

The Old Forge Brewery

Ken Severs

The Old Forge Brewery is a registered private company, located within the premises of The Farriers Arms (pub and restaurant), Mersham and under the same ownership, namely Farriers Arms Kent Ltd (FAKL). This last-mentioned is itself a registered private company, incorporated on 23 April 2009 and now owned by 121 local villagers. (Unfortunately it was subsequently discovered that the same brewery name is used by a pub in Oxfordshire; however there is no connection between the two and The Farriers Arms' business is purely local). Interestingly though, there is public record of there having been a brew-house on the Farriers site in the 19th century. The dilapidated and closed-up premises of the pub were acquired on 12 June 2009, from Punch Taverns, who no longer had use for the facility.

There followed a period of intensive work by volunteer shareholders and some local craftsmen, which work involved landscaping of the gardens and the complete refurbishment of buildings, with extensions and conversions including new kitchen, The Anvil dining room and The Village Forge function room. The main complex was re-opened to the public on 28 November of the same year, with other facilities coming on stream, as they became completed.

The brewery though, was not built until 2010, with commissioning on 23 October.

The officers of FAKL are Ken Severs (non-executive chairman), Richard Bishop (managing director), David James (financial director), Mike Collins (commercial director), plus non-executive directors Cherry Knox, Robert Taylor, Michael Gallagher, Cliff Robinson and Nobby Southern, each with special responsibilities. (Marion Westacott and Gwyn Thomas served diligently as original directors but had to step down within 18 months, for personal and business reasons). The pub is managed by Michael Baker.

Specifically regarding brewing, it was always the group's intention to build a micro-brewery but realisation of that ambition had to be of second priority and await other issues: and it must be mentioned at the outset that a grant funded by EU-DEFRA was negotiated via South East England Development Association (SEEDA) and the local LEADER group (Liaison Entre Actions de Developpement de l'Economie Rurale - European Union Initiative for Rural development), through its Kent Downs and Marshes branch. The grant was awarded, effective 1 June 2010, and this date became the start time for

building of the brewery. The grant was awarded only after the required operating permits and licences had been approved by relevant authorities.

The Farriers put together a design team from within its shareholder base, the team consisting of Nigel Ambler (engineer), Richard Dixey (company director), Ed Kentish-Barnes (master brewer and brewery manager), Robert Rice (retired engineering and production co-ordinator), Frank Rothera (retired chartered electrical and mechanical project engineer) and Ken Severs (retired chartered chemical engineer and company director). Each member contributed directly and practically or as a consultant, depending on expertise and availability. Advice was received also from private brewery-operator and consultant, Andy Skene (Colchester).

The first decision was to opt for the originally-conceived 5-barrel unit (upon which size the SEEDA grant had been awarded). An available unit was quickly identified: and accordingly, purchase was made of the redundant Black Dog Brewery that was then lying inactive at a property within the National Park, near Whitby in Yorkshire, to where it had been re-located some 5 years earlier. Lack of an operating permit was the reason for it never having been re-commissioned. The Farriers brew-team dismantled the entire brewery and transported it back to Kent, using a hired 7½ ton truck. The usable parts of the equipment consisted of hot-liquor tank, mash-tun/lautering-tank, underback (Grant),

kettle/copper, fermentation vessels, heat exchanger, chilling units, pumps and a few valves, plus sundry ancillaries. All wooden, plastic and copper items were rejected along with below-specification valves.

The space allocated for the brewery was absolutely minimal, consisting as it did of a room with area approximately 20 square metres (approx 5m x 4m) and only modest headroom! Thus a very, very tight layout was adopted: flow-sheet and piping diagrams were drawn, and the electrical, water and discharge services were organised. The fabric of the plant is now stainless steel, all valves are of the hygienic butterfly type, and tank insulation is of expanded poly-styrene contained in a decorative wood-stave finish of French pine: there are no double-skin vessels. Heating is electrical - with 18 kW 3-phase power in each of the hot-liquor tank and kettle - and cooling of the 2 fermentation vessels is by a chiller feeding externally-wrapped copper coils in series with a stainless-steel, internal brewers' loop. Ventilation of the kettle is via a condenser due to the premises being listed and because of the proximity of other buildings. The floor of the room is concrete, sealed by a plasticised paint: the lower walls of the room are panelled in stainless-steel sheet to protect ancient bricks and timbers. A later addition was an in-house-designed, twin compartment cask-washer.

Local welding company AS Percival modified all the vessels to accord with piping diagrams, built support frames and, significantly, fabricated rims for all the tanks

to facilitate the ready fitting of external insulation materials. Afterwards, local instrumentation, control and fabrication company COLSAN Ltd provided pipework and instrumentation (new and used, as available) and erected the entire plant as a self-standing unit in its own workshop - all the time modifying and improving layout, as needs dictated. (The cask-washer was fabricated later). COLSAN then transported and re-erected the brewery in its allocated position at The Farriers Arms. The brewery remains self-standing and is attached to the building by only a water pipe and electrical connections.

The overall capital cost of the project has been about £17,000 plus nominally £8,000 from the government grant i.e. total cost £25,000.

The brewery was commissioned on 23 October by head brewer Richard Dixey and his team of assistants consisting of Peter Bates, Barry Dinning, Bobby Hadlow, Alan Ingham, Robert Rice and Ken Severs: consultant Andy Skene provided significant guidance, especially on commissioning day. Actual operation of the brewery is of course the key and most critical component of the entire brewing venture and consequently the brewing team is keen on and dedicated to the task; and the same team - since initial commissioning - has been brewing nominally fortnightly, depending on demand. Annual output is forecast at around 500 casks, which relatively low volume keeps the brewery at the lower Excise rate (50% of normal and thus currently equating to

just over 5 pence per pint per % alcohol e.g. 19.5p on a pint of Farriers 1606 ale). A typical brewing operation commences with about 3 hours of sterilising procedures, followed by about 8 hours of actual brewing, then another hour or two of final sterilisation and clean-up. After about 6 days of fermentation and then chilling, the brewing team sterilises casks, racks off beer from the fermentation vessel and finally sterilises that fermentation vessel. Ale is drinkable in a total of some 11 days from date of brew. Because of the lack of mechanical aids and the constricted space, between 50 and 60 man-hours are needed, per brew, including the daily checking of temperatures and liquor gravities throughout the length of the entire process. Brewing at The Farriers is a labour of love - of beer.

The flagship product is a 3.7% ABV Farriers 1606 ale, named after the construction date of the Grade II listed building, which is the pub itself. A stronger Xmas Ale at 5.2% ABV is brewed for the appropriate season and to date (January 2012) there have been Summer Gold at 4.2% ABV, Harvest Plenty at 4.2% ABV and a special-occasion stout at 4.3% ABV named Bishop's Brew, in recognition of the absolutely key role played by the managing director in firstly recognising that The Farriers was for sale and then in setting up FAKL, raising the finance and later managing the refurbishment programme. The intent of the brewery is to be fairly exclusive and thus to provide ales for only The Farriers Arms, although casks have recently been sent to beer

festivals in Woodchurch, Egham, Faversham and in Folkestone; and some 'advertising casks' have been delivered to The Life-boat Inn, in Margate. The range of brews will be varied seasonally or as demand dictates. The limit on output and distribution is predominantly that of production capacity, occasioned by the very tiny premises, the consequent lack of storage space and the limited availability of the mainly volunteer labour: however there are also minor administrative issues that would need to be addressed, were regular external sales to be considered. The logic might change in future but there is no short-term plan to increase output significantly.

In the overall project team, the engineer-

ing, design and construction expertise for the early part of the project, was almost unlimited, whereas - in the actual brewing team - beer expertise was limited to Richard Dixey's many years as a home brewer and Ken Severs' 3-day course at Brewlab (University of Sunderland) - plus of course the drinking enthusiasm of every other member! Ed Kentish-Barnes' profession is actually one of commercial brewing but his location and other commitments preclude his day-to-day involvement: nonetheless he has in the past provided and currently continues to provide significant consulting help, albeit from afar. As more experience is gained, other members of the brewing team will be able to substitute for the Head Brewer, from time to time.



Figure 1. The Farriers Arms, The Forstal, Church Road, Mersham, Kent.



Figure 2. The Old Forge Brewery is in a small room, hidden behind the wooden gate in the centre of the picture.



Figure 3. Brewery interior.



Figure 4. Brewery interior.