

# *A Township Complete in Itself: The London County Council Architects and the Building of Becontree, 1919–34*

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## ABSTRACT

Between the first and second world wars, the London County Council (LCC) provided 82,000 working-class cottages and flats, of which 25,000 were built on the vast Becontree estate in the east of the metropolis. With these immense housing operations in hand, the LCC drastically increased its technical and administrative staff, becoming one of the largest municipal housing authorities in the world. This article sheds light on the organisation and functioning of the LCC Architect's Department through analysis of the Becontree estate. Despite the extensive literature on municipal housing in the inter-war years, the council's own architects during this period have remained almost entirely unknown. Contrary to the widespread preconception of the 'official architect', the LCC Architect's Department evaluated and revised its organisational structure and managed to maintain a remarkable variety and complexity in its urbanistic approach — despite the overarching principles of standardisation and simplification, and despite its limited influence in relation to other departments within the LCC. Analysis of archival sources reveals the identity of these official architects and questions whether the organisational structure of the LCC Architect's Department as a bureaucracy was reflected in the character of its housing estates.

Shortly after the first world war, the London County Council (LCC) endeavoured to build an entire new township on the eastern periphery of London. Covering an area of nearly 3,000 acres and designed for a population of 120,000 inhabitants, Becontree estate became one of the most striking results of the 'homes fit for heroes' programme and an example of the continued rise of council housing during the inter-war period.<sup>1</sup> Already during its construction, Becontree was considered as one of the vast new 'ultra-suburbs' of London.<sup>2</sup> In 1934, the year of its completion, a detailed social survey by Terence Young was published that contributed to the controversial image of Becontree as a monotonous housing estate of only one class of people.<sup>3</sup> Later studies by Alan Jackson, Mark Swenarton, Ken Young and Patricia Garside and Dennis Hardy examined the housing estate as an example of broader tendencies during the inter-war period, while Andrzej Olechnowicz looked at the occupation of Becontree and specifically why it was regarded as a 'social failure'.<sup>4</sup>

Notwithstanding these various studies, the planning process for Becontree and the organisational structure of the LCC Architect's Department have escaped detailed

attention. Although the LCC had gained some experience with the development of cottage estates before the war, all four of these — Totterdown Fields (1903–11), as well as the first sections of Norbury (1906–10), White Hart Lane (1904–15) and Old Oak (1912–13) — amounted to only 3,000 houses on an area of 280 acres, which was a fraction of the projected 24,000 houses (ultimately 25,000 were built) on 3,000 acres of the Becontree estate. This project introduced a completely new dimension of council housing to the LCC and its staff. While the estate was exceptional by its sheer size, the organisational challenges affected the entire LCC housing programme of the inter-war period. Through analysis of the Becontree estate, this article sheds light on the organisation and functioning of the LCC Architect's Department and brings to light the architects and other staff members who were crucial to the success of the council's housing operations.

Between 1919 and 1939, the established permanent staff of technical and administrative assistants in the Architect's Department increased fourfold, from about 200 to nearly 900. This figure did not include the varying but substantial proportion of unestablished and temporary assistants, who in July 1919 accounted for more than half of the total staff.<sup>5</sup> The Architect's Department was concerned not only with housing, but also with the administration of the building acts, the naming of streets, and the provision and maintenance of schools, fire stations, mental hospitals, tramway buildings and various other public buildings under the jurisdiction of the LCC. Even though the housing section made up less than 10 per cent of the entire staff, those other responsibilities were often linked in some way or other to the development of new housing estates.

#### THE RISE OF MUNICIPAL ARCHITECTURE

Founded in 1889, the LCC was the first directly elected municipal authority for the London area. Unlike its predecessor, the Metropolitan Board of Works, the LCC under the political control of the Progressive Party no longer trusted private enterprise with the provision of working-class houses and decided to erect, let and maintain these dwellings on its own account. The eighteen-year rule of the Progressives produced some of the first and finest examples of municipal housing, but a change of power in 1907 to the Municipal Reform Party initially resulted in spending cuts and the curtailment of the council's building operations. Still, the population of London continued to grow and private enterprise failed to meet the increasing need for affordable working-class dwellings, which put pressure on the LCC to revive its housing programme.

In view of the expected increase in state and municipal housing operations, the Royal Institute of British Architects (RIBA) was anxious to defend the interests of private architects. The president of the RIBA, Leonard Stokes, in his opening address at the general meeting of the institute in November 1911, denounced 'the huge architectural mill' of the government's building department, the Office of Works, for the high cost, poor quality and uniformity of its work. Stokes's attack was directed against all large public bodies that attempted to do their own architecture, and he demanded that all 'official architecture' — by which he meant architectural work intended for and commissioned by the state and municipal bodies — should be entrusted to 'independent architects' rather than those in official employment.<sup>6</sup>

Following the address of the RIBA president, the issue was widely discussed in professional journals. Commentators referred to the architectural departments of large public bodies as 'socialistic treadmills' and 'drawing machines', their 'unnamed machine-output' being contrasted with the 'named mind-work' of private architects.<sup>7</sup> Yet the real concern was that opportunities for private architects diminished while official architects assumed more and more responsibilities. At the same time, a large proportion of official architects were also members of the RIBA, which complicated the institute's position on the matter.<sup>8</sup>

#### THE GROWING NEED FOR STAFF

In the latter stages of the first world war, as Swenarton and others have shown, the housing shortage assumed increasing political importance for the government, and as a result local authorities, including the LCC, came under increasing pressure to develop plans for post-war housing. In January 1918, the chairman of the LCC housing committee, Henry de Rosenbach Walker, urged the council to 'take the lead in London and Greater London in the matter of Housing', admitting that the LCC was 'very much in the dark' as to what the population of either London or Greater London would be after the war.<sup>9</sup> To shed light on the issue, LCC officers from different departments prepared extensive reports dealing with the demographic development and housing need 'from a point of view of London as a whole, disregarding for this purpose the boundaries between borough and borough'.<sup>10</sup> One finding was the 'shifting of population' from central to outlying boroughs and to the area outside the County of London, termed 'Extra-London' — a tendency that was also projected for new council estates.<sup>11</sup> Accordingly, six months after the armistice, in May 1919, the LCC housing committee instructed the council's valuer, Frank Hunt, to investigate the possibilities of acquiring land in the district east of Barking in Essex.<sup>12</sup> Here was a potential site of almost 3,000 acres, which could accommodate 24,000 of the 29,000 dwellings that the LCC planned to build in the next five years — including 5,000 within two years, by the end of March 1921.<sup>13</sup>

The announcement of the five-year housing plan in July 1919 presented a considerable challenge to all LCC departments involved in the planning, construction and management of new housing estates. In a memorandum of May 1919, the new chairman of the housing committee, Bernard Holland, emphasised that 'the immense operations now in prospect' required a speedy reorganisation and strengthening of the official staff.<sup>14</sup> To achieve this, the committee responsible for staffing, the general purposes committee, established a special subcommittee on staff. The duties of the housing manager were changed so that they were now limited to the management of existing estates, and a new position of director of housing was created, initially on a two-year basis, responsible for the programmatic aspects, the required types of flats and houses and the search for suitable sites. The valuer's responsibilities for preparing statistics on housing, as well as on the distribution, growth and movement of the working-class population, were transferred to the director of housing, who consequently took on a key role in the strategic planning of the council's housing schemes (after October 1921, these responsibilities reverted to the Valuer's Department). With regard to the construction of roads, sewers and buildings, the chief engineer held

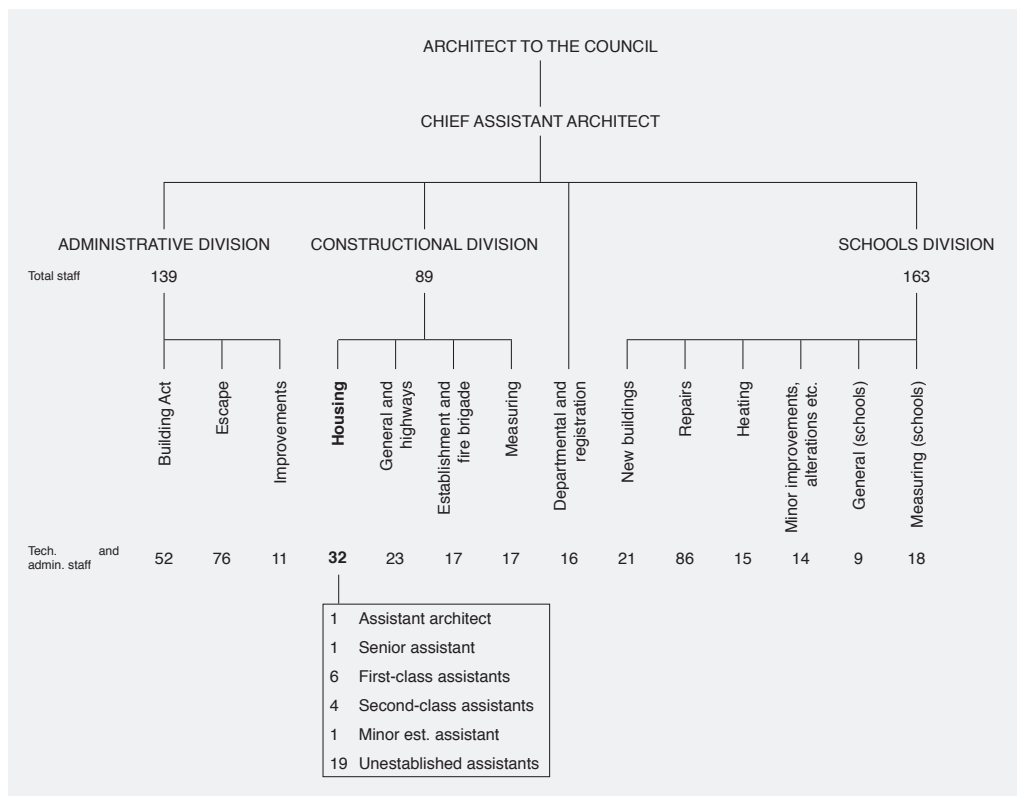


Fig. 1. Staff organisation of the London County Council Architect's Department in July 1919, redrawn by the author from a report of the superintending architect, London Metropolitan Archives

a leading position; later, as we will see, he was given overall responsibility for the administration of housing operations, which in effect curtailed the elevated position of the architect among the department heads concerned with housing.

Already in May 1919 when the housing programme was still being formulated, the subcommittee on staff instructed the council's architect, William Riley, to give his opinion whether the housing programme should be carried out under his direction alone, or if private architects should be engaged for some of the work. Riley left no doubt that the first phase of 5,000 new dwellings within less than two years could hardly be accomplished, and all the more if outside architects were employed with no experience in carrying out work for a public authority. In the light of the acute need for housing and the difficulties experienced in connection with skilled labour and materials, he emphasised that there was 'a well-trained nucleus of established officers with past experience of housing operations' available in his department, whom he considered as 'fully qualified to take leading positions'. Nevertheless, at least eighteen additional assistants were necessary, on top of the existing staff of about thirty assistants, only for the work already in hand. For projected housing schemes, Riley anticipated that

an additional 123 assistants were required, organised in eight architectural divisions of nine and six road divisions of seven assistants each, as well as directing and clerical staff. More than half of this number, sixty-six assistants in total, should be assigned to the first section of the Becontree scheme. However, Riley also acknowledged that if architectural variety in each locality was the main objective, the involvement of outside architects would be advisable.<sup>15</sup>

A few weeks later, in July 1919, Riley provided organigrams of his department, including both permanent and temporary staff (redrawn in Fig. 1).<sup>16</sup> There were three main divisions — administrative, constructional and schools — which were in turn subdivided into a total of thirteen sections, plus the departmental and registration section. The housing section was part of the constructional division and at that date consisted of thirty-two assistants: one assistant architect (who headed the section), one senior assistant, six first-class assistants, four second-class assistants, one minor establishment assistant and nineteen unestablished assistants. The organigrams also compared pre-war and present staff numbers, showing that the war had reduced the total staff number by 31 per cent, from 595 to 409, with the housing and repairs sections being the only two branches that were slightly strengthened. Riley reminded the housing committee in July 1919 of the increasing workload and sought authority for the payment of overtime hours to the staff engaged on housing work.<sup>17</sup>

In view of the work opportunities presented by the national housing programme, the RIBA pressed the government to require the use of independent architects.<sup>18</sup> The influential Tudor Walters report of 1918 had already recommended that every housing scheme should 'be prepared by a competent architect'.<sup>19</sup> The 1919 Housing Act went further and included a clause allowing the government to 'require as a condition of their approval the employment by the local authority of an architect to be selected from a panel of architects nominated for the purpose by the Royal Institute of British Architects'.<sup>20</sup> In line with this, in July 1919 the RIBA notified the LCC of the formation of a Central Consultative Board, which should nominate candidates qualified to undertake such housing schemes.<sup>21</sup> The new president of the RIBA, John William Simpson, also campaigned publicly for the involvement of private architects, writing a letter to *The Times* in which he explained that 'the policy adopted is to distribute the work widely, so that many may be employed and monotony of design avoided'. Furthermore, he warned that if housing authorities waited too long, whole regions would be covered 'with the sealed patterns of soulless officialism'.<sup>22</sup> The LCC, however, was unimpressed and continued to rely on the expertise of its own architects.

## TWO HIGH-RANKING VACANCIES

As well as the departmental reorganisation, in the summer of 1919 there were two major new appointments to be made — the successor to Riley as architect and the first director of housing.

For the post of the council's architect, 44 applications were received, from which nine were selected and interviewed. Four were invited to attend before the committee: Henry Thomas Bromley, district surveyor for Whitechapel; William Robert Davidge, district surveyor of Lewisham and housing commissioner for the South Eastern Counties at the

Local Government Board; David Nicholas Dyke, architect and surveyor at the Office of Works; and George Topham Forrest, county architect of Essex. These were then reduced to two, Davidge and Topham Forrest.<sup>23</sup>

At the moment when the LCC was about to make its decision, two grandees of the architectural profession — Aston Webb, president of the Royal Academy and chairman of the London Society, and Simpson, president of the RIBA — intervened. In a letter to *The Times*, they argued that the elected candidate 'should be a man not only thoroughly conversant with the intricate building regulations of London, but, what is far more important, that he should possess wide attainments and an architectural training of the highest order' — qualifications which, according to Webb and Simpson, the council's favourite apparently lacked.<sup>24</sup> Although Webb and Simpson did not mention any names, the intention of their letter was very clear to everyone involved. Both men had written testimonials for Davidge, who was well known within the upper echelons of the profession, being at the time a council member of the RIBA, the Town Planning Institute and the Garden Cities and Town Planning Association.<sup>25</sup>

The general purposes committee, however, ignored this intervention and recommended Topham Forrest.<sup>26</sup> Unlike Davidge, Topham Forrest derived his testimonials not from peers, but from elected councillors (at both Northumberland and Essex county councils) and, according to these testimonials, he had gained a reputation as an 'extremely painstaking', 'courteous' and 'obliging' officer, a 'hard worker' and a man of 'untiring energy'.<sup>27</sup> He was born in Aberdeen in 1872 and educated at the grammar school, then the university of that city. In 1894, after a four-year apprenticeship in an Aberdeen firm, he came to London and worked for four years as an assistant with John Macvicar Anderson, mainly on large office buildings. During his time in London, he took the full curriculum at the studios of the Architectural Association.<sup>28</sup> In 1898, he was appointed principal architectural assistant with the city engineer of Leeds, and a year later moved to the Architect's Department of the West Riding (of Yorkshire) County Council where he worked for six years, mainly on school buildings, and became chief assistant to the county architect. In 1905, he was appointed county education architect for Northumberland, and in 1914 county architect of Essex. His work for the Essex County Council involved a new county hall, a sanatorium, several schools and a housing scheme for the council's employees. Early in 1919, he was asked to serve on the advisory committee of the Local Government Board for the supply and control of building materials for the state-aided housing operations after the war.<sup>29</sup>

With the appointment of the new director of housing, the final choice was again essentially between a figure well known in professional circles and a council officer with a much lower public profile. Out of 156 applications received, the selection process (postponed until after the summer recess) was narrowed down to two candidates: Ewart Gladstone Culpin and James Peter Orr.<sup>30</sup> Culpin was a well-known proponent of the garden city movement who had made his name as an expert in housing and town planning, even though he had no professional qualifications at all. James Orr, in contrast, had worked for the Indian civil service for thirty years and in 1909 had been appointed chairman of the Bombay City Improvement Trust, being concerned foremost with slum clearance, improvement and rehousing schemes.<sup>31</sup> The general purposes committee recommended the appointment of Orr, but the housing committee objected,



Fig. 2. Site of the proposed housing scheme of Becontree, photograph of 1922 (London Metropolitan Archives)

stating that ‘we do not under-rate the position which Mr Orr held in Bombay, but it is not shown that he has any practical experience of English conditions, or any real acquaintance with those of London’.<sup>32</sup> Nonetheless, the general purposes committee got its way and Orr was appointed in October 1919.

One can only speculate why the LCC eventually picked Topham Forrest as architect and Orr as director of housing, the latter against the advice of the council’s own housing committee. Topham Forrest’s straightforward career, his solid experience in heading a large department and his expertise in a variety of building typologies arguably met the council’s requirements better than the wide interests and independent mind of Davidge. The same could be said about Orr in relation to Culpin. Moreover, Topham Forrest’s intimate knowledge of and connections with members of the Essex County Council, as well as his insights into the government’s distribution of building materials, must have appealed to the LCC — particularly with the large Becontree scheme in mind.

#### PLANNING A TOWNSHIP FOR 120,000 INHABITANTS

The 3,000 acres of fairly flat land selected for the future Becontree estate were situated outside the LCC’s area, in the county of Essex, and took in three administrative districts — Ilford Urban District, Barking Town Urban District and the parish of Dagenham, which was part of Romford Rural District. Hence the LCC had to deal with five different authorities that were vested with different powers and responsibilities, such as sewerage, education and open spaces. In the early nineteenth century, William Cobbett described this part of Essex as being dominated by the immediate influence of ‘the gorgings and disgorgings of the Wen; that is to say, [...] the demand for crude vegetables and repayment in manure’.<sup>33</sup> At the time of the first enquiries of the LCC, substantially the whole area was under cultivation as market gardens (Fig. 2).

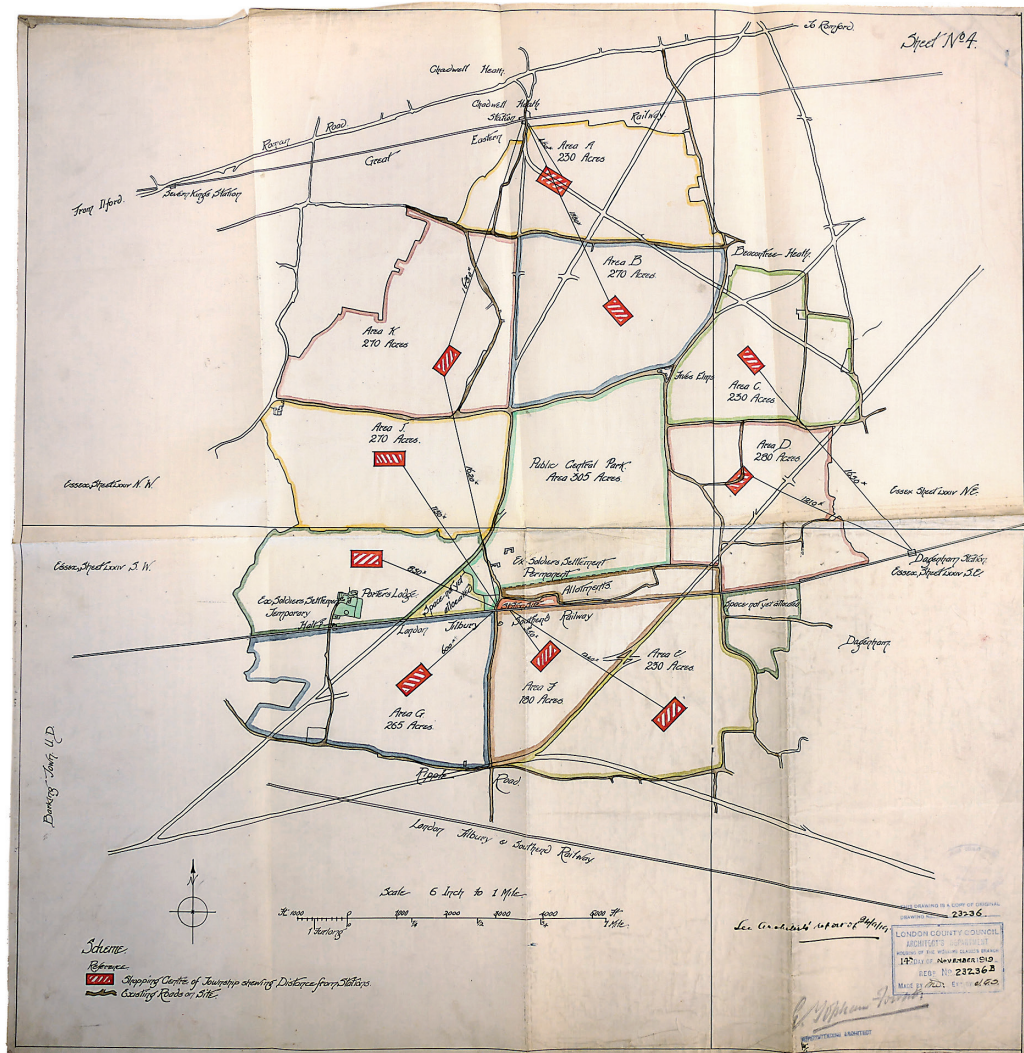


Fig. 3. Layout plan of the Becontree estate, 14 November 1919 (London Metropolitan Archives)

Particulars of the purchase of the land were first reported in *The Times* of 20 October 1919.<sup>34</sup> One of the first issues discussed was the social fabric of the future estate. The idea of 'mixed development' had been put forward before the war for the extension of White Hart Lane estate, where it was argued the development of houses for different social classes would help to create a cohesive community. In 1910, the LCC councillor Robert Ensor of the Labour Party sought parliamentary power to develop cottage estates 'on Garden City lines and not solely for the accommodation of the working classes'.<sup>35</sup> In 1912, however, the initiative was turned down and the experiment at White Hart Lane estate could not be followed through.<sup>36</sup> The concept of 'mixed development' was



revived after the war, with the 1919 Housing and Town Planning Act empowering local authorities to provide not only working-class dwellings, but also 'factories, workshops, places of worship, places of recreation, and other works or buildings for, or for the convenience of, persons belonging to the working classes and other persons'.<sup>37</sup>

Given the magnitude of Becontree, the mix of different social classes seemed even more crucial. It was clear to the LCC that designing a new township for 120,000 inhabitants of only one social class would not only intensify social segregation, but also provoke opposition by adjacent neighbourhoods. Early in October 1919, the chairman of the LCC housing committee, Bernard Holland, pointed to 'the importance of making provision for mixed development in the case of large housing estates'. The underlying idea was, in his words, 'the foundation of garden cities in which provision is to be made for a large mixed population'.<sup>38</sup>

The skeleton plan of Becontree, outlining main roads and open spaces, evolved between September 1919 and March 1920, and was one of the first designs produced under the new architect and new director of housing. A draft plan of November 1919 showed a first attempt to define the main features of the scheme. The site was divided into ten areas similar in size and a large area in the middle was designated as a central park, with the design following the lines of existing roads and boundaries rather than imposing a new geometry (Fig. 3).<sup>39</sup>

In the same period, between October and November 1919, the government got involved when a joint committee was formed by the prime minister, David Lloyd George, to coordinate the development of large housing and land-settlement schemes in their relation to transport. The committee was headed by the director general of development at the Ministry of Transport, Sir Charles de Bartolomé, and consisted of representatives of the four government departments concerned with agriculture, housing, transport and trade. The most important meetings were attended by the four ministers and their respective chief officers — Sir Eric Geddes with Bartolomé (Ministry of Transport); Christopher Addison with Edward Forber and George Pepler (Ministry of Health); Sir Auckland Geddes with Harold Carlill (Board of Trade); and Lord Arthur Lee with Lawrence Weaver (Ministry of Agriculture and Fisheries) — as well as two influential advisers to the prime minister, Lord Waldorf Astor and Philip Sassoon. Four schemes, including the LCC estate, were agreed on as matters of national concern.<sup>40</sup> Accordingly, in November 1919 a meeting was held with representatives of the LCC.<sup>41</sup>

But if the LCC was hoping to find support for its proposal, it was disappointed. In January 1920, in a lengthy memorandum, the joint development committee made clear its opposition to how 'the primary object of the scheme is as a London dormitory', arguing 'that such fertile land ought not to be entirely covered by bricks and mortar' and 'that it would be wrong to add to the growth of built-up London without leaving some belt of open land'. Instead, the committee called for 'new self-contained settlements' in which the population would live near their work.<sup>42</sup> At the same time, early in January 1920, the government pressed for the housing programme to be accelerated: the LCC was summoned to a meeting at the Ministry of Health at which the minister called for the Becontree site alone 'to have 8,000 houses completed this year' — 60 per cent more than the LCC's plan for 5,000 houses by March 1921.<sup>43</sup>

In February 1920, a meeting was held in County Hall between a group of LCC officers and Ebenezer Howard, the originator of the garden city idea and founder of both the Letchworth and Welwyn garden cities. The subject was 'mixed development' and Howard's practical experience with the development of Letchworth Garden City. The meeting was attended by Orr, as the new director of housing; his assistant, William John Berry; and from the Architect's Department Robert Robertson, William Hynam and William Thomas Sadler, although not Topham Forrest. Howard urged that sufficient land should be reserved for some factories and small industries, as well as middle- and upper-class houses, while the working-class areas should not be isolated, but rather intermingled with the other residential areas.<sup>44</sup>

In March 1920, only five days after this interview, the Architect's Department issued a heavily revised plan (Fig. 4).<sup>45</sup> The new plan and the accompanying report by the architect and the director of housing depicted what was termed 'a township more or less complete in itself'.<sup>46</sup> The new design formed an almost regular, concentric composition. The town was surrounded by a wide octagonal boulevard and divided by three main avenues radiating from centre to circumference, with a 'civic centre' at the junction of these avenues, next to a central park. Narrower streets formed a subsidiary network within each part of the township. In addition to the central park, a 'sylvan belt' formed a breathing space along the western and southern boundaries — that is, between the new development and the existing metropolis. The civic centre formed the heart of the town, with the main shopping centre, markets and most important public buildings. Local 'village centres' with smaller shops were arranged at the eight angles of the octagon 'to supply the common daily necessities of life'.

The new design was evidently influenced both by Howard's idea of the garden city and by the concept of the satellite town put forward by Raymond Unwin in 1912, which was being actively promoted by the Ministry of Health at this time.<sup>47</sup> But neither of these influences was acknowledged by Topham Forrest. The only references that were explicitly mentioned in a report to the LCC housing committee in October 1920 and in a public lecture in June 1921 were 'continental towns approximating in size to Dagenham [Becontree]' and 'aspects of modern town planning as embodied in schemes such as the rebuilding of San Francisco and the development of Chicago, which are notable examples of city development, prepared by Mr D. H. Burnham'.<sup>48</sup> The influence of Burnham's City Beautiful idea was especially evident in Topham Forrest's description of the 'civic centre', which 'was designed to be an important architectural feature to accommodate administrative and public buildings necessary for a township of the size contemplated'. The radial layout, together with the importance of these buildings, should 'impart to the Centre a duly impressive and dignified character'.<sup>49</sup> This conception of a grand architectural scheme, however, collided with the practical difficulties and escalating costs during the first years after the war.

#### THE 1920 REORGANISATION OF THE ARCHITECT'S DEPARTMENT

In March 1920, in the early stages of designing the Becontree scheme, the Architect's Department was completely reorganised (Fig. 5).<sup>50</sup> The aim was to create a clear line of demarcation between the technical work of architects and the administrative work



Fig. 4. Layout plan of the Becontree estate, 3 March 1920 (London Metropolitan Archives)

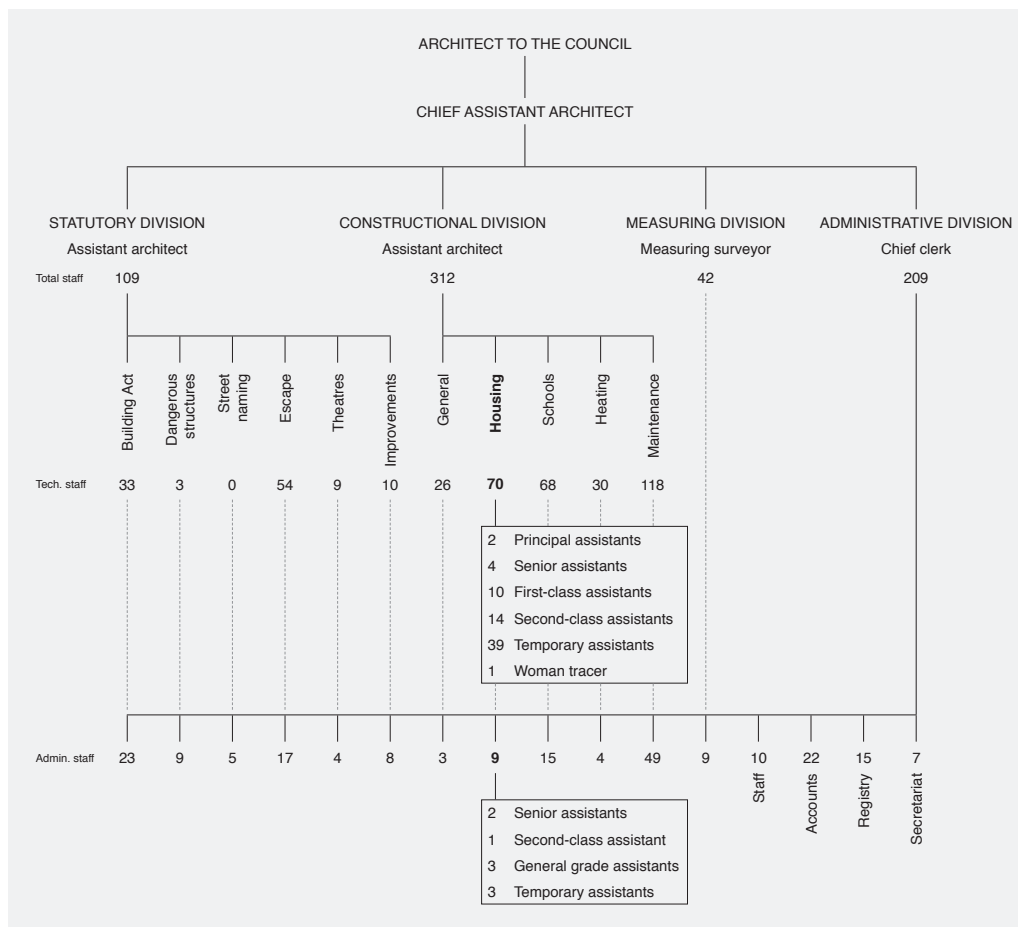


Fig. 5. The LCC Architect's Department after the 1920 reorganisation, showing staff numbers as at April 1926, redrawn by the author from a report of the departmental committee on the Architect's Department, 23 June 1926, London Metropolitan Archives

peculiar to a large public department engaged not only in constructional work, but also in the administration of legislative acts. The department was rearranged into three technical divisions — statutory, constructional and measuring — plus an administrative division. The former schools division was incorporated into the constructional division and the newly established statutory division took over many of the responsibilities of the previous administrative division, which now assumed an assisting function by allocating administrative and clerical staff among the three technical divisions.

While it could be expected that the council's architect would take a greater interest in a prominent project such as Becontree, the development of so large an estate necessitated a collective effort. His responsibilities and duties as head of a large department and his dual capacity as superintending architect of metropolitan buildings — being responsible

for building acts and building permits — and as architect to the council — supervising the design and construction of the council's entire architectural production — made it almost impossible for him to have an intimate knowledge and direct oversight of individual projects. Still, the real authorship remained undeclared. Every official document, report or plan produced by the Architect's Department was signed by the head of the department, who therefore appeared as sole author and designer of LCC buildings, while the several hundred assistants stayed anonymous. Moreover, after the early 1900s there are almost no instances of one of the senior staff members appearing publicly as lecturer or author in a professional journal. This was very different from the early days of the LCC, when the first council architect, Thomas Blashill, had allowed Owen Fleming, the head of the housing section, to lecture and write articles about the renowned Boundary Street scheme.<sup>51</sup>

In her study of the pre-war period, Susan Beattie interpreted the design of the council's housing estates as a collaborative effort, 'the living expression of the corporate identity of the Housing branch'.<sup>52</sup> That was even more the case in the inter-war period, with its standardised and simplified designs. While official reports to LCC committees and all outgoing correspondence had to be signed by the head of department, these documents often showed the initials of responsible assistants and thus provide some information about the involvement of staff members. In particular, the initials of Robert Robertson appeared repeatedly. Robertson, a native of Perth, had studied at Edinburgh School of Art and was one of the original members of the LCC Architect's Department when it was set up in 1892, becoming head of the housing section in 1901. According to his RIBA licentiate declaration in 1911, he took 'a leading part in designing all the large Housing Schemes for the LCC — for example — Boundary Street area, Millbank area, Caledonian Estate, White Hart Lane, Tottenham (Garden Suburb), Norbury Estate, Totterdown Fields Estate, Old Oak Lane Estate (Garden Suburb)'.<sup>53</sup> During the latter part of the first world war, between 1916 and 1919, he was seconded to the Ministry of Munitions as director of housing construction and was responsible for the planning of temporary and permanent housing schemes for munitions workers (other than those undertaken by the Explosives Department, which were under the supervision of Unwin).<sup>54</sup> After the war, Robertson returned to the LCC, doubtless helping to smooth the transition from Riley to Topham Forrest, and in 1920 was placed in charge of the constructional division, responsible not only for housing, but for the design and construction of all LCC buildings.

Under Robertson's aegis, the housing section was headed by William Hynam, Reginald Minton Taylor and Ernest Hadden Parkes. Hynam and Minton Taylor were responsible for the slum clearance schemes, as well as for Roehampton, White Hart Lane and Old Oak, while Parkes was in charge not just of Becontree, but also Bellingham, Grove Park, Castelnau and Norbury.<sup>55</sup> Parkes had been part of the housing section for his entire career, beginning in 1894, and Beattie tells us that the pre-war Bourne estate in Holborn with its multi-storey blocks of flats was predominantly his work.<sup>56</sup> By the outbreak of the first world war Parkes had become, according to the obituary written by his colleague Frederick Hiorns in 1953, 'a recognised leader among the highly competent staff that W. E. Riley had collected for this increasingly important work, so that, with the enormous increase of housing that occurred between 1920 and 1930, in which period an

incredible amount of rehousing and estate development was accomplished, he became directing Head of that Section of the Department's work, with a major responsibility for its accomplishment'.<sup>57</sup> Hiorns further emphasised that Parkes would always be the first to acknowledge his debt to the many teams 'of promising young architects', at a time when 'anonymity' was 'the commonly observed but somewhat evil practice of public departments'. Under Parkes's supervision, James William Hepburn was the primary assistant responsible for the Becontree estate. Hepburn had entered the LCC Architect's Department in 1902. Before the first world war, he was part of the highways section, and he transferred to the housing section probably after the war. Here he worked on the Bellingham estate first, but was placed in charge of Becontree not later than March 1921.<sup>58</sup>

In 1922, Robertson was promoted to chief assistant architect — that is, the architect's deputy overseeing all four divisions on behalf of the architect — while Parkes retained his post as the head of the housing section until his retirement in 1931. Hepburn, in turn, was placed in charge of the housing section in 1934 and retained the post until his retirement in 1944. Together, Robertson, Parkes and Hepburn played a pivotal role in the LCC's housing programme of the inter-war period, each serving in the Architect's Department for more than forty years.

#### A LARGE ENGINEERING WORK

Of the challenges facing the new department, the largest and most complex was Becontree. In January 1920, the Architect's Department calculated that building the entire estate would require more than 3.5 million tons of materials; over the first five years 2,500 tons would have to be delivered, and about 8,000 to 10,000 workers would have to commute to the area on a daily basis.<sup>59</sup>

The LCC had initially considered three different methods by which the work should be carried out: the traditional method of subdividing the work among a number of contractors; the employment of direct labour; or entrusting the whole work to one master contractor. Due to the magnitude of the scheme and the urgency of the housing programme, and in order to avoid competition for a limited supply of material and skilled labour, Topham Forrest strongly recommended that a master contractor should be appointed on a 'cost-plus-profit' basis. 'It would be following the precedents created by the Government during the war in similar circumstances where urgency in completion was vital', he stated: 'one controlling guiding influence is just as necessary for the conclusion of this programme as it was in the active military operations during the latter and successful period of the war'.<sup>60</sup> This course was adopted. Following the recommendation of the chief engineer and the architect, C. J. Wills & Sons was appointed, a long-established firm primarily known for the construction of railways and docks at home and abroad, 'having carried out some of the largest known', as the two department heads emphasised.<sup>61</sup> During the first world war, the company had undertaken heavy engineering works in connection with fortifications, submarine defence works and the provision of oil fuel installations.

Very much in the same spirit, the general purposes committee in April 1920 discussed the rearrangement of responsibilities for the Becontree scheme. While the chief engineer and the architect typically supervised their respective areas of a housing

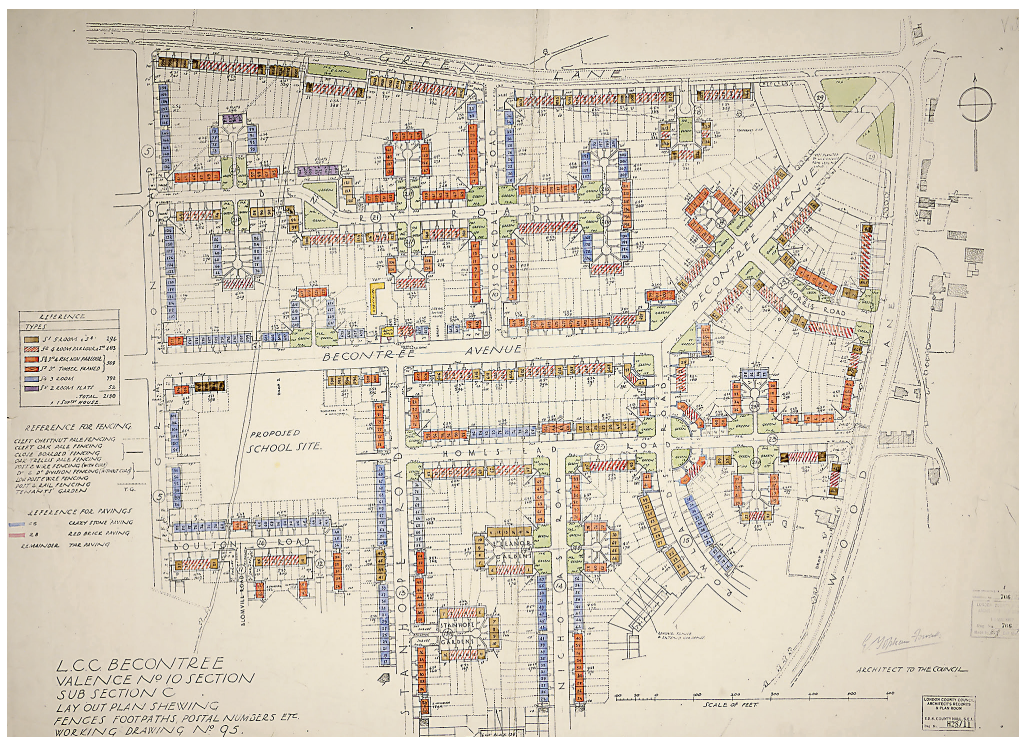


Fig. 6. *The Becontree estate, Valence No. 10 Section, Subsection C, 10 March 1927*  
(London Metropolitan Archives)

scheme, the committee suggested that a new position should be created in charge of the whole. This administrator of housing developments would coordinate between all departments and officers involved, supervise the work of the master contractor and control all expenditures and contracts. The committee recommended appointing the chief engineer, George William Humphreys, who would hold the two offices at the same time and receive an additional salary of £ 2,000 a year.<sup>62</sup> In his dual capacity as chief engineer and administrator of housing developments, Humphreys took precedence over the architect, valuer and director of housing. The general purposes committee argued that ‘the development of the Dagenham [Becontree] estate, in reality the building of a town, involves not only building work proper on a large scale, but, in the initial stages especially, many problems of an engineering character arise’.<sup>63</sup> The council followed the recommendations and appointed Humphreys in July 1920 (who indeed received twice the salary of the other chief officers). The original goal of 5,000 houses by the end of March 1921, however, dropped increasingly out of sight.

By the end of March 1921, not a single house had been built at Becontree and only sixty houses were under construction. The cabinet minister in charge, Christopher Addison, was facing mounting criticism of the cost and slow progress. In April 1921, Addison was moved from his post, and in July 1921 his successor as minister of

health, Sir Alfred Mond, announced that no further houses could be started under the programme beyond those already in approved contracts.<sup>64</sup>

### BUILDING BECONTREE

Becontree was designed as a township comprising sixteen 'sections' or 'wards' with between 1,000 and 2,000 dwellings each, and this largely determined the way in which the development of the estate was organised. While the township as a whole was characterised by a regular system of ring roads and avenues, each section was treated as a separate unit or an estate in itself, with its own system of (mainly regular) traffic roads and (mainly irregular) residential streets. Through this combination of regular and irregular planning, the LCC architects tried to avoid the impression of monotony. The idea of an 'ordered variety' seemed even more crucial as the design of the individual houses was increasingly standardised.

The first sixty houses of the Becontree estate were erected in late 1921 and construction picked up speed in 1922 when more than 2,000 dwellings (that is, those approved by the Ministry of Health before July 1921) were completed. New starts remained at a low level, however, until a new government subsidy was introduced in 1924 by John Wheatley as minister of health in the short-lived minority Labour government, a subsidy that significantly was retained by Neville Chamberlain when he returned as minister of health in the Conservative government (1924–29).<sup>65</sup> As a result, at Becontree as elsewhere, from 1925 building activities quickly regained momentum.

Insight into the organisation and daily workings of the Architect's Department, and of the planning of Becontree in particular, is provided by an internal inquiry that ran between May 1925 and June 1926. It was set up under a council resolution of April 1924 which required 'that heads of departments do appoint from time to time, but not more frequently than once in every three years nor less frequently than once in every five years, departmental committees for the purpose of advising them on the organisation of the work and method of working of their departments'.<sup>66</sup> The committee appointed on that basis by the architect in May 1925 comprised Robertson, Edwin Paul Wheeler and Francis Augustus Spencer from the Architect's Department, plus Percy Edwards from the clerk's (that is, chief executive's) department. At the first meeting, Robertson was elected chairman. In all, ninety-three meetings were held and fifty-three witnesses were heard representing different sections and various grades of the department.<sup>67</sup>

Hepburn, the project leader for Becontree, was interviewed by the committee in December 1925.<sup>68</sup> He reported that the work was proceeding 'smoothly and expeditiously' and that 'the output of the drawing office is keeping pace with the rate of progress possible on the part of the contractor'. His team was dealing with drawing work in respect of two of the sixteen sections of the estate – each equal in size to an estate such as Roehampton and comprising about 2,000 houses. Under the immediate direction of Hepburn and first-class assistant Frederick Charles Wylde, the work was again divided into a number of subsections of roughly 400 houses each, one assistant being responsible for each subsection, including the preparation of layout plans and whatever further drawing work was necessary (Fig. 6).<sup>69</sup> This was possible only because the designs and hence the drawings were considerably simplified and



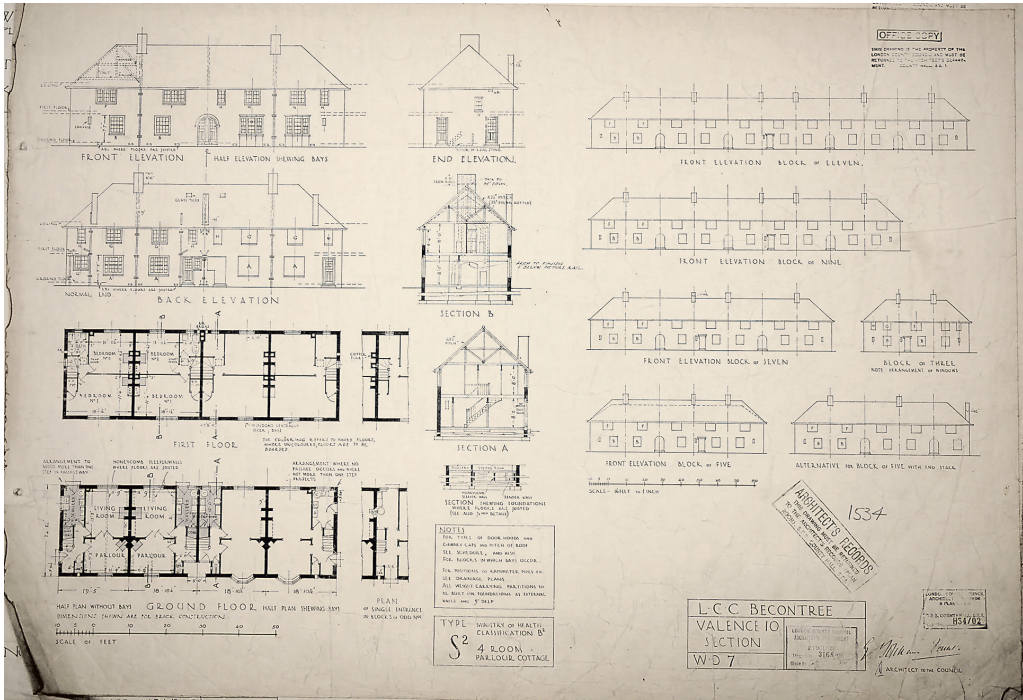


Fig. 7. The Becontree estate, Valence No. 10 Section, S2-type cottage plan, 21 October 1926 (London Metropolitan Archives)

the houses were based on a limited number of cottage-type plans. During the visit to Hepburn’s offices, the committee members examined examples of ‘skeleton elevations’ and were impressed by the degree of simplicity and standardisation that Hepburn and his Becontree colleagues had attained.

The committee also conducted interviews with Parkes, Hepburn’s superior as the head of the housing section. They were told that the housing section had achieved a considerable degree of standardisation and simplification in their work due to the economic constraints after the war. Parkes emphasised that ‘all possible steps’ had already been taken in the direction of economy as regards both work and staff. He also mentioned that the question of the ‘simplification of drawings’ had always been a matter of special concern owing to the urgency of the work. While the working drawings of the first cottage types at Becontree from 1920 and 1921 were coloured and had a sense of depth and texture to them, later cottage-type plans of the mid-1920s were simple line drawings. Not only the drawing style but also the designs themselves were considerably simplified so that they could be replicated and combined in groups of three, five, seven, nine or eleven dwellings (Fig. 7).<sup>70</sup>

One issue that was raised with the committee by the architectural staff was the lack of status of all officers other than the head of department. Hiorns (principal assistant in the general section) argued that ‘the status and responsibilities of heads of sections



Fig. 8. *Construction work in progress at Becontree, photograph of 1925 (London Metropolitan Archives)*

and other officers who immediately direct large blocks of important works should be more definitely recognised'.<sup>71</sup> He urged that 'the designation of such officers should clearly indicate that they are Architects', since 'their present designation, viz., Principal Assistant, tended to obscure the fact that they are officers who by reason of their training, experience, and the positions they hold under the Council, actually perform the functions of Architects, with responsibilities as such'. Minton Taylor pointed to how he was not authorised to sign any correspondence and called for an increased measure of authority, with the object of 'simplifying routine and obviating as far as possible the necessity of consulting higher officers before taking executive action'.<sup>72</sup> But there is no indication that their pleas had any effect.

As noted above, the building of Becontree was a massive engineering and logistical operation. In keeping with the wartime experience and expertise of the contractors, C. J. Wills and Sons, a supply route for the delivery of construction materials was established practically from the outset. The necessary materials were distributed over the estate, which measured about two miles in each direction, by a temporary railway system, connected in the north to the main London North Eastern Railway line and in the south to a jetty on the River Thames. This jetty had a frontage of 500 ft (152 m), with berths for eight barges, and was equipped with steam cranes for the handling of cement, bricks, timber and other materials. In October 1926, when the number of workmen employed on the estate was

more than 4,000, the total length of track of the temporary railway system was 20 miles, operated by eleven locomotives and more than 400 trucks (Fig. 8).<sup>73</sup>

The construction works at Becontree reached a peak in 1928, with nearly 4,000 houses erected in that year. From then building activity again slowed, but never came to a halt, and the entire estate of 25,000 houses — 1,000 more than originally planned — was completed in March 1934. Of the final number, approximately 3,900 houses were built under the 1919 Housing Act; 2,000 under the 1923 Housing Act; and the great majority, 19,100 houses, under the 1924 Housing Act.<sup>74</sup>

The original plan to develop Becontree estate as a self-contained township was never officially abandoned, but it was slowly watered down. With every new section developed, LCC officers urged the council and the Ministry of Health to allow a degree of social mix — that is, housing for other social classes — and sites for business premises. However, the provision of working-class houses remained the overarching and most pressing objective. The LCC anyway experienced great difficulties in attracting businesses to Becontree and most of the sites along the main avenues originally reserved for business premises were repurposed for housing. Likewise, the 'civic centre' was never realised. For Becontree, neither the LCC nor Essex County Council felt compelled to invest in administrative and other public buildings of 'impressive and dignified character', as originally envisioned by Topham Forrest.

## CONCLUSION

The Becontree estate was one of the most ambitious, and by far the biggest, of the LCC's housing schemes of the inter-war period. To cope with the workload that the estate entailed, the Architect's Department was restructured; office processes were rationalised; drawings and plans were simplified; and the design of houses was increasingly standardised. The wartime experience gained on major housing and engineering works undertaken for the government was used on a practical and management level. Instead of many different contractors, the LCC appointed a single 'master contractor' — and one with experience of these wartime projects — responsible for the development of the entire estate. New posts were created and filled within the LCC, some short-lived (director of housing), others becoming permanent (chief engineer/administrator of housing developments). While the head of the Architect's Department, Topham Forrest, appeared as the sole author of the council's architectural production, the architects primarily responsible for the design of the Becontree estate — Robertson, Parkes and Hepburn — served anonymously in the shadows. Priority was given not to the names of individuals, but to the LCC's coat of arms, which was proudly displayed at each housing estate.

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## NOTES

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