1. Introduction

This report presents the results of an extensive survey of the remaining structures associated with the provision of housing by industrialists and industrial companies for their workforces, in Essex. The survey has concentrated on the housing provided on or near to the industrial site built by the industrialist or company for the workers, in order to attract and retain an effective workforce.

The survey did not include:

- the houses in which industrial activity took place alongside the provision of accommodation, e.g. weavers' cottages (see The Essex Textile Industry, Crosby 2001);
- the houses associated with forms of transport to accommodate staff at their place of work, e.g. station masters, lock-keepers etc., which are covered in the surveys of individual transport routes, (see 'The Flitch Way', Pratt, 2003 and 'The Chelmer and Blackwater Navigation and Conservation Area', Kemble & Gould, 2001);
- brewers' houses as these were covered in 'Essex Breweries', Crosby, 2002 as one of the component parts of a brewery site;
- the houses associated with Courtaulds which were well documented in 'The Essex Textile Industry', Crosby, 2001, but are listed also as an appendix to this report.

An activity and its associated housing that has been included, however, is that of market gardening and specifically the houses provided by the Land Settlement Association Ltd. This is because the LSA was a significant provider of housing for workers which has had a particular impact upon the landscape of Essex, the houses were provided to attract and retain the workforce and they were of good quality but built at a reasonable cost. They, therefore, make an appropriate comparison with the other industrial housing.

The aim of the survey is to establish priorities within the industrial housing identified, to assess existing statutory designations and to formulate a coherent management strategy. Assessing the significance of each site and recommending a statutory framework for the future management of structures ensures that the site's significance is given proper consideration when change, either alteration or new development, is proposed enabling an appropriate response should significant remains become threatened.

Neither Listed Building nor Conservation Area status is intended to prevent change or rule out creativity and imagination in the alteration of the structures surveyed, but they are to be used to prevent unnecessary demolition, and unsuitable and insensitive alteration. Such status does not preserve the total internal integrity of a building - the spatial layout and associated social context and meaning/interpretation of that layout - hence the many recommendations in this report that current internal configurations should be inspected and assessed whenever the

opportunity presents itself. This survey has only been able to consider the actual existence of the structures on a particular site, their external character, features and architecture, and the historical and group significance of the structures.

The survey assessed some xx groups of houses totalling over xxx individual houses associated with xx industries throughout the County. X% of structures already have some statutory protection.

This report should not be considered as a definitive list of all housing in Essex associated with accommodating the industrial workforce. As has been stated above, certain categories have been omitted from this survey for reasons of duplication and practicality. As documentary and field research progresses, more sites and structures are bound to be discovered. This report must therefore be seen as a baseline survey based on current knowledge against which future sites and structures identified can be assessed and compared.

2. Layout of the report

The report is divided into several sections. It begins with a summary of the national context for the provision of housing for the workforce of various industries in Section 3, followed in Section 4 by a more detailed consideration of the situation in Essex itself. Section 5 contains consideration of the architectural characteristics of the houses and especially the comparisons that can be made, not only over time and between industries, but also in relation to the workforce hierarchy for which the individual units were provided.

The priorities are established in Section 6, the criteria for statutory protection are critically appraised and additional sites and structures of outstanding merit have been recommended for statutory protection. The need for more detailed recording is also considered.

An inventory is provided at the back of the report containing information on all the sites surveyed, grouped according to the associated industry and ordered (were possible) according to Essex Heritage Conservation Record Number (EHCR). Each assessment sheet includes a description of the building(s), their archaeological potential, the site's significance, current statutory protection, recommended action and future management strategy. Each site is also graded according to local, regional and national importance. The textual information is supplemented by at least one photograph, a current map and a copy of the appropriate O.S. 1st, 2nd and/or 3rd edition map.

3. National context

With the Industrial Revolution came the large-scale extraction and processing of minerals, production of consumer goods and transportation of raw materials and finished products. This move towards greater mass production required considerably more labour, however the labour was not necessarily where it was required. Mining and water-powered production were frequently based away from the existing urban

centres. When new factories were being developed in urban areas, these did not necessarily have the population base to support them. Thus, in the late 18th and 19th centuries there was an increasing demand for housing for the workforce of these new industrial centres - the mines, textile mills, ironworks, factories etc. of the extractive and manufacturing industries. There was a need to attract people to previously sparsely populated rural areas where the mines and water-powered textile mills were located and to the developing industrial urban areas.

Although some of the required new housing was built by speculative builders for rent or sale and in the 20th century by Local Authorities (e.g. London County Council built the Becontree Estate in Dagenham which housed many workers for the Ford car plant in Dagenham), the industrialists took some responsibility for this themselves. The breadth of the motivation for industrialists to do something about workers' housing varied and hence so did the quality of the houses provided. Some just built basic, cheap accommodation without basic amenities in order to meet the need in the cheapest way possible: back-to-back cottages with no gardens, shared water supply and external sanitary facilities all close to the smoking factory chimneys are well known and accurate images of the age.

However, even as early as the late 1700s/early 1800s some more enlightened employers such as the Strutts at their mill at Belper, Derbyshire, and Greg at Styal, Cheshire, provided higher standard housing plus other facilities - a school, shop and chapels at Styal. By the 1820s Ashworths, cotton spinners of Bolton, and non-conformists, 'realised the expediency of well housed, content operatives in the mills...' and provided piped water, redecoration and book shelves! Such a concept continued through the 1800s. Saltaire (founded 1850) is generally given the credit as the first industrial model village where Sir Titus Salt fulfilled his dream of an industrial community away from the heavy atmosphere of Bradford with hygienic living standards, a church, dining rooms, school room and lecture hall and steam laundry.

This now well known tradition of industrial model villages continued at the end of the 1800s. Port Sunlight, Lever Brothers' self contained model community was begun in 1888 with terraced cottages and semi-detached houses all with gardens and space around them. Cadbury's Bournville begun in 1895 offered similar living conditions as well as recreational social and educational opportunities to its employees. Then in 1901 Rowntree's model factory village at New Earswick was begun, the planners being Parker and Unwin, and it is still considered the most influential and successful of the type to be copied later. This housing development commissioned by the industrialist thus continued despite the number of Acts passed in the latter half of the 19th century to permit Local Authorities to provide housing for the working classes.

While for some the motivation was mere economics and they only provided the bare necessities, others provided more and better facilities born out of a more paternalistic approach to the workforce, wanting to ensure full control of all aspects of their workers' lives. Others had a genuine concern for the welfare of their workforce and these were amongst those that recognised that a healthy, happy, content workforce was a loyal and productive one - it was good for business as well.

In 1902 Ebenezar Howard re-published his vision in 'Garden Cities of Tomorrow' and the year after saw the start of the first Garden City at Letchworth, on which Parker and Unwin worked, followed by that at Welwyn straight after the first world war. Municipal housing had now begun to take over from the private provider, especially following the Housing & Town Planning Act 1909, which gave Local Authorities the power to build and let houses, and the succession of Acts after the war which stimulated council housing.

4. Essex context

At the start of the Industrial Revolution Essex was a rural, agricultural county with few large urban areas and no vast mineral wealth to be exploited. As its own industries developed, however, the need to provide housing to attract and retain a workforce close to the place of work did become an imperative. Although housing had been built for the workers on the rural estates, such as the cottages built by Lord Braybrook at Audley End when earlier cottages were cleared away as part of the landscaping of his estate c1764, the first non-agricultural, industrial housing in the county was that built by Richard Rigby at Mistley. This planned industrial, and later spa, village was begun in the early 18th century by Richard Rigby (1690 – 1730). As well as renovating existing properties he built new houses and community facilities such as the Thorne Inn. As industry expanded, population increased and the need for more houses became evident. Thus in 1760s Richard Rigby's son (also Richard, 1722 – 1788) built a further 12 cottages. (EHCR No xxxx)

It is then well into the 19th century, when the industrialisation of the country was firmly established, before any further housing is built for employees in Essex. This then continued for about 100 years into the 20th century, the local Water Companies still providing housing for staff into the 1950s.

Until the 1870s there were just occasional developments including those by Gibson the brewer in Abbey Lane, Saffron Walden (EHCR No xxxxx) in the 1840s and the first of the developments associated with brick making, that at Thornwood, Epping (EHCR No xxxxx) in mid century. This early period of development also included the establishment in 1864 of the Gas Works in White Colne with its staff house (EHCR No xxxxx) and the construction of the terrace of three-storey tenements in Roydon whose purpose in uncertain (EHCR No xxxxx).

Although not built by an industrialist for his workforce, the mid to late 19th century also saw the construction of tenements and dwellings for craftsmen and artisans. Two examples in Saffron Walden are Alpha Place, a development of 16 three-storey tenements built in 1850 as two parallel terraces of eight (Figure 1) and Artisans Dwellings (at the rear of Fairycroft Road), a development of 16 two-storey houses built in 1882 again as two parallel terraces (Figure 2). According to the census returns of 1861 in respect of Alpha Place and 1891 in respect of Artisans Dwellings, these were occupied by various craftsmen such as carpenters, painters, tailors, boot & shoemakers, coach builders, domestic staff and a brewer's labourer. Artisans Dwellings were built by Dix, Green & Co., cement makers of West Road, Saffron Walden, but as evidenced not for their own workers, but more probably as a demonstration of the use of their product as a building material.

The 1870s seem to be the time when the main phase of building cottages and houses for the employees of the various developing industries of Essex began.

Robert Warner moved the family business to Walton-on-the-Naze, building the Crescent Foundry there in 1871/2. The company built its first houses for employees, Broomfield Cottages, in the early 1870s. In 1875 Crescent Hall was built at the end of this first terrace of houses as a dining hall and an education centre in the evenings. More houses were built during the rest of the century in Saville Street and First Avenue. (EHCR Nos xxxx)

The Courtaulds, a Huguenot family, settled in Spitalsfield, East London, in the late 1680s. George (1761 - 1823) became involved in the silk industry in Essex in 1799, but it was his son, Samuel (1793 - 1881) who founded the family business in Bocking and Braintree in the second decade of the 19th century. By the middle of the century Samuel Courtauld & Co. had developed its three main operational bases at Bocking, Braintree and Halstead and the business flourished there and elsewhere well into the 20th century. Despite the changes in the silk industry towards the end of the 19th century Courtaulds became an international company in the 20th century as it diversified into the production of artificial fibres and continued production of rayon in Essex until the 1980s. In common with many successful Victorian business families, particularly those from non-conformist backgrounds, they were benefactors towards their workforce and the public at large, providing churches, public buildings and parks, schools, cottage hospitals and much more.

Although there was a pattern of the development of model industrial communities, especially amongst textile companies of the north such as Saltaire, Courtaulds, like Reuben Hunt at the same time, preferred to develop housing and associated facilities within the existing settlements in which the works were situated. This began in 1872 with the construction of the five pairs of semi-detached cottages in Church Street. Bocking (EHCR No 28006). In the same year Factory Terrace in Halstead was built; this consisted of one terrace of six and another of ten three-storey industrial tenements (EHCR No 26119). Also in Halstead in 1883 Courtaulds built The Causeway, a group of staff houses adjacent to the mill site consisting of a pair of houses and a terrace of ten all two-storey cottages (EHCR Nos. 26111-13). At one end was a dining room for employees. It was some 40 years before Courtaulds constructed more company houses, all of which were in Halstead. 55 houses were built in total between the early 1920s and 1935. The first were five pairs of semidetached houses in Vicarage Meadow (EHCR No 15894) adjacent to Factory Terrace and hence opposite the mill complex. The remainder were detached, semidetached and terraced houses on or around Hedingham Road and Colchester Road (EHCR Nos 15839 - 42 & 15890). All these were built in what became known as 'Courtauld Tudor' style, an Arts & Crafts style in a Garden Suburb setting. The Homes of Rest in Halstead were another contribution by the company to the workforce and the community at large.

Robert Hunt settled in Earls Colne in 1825 working as a millwright. His business developed such that by 1851 he was making agricultural implements and exhibiting them at the Great Exhibition. By the late 1860s major re-development of the Atlas Works site was taking place under the management of Rueben Hunt, one of Robert's

sons, and the business continued there until the 1980s.

Attracting and retaining a workforce which increased from single figures in 1850 to 20 in 1860, 49 in 1870 and 127 in 1880 became a major issue. The provision of workers' housing was a solution and began in 1872 with the building of a terrace of 12 cottages – Hibernia Cottages (EHCR No 28723) - opposite the works in Foundry Lane, followed by a further ten in 1876 – Belle Vue Cottages (EHCR No 28724). The works further expanded in the 1880s and the workforce rose to 200 by 1890 and over 300 by 1905. More house building took place during this period both adjacent to the works, elsewhere in Earls Colne and also in Great Tey. The period 1905 - 1912 saw the development of semi-detached villas for management staff, the design and layout of which was influenced by the Garden City movement. Like Courtaulds, Hunt provided other community facilities in the village including a village hall and bungalows for retired workers.

The second half of the 19th century saw Mistley emerge as a major malting centre. Seven multi-storey malthouses were built for the firm of Free, Rodwell & Co. The company also created a purpose built workers' settlement at New Mistley to the east of Mistley Thorn from at the latest the early 1870s which, as well as terraced houses (EHCR Nos. xxxxx), consisted of a school, inn and Methodist Chapel. Robert Free's own house, The Elms, had been built before 1859 and stood prominently overlooking the guay, the malthouses and the employees' route to work.

In the 1870s there was also the erection of houses in Rochford for the employees of Carey & Birch Steam Plough Works (EHCR No xxxxx).

During the period from the 1880s through the turn of the century to early 1900s many smaller employers, principally brickmakers, developed houses for their workers adjacent to their works and in the case of the brickmakers probably as an advertisement for their own products. It was during this period that another engineering company, that of Thomas Hollick, built two terraces of houses in South Fambridge (EHCR No xxxxx).

One development from the late 19th century which no longer exists was that at Kynocktown associated with the explosives industry. Kynochtown was developed from 1896, on the site of what is now Shellhaven, as a self-contained community for the workers at the explosives factory of Kynoch Limited. As well as the factory for the manufacture of nitro explosives, cordite, smokeless sporting powder, black gunpowder etc., the settlement consisted of stores, schools, an Institute, post and telegraph offices, and an unknown quantity of housing. This model village has now been lost under the development of the Shellhaven oil complex.

The turn of the century witnessed the food and drink industries having to provide housing with Ridleys the brewers of Hartford End doing so in the late 19th century (EHCR No xxxxx) and then Wilkin & Sons Ltd, jam makers, beginning major development in Tiptree from the early 20th century (EHCR No xxxxx).

The next major period of development comes during the inter-war period with a number of major and historically significant developments. Rippers Ltd., joinery manufacturers, established a very extensive joinery works adjacent to the Colne

Valley & Halstead Railway at Sible & Castle Hedingham Station. Between 1924 and 1928 they built 14 wooden bungalows (now demolished) and 94 semi-detached houses to the north and south of the works (EHCR No xxxxx).

The Land Settlement Association Ltd. was founded in 1934 with the aim of providing work on small holdings for unemployed industrial workers / miners principally from northern England. Two LSA estates were established in Essex - the Foxash Estate in Lawford (EHCR No xxxxx) and one around Great and Little Yeldham and Tilbury Juxta Clare (EHCR No xxxxx). These estates consisted of plots of land of varying sizes with house, out-buildings, glasshouses, piggeries and poultry huts as appropriate. There was also a central administrative and storage area. Inevitably the houses were scattered singly around the estates. These were taken over by the Ministry of Agriculture in the post war period and then sold off in the late 1950s.

The two developments of major international significance in Essex were begun during this inter-war period. Francis H. Crittall in his autobiography recalled 'a recent tour...of several large towns in Yorkshire, where [he] was appalled with a series of sordid pictures of entire streets built back-to-back, the front doors abutting on the cobbled pavements'. His views were commonplace in the early 20th century amongst enlightened manufacturers and thus he was aware that 'many men dreamed this dream...' of a garden city in the country, when he began to consider solutions to the problem the firm had of housing its workforce, their most important asset. He saw it as good business sense not just philanthropy to pay careful attention to the welfare of his employees.

The vast increase in the work of post-war re-construction for the business required a similar increase in the workforce in an area where rises in population were slow. In 1924 1100 people were employed by Crittalls at Braintree, 400 at Witham and over 100 at Heybridge. Workers had to be attracted from other parts of the country and, hence, when the jobs at the new Silver End factory were created they were advertised all over the country including the depressed Midlands and North and Wales. This brought many semi-skilled workers to Braintree and Witham who needed accommodation in an area of severely limited options. Although in both towns some Council houses were built, they did not meet the demands of Crittall's workforce. Housing, therefore, became of immediate concern as the company's existence depended upon having a growing supply of labour which needed accommodation.

This challenge appealed to Francis who as a young adult had wanted to be a builder and here at last he saw a golden opportunity to build on a large scale. He had in the immediate post-war years instigated the building of an estate of 65 houses, designed by Walter F. Crittall and C.H.B.Quennell. The initial pair built in 1918 were at 156 & 158 Cressing Road, Braintree and when complete all 65 houses formed the Clockhouse Way estate and these were the first flat-roofed houses in the country (EHCR Nos. xxxxx).

Francis did consider building superior housing in and around Braintree in proximity to the Manor Works in Braintree, including a Clockhouse Way extension, but wished to avoid crowding small dwellings onto a limited plot which would only offer small gardens. What Francis wanted to achieve was 'a pleasant village of a new order,

planted amid fields and trees and streams; ... its quiet thoroughfares, its fine open spaces, its modern dwellings with ample gardens, its playing fields, recreations and amusements ... a contented community of Crittall families enjoying the amenities of town life in a lovely rural setting'.

220 acres of farm land at Silver End, mid-way between Braintree and Witham, were purchased for £7,500 in 1925 which was more than enough to provide an average of six houses per acre so they all could have gardens and plenty of amenity space. The Silver End Development Co. was set up by Crittalls in December 1925 to co-ordinate the whole development at an estimated cost of £600,000. The early months of 1926 saw the building of the factory while plans for the houses were finalised. Crittall wanted every house to have hot and cold water in both bathroom and scullery, the hot water coming from a properly equipped cooking and heating stove, gas or electric light, proper sanitation and gardens front and back. The houses were to be developed at the rate of 100 per year for five years and were to be of a variety of types to suit the finances and other requirements of the families.

Thus, there were to be a number of non-parlour type houses having three bedrooms and a bathroom upstairs, and a lounge-living room and scullery below; the parlour type were to have an extra living room, while both sorts were to have small outer barns. Then for the higher salaried staff larger houses were planned, containing 4 and 5 bedrooms and 2 and 3 reception rooms. Rents were set between 10/6d [52p] and 19/9d [99p] per week with an option to purchase the house in 20 years. The development rate allowed for just less than 500 houses to be built. On 17 April 1926 the foundation stone of the first house 15 Temple Lane was laid and by 5 July when the factory began working several houses were near completion. By the end of 1926 50 houses were occupied and the whole village was completed by 1932.

The village was completed by a number of community facilities including a village hall with a library, theatre-cum-cinema seating 400, restaurant, lecture room and various other games and social rooms; hotel; Departmental Store; and two churches. Playing fields for football and cricket, a bowling green and tennis courts were provided and other open spaces including the memorial gardens and their once thatched tea-rooms.

The second development of significance is that at East Tilbury. Thomas Bata had founded a Czech shoe making firm in 1900 and having expanded to England decided to build a company village adjacent to its factory at East Tilbury. The design was based on previous such estates in Czechoslovakia, including the Czech factory town of Zlin, and other European countries. The factory is of a steel-frame and concrete daylight construction and towers above the houses built for the workers. Here the majority of houses are in the International Modern style, but not as well kept as Silver End, in fact it appears that some have been demolished. The village also had an Hotel (now flats), a farm (now derelict land), primary school, playing fields, shops and a village hall.

Finally during the inter-war period as the public water supply industry developed to meet the needs of both the rural communities, whose supply was still primitive, and the growing urban areas, it was found that as the waterworks were in remoter locations staff housing was needed. The Southend Waterworks Langford site was

the first to be developed with housing in the 1920s (EHCR No xxxxx). During the 1930s the waterworks at Tiptree (EHCR No xxxxx), Langham (EHCR No xxxxx) and Layer-de-la-Haye (EHCR No xxxxx) were all established with their own staff houses. In the post-war period Langford had additional housing constructed, while the West Hanningfield scheme of the 1950s also included staff housing.

In analysing the development of industrial hosing in Essex as outlined above, there seem to be four different models of development which could be proposed:

- 1. A few houses built around an isolated industrial site, e.g. many of the brickworks, Ridley's Brewery and the various waterworks sites.
- 2. Houses built in an existing settlement, e.g. some brickworks, Warners, Wilkins and Rippers.
- 3. Developments of housing and community facilities with major impact upon an existing settlement, e.g. Courtauld and Hunt.
- 4. The planned industrial community, i.e. New Mistley, Silver End, East Tilbury and Parkeston

5. Architecture

There is a wide variety in the architectural styles used in the housing identified for this report, ranging from the ubiquitous simple red-brick Victorian terrace to the International Modern Movement style used at Silver End and East Tilbury. This variety is a result of a number of factors including the status of the company building the houses; other purposes for which they may have been built (for example as a demonstration of the company's product); the status of the staff for whom they were built; and the architectural styles of the age, especially considering that this report covers a period of over 200 years in total.

The very earliest development is that at Misley Thorn built during the 18th century and which, therefore, reflects the Georgian style of architecture (ECHR No xxxxx). The housing associated the brickworks was built from the mid 19th century through to the early 20th century and hence reflects the red-brick, slate roofed Victorian style of terraces and semi-detached houses. Some of these were plain and simple in design while others had decorative features including decorative brick and tile work (e.g. William Clover's terrace at Hatfield Peverel, EHCR No. xxxxx) and were, no doubt, used as an advertisement for the company's product. Other industries which built houses in the second half of the 19th century adopted a similar style, e.g. the engineering works of Carey & Birch in Rochford (EHCR No xxxxx), Hollick at South Fambridge (EHCR No xxxxx) and Warner at Walton-on-the Naze (EHCR No xxxxx), plus the food and drink industries of Wilkin in Tiptree (EHCR No xxxxx), Free at New Mistley (EHCR No xxxxx) and Ridley at Hartford End (EHCR No xxxxx).

There are also examples of tenements being built, for example the two terraces of three-storey tenements at Alpha Place in Saffron Walden (EHCR No xxxxx) built for

local artisans, the terrace in Roydon (EHCR No xxxxx) and that built by Courtauld in Halstead at Factory Terrace (EHCR No 26119).

In fact Courtaulds is an example of a company which did not just develop housing within one limited period of time and hence the architectural style used changed over time. They began with Victorian semi-detached cottages at Bocking (EHCR No 28006) and Factory Terrace in Halstead, developing through the Queen Anne style for The Causeway in Halstead (EHCR No 26111 - 26113) to what became known as the 'Courtauld Tudor' style of the inter-war period for the developments in Halstead (EHCR Nos 15839 – 42, 15890 & 15894).

Reuben Hunt, the Earls Colne engineer is a good example of this multi-period development. He began with typical, but decorative, red-brick and slate roofed terraced cottages in the 1870s – Hibernia Cottages of 1872 (EHCR No 28723) and Belle Vue Cottages of 1876 (EHCR No 28724). As he progressed into the early 20th century the terraces became shorter and more substantial and semi-detached villas anticipating a more Edwardian style were introduced. Finally in the first decade or so of the 20th century he used a more Garden City style of semi-detached housing set within large front and rear gardens.

This inter-war period also saw Rippers the joinery company build over 100 houses in Sible Hedingham, although these are unremarkable semi-detached houses. The houses built by the Land Settlement Association on their two Essex estates are again unremarkable reflecting functionality and economy. However, this period also saw the establishment of the two most significant industrial housing developments in Essex, those at Silver End and East Tilbury. Crittall had experimented with a small estate of International Modern Movement style, flat-roofed, concrete houses in Braintree in the immediate post-war period (EHCR No xxxxx) and continued to use this style at Silver End. Although this model village was infamous at the time and is famous today for that style of housing, Silver End is, in fact, predominantly (66%) neo-Georgian pitched roofed houses in terraces, flats, semi-detached and detached houses. Bata's East Tilbury, on the other hand, shows its European roots being predominantly International Modern Movement style housing with pitched roofed housing only being introduced after the second World War.

While the water companies also adopted the International Modern Movement style of architecture for their water treatment works, especially Langham, Layer-de-la-Haye and Tiptree, the associated housing is a more restrained style similar to that used by Hunt and Courtauld at this time. However, a certain house-style was evident here.

The use of the various types of houses from terraced cottages through semidetached villas to substantial detached houses is not just a function of changing tastes over time. It also reflects the different status of the workers for whom these houses were built. This is most clearly shown at Silver End where the four and five bed-roomed detached houses were built for the higher-salaried staff and Francis Crittall's own detached house - The Manors – was on a site presiding over the village centre. This may be viewed as paternalism similar to that of many 19th century philanthropic industrialists, but Crittall did say in his autobiography that he wished to avoid becoming 'that awful pest - the busybody employer who suffocates with charity and kills with kindness'.

6. Priorities

The priorities generally are dealt with as one complete set of sites, although the four models proposed above are reflected in the arguments being made for the relative priorities of the sites.

Many of the industrial housing developments identified for and recorded in this survey, although associated with particular extractive and manufacturing industrial sites, were initially isolated, small and typical of the terraces of the Victorian era. In a number of cases the associated industry has long since ceased operations and those sites have been redeveloped leaving the housing now within expanded urban areas, divorced from its original associations and now often indistinguishable from other adjacent housing. As the houses have transferred into private owner occupation, alterations and modernisation have been undertaken affecting original materials and external features and also the internal character as well, although this has as yet to be conformed. Most of the sites are thus deemed to be of just local significance, are not currently statutorily protected and do not warrant such protection.

Sites of local significance and low priority

| EHCR NO. | SITE NAME | CURRENT STATUS | RECOMMENDED ACTION |
|----------|---|--|-------------------------|
| | Kavanaghs Road & Kavanaghs Terrace, Brentwood | None | None |
| | 56-66 South Primrose Hill, Chelmsford | None | None |
| | 1-32 Hill Cottages, Great Bentley | None | None |
| | 88-114 New Road, Mill- head Cottages & Millhead Villas, Common Road Great Wakering | None | None |
| | 1-10 Brickfield Cottages, Pooles Lane, Hullbridge | None | None |
| | Quay Lane, Kirby-le-Soken | None | None |
| | 127-165 Ashingdon Road, Rochford | None | None |
| | Cherry Orchard Lane, Rochford | None | None |
| | Mount Road, Theydon Mount | None | None |
| | 75-89 Nevendon Road, Wickford | None | None |
| | Various addresses, Great Tey (Reuben Hunt) | Those within the village of Great Tey are within the Conservation Area | Maintain current status |

| 101-119 Stambridge Road, | None | None |
|------------------------------|-------------------|------------------|
| Rochford | | |
| 21-32 St Thomas's Road, | None | None |
| South Fambridge | | |
| 88-112 Hall Lane, 75-103 | None | None |
| Saville Street and 26-38, 9- | | |
| 13 & 19-35 First Avenue, | | |
| Walton-on-the Naze | | |
| Waterworks Drive, Cloes | None | None |
| Lane, Clacton | | |
| Gas works site, Colneford | Within the | Maintain current |
| Hill, White Colne | Conservation Area | status |

However, even examples of the commonplace should be afforded protection as a reflection of what was an important period of development – the provision by industrialists of housing to attract and retain a workforce in 19th century Essex. A representative sample, therefore, is recommended for statutory protection and those chosen have additional factors which indicate greater significance.

Sites of local significance with additional factors

| EHCR NO. | SITE NAME | CURRENT STATUS | RECOMMENDED ACTION |
|----------|--|-------------------|---|
| | 1-12 & 14 Wethersfield Road, Castle Hedingham | None | Consider Conservation Area status. Possible link to remains of brickworks |
| | 87-93 Nunnery Street, Castle Hedingham | None | None |
| | Brickfield Cottages, High Road, Thornwood, Epping | None | List Grade II or Conservation Area due to early date and surviving out- buildings |
| | The Terrace, Hatfield Peverel | None | List Grade II due to decorative work showing product of the associated industry |
| | Church Lane, Marks Tey | None | Houses survive in a group with the brickworks which are still operational, are decorative and should be Listed or included in the Conservation Area |

| | 1-4 Mill Lane and 'Sandhills' & Hillside', Chelmsford Road, Hartford End | None | Houses in Mill Lane should be protected along with the now redundant brewery buildings |
|-------------------------------|--|--|--|
| | 4-8 Abbey Lane, Saffron Walden | Listed Grade II | Maintain current status |
| 28006 | 121-139 Church Street, Bocking | Listed Grade II and Conservation Area | Maintain current status |
| 15839-42, 15890 & 15894 | Various numbers in Box Mill Lane, Hedingham Road, Mill Chase, Colchester Road, Mallow Field & Vicarage Meadow, Halstead | Some lie within the Conservation Area | Extend Conservation Area to include all 'Courtauld Tudor' style company housing |
| | 154-188 Swan Street, 1-24 Brook Terrace, 1&2 Crosspath, 1-24 Yeldham Road and 1-31 & 35-53 (odds) Station Road, Sible Hedingham | None | Extend Conservation Area to include Rippers' extensive housing development of inter-war period |

In some cases the associated industrial sites are still operational, particularly in the public water supply industry, but also Wilkins the jam makers of Tiptree continue in production. There is, therefore, group value in this surviving association with the industry to which the houses relate. Some of the waterworks sites have been recommended for statutory protection and the associated houses should be included within this protection - for example Layer-de-la-Haye and Tiptree sites were both recommended for Listing Grade II and Langham Grade II* for the principle buildings and Conservation Area status for other structures including the houses (see Crosby 1999).

Sites of local/regional significance with the original industry still being operational

| EHCR NO. | SITE NAME | CURRENT STATUS | RECOMMENDED ACTION |
|----------|--|-------------------|---|
| | 1-18 Cherry Chase, Mulberry Walk, 5-23 Chapel Hill, 1-4 Factory Hill, Tiptree | None | Extend Conservation Area to include all sites |
| | 1-18 Middlemead, West Hanningfield | None | Conservation Area status |
| | 1-16 Ulting Lane, Langford | None | Conservation Area status |

| 'Kilmory', 1-6 High Lift Villas Road and 1-3 Low Lift Cottages, Langham | None | Conservation Area status (or higher dependent on status of waterworks) |
|---|------|--|
| Essex House and 1-13 Waterworks Close, Layer- de-la-Haye | None | Conservation Area status (or higher dependent on status of waterworks) |
| Waterworks Cottages, Grange Road, Tiptree | None | Conservation Area status (or higher dependent on status of waterworks) |

Five groups of sites are deemed of being of at least Regional significance, in three cases due to the associated community facilities provided by the same company and the group value of these various sites. The two Courtauld sites in Halstead, Factory Terrace (EHCR No 26119) and The Causeway (EHCR No 26111 & 26112) were thus identified in the report on the Textile Industry (Crosby 2001, p22) due to their association with Courtaulds, group value and architectural merit. Both sites are already Listed Grade II and within the Conservation Area and this status should be maintained. Hunt's housing in Earls Colne has significance due to its association with surviving listed buildings at the former Atlas Works, group value and, in some cases, architectural merit. Some are already Listed and most are within the Conservation Area, so the only recommendation is to ensure all are included within the Conservation Area. Free's houses at what was New Mistley also have group value within themselves and with the associated malthouses (some of which are Listed) and the community facilities. All are already within the Conservation Area and this status should be maintained.

The housing and other structures on the two Land Settlement Association estates in Essex are an unusual example of planned settlements within the Region and Nationally. The estates themselves are generally intact as originally laid out, although some of the houses have been altered and extended since transferring into private ownership. They are deemed to be of at least Regional significance but this may need to be re-assessed when the condition of the other estates in England has been assessed.

The block of three-storey tenements in Roydon are of at least Regional significance as one of a few examples of such housing in the Region and as such are already Listed Grade II. This status should be maintained.

Sites of Regional significance

| EHCR NO. | SITE NAME | CURRENT STATUS | RECOMMENDED ACTION |
|----------|----------------------------|---------------------|--------------------|
| 26119 | Factory Terrace, Halstead | Listed Grade II and | Maintain current |
| | | Conservation Area | status |
| 26111/2 | The Causeway, Halstead | Listed Grade II and | Maintain current |
| | | Conservation Area | status |
| (28723 & | Various addresses, Earls | Some Listed Grade | Ensure all houses |
| 28724) | Colne | II and most in | are within the |
| | | Conservation Area | Conservation Area |
| | Land Settlement | ? | ? |
| | Association Estates | | |
| | Various addresses, Mistley | Conservation Area | Maintain current |
| | | (& Listed Grade ?) | status |
| | 27-37 High Street, Roydon | Listed Grade II | Maintain current |
| | | | status |

Just one site has been identified as being of National significance and that is the planned 18th century, Georgian town of Mistley Thorn. Here there is housing built in two periods from the early 18th century with associated community facilities from both periods. The settlement was built initially to house the workers of the port and its associated industries. *It is all currently a Conservation Area (?) and ? houses are Listed ? (Some protection is recommended)*

Sites of National significance

| EHCR NO. | SITE NAME | CURRENT STATUS | RECOMMENDED ACTION |
|----------|---|-------------------|--------------------|
| | High Street and 1-12 The Green, Mistley | ? | ? |

Finally three settlements are deemed to be of international significance due to their being planned settlements, two of which were self contained and self sufficient estates with all the necessary community facilities and all of which are of international architectural merit. These three settlements are the Clockhouse Way estate in Braintree, the experimental estate of flat-roofed, concrete and steel houses built by Crittalls immediately after World War I; their subsequent planned company village at Silver End; and the planned company village at East Tilbury for Batas. Two houses on the Clockhouse Way estate are Listed Grade II and this status should be maintained. Silver End is a Conservation Area with a number of houses Listed and again this status should be maintained. East Tilbury is also a Conservation Area and this should be maintained and some houses considered for Listing as a sample of the range of the original houses.

Sites of International significance

| EHCR NO. | SITE NAME | CURRENT STATUS | RECOMMENDED ACTION |
|------------------|---|--|-------------------------|
| 28016 & 28017 | 1-41 Clockhouse Way and 156-194 Cressing Road, | 156 & 158 Cressing Road are | Maintain current status |
| | Braintree Various addresses in Silver End | Listed Grade II Whole original village is a Conservation Area and some houses are Listed | Maintain current status |
| | Various addresses in East Tilbury | Whole village is a Conservation Area | Maintain current status |

7. Adaptive re-use and recording

(Need a summary statement of the percentage that have some protection already and how many are being recommended for initial / further protection.)

As already stated this survey has only been able to confirm the existence of the various sites of industrial housing in Essex in accordance with current knowledge and assess the external integrity compared with what were probably the original materials and features. No internal inspection of any of the houses has been undertaken as part of this survey and hence, in respect of all sites, internal inspection is recommended followed by recording and a review of statutory protection as appropriate. By undertaking these internal inspections it will be possible to assess what the original internal spatial configuration was, what were the original uses of the various spaces and what of this original spatial configuration survives. This will provide evidence of the social history of the provision and use of the housing.

All the structures considered were built as housing and all remain in that use. Ownership will have changed and many of the houses have been sold by the companies who originally built them, either after a period of time to their employees or at some future date when the company needed to gain capital through sale or as they ceased business. As houses have entered private ownership the inevitable alterations and modernisations have taken place — replacement windows and doors, re-roofing, porches and more substantial extensions etc. have been observed and recorded in the inventory. These have affected both the external materials and features and also no doubt the internal spatial configuration and use of spaces.

8. Conclusions

Despite the County not having had the extent of heavy extractive and manufacturing industries as areas of the North and Midlands, the Welsh valleys etc., its original pattern of scattered rural settlements and eventual expanding urban centres did

require its industrial concerns to attract and retain a workforce that was not necessarily readily on hand. There is thus a long history of providing housing for the workforce by the full range of industrial concerns from the local small-scale brickmaker to the internationally trading companies such as Crittalls and Batas. These housing developments range from a few cottages built adjacent to the otherwise isolated works, through the building of houses and also, in some cases, community facilities within an existing settlement, to the development of whole new communities of housing and associated communal facilities. This provision of housing dates from as early as the 18th century in Mistley Thorn and ended in the immediate post-war era when water companies developing waterworks in rural areas still found the need to build for their staff.

Considering the length of period over which such development was taking place, the requirements of different companies and their staff a large variety of types of houses has been built and in a large variety of architectural styles. There are thus terraces of varying lengths, three-storey tenements, semi-detached and detached houses. Architectural styles vary from Georgian terraces, through red-brick Victorian terraces and semi-detached villas to neo-Georgian and Modernist housing. Although there has been the loss of some of the industrial housing built, especially small developments adjacent to brickworks, examples of this range of ages, types and styles of housing survive.

This housing reflected not just a basic provision of shelter but rather a considerable improvement in the standard of housing and facilities for the working class during the second half of the 19th century onwards. As well as somewhere to work and live, many of the occupying workers were able to enjoy a wide range of leisure facilities provided by their employers within the existing settlements as well as the model villages.

While much of the housing is typical of the era, commonplace and, therefore, only of local significance, there are developments which are of national and even international importance and this is reflected in the statutory already afforded or being recommended to the various sites.

9. Recommended future policy

Having quantified the remains, Essex County Council together with its District Council colleagues will seek sympathetic schemes of reuse for those buildings and structures associated with Industrial Housing that are recognised as being of local, regional, national and/or international significance. Proposals that fail to appreciate the special character of a building or that result in the loss of a site's historic integrity will not normally be accepted. In order to understand the original purpose and evolution of the surviving resource, records will be secured in advance of development and deposited for future research in the Essex Records Office. Demolition will only be considered in circumstances where the site is deemed to be of insufficient importance to merit retention.

Tony Crosby and Adam Garwood - 2006

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