INDUSTRIAL DULVERTON

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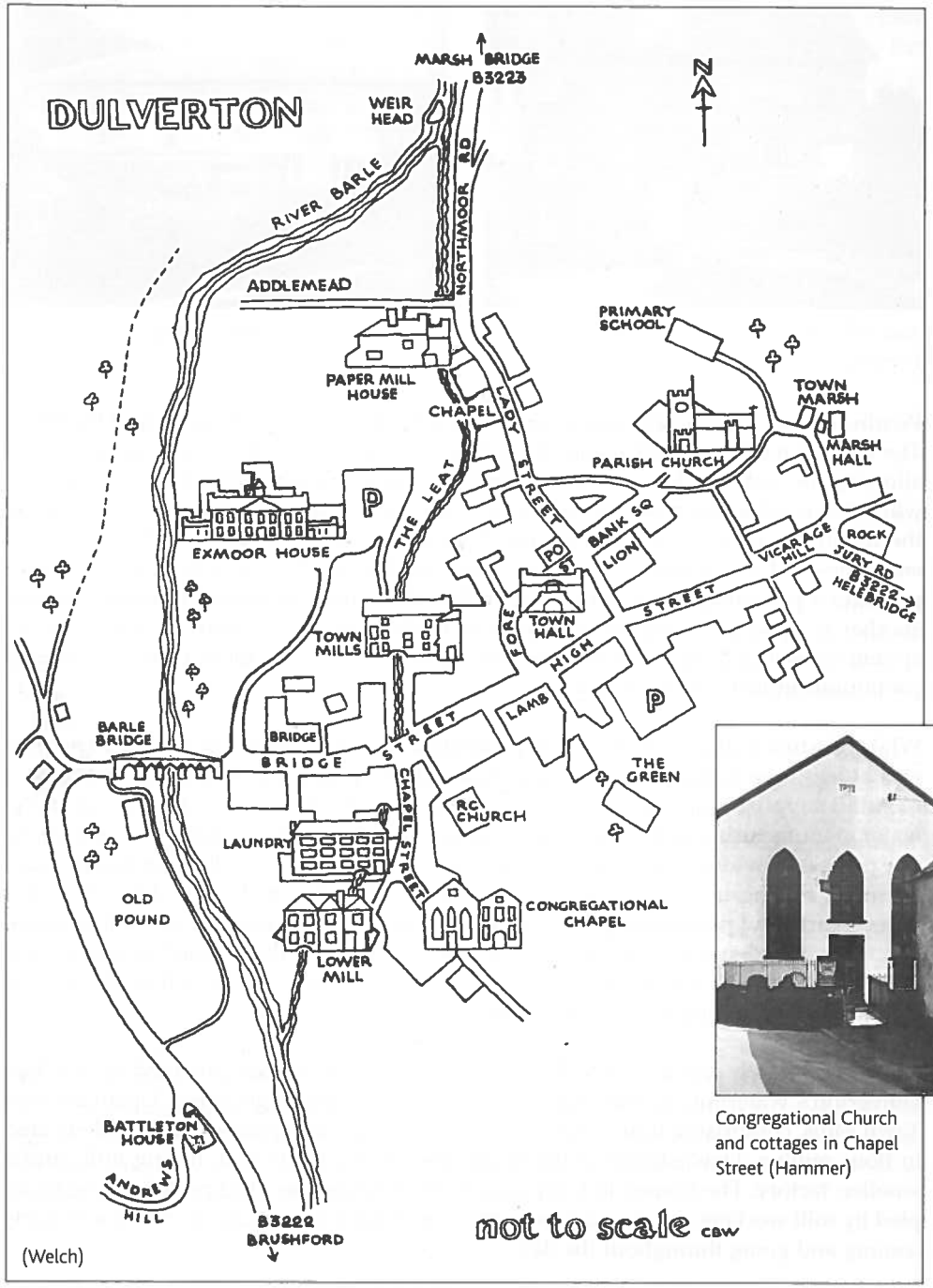
FURTHER WORK IS required to identify definitively when Dulverton's watermill landscape (weir, leat and watermill system) was originally built though most experts believe it to have been constructed in the eleventh or twelfth centuries. The Dulverton system is not listed in the Domesday Book, but there is something stunningly similar at Otterton in Devon which is listed, and this tends to support the current view of the age of the Dulverton system. The watermill landscape still visible in Dulverton gives clear indications of the town's importance as an industrial centre and has implications for our understanding of the history of the town itself.

Nowadays we look back on Dulverton's past and imagine a generally bucolic place, as it is today, perhaps with a few watermills scenically grinding corn to make artisan bread, and perhaps more fish in the leat. The reality could not have been more different. The centre of Dulverton was a dirty, smelly, noisy place with closely packed small cottages, very close to the mills where the occupants worked. In the 1830s there were up to 70 people working in the silk and crepe mill (now the laundry) alone. Cottages now housing one or two retired people would have been packed with whole families living without running water or sanitation, quite possibly with a fair amount of deprivation, exploitation and child labour.

The 1841 census shows 104 people living in 16 cottages in Chapel Street, with eight of the cottages housing a silk weaver. The leat itself, as well as carrying water to drive the mills, was an open sewer carrying domestic and industrial waste. These are very much conditions that we tend to identify with the industrial Midlands and North, resulting from the (second) Industrial Revolution that was based on coal.

As the historian Jean Gimpel has pointed out, there was an earlier, mediaeval, industrial revolution based on waterpower. In the Middle Ages waterwheels (or perhaps more properly 'hydraulic motors') were cutting edge technology, giving vast gains in productivity and output (a 'five horsepower' waterwheel did the work of five horses). Gimpel refers to 'the mediaeval genius of inventiveness' that led to the harnessing of waterpower all over Europe with watermills not only grinding corn but also mechanising countless other tasks. For example, the Domesday book records two mills in Somerset that were used to forge iron. Waterwheels aroused fear, awe and wonder amongst onlookers much as nuclear power does today.

Dulverton was part of this first industrial revolution, with the constantly flowing waters of the River Barle allowing a major investment to be made in the new technology. Water from the river was diverted by the construction of a 160 metre long weir at



Congregational Church and cottages in Chapel Street (Hammer)

Town Mills, the leat runs beyond the wall on the left (Hawtin)

Dulverton Laundry (Bonham-Carter)

Weirhead to feed a leat running along what was then the western boundary of the town. The skill in mediaeval leat engineering was to keep as near level as possible, whilst allowing the water to flow forwards to build up the maximum 'fall' or 'head' of power when it arrived at the point where it was to be used to drive machinery. A walk along the leat (particularly opposite Hanover House) reveals how carefully the mediaeval engineers laid out retaining banks to keep the leat level. The system at Dulverton provides a particularly powerful fall of 30 feet allowing a succession of mills one after another in close proximity to be worked at the bottom end of town. So well was the system constructed, that it was to remain a power source for more than 700 years of continuous industry in the town.

Whilst the first mill in Dulverton was probably a flour mill, we know that by 1330 there was at least one fulling mill. The abundance of sheep grazing on Exmoor provided a plentiful supply of the raw material for Dulverton to become established as one of the major manufacturing centres for heavy woollen blankets, along with Witney and Leeds. The process provided employment for spinners, weavers, dyers, fullers (or tuckers) and finishers. Fulling involved soaking in a number of agents including stale urine and fuller's earth and pummelling the cloth with large wooden hammers, or fulling stocks, tripped by wooden cams directly driven by the waterwheel. The finished woollens were hung out to dry in the rackfields above the town at Weir Cleeve, where there were longer hours of sunlight than in the valley.

By the eighteenth century, there were at least nine waterwheels powered by the leat. Dulverton's watermill quarter was divided in two by the High Street. Upstream was Town Mills, comprising four waterwheels each with grinding stones, mainly dedicated to flour milling. Downstream of the High Street was a blade mill, fulling mills and a woollen factory. The houses in Chapel Lane (then known as Duckpuddle) were occupied by mill workers and the narrow street would have been a chaotic scene with carts coming and going throughout the day.

The woollen trade was the mainstay of Dulverton's economy for more than 400 years, but by the start of the nineteenth century the rise of coal mills had led to its demise. But this was by no means the end for Dulverton; its existing resources were adapted to changing markets, and industry and employment continued. By 1828, the former woollen factory had become a silk and crepe mill using power looms newly invented by M. Debergue and manufactured by Sharp Roberts & Co. in Manchester. The workers still mainly lived in the mill cottages. They had their own local pub, the White Ball in Duckpuddle, run by James and Anne Reed, and their own place of worship at the Congregational Chapel built in 1831, while the gentry attended the parish church at the top of the town.

By the end of the 1860s Dulverton had again seen change. The silk trade had gone the same way as the woollen industry. The silk and crepe mill became a joinery workshop using waterpower to manufacture windows, doors and staircases for new building developments in the area. In the meantime Town Mills had been rebuilt with two breast wheels. Lower Mill concentrated mainly on milling animal feed and a fulling mill had been taken over by a blacksmith. The rackfields where woollen cloth had been dried in the sun were planted with strawberries and a tramway was laid to take water from the leat up to the fields for irrigation

In 1897 a laundry using water from the leat started in part of the joinery factory to serve the needs of the hotels and sporting estates and ultimately took over the whole building, and the premises were again the town's largest employer. The laundry continues there to this day but no longer uses water from the leat. A good deal of the original watercourse under the laundry is still visible but now is silted up. On a recent visit Dr Edgeworth of Leicester University identified an additional mill building adjacent to the laundry, as well as uncovering the original gear wheel casting patterns from the laundry waterwheel. The waterwheel itself was removed in the 1930s and although we do not know what happened to it, the casting patterns will enable us to estimate its size.

Town Mills continued milling flour until 1972. One of its waterwheels was later relocated to Bickleigh Mill where it is still turning albeit as a centrepiece for a tearoom.

Much of Dulverton's watermill landscape is still in place and still visible as a testament to Dulverton's industrial past, but it is currently not protected by legislation and is falling into disrepair. There is now a groundswell movement in the UK to value weirs and leats as important historical structures in their own right as well as to recognise that they can make important contributions to their communities via tourism, recreational use and amenity value. We hope that the Dulverton watermill landscape will be so recognised and conserved for future generations.