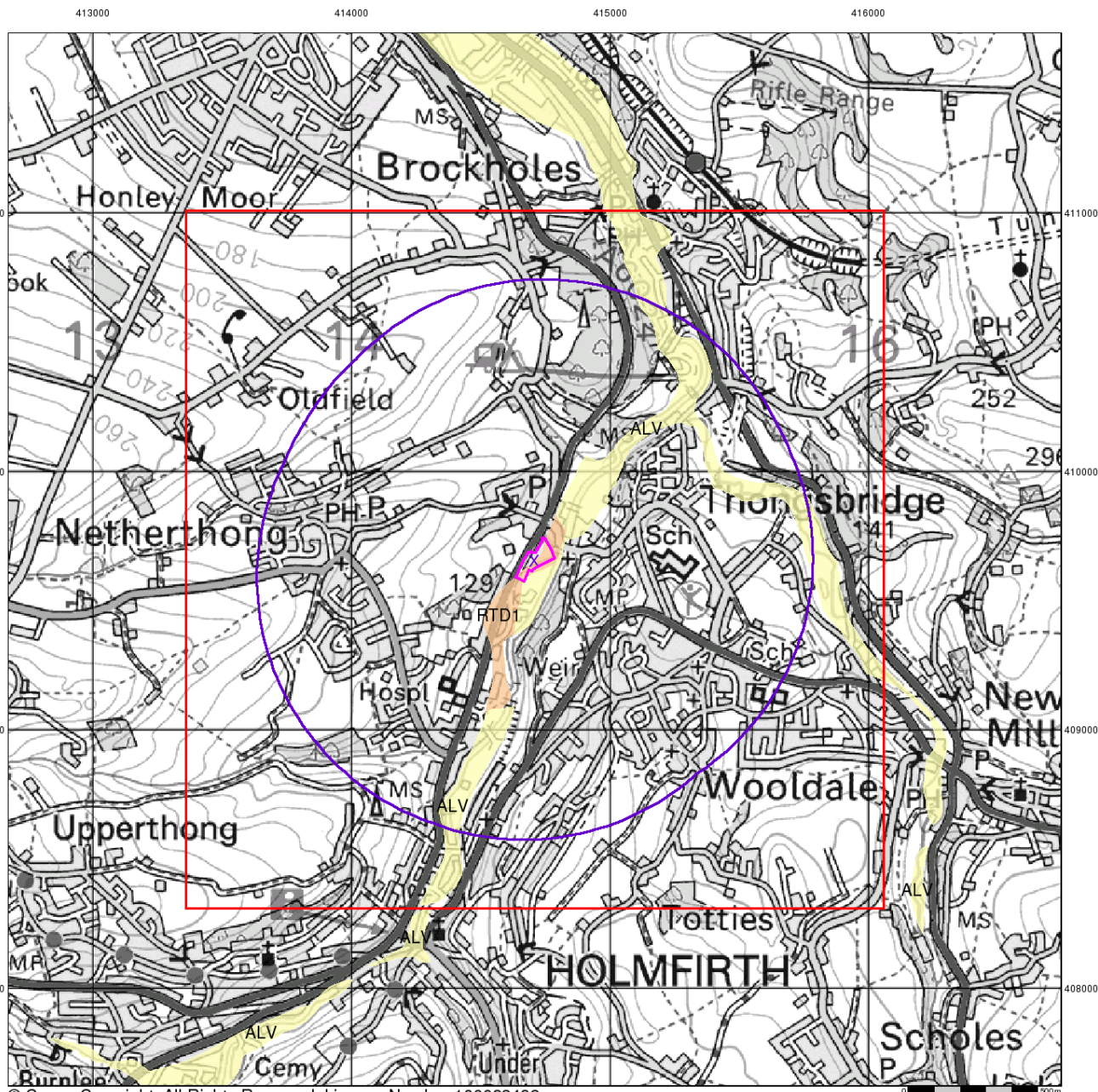
Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

### Artificial Ground and Landslip Map - Slice A



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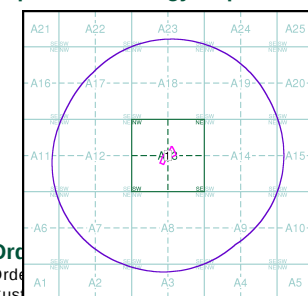
### Superficial Geology

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

### Superficial Geology Map - Slice A



Ord

Order

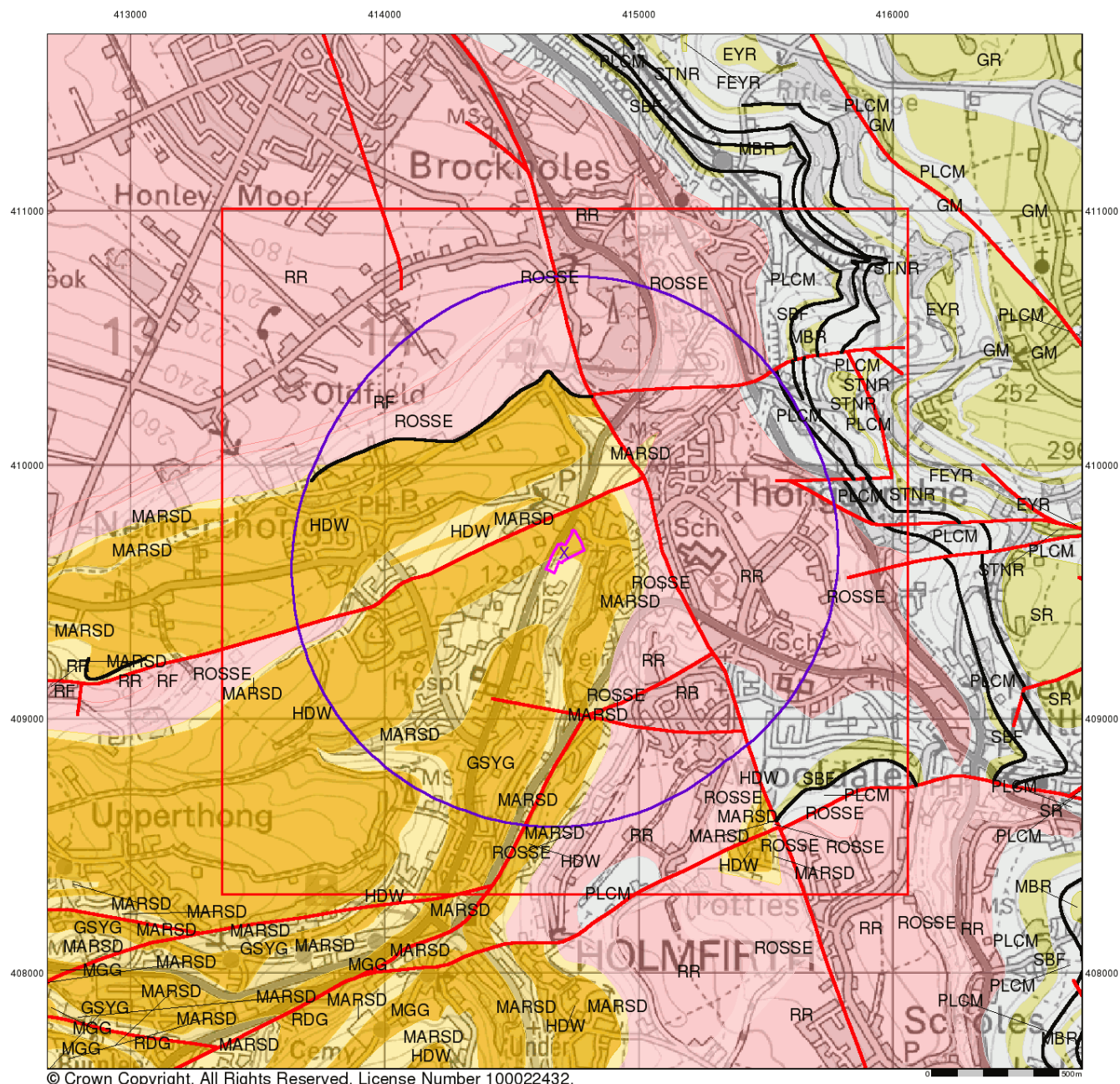
Cus

National Grid Reference: 414710, 409650

Slice: A  
Site Area (Ha): 0.95  
Search Buffer (m): 1000

### Site Details:

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## Bedrock and Faults

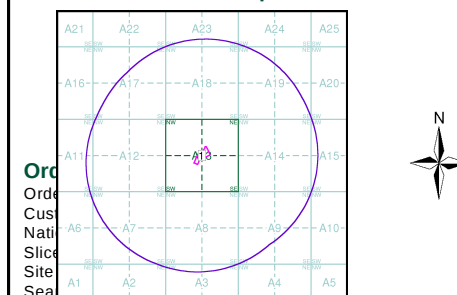
Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.

## Bedrock and Faults Map - Slice A



## Site Details:

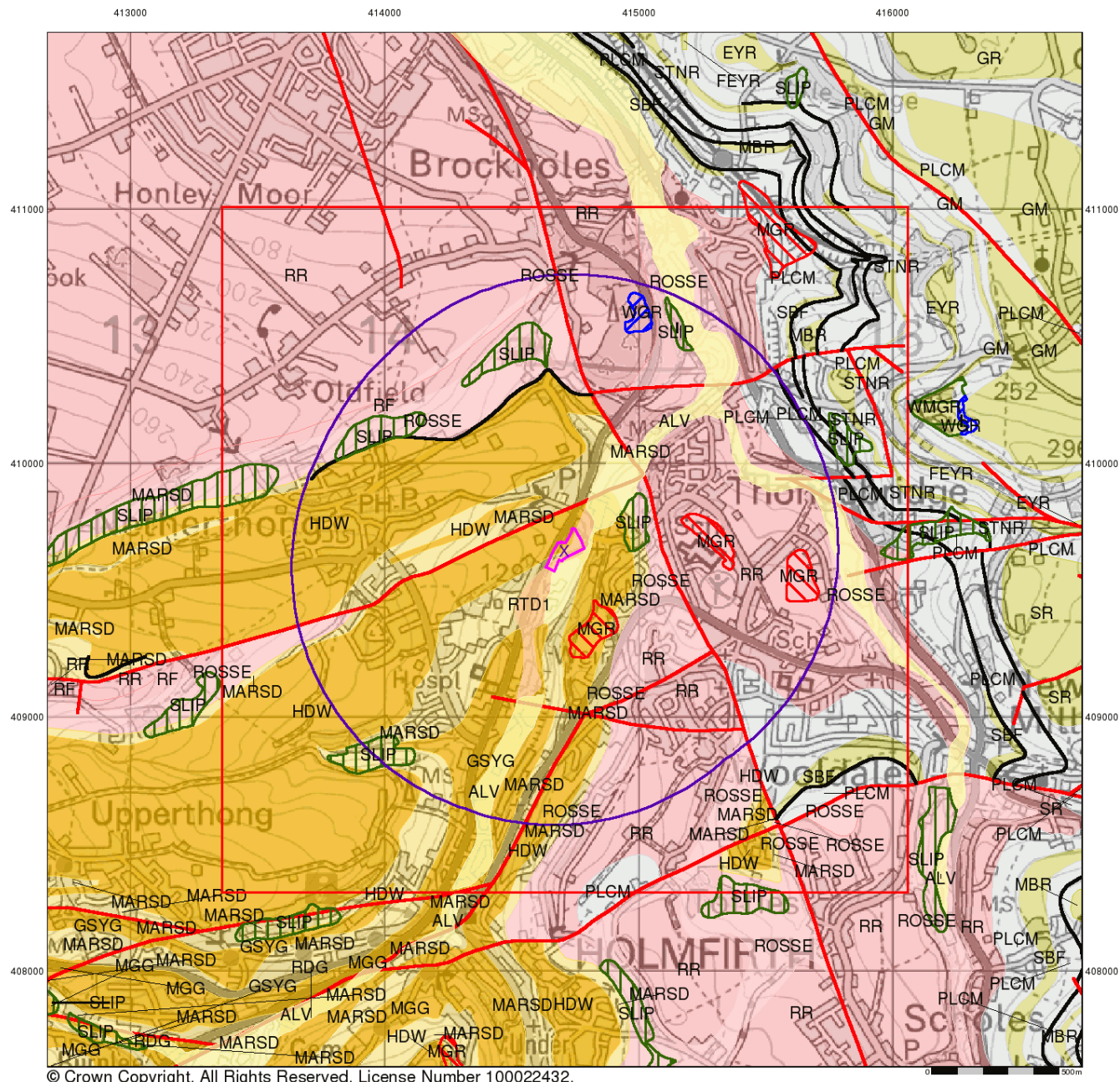
Thongsbridge Mills, Thongsbridge, HOLMFIRTH, HD9 7RW



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### Combined Surface Geology

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

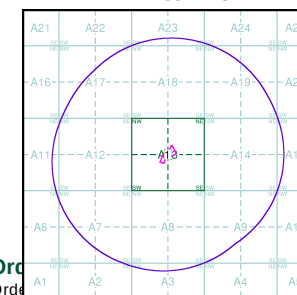
### Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

### Contact

British Geological Survey  
Kingsley Dunham Centre  
Keyworth  
Nottingham  
NG12 5GG  
Telephone: 0115 936 3143  
Fax: 0115 936 3276  
email: [enquiries@bgs.ac.uk](mailto:enquiries@bgs.ac.uk)  
website: [www.bgs.ac.uk](http://www.bgs.ac.uk)

### Combined Geology Map - Slice A



### Order

Customer Reference: MSD/01  
National Grid Reference: 414710, 409650  
Slice: A  
Site Area (Ha): 0.95  
Search Buffer (m): 1000

### Site Details:

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## **APPENDIX E**

### **COAL MINING REPORT**



The Coal  
Authority

# Consultants Coal Mining Report

Thongsbridge Mills  
Miry Lane  
Thongsbridge  
Holmfirth  
Kirklees  
HD9 7RW

|                        |                |
|------------------------|----------------|
| Date of enquiry:       | 14 August 2018 |
| Date enquiry received: | 14 August 2018 |
| Issue date:            | 14 August 2018 |

|                 |                |
|-----------------|----------------|
| Our reference:  | 51001897936001 |
| Your reference: | MSD/01         |

