

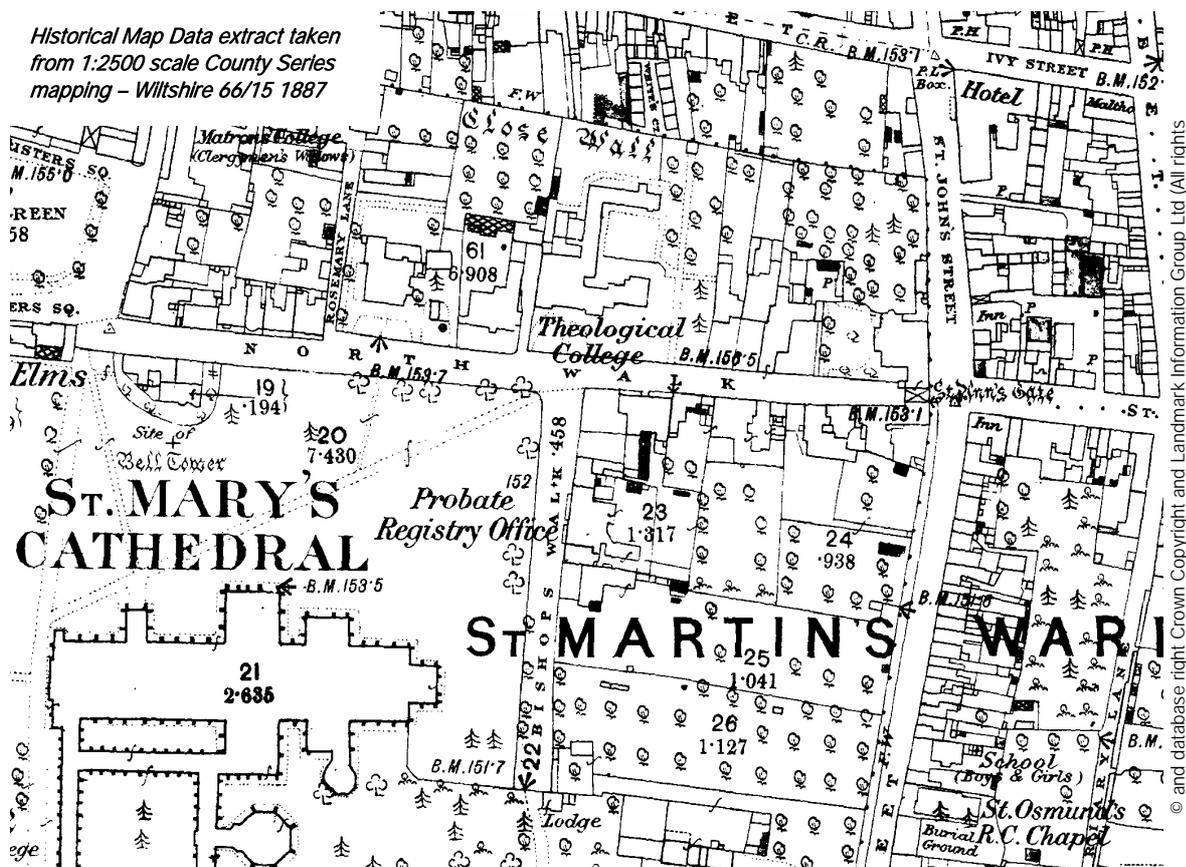
## Historical Map Data Technical Information Leaflet

### The Product

Ordnance Survey has one of the largest collections of historical mapping in Great Britain and until recently this was only held as a paper archive. As the result of a joint venture between Ordnance Survey and Landmark Information Group Ltd, an extensive collection of mapping from 1841 to 1996 has been created in digital form. This has been taken from Ordnance Survey's historical archive of Town Plans, County Series and post-war National Grid mapping.

Ordnance Survey large-scale mapping began with the first maps, covering individual counties, in September 1841. Each county was then revised between three and five times prior to 1945. These sheets became known as the County Series. Mapping was produced to the Cassini projection with each county surveyed separately, and often to different origins and projections, which meant that they did not match the neighbouring county. In 1944 – 45 the National Grid was adopted and the entire country's mapping was transferred to the National Grid projection that we use today.

Historical Map Data is offered as black and white raster data in a range of formats on CD-ROM. Raster data provides a map image where the map information is composed of a grid of pixels that can be displayed on a computer screen. The data provides a good quality map background and, as the data is geographically accurate, it can be overlaid with a variety of other modern data products, including modern Ordnance Survey Landline® and MasterMap®. This allows a direct comparison to be made between the present and the past. Historical Map Data can also be outputted to a suitable plotter or printer.



The CD-ROM contains:

- the raster images;
- a file containing National Grid co-ordinates for the map (tile) corners;
- a file containing the map sheet publication dates; and
- text files containing general information about Historical Map Data.

## Scale and source

The data is available for the following scales:

- 1:10 560 scale pre-war County Series mapping
- 1:10 560 or 1:10 000 scale post-war National Grid mapping
- 1:2500 scale pre-war County Series mapping
- 1:2500 scale post-war National Grid "A,B,C,D" editions
- 1:1250 scale post-war National Grid "A,B,C,D" editions
- 1:500, 1:528 and 1:1056 scale pre-war Town Plans

The source mapping for the scanning process is the original mapping published after survey and held in the Ordnance Survey archive. This mapping has been supplemented by using material obtained from other sources.

## Scanning and processing

Each of the paper maps is scanned at a resolution of 300 dots per inch (dpi). This resolution optimises file size with quality of line detail, resulting in clear images and manageable file sizes. The 1:2500 and 1:1250 scale post-war maps were scanned at a resolution of 200 dpi since these were scanned from aperture cards.

The scanned raster images have had all the information outside the neat line (boundary of the mapping) removed, and have been de-skewed as much as possible to align the maps north and south. A grid for each county has been created from Ordnance Survey material based on the original county origin. Each map (tile) is uniquely identified and the four pairs of National Grid co-ordinates that define the corners of the map sheet are provided.

## Quality

The majority of the historical mapping is in excellent condition resulting in clean line work and background. However, a number of factors affect the quality of the scanned image. For instance ingrained dust on the maps has, in a small proportion of cases, resulted in dark areas, as does colour on the paper maps.

The paper of some maps has become slightly distorted, affecting the overall geometry of the map; this is especially the case with the full sheet 1:10 560 scale County Series maps. As a result, these maps are not perfect rectangles and once de-skewed there may be some loss of data and a less than perfect join when the maps are lined up. However, this category of maps is a small proportion of the total.

## Epochs

Historical Map Data is available for different time periods, referred to as epochs. These epochs roughly equate to the first County Series survey, and subsequent revisions, and the first National Grid resurvey/overhaul and subsequent sheet revisions. Not all areas will have mapping available for each epoch as the number of revisions for each county varies. Generally, epochs 3 and 4 are only available for urban areas.

**Epoch 1: the first County Series survey; published dates 1843 to 1893**

**Epoch 2: the first County Series revision; published dates 1891 to 1912**

**Epoch 3: the second County Series revision; published dates 1904 to 1939**

**Epoch 4: the third County Series revision; published dates 1919 to 1939**

**Epoch A5: the first survey/overhaul to the National Grid; published dates from 1945**



Epoch B6: the first National Grid revision

Epoch C7: the second National Grid revision

Epoch D8: the third National Grid revision

Epoch E9: the fourth National Grid revision

## Coverage

Tiles sizes are as follows:

- 1:500 and 1:528 scale County Series Town Plans, 0.3 miles by 0.2 miles or 0.15km<sup>2</sup>
- 1:1056 scale County Series Town Plans, 0.6 miles by 0.4 miles or 0.61km<sup>2</sup>
- 1:2500 scale County Series maps (also know as 25 inch), 1.5 miles by 1 miles or 3.84km<sup>2</sup>
- \*1:10 560 scale County Series maps (also know as 6 inch), full sheets, 6 miles by 4 miles or 61.44km<sup>2</sup>
- \*1:10 560 scale County Series maps (also know as 6 inch), quarter sheets, 3 miles by 2 miles or 15.36km<sup>2</sup>
- 1:1250 scale National Grid maps, 0.5km by 0.5km
- 1:2500 scale National Grid maps, 1 by 1 sheets, 1 km by 1 km
- 1:2500 scale National Grid maps, 2 by 1 sheets, 2 km by 1 km
- 1:10 000 scale National Grid maps, 5 km by 5 km or 25 km<sup>2</sup>

\* Most first editions 1:10 560 scale County Series maps were published as full sheets. Most revised sheets were published in quarter sheets but full sheets were retained in a few counties. Also, note that some County Series sheets are parish based.

## Raster formats

Historical Map Data is supplied on CD-ROM and is available in the following formats:

- TIFF™ tiled Group 4 compressions
- TIFF banded Group 4 compression
- PCX

It may be possible to supply other formats for an additional charge.

## Media

Historical Map Data is available on CD-ROM only.

### File sizes:

File sizes will vary according to the format and compression techniques used. They will also vary from tile to tile depending on the amount of detail. A sparse rural tile will compress further than a dense urban-area tile.

*Typical files sizes for 1:2500 scale urban tiles (at 300dpi) are:*

- |                                    |               |
|------------------------------------|---------------|
| • TIFF™ tiled Group 4 compressions | 0.5 – 4.0 Mb  |
| • TIFF banded Group 4 compression  | 0.5 – 4.0 Mb  |
| • PCX                              | 4.0 – 15.0 Mb |

*Typical files sizes for 1:10 560 scale tiles (at 300dpi) are:*

- |                                    |               |
|------------------------------------|---------------|
| • TIFF™ tiled Group 4 compressions | 0.5 – 3.0 Mb  |
| • TIFF banded Group 4 compression  | 0.5 – 3.0 Mb  |
| • PCX                              | 2.0 – 12.0 Mb |

## Availability

Historical Map Data can be ordered from Landmark Government, a part of Landmark Information Group Ltd (see details below).



## What is needed to use the data?

The Historical Map Data can be loaded into a geographical information system (GIS) or most desktop mapping packages. GIS formats available include MapInfo®, ArcInfo®, ArcView®, GGP, dataMap, FastMap® and Cartology™ from Innogistic Software plc.

Historical Map Data County Series is reformatted into National Grid tiles as required. Data can then be derived in National Grid format with tiles of 1km<sup>2</sup>.

## Licencing and Copyright

County Series Historical Map Data is supplied under a joint Ordnance Survey and Landmark Information Group Ltd perpetual licence agreement, for agreed internal business use of the data on up to 50 PCs or workstations. Licences can be extended for unlimited use for an additional fee dependant on the size of the authority.

National Grid Historical Map Data is supplied under a joint Ordnance Survey and Landmark Information Group Ltd annual licence agreement, for agreed internal business use of the data on up to 50 PCs or workstations. Licences can be extended for unlimited use for an additional fee dependant on the size of the authority.

The standard licence, the fee for which is included in the price of the data, gives the right to make unlimited hard copies for internal use (subject to the terms and conditions of the licence agreement).

### Educational Use:

For local authority users a licence extension allowing the use of the data in local authority controlled educational establishments is also available for an additional fee dependant on the size of the authority.

### Internet Publication:

Under certain conditions the County Series 1:10 560 scale County Series mapping is available for publishing on the Internet. Please contact us if you would like further information and costs.

### Fair Dealing:

All Historical Map Data licences, both County Series and National Grid, are now covered by Fair Dealing. This means that extracts can be supplied to members of the public for private study and research free of charge through the libraries system. This is automatically built into all licences.

## For further information about Historical Map Data contact:

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