Housing the Workers

Early London County Council Housing 1889-1914

Martin Stilwell
August 2015

Part 2
The LCC, its architects and the financial environment in which they operated

1. Introduction

This is Part 2 of the four part on-line publication that describes, in detail, the first of the London County Council housing built between 1889 and the First World War.

Part 1 set the scene, describing the early days of social housing, the Building Acts that controlled the development of social housing, and the demographics of London.
This Part 2 covers the formation of the LCC, its architects, the designs for the housing and how the costs were managed.
Part 3 covers, in detail, all the schemes built between 1889 and 1914.
Part 4 is the summary and conclusions.

A note on terminology: Throughout this publication the terms dwelling, tenement, block and cottage are used.
The term **dwelling** refers to any structure that is to house people. The dwelling can be a single-family structure, such as a cottage, or can but for multiple occupancy, invariably blocks. For the period this publication covers, the term "house" was used to indicate a large property with many rooms, and only applies to lodging houses.
The term **tenement** equates to the more modern term "flat" and is a rentable home for one family that has been specifically designed as such in a block dwelling.
The term **block** was used at the time to described the multiple tenancy buildings, no more than 5 storeys high, built by developers, philanthropic organisations and local authorities. All of these were named "Buildings", such as in Darcy Buildings near Waterloo. Most of these blocks have since been renamed as "Houses".
The term **cottage** at the time referred to what today we would call a terraced or small semi-detached house. Many that are still standing are called "cottages" today as there is no better modern description.

2. The formation of the London County Council

The London County Council was formed on 21st March 1889 under the 1888 Local Government Act which extended the representation of local government officers elected by ratepayers. This created the County of London whose boundary encompassed the old vestries and districts, but excluded the City of London, and which took over the responsibilities of the Metropolitan Board of Works (MBW). The only important operational change over that of the MBW was that the Council was elected by the ratepayers and so had to always keep one eye on costs lest they should upset the voters. Eleven years later, in 1899, the Tory government of the time passed the London Government Act, out of which came the formal metropolitan borough councils that generally became known as the London Boroughs. The LCC county boundary did not change until the formation of the Greater London Council in 1965 which managed a much larger county than the LCC and included most of the old county of Middlesex. Legislation was split between the LCC and the borough councils, but the LCC remained the central authority for enforcing slum clearance. Borough councils could build working class housing themselves, but few did so before World War 1 because of the cost.

London benefited from a series of particularly forward thinking LCC councillors in its early days. From 1889 until 1907 the majority of the councillors were members of the Progressive Party which was unofficially aligned to the Liberal Party, but also consisted of Fabians and members of the Social Democrat Federation. The Progressives were keen on moral improvement of the people. Council elections were held every 3 years and in 1907 the Municipal Reformers ('Moderates') took control, and this party was aligned to the Conservatives and was less inclined towards the socialist ideals of their predecessors. This party kept power until 1934 when Labour won the election. Labour continued to run the LCC until it was replaced by the GLC in 1965. It is interesting to note that the Municipal Reformers did not start one housing development between 1907 and the 1920s although they did complete all those already in progress when they took over (even if they were still in the planning stage).

3. The Architects and Their Designs

The formation of the London County Council was the responsibility of the Liberal Government of the time and they wanted Lord Rosebery (Home Secretary 1885-6) to head the council. Lord Rosebery very reluctantly accepted the post but kept a low profile and proved to be a very capable Chairman. The early years of the Council were dominated by a Liberal-Radical group known as The Progressives. Lord Rosebery approved of the Progressive's social outlook and allowed them to develop it further.

The outcome of this social outlook was the recruitment of a number of predominantly young architects under the leadership of experienced architects. Most of the architects were followers of the Arts and Crafts movement founded by William Morris. The names of these architects were never known to the public in the way modern architects are but they quietly influenced the designs of the buildings of London in the early days of the LCC.

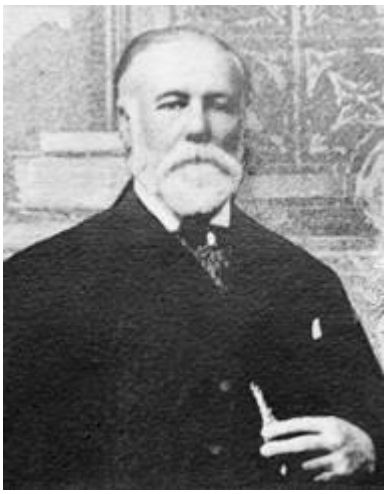


Fig. 1: Thomas Blashill

The LCC's architect's department was large with the strict hierarchy that was similar to the Civil Service. New architects were often juniors who were not on the permanent headcount until they had proven themselves. The architect's department was responsible for all LCC building designs and was complemented by the Building Acts department which was responsible for ensuring all London buildings, irrespective of who built them, met the current regulations of the time. The architect's department was split into a number of teams, headed by an Assistant Architect and one of those teams was responsible for housing. In overall charge of the architects was the Superintending Architect and this post was held by the respected Thomas Blashill from 1887 to 1899. The seniority of this post can be judged from the fact that it carried the substantial salary of £1500 per annum. In 1895 he was asked to stay on beyond his normal retirement age of 65 and officially retired on 31st Dec 1899 although he actually retired 3 months later because of a lack of suitable replacement. He was described as "*A scholarly, dignified and genial personality, he was greatly esteemed by the staff of his department*"[1]. The LCC minutes record that on retirement his pensionable service was increased by 10 years to 21 years, on the full salary of £1500, in gratitude of his service. He was replaced by William Edward Riley who held the post until his retirement in 1919. Riley's character was notably different to Blashill's and this may have been the reason for some transfers around 1900 that are described below. Riley was described as "*A man of unusually forceful personality who, - almost inevitably, - expressed himself by somewhat autocratic methods. His powers of organisation placed him in the forefront of administrators. He possessed a fine literary taste, was a brilliant conversationalist, and a most genial companion*". There is no evidence to suggest that the Council were unhappy with Thomas Blashill, but they may have deliberately chosen the more forceful William Riley to ensure the planned schemes were as cost-effective as possible.

Fig. 2: William Edward Riley

Fig. 3: Owen Fleming

The Architect's Department had no lower departmental breakdown but included Assistant Architects who were in charge of Sections that carried out various aspects of the LCC's work such as fire stations, public buildings and housing. Reading the minutes of the time the reader gets the impression that being in the Fire Stations Section was the place to be. The first recorded Assistant Architect in charge of the Housing Section was a relatively young Owen Fleming (b.1865), who held the post until 1899. He did not gain promotion to the post of Superintending Architect on Blashill's retirement but was transferred to be head of the Fire Station Section. Fleming had a high reputation amongst the architects but he was probably not a forceful or charismatic enough person to take over the senior role. He is described simply as a "*warm personality and had a list of friends*". Fleming was replaced by John Briggs who only held the post until 1901 when he was promoted to be Riley's assistant. This short time in charge seems to have been planned and suggests that Fleming's move to the Fire Brigade Section was part of a larger reorganisation plan. Briggs retired in 1922 on the grounds of ill health, still as assistant to Riley. He seems to have been a good administrator and probably a 'safe' appointment as he is described thus: "*He was a sincere, kindly and approachable man – the correct administrator rather than the practising executive architect – highly esteemed not only by the staff of the Department but by all who knew him*". Briggs was replaced by Robert Robertson in 1901 who held the post until his retirement in 1931. In 1919 Robertson was created Director of Housing Construction, a post to match the requirement of the "Homes Fit for Heroes" objectives post World War 1. Robertson seems to have been another well-liked head of section as he was described as "*He was courteous and kindly disposition and was held in high esteem by the staff*".

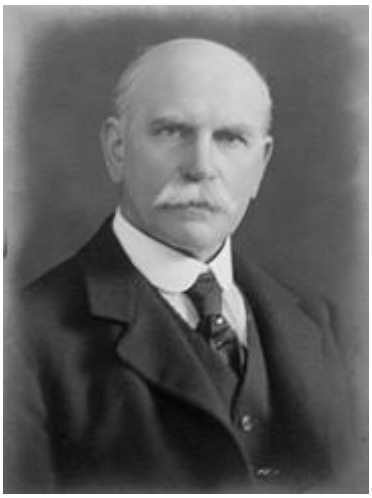


Fig. 4: John Briggs

Fig. 5: Robert Robertson

Working in the Housing Section for the Assistant Architect were a number of architects who were very influential in their designs and their names appear on many of the drawings and designs. They include Reginald Minton Taylor (1892-1932), Charles Canning Winmill (1892-1899 when transferred to Fire Stations Section), James Rogers Stark (1900-1910 when transferred to Schools Section), and briefly but influentially, Archibald Stuart Soutar. Under the leadership of Fleming, Briggs and then Robertson, the designs continued to flourish, despite the autocratic William Riley being the Superintending Architect from 1900. One suspects that a vital skill Briggs and Roberston needed was to protect their architects from Riley.

All the purely architectural aspects of the early LCC Buildings are very well covered by the GLC's publication "*A Revolution in London Housing, 1893-1914*' edited by Susan Beattie.

The designs of the blocks evolved with experience but, from the start, they were nearly all self-contained with WCs and kitchens (usually called sculleries), whereas many of the philanthropists were still building 'associated' dwellings where WCs and sinks were shared. The Council's regulations initially stated that the buildings should be a maximum of 4 storeys and the first LCC designed block, Beachcroft Buildings in Limehouse, were built that height. The resulting costs were high and the LCC soon had to modify their ideas to prevent the buildings generating a charge on the county rates. The second block, at Yabsley Street Poplar, had a fifth storey added to the design and this actually improved the looks of the building. After that, nearly all the blocks were designed from the start with 5 storeys.

The influence of the Arts & Crafts movement was to show itself in the exterior design and in the airiness of the interiors. Many of the buildings showed flair in their designs with curved bays, dormer roofs, glazed lower brickwork and ostentatious stairways and entranceways. All rooms were designed to have good natural lighting and the fittings were of high quality. The aim was for the residents to get pleasure living there, thus reducing potentially high repair costs due to vandalism, and for the buildings to last many years before needing refurbishment. These aims were generally achieved as many buildings still stand and their current owners are willing to spend money refurbishing them rather than demolish and re-build.

The designs of the early cottages also blossomed into quality housing. The early designs lacked many external features that modern historians would have expected to see, but the quality of the interiors made up for that.

The building regulations introduced by the Council on 3rd December 1889 are detailed in the minutes of the Housing of the Working Classes Committee:[2]

> *(a) Staircases*. - A central staircase in blocks of dwellings is objectionable, and, as regards convenience of plan and thorough ventilation of each dwelling, the best amongst the modes commonly in use is that which provides a staircase close to the outer wall, and having large openings communicating with the open air. Such a staircase can be conveniently arranged to give access to four dwellings, and the ventilation of such dwellings can be effected by means of open doors and fanlights, so that a thorough current of air can be obtained when it is desired. If it is felt in the winter time that this arrangement leaves the persons using the staircases too much exposed to the weather, windows partially enclosing the openings can be provided. The chief alternative to this kind of staircase seems to be one which is in the centre of the block, and gives access to dwellings on each side of it. In this case the ingress of fresh air to the staircases can only be through the entrance doorway and along a short passage, and through the skylight at the top of the staircase. Upon this the dwellings opening from the staircase have to depend for their through ventilation. Both these plans are in considerable use. Staircases in buildings more than three storeys high should be at least 4 feet in width. The walls of the staircases to a height of about 4 feet 6 inches should be finished with glazed or hard-pressed bricks; the upper portions with hard bricks neatly pointed.
>
> *(b) Basement Floors*. - There is no doubt that, as compared with the other floors of a building, the basement floor is undesirable as a residence, but in building artizans' dwellings it is generally expedient to construct a storey below the ground floor, though it is not necessary that they be used as 'dwellings'; but inasmuch as there is no definite evidence at the present time that basement rooms, fronting upon a principal street, should not be used for dwelling purposes, their use need not be forbidden, provided that adequate precautions against fire are taken, and that the bottom of the window sills is not lower than the level of the adjoining pavement, and not more than 3 feet above the

floor, and that in other respects they agree with the provisions of section 103 of the *Metropolis Local Management Act (18 and 19 Vic. cap. 120)*, as applied to new buildings. They are usually let at a rate materially lower than the rooms above them, but if they are let at the same rate as the upper floors in a high block of buildings, they are preferred by many people who are not able to mount a considerable number of stairs. Beyond the question of health, it is not necessary to object to such rooms on account of their proximity to the street, those who occupy them being able to make such arrangements for privacy as they find necessary. Where no areas are practicable, the walls should be covered with asphalte or other damp-resisting material, from the damp-course to the footings.

(c) Bath-rooms, &c. - Unless they are in close vicinity to public baths and wash-houses (a condition which can very rarely happen), bath and wash-house accommodation should be provided to every block of dwellings, and this can best be provided in a separate building or on the basement floor, or in a distinct section of the block that can be constantly under inspection, and to which inexpensive arrangements for water-supply, &c., can be applied. In connection with this matter, the water-closet accommodation has been considered, on the assumption that the dwellings to be built or promoted by the Council will generally be for the accommodation of the lowest class of the population which inhabits separate tenements, a class just above that which uses the common lodging houses, and for which neither private speculators nor the societies for building artizans' dwellings make any provision. It seems inexpedient that either water-closets or separate water supply or sinks should be constructed so as to be immediately accessible from any dwelling rooms. A sufficient number of closets should be supplied to each floor of dwellings to which a separate staircase is provided, together with a provision of sinks and water supply for common use. Such closets should have both doors and windows opening directly to the open air; and, where possible, there should be one closet to each family. Dust-shoots should be provided from each common scullery, or from the landing adjacent, to discharge into galvanized iron moveable dustbins, which can be carried out and emptied into the dust-cart.

(d) Size of rooms. - The number of rooms to be provided in each tenement, and their sizes, have been considered as one question, and the following may be regarded as minima:-

(1.) In a one-roomed tenement the minimum superficial area should be 144 feet. This would conveniently be provided in a room measuring about 12 feet by 12 feet.

(2.) A two-roomed tenement should have a similar room, with an additional room containing 96 superficial feet, or measuring 12 feet by 8 feet.

(3.) A three-roomed tenement should have a large room containing 144 feet in superficial area, and two rooms each containing 96 feet.

These sizes, however, should not be rigidly fixed, but rooms of various sizes should be provided. Four-roomed tenements need not be provided, but if they are, the fourth room should be of about 100 feet superficial area.

It would be convenient as regards planning, and also as regards the population to be accommodated, that some little variety should exist in the sizes of the rooms in each tenement as well as in their number, in order to provide for the different conditions of the families. As regards the interval which should exist between any block of dwellings and the nearest building obstructing the light from its windows, it is suggested that, if

> practicable, this distance should be equal to one and a half times the height of the obstructing building. But it does not appear that this space can, in view of the cost of land, be generally provided. Under no circumstances should a nearer distance than the height of the buildings be allowed.

From the very first building it was realised that the above regulations would make the buildings uneconomic to build and in 1893 the minimum height of rooms was reduced to 7' 6" and shortly afterwards minimum width of staircases was set at 3' 6". Most of the other regulations remained. Baths and washhouses were rarely provided in blocks but one notable exception was the Boundary Street Estate in Bethnal Green which had a separate and large washhouse. The Council made every effort to increase the size of rooms where cost-effective, but this was rarely possible in central areas.

One important amendment was concerning the minimum sizes of the rooms. As stated in the "size of rooms" above, the living rooms were to be a minimum of 144 sq. ft. and the bedrooms a minimum of 96 sq. ft. Following criticism of the size of the rooms compared to rents asked for the Boundary Street Estate, the Secretary of State increased the minimum living room size to 160 sq. ft. and bedroom size to 110 sq. ft. (or 100 and 120 sq. ft. respectively where there are two bedrooms). These minimum standards were supposedly rigorously observed[3]. As will be seen later in this publication, many of the later Part I schemes did not have room sizes that met the new minima making one question the rigour in applying the standards. The Secretary of State introduced other regulations such as limiting the number of people who had access to a staircase, and the insistence of minimum of 45 degree angle of direct light to all rooms. Note that these changes to regulations only applied to housing built under Part 1 of the Housing of the Working Classes Act, 1890 as housing built under Part II were approved by the Local Government Board.

The architects designed buildings to the highest standards that could be afforded. The resulting blocks and cottages were better than working-class houses in the area, but the rents were too high for the lower-paid working-classes to be able to afford. But what was the Council expected to do? Build hovels to the lowest standard and so enable low rents to be charged? This would simply generate new slums and this is something that has been seen from the late 1950s where concrete partly-prefabricated housing was built that was very cost-effective but suffered from technical and build problems and was unloved from the beginning and therefore suffered from vandalism.

The decision by the Council to raise housing standards, and give the lowest paid something to aspire to, was probably the only choice they had as they were hamstrung by not being allowed to fund housing from their county rates.

Now that the rules, recommendations and restrictions have been described, it is possible to analyse the Council's schemes in the light of these parameters rather than by modern standards. The next section analyses the schemes constructed under the various Acts and Parts of Acts. The costs for most of them can be compared as the figures are generally available and can be converted into a basic measure of cost-per-person, based on the standard measure of the time of two persons per room. Only where the scheme formed part of a larger street clearance or public works scheme has it been difficult to provide a comparison as some costs are hidden in the public works scheme and cannot be reliably extracted.

4. The LCC designs

To place working class housing into its correct context of that time, it is necessary to understand the housing standards that were being applied in the late 1800s.

The majority of the working classes at the time would not have any experience of living in housing with a private flush toilet, or even a toilet shared between just one other family. Neither would the majority have experience of a separate kitchen or scullery. Many of the families in the lower earnings group (12s a week or below) would be living in considerable poverty and would, almost certainly, all live in just one room of a house originally built for just one family. The sanitation and water supply would probably be unmodified and therefore be shared amongst all the families in the house. The families in the next group above (12s-18s) would fare a little better and may be able to afford 2 rooms either in an un-converted house or in one of the blocks built by the philanthropists or entrepreneurs. However, they were likely to still have to share washing and toilet facilities. Only when the income of the family rose to 20s or above was there usually enough of a surplus to be able to choose where to live and the better philanthropic housing became affordable. It was not just the income that mattered, but the regularity of that income. The better accommodation was only available to those with a regular income because of the stricter control over rent collection.

As a result, the majority of the working classes would be grateful for any clean and sanitary accommodation at an affordable rent and close to their place of work. Those on low and/or irregular wages were never going to be able to be provided for, and these workers would have had a hard uphill battle to better themselves.

The majority of London working-class housing was owned and managed by private landlords. Much of this housing had complex ownership issues and at the top of the ownership tree was the land owner. Much of London housing had been built on land owned by a few privileged landlords, including the Church (through the Ecclesiastical Commissioners) and the Prince of Wales. Despite the reputation these land owners tried to portray, most were surprisingly uninterested in those who lived in the housing built on their land (Lord Portman and Lady Henry Somerset were notable exceptions). Next down in the chain were the owners of the houses built on the land. There was very little freehold property in this marketplace and so the property would be leasehold or, more usually, copyhold. Many owners of the working class housing would not live in them but simply purchase the housing as an investment. The rents would often be collected by rent collectors chosen for their ability to collect rent rather than their social skills. Sometimes the main tenant lived on part of the premises and sub-let one or more rooms to other tenants. The census returns of the time show many elderly couples or widows/widowers living in just one part of the dwelling, with another family living in the same accommodation as the second family in that property. With no social security or pensions for the working classes, sub-letting was often the only way for elderly people to make ends meet. The worst method of sub-letting was known as rack-renting and could reach many levels with the sub-letter further sub-letting rooms to another family or person. There are even stories reported at the time of people renting a single room then sub-letting space on the floor in that room.

It was into this housing marketplace of old unsuitable property, divided into 2 or more tenements, that the philanthropists and speculators came with their offers of block housing for the working classes. Only one person was advocating cottages as being the only ideal accommodation for the working classes and that was Octavia Hill. Much has been written about this remarkable lady and this needs not be repeated in this publication. There are two key ideals that Miss Hill brought to the marketplace that are significant when discussing the early LCC housing. The first is that Miss Hill genuinely believed that the very lowest of the working

classes did not warrant high-quality housing as their moral standards were not good enough and the property would soon be in a state of disrepair. Her plan was to provide very basic housing with, for example, just one water source per floor. Those tenants who improved themselves could move on to better tenements in the same property or other property she managed. The second ideal, and it is a key one, is that the property needs to be micro-managed by a manager who lived close to the property (or even in it) and who had daily contact with the tenants. As tenants improved themselves repairs were carried out as a reward. It is no accident that all of Miss Hill's property managers were ladies and the majority of the communication with the tenants was not through the man, the traditional head of the family, but with the wife who was the person who occupied the dwelling most of the time during the day.

Apart from Miss Hill no other organisation, whether charitable, philanthropic or speculative, advocated cottages and only offered to build 'blocks', or Model Dwellings as they were called at the time. The simple economics based on land values, building costs and potential rents made blocks the only economical choice.

The LCC, from the start, wanted to build better houses than the standard of the time. They were hoping to build cottages but the economics, particularly with the high land values in London, made this impossible for most of the county as the adverse impact on the rates would have been politically dangerous for the Council. Instead, they chose to build high quality blocks with an en-suite WC and separate kitchen/scullery for each dwelling. But before introducing those ideals the LCC had to decide what to do with on-going programmes they inherited from the Metropolitan Board of Works. To the Council's credit they chose to complete all on-going programmes although not all resulted in the planned buildings as some cleared land was turned into open spaces and some land was purchased by the London School Board for new schools. The Council did build some cottages in the early days but these were to the east of London where the lower land values made cottages viable.

For the period in question there were four types of dwelling being built for the working classes; (i) Blocks, based on the designs of Model Dwellings as first suggested by Prince Albert in 1851 and built for the Great Exhibition in Knightsbridge Barracks near Hyde Park by Henry Roberts[4], (ii) Blocks with internal landings or external walkways providing access to each dwelling, (iii) cottages, mainly two storey and terraced, and (iv) housing built on garden estates. Note that "cottages" are what would simply be termed terraced housing in modern times. Added to the above types are Lodging Houses, usually for men only, but always for single people. These were required because London contained a large number of privately-run lodging houses, and not all were well run or monitored. The Council believed they could build better ones but the results were often well below the expectations.

Blocks were usually 5 storeys high (never more) but a few were 2 – 4 storeys. No reliable pattern can be established as to why some were designed with external walkways across the front of each floor giving access to front doors, and why some had internal landings. Having walkways (or verandas as they were sometimes referred to) meant space would only be required for one staircase (or one each end in the case of long buildings), but space was taken at the front of the building for the walkways and so negated the space saving. Long buildings would be difficult to design effectively with internal landings as they would need staircases spaced along the length of the building. Each staircase took valuable space that could have been used for tenements. There is also the impression that some architects preferred internal landings whilst others preferred the external walkways. Three final advantages of external walkways are evident in the surviving buildings and are immediately obvious to anyone who looks at them. The first is that the occupier has external space in front of their entrance. This space is used by many tenants for pot plants giving the tenant a pseudo-garden that was always the dream of the

LCC for all their tenants. The second is one of visibility. The walkways give the tenants a better feeling of security as any visitor is visible from the yard/pavement below and they generate neighbourliness with fellow tenants. The third is ventilation; almost an obsession with the Victorians. Direct air from a front door on an open walkway was preferred to musty air from an internal and potentially damp landing.

The quality of construction of the blocks is well illustrated by their survival of the bombing in World War 2. Many buildings survived with repairable damage whilst adjacent buildings were destroyed or so badly damaged that they were pulled down.

As regards the cottages, a surprising number have been demolished, and not necessarily because they were in the way of street or road developments. This suggests that many were not cost-effective to modernise into larger tenements with proper kitchens and bathrooms. Those that have survived are predominantly the type that were built in two halves with left and right halves being separate dwellings with their own front doors. These have easily been converted into larger single dwellings. For reasons unknown, Greenwich and neighbouring Deptford seem to have lost most of their cottages to modern developments, although the reasons may well have been the high cost of modernisation in the 1960s. In only one case did WW2 bomb damage result in demolition of some cottages.

The real success story was in the development of the garden estates. The success can be measured both in financial and social terms. All the pre-WW1 garden estate houses are is still standing, with some in extremely good condition.

The tables on the next pages list the schemes, including those started by the MBW. In all tables the maximum capacity of the new dwellings is calculated as being 2 people per room, and this simple equation was used officially by the authorities right through the period in question and provides a useful comparison.

The first table below, Table 1, covers schemes started and completed by the MBW and the most significant information is the considerable differences between the highest and lowest costs to the MBW. The lowest cost is an exceptional 8 shillings (40p) per person for the Great Peter St. scheme, and the highest is £104 17s 7d (£104.88) per person for the Bedfordbury scheme. The Great Peter St and Little Coram St schemes cannot be used directly as a comparison as most of the land was already owned by the developer, Peabody Trust, and they purchased most of the original property at their own expense. The purchase price paid by the MBW stated for these schemes was just for land required for street widening in both cases. Of the other schemes the variance was either due to being away from the heavily built-up areas in the case of the cheapest schemes; or was high because of the high density of the original housing or the ability of the landlords to extract the maximum compensation, or both. It should be noted that the Pear St Court scheme had a relatively low acquisition price for the buildings because the houses were particularly old and probably the last of their kind in London.

Metropolitan Board of Works - Artizans Dwellings Act - 1875-1882

Initiated	Where	Displaced numbers	Purchase price	Site works	Total costs	Total recovery	Net costs	Max cap. of new housing	net cost (£) per person	Compl.	Progr period	Notes
Oct-75	Bedfordbury, St Martin in the Fields,	797	£84,146	£3,066	£87,212	£11,702	£75,510	720	104.88	1881	6 yrs	Peabody
Dec-75	Gt Wilde St, St Giles	1939	£121,266	£3,012	£124,278	£18,628	£105,650	1620	65.22	1881	6 yrs	Peabody
Nov-75	Whitecross St, St Luke, near Old Street	3687	£368,767	£22,536	£391,303	£76,360	£314,943	3740	84.21	1882	7 yrs	Peabody, with some plots sold to developers
Nov-75	High Street, Islington	547	£42,901	£1,875	£44,776	£6,589	£38,187	800	47.73	1882	7 yrs	IIDC
Jul-76	Old Pye Street, Westminster	1333	£74,405	£4,984	£79,389	£29,493	£49,896	1700	29.35	1882	6 yrs	Peabody, with surplus plots to developers
Jul-76	Great Peter St, Westminster	179	£235	£0	£235	£23	£212	532	0.40	1882	6 yrs	Peabody
Nov-77	Essex Rd, Islington	1796	£102,891	£12,217	£115,108	£17,209	£97,899	3866	25.32	1883	6 yrs	Private developers
Oct-75	Duke St, King St, Mint St, Southwark	1266	£65,283	£1,502	£66,785	£14,342	£52,443	1906	27.51	1884	9 yrs	IIDC (Mint Street) + private
Aub 75	Bowmans Buildings, Edware Rd, Marylebone	806	£49,316	£3,032	£52,348	£15,890	£36,458	1288	28.31	1884	9 yrs	IIDC + private developer
Nov-76	Little Coram St, Tavistock Place, Bloomsbury	858	£12,608	£1,751	£14,359	£871	£13,488	840	16.06	1884	8 yrs	Peabody
Nov-75	Pear St Court, Clerkenwell	410	£24,070	£3,356	£27,426	£6,557	£20,869	1326	15.74	1885	10 yrs	Peabody
Mar-76	Wells St, Poplar	1029	£68,257	£7,514	£75,771	£11,652	£64,119	1030	62.25	1885	9 yrs	James Hartnoll. 1030 capacity from plans.
Oct-75	Goulton St & Flower & Dean St, Whitechapel	3293	£350,321	£21,286	£371,607	£87,636	£283,971	3702	76.71	1887	12 yrs	East End Dwellings Co., Rothschild & private
Oct-83	Tabard Strat, Newington	220	£17,346	£1,283	£18,629	£10,400	£8,229	280	29.39	1888	5 yrs	Private developer
Aug-77	Windmill Row, Lambeth	459	£12,307	£905	£13,212	£3,434	£9,778	460	21.26	1889	12 yrs	James Hartnoll
Nov-75	Whitechapel & Limehouse adjacent to Royal	3669	£176,041	£11,517	£187,558	£35,795	£151,763	3600	42.16	1890	15 yrs	Peabody built for 1372 people. Rest built

Number of poor people estimated to live on the site
Price to purchase buildings, freehold and copyhold and to recompense tenants and businesses
Additional site costs - mainly road widening and sewerage
Total amount received from sale of demolished materials and the cleared site
Total costs less recovery
Maximum theoretical capacity based on 2 people per room
Net cost / maximum capacity
Final completion of all planned new housing

Table 1: Metropolitan Board of Works schemes

Table 2 lists the schemes started by the MBW but completed by the LCC. Note that the costs are noticeably higher than on Table 1. This can be directly attributed to the cost of building the new dwellings – something that the MBW did not have to worry about as they never built new housing themselves. However, this still does not excuse the LCC for the particularly high costs of the Sheldon St scheme which can only be partly explained as being due to the somewhat complex and fragmented shape of the sites to be cleared.

The Cable Street scheme was planned to be handed over to the Guinness Trust for them to build, but the building regulations on the height and size of the new property were too strict for Guinness and they decided they could not build economically. This is a key fact as the Guinness Trust successfully built much high density housing in large blocks (but still to a high construction standard). Guinness felt they could not build the dwellings required and continue to make a profit over a long period. This resulted in a conflict between the required high building standards and low density of occupation on one hand, and the need to build for the low rents the targeted tenants could afford.

Ex-MBW schemes completed by the LCC under 1890 Housing Act

Initiated	Where	Displaced numbers	Purchase price	Site works	LCC building costs	Total costs	Total recovery	Net costs	Max cap. of new housing	Type	Net cost (£) per person	Completed	progr. period	Notes
1875	Tench St, St George in the East	1284	£49,375	£3,262	£0	£52,637	£646	£51,991	0		£0.00	1889	14yrs	Site unsold. Made an open space for recreation
1876	Brook St, Limehouse	562	£21,988	£1,619	£15,934	£39,541	£2,090	£37,451	306	C/B	£122.39	1894/1900	18 yrs	LCC built a block dwelling (Beachcroft Buildings) and 18 cottages (Cranford Cottages)
1877	Hughes Fields, Deptford	1786	£84,333	£5,991	£35,464	£125,788	£3,530	£122,258	668	C	£183.02	1895	18 yrs	Some cottages built by Provident Assoc (240 persons), and rest Lewisham Cottages built by LCC (668 persons).
1883	Shelton St, St Giles, nr Drury Lane	1208	£77,051	£1,101	£19,836	£97,988	£1,546	£96,442	292	B	£330.28	1896	13 yrs	Aldwych, Cotterell, Lindsey, Powis, Wimbledon Bldgs
1877	Trafalgar Rd, Greenwich	190	£19,724	£817	£12,299	£32,840	£2,024	£30,816	306	C	£100.71	1901	24 yrs	51 3-roomed dwellings of 2-storied cottages called
1883	Cable St, Shadwell	910	£46,390	£4,831	£37,592	£88,813	£1,766	£87,047	798	B	£109.08	1894/1901	11 yrs	LCC built all dwellings after Guiness Trust dropped out of negotiations. Bewley, Dellow, Lowood, Chancery Bldgs (800 people)

No. people estimated to live on the site
Price to purchase buildings, freehold and copyhold and to recompense tenants and businesses
Additional site costs - mainly road widening and sewerage
Costs for LCC to build new dwellings
Total amount received from sale of demolished materials and the cleared site
Total costs less recovery
Maximum theoretical capacity based on 2 people per room
Cottage/Block dwelling type built
Net cost / maximum capacity
Final completion of all planned new housing

Table 2: Scheme started by MBW and completed by the LCC

Following the introduction of the 1890 *Housing of the Working Classes Act*, and the subsequent amendments in the next two decades, the housing standards started to be raised. Unfortunately, this conflicted with the requirement to charge low rents to meet the needs of the working classes. The rents charged needed to be comparable with those in property in the adjacent area and the drive to improve housing standards conflicted with that. Although the philanthropic and speculative builders had to meet certain basic building requirements such as a maximum height of 5 storeys, they did not have to meet the LCC standards for building materials, toilet and washing facilities, stairways and landings, and party walls. Peabody, in particular, was successful at building high quality housing but with certain shared facilities to keep the costs down. The fact that almost all the original Peabody buildings are still standing is testament to the soundness of their approach, although the shared facilities in their designs were fast being outmoded by the end of the Victorian era.

The first schemes sanctioned by the LCC under the 1890 Housing of the Working Classes Act were either under Parts I, II or III of the Act. Part I deals with the clearance and rebuilding of unhealthy areas. Part II is very similar but concerns unhealthy buildings. Part III was originally written to replace the Labouring Classes Lodging Houses Acts of 1851 and 1867, but was interpreted by councils, and the LCC in particular, to include more than just 'lodging houses'. Section 53 of the 1890 Act clarifies the term Lodging House: *"The expression 'lodging houses for the working classes' when used in this part of the Act shall include separate houses or cottages for the working classes, whether containing one or several tenements, and the purposes of this part of the Act shall include the provision of such houses and cottages".* Part III also allowed for compulsory purchase of other buildings to make schemes more cost-effective, and for the building of 'cottages'. As we will see later, this allowed the LCC flexibility to carry out some of their plans to raise the standards of working class housing.

Table 3 and Table 4 list the schemes carried out under Parts I and II of the 1890 Act. In Table 3 (Part I of the 1890 Act) the cost of the schemes varied considerably. The Aylesbury Place scheme in Clerkenwell represents poor value for money, but the Clare Market scheme in The Strand is good value, especially considering location. The Nightingale St scheme is an interesting one in that Lord Portman bore all the costs as the slums were on his land. Lord Portman himself was not able to carry out the scheme as a totally private venture due to complexities of certain leases, but the LCC agreed to manage the inspection and purchase of the property, after which Lord Portman took ownership of all the interests in the property and repaid the expenses. Lord Portman organised and funded the erection of the new dwellings. It is a pity that there were not more 'Lord Portmans' to help the LCC and the working classes of London.

Table 4 (Part II of the 1890 Act) shows similar numbers but the Brooke's Market scheme housed only 60 people and, with hindsight, may have been dealt with better by the LCC. The slum area was first brought to the attention of the medical officer in 1875 but proved to be a protracted scheme and the LCC had great difficulty in getting anyone to build the new housing and so were forced to build themselves. Even with £3000 contributed by the Holborn District Board the scheme was an expensive one, although the area was considerably improved with paving and open spaces around the new building.

Table 5 (Part III of the 1890 Act) lists the pro-active development carried out by the Council, and Table 6 lists the schemes carried out as a result of the requirement to rehouse people who were displaced by street improvement schemes. The cost-per-person for the latter cannot be calculated because the purchase and clearance costs were included in the cost of the whole improvement scheme and cannot be accurately isolated.

LCC schemes completed under Part 1 of the 1890 Housing Act

Initiated	Where	Displaced numbers	Cost of scheme	LCC building costs	Net costs	Max capacity of new housing	Type	Net cost (£) per person	Completed	Notes
1890	Boundary Street, Bethnal Green	5719	£319,179	£260,546	£579,725	5524	B	£104.95	1900	First of the LCC's large schemes. Streatley, Cleeve, Culham, Sonning, Hurley, Sandford, Henley, Walton, Marlow, Shiplake, Taplow, Chertsey, Sunbury, Iffley, Clifton, Molesey, Wargrave, Cookham, Benson, Hedsor, Abingdon, Laleham Buildings. Includes Goldsmiths Cottages for 144 people
1891	Churchway, St Pancras, off Euston Rd	1095	£32,062	£39,127	£71,189	832	B	£85.56	1901	Wellesley, Seymour, Somerset Buildings
1890	Clare Market, Strand	3172	£118,400	£102,535	£220,935	1680	B	£131.51	1902-04	Beaumont, Fletcher, Sheridan, Siddons, Stirling, Thackeray, Dickens, Coram, Shene, Ledham, Skipwith, Frewell, Denys, Scrope, Redman, and Radcliffe
1898	Nightingale St, Marylebone	576	£0	£0	£0	630		£0.00		All costs borne and buildings erected by Lord Portman
1899	Garden Row, Roby Street Baltic Street and Honduras St.	1193	£90,633	£55,588	£146,221	1216	B	£120.25	1905-07	Wenlake & Chadworth Buildings
1899	Southwark (3 sites, incl Webber Row)	997	£66,739	£43,041	£109,780	1148	B	£95.63	1906	Delarch, Overy, Algar, Dauncey, Mawdley Bldgs
1897	Aylesbury Place, Clerkenwell	1402	£155,174	£82,756	£237,930	1260	B	£188.83	1907	Buckridge, Kirkeby, Laney, Nigel and Mallory Bldgs
1901	Providence Place, Poplar	361	£11,107	£0	£11,107	0		£0.00		Site cleared

Number of poor people estimated to live on the site
Price to purchase buildings, freehold and copyhold, plus cost of site works, less recoveries for materials and surplus land sales
Building costs
Maximum theoretical capacity based on 2 people per room
Cottage/Block dwelling type built
Net cost / maximum capacity

Table 3: Housing schemes carried out under Part 1 of the 1890 Housing of the Working Classes Act

LCC schemes completed under Part II of the 1890 Housing Act

Initiated	Where	Displaced numbers	Cost of scheme	LCC building costs	Total costs	Contribution by local authority	Net costs	Max capacity of new housing	Type	Net cost (£) per person	Completed	Program me period	Notes
1875	Brooke's Market Holborn	55	£9,033	£2,847	£11,880	£3,000	£8,880	60	B	£148.00	1897	22yrs	Cranley Bldgs
1895	Falcon St, Borough	824	£29,400	£35,598	£64,998	£7,750	£57,248	678	B	£84.44	1900	5yrs	Hunter, Murphy Gardiner and Cobham Buildings
1893	Ann St, Poplar	261	£8,754	£23,812	£32,566	£4,400	£28,166	630	B	£44.71	1901/2	8yrs	Adelainde, Melbourne, Sydney Buildings
1892	Mill Lane, Deptford	715	£20,953	£54,937	£75,890	£10,478	£65,412	947	C/B/L	£69.07	1903	11yrs	Carrington House (lodging house for 803 people) and Sylva Cottages (144 people)

Number of poor people estimated to live on the site

Price to purchase buildings, freehold and copyhold, plus cost of site works, less recoveries for materials and surplus land sales

Building costs

Maximum theoretical capacity based on 2 people per room

Cottage/Block/Lodging House dwelling type built

Net cost / maximum capacity

Table 4: Housing schemes carried out under Part II of the 1890 Housing of the Working Classes Act

LCC schemes completed under Part III of the 1890 Housing Act

Initiated	Where	Cost of scheme	LCC building costs	Total costs	Max capacity of new housing	Type	Net cost (£) per person	Completed	Programme period	Notes
1888	Dufferin Street, Finsbury	£6,300	£0	£6,300	174	B	£36.21	1889	1yr	Dufferin St costermonger's dwellings
1893	Shelton Street scheme	£3,750	£18,386	£22,136	324	L	£68.32	1893		Parker Street Lodging House
1889	Green & Gunn Street	£3,860	£20,983	£24,843	420	B	£59.15	1897	8yrs	Albury, Clandon, Merrow, Ripley Bldgs
1896	Millbank Estate, Westminster	£45,202	£205,959	£251,161	4430	B	£56.70	1899-1902	3yrs	Hogarth, Millais, Leighton, Romney, Turner, Rankin, Rosetti, Reynolds, Mulready, Maclise, Landseer, Morland, Wilkie, Gainsborough Bldgs
1894	Holmwood Bldgs, Southwark	£1,886	£0	£1,886	72	B	£26.19	1900	6yrs	Conversion of existing building
1900	Totterdown Fields, Tooting	£79,533	£318,798	£398,331	8788	C	£45.33	1903-11	3yrs	Garden estate
1902	Hughes Field, Deptford	£855	£16,375	£17,230	440	B	£39.16	1904	2yrs	Raleigh, Benbow and Drake Buildings
1901	Wedmore Street, Islington	£11,819	£46,060	£57,879	1050	B	£55.12	1905	4yrs	Wessex Buildings
1900	Norbury	£14,600	£219,000	£233,600	5640	C	£41.42	1906 →	6yrs	Garden estate
1902	Old Oak, Acton	£19,358	£666,000	£685,358	13834	C	£49.54	1906 →	4yrs	Garden estate
1903	Brixton Hill	£7,040	£27,968	£35,008	718	B	£48.76	1906	3yrs	Briscoe Buildings
1904	Caledonian Estate, Holloway	£15,764	£53,192	£68,956	1384	B	£49.82	1906	2yrs	Burns, Scott, Wallace, Knox & Bruce Bldgs
1901	White Hart Lane, Tottenham	£34,000	£158,445	£192,445	5889	C	£32.68	1907-11	6yrs	Garden estate

Price to purchase land and prepare site
Building costs
Maximum theoretical capacity based on 2 people per room
Cottage/Block/Lodging House dwelling type built
Net cost / maximum capacity

Table 5: Housing schemes carried out under Part III of the 1890 Housing of the Working Classes Act

LCC schemes completed as part of street improvements

Where	Cost of purchasing	LCC Foundation costs	LCC building costs	total costs	max capacity of new housing	Type	completed	Notes
Blackwall Tunnel (north)	N/A	£1,547	£13,840	£15,387	240	B	1894	Council Buildings
Blackwall Tunnel (south)	N/A	£4,935	£42,601	£47,536	400	C	1894	Idenden, Westview, Armitage and Collerston Cottages
Blackwall Tunnel (north)	N/A	N/A	£12,320	£12,320	360	B	1901	Toronto and Montreal Buildings
Battersea Bridge	N/A	N/A	N/A	N/A	289	B	1901	Battersea Bridge Buildings and Folly Cottages
Rotherhithe Tunnel	N/A	N/A	N/A	N/A	1890	B	1902-07	South of Thames: Winchelsea, Rye, Seaford, Hythe and Sandwich Buildings. North of Thames: Brightlingsea and Bekesbourne Buildings
Blackwall Tunnel (north)	N/A	N/A	N/A	N/A	1304	B/C	1904	Ottawa, Baffin, Ontario, Winnipeg and Quebec Buildings. St Lawrence Cottages. LCC took on a commitment to re-house those displaced by London School Board schemes
Wandsworth and Battersea Street improvements	N/A	N/A	N/A	N/A	536	B	1904	Durham Buildings
Long Lane & Tabard Street	N/A	N/A	N/A	N/A	400	B	1904	Barnaby Buildings
Mare Street widening, Hackney	N/A	N/A	N/A	N/A	606	B	1904/1906	Valette and Darcy Buildings
Nine Elms Lane widening, Battersea	N/A	N/A	N/A	N/A	236	B/C	1905	Lennox Buildings and Clere Cottages
Fulham Palace Rd and Fulham Rd improvements	N/A	N/A	N/A	N/A	220	B	1906	Bearcroft Buildings
Clare Market & Strand Improvement	N/A	N/A	£47,105	£47,105	699	L	1906	Bruce House (lodging house). All other buildings in the scheme were erected under Part 1 of the 1890 Act

Price to purchase land and prepare site
Building costs
Maximum theoretical capacity based on 2 people per room
Cottage/Block/Lodging House dwelling type built

Table 6: Housing schemes carried out as a result of street improvements

5. The costs – did the numbers add up?

When calculating the costs of any of the LCC schemes, finances alone cannot give the whole picture as to the potential success or failure of a scheme. The social aspects that must be taken into account include the improved social circumstances and welfare of the tenants (if, indeed, there was an improvement), the betterment of the area of any slum clearances, and the impact of the standards of the new buildings on future working class housing.

As to the improvement in the lives of those cleared from slum schemes, this needs to take into account the fact that most of the tenants of the slums were unable, or unwilling, to take up tenancies in the replacement dwellings and so had to move to slums close by. This is recognised as having a negative impact on the lowest of the working classes which was offset by the long-term impact of the clearance of the slums. The poorest had little option but to try and find accommodation elsewhere, but as slums got cleared those opportunities reduced and they were forced to improve their earnings to enable them to afford the accommodation available. Although some poor people were never able to raise themselves out of the predicament they were in, the social changes that occurred in the early 20th century enabled many to provide decent housing for their families. These improvement included the introduction of state pensions and the ability of the Council's housing to be funded from the county rates and so provide true social housing.

For this publication, the social benefits will be hard to measure as the period is relatively small, and it covers the early period of the LCC when, inevitably, mistakes were made and working practices were still being developed. Alison Ravetz in her book "*Council Housing and Culture. The history of a social experiment*" covers the subject very well. As a result, I am able to concentrate of the finances, and provide opinions and comments on the potential social impact.

The costs of any of the LCC re-housing schemes were always the subject of much debate at the time. There are many letters and reports at the time arguing for and against the cost of such schemes, depending on your political alignment. The problem was that social housing, as developed by the Council, could not be funded from the rates and so the re-housing schemes had to prove that they could be self-funding from the rents. This was difficult, and the success rate of the Council was not good, although many of the annual deficits were small.

5.1. Breaking the costs down

When calculating the net cost to erect new buildings, there are a number of individual costs to take into consideration. The Council was not always consistent in how they applied the numbers across all their publications, and some costs remain hidden; either deliberately to hide them or because the Council felt they were not important and are subsumed into numbers published elsewhere.

The net cost of a scheme is made up of costs and receipts. The main elements are in Table 7 below.

Costs	Receipts
Purchase of the slum dwellings	Sale of materials from slum clearance
Purchase of the freeholds	Sale of surplus land
Overheads to carry out the purchase	Rents received pending demolition
Road and street improvements	Contribution from District or Vestry
Construction of new buildings	Value of site after completion

Table 7: Costs and receipts typical of a clearance scheme

There are often some smaller hidden costs such as the re-imbursement of rents or compensation to tenants being evicted. Note that the landlord has sold the property and the freeholder has sold the freehold, but the tenant has lost his home. In some cases the tenants may have paid

rent in advance or have commercial interests to protect and so demand compensation from the new owners – the LCC. However, in all the cases, adjustments to the costs or revenue are very small compared to the main figures in the calculation.

The Council were adamant that the value of the site after completion was treated as 'revenue', despite this value being the only element where there is no transfer of monies. The value is an asset, of course, but one that cannot be realised for many years, maybe as much as 80 years, and would then bear no relation to the original figure because of the effects of inflation. As a result, my calculations do not include this figure.

Once the final costs have been calculated it is simple to assess the cost of the scheme as the standard method of calculating building capacity for housing blocks is to simply multiply the number of rooms per dwelling/tenement by 2, that being the maximum allowable capacity per room. The maximum capacity of cottages was sometimes calculated differently, and was stated in the plans.

The actual capacity (extracted from census returns) is usually well below the maximum for all the well-run buildings.

Two examples to illustrate the calculations:

1. Trafalgar Rd scheme, Greenwich. Started under the MBW in 1883 and completed by the LCC in 1901.

	Cost	Revenue
Acquisition: amount claimed was £13,284. Amount settled (1884)	£7,859	
Acquisition: remaining settlement through arbitration (1884)	£9,986	
Overheads	£1,879	
Cost of widening East Street and Old Woolwich Rd	£817	
Rents received and sale of building material (up to 1886)		£618
Sale of surplus land to the London School Board		£1,406
Cost to Council of erecting cottages	£12,299	
Totals	£32,840	£2,024
NET COST	£30,816	

The cottages were planned for 306 people and so the cost per person is £30,816 / 306 = **£100.71**

2. Brooke's Market, Holborn. Slum clearance under Part II of the 1890 Housing of the Working Classes Act. Completed in 1897.

	Cost	Revenue
Acquisition: amount claimed was £9,498. Amount settled (1884)	£4,989	
Acquisition: remaining settlement through arbitration (1884)	£665	
Cost of street widening	£1,851	
Cost of paving surrounding streets	£1,528	
Contribution by Holborn District Board		£3,000
Cost to Council of erecting Cranley Buildings	£2,847	
Totals	£11,880	£3,000
NET COST	£8,880	

Cranley Buildings were planned for 60 people and so the cost per person is £8,880 / 60 = **£148**

The above examples show that exact comparisons are difficult, although those detailed differences generally involve relatively small amounts. In both the above examples the Council

needed to carry out (or took the opportunity to carry out) street widening schemes. The benefits of the widening would have been felt across the next century and beyond. The cost of paving the surrounding streets with 'asphalte' in the Brooke's Market scheme was a cost that would have to be borne by the Council anyway at some later date. The only other significant difference between the schemes is that Holborn District Board contributed £3000 towards the second scheme. A number of Part II schemes, such as Brooke's Market, required the local District to contribute towards the costs, although not all did. Holborn District Board originally offered £1,400 but eventually agreed to fund half the cost, not to exceed £3,000, which they paid following acquisition of the property to be cleared.

Where the value of the land is quoted in the Council's papers (officially, the Rateable Value), this figure is not a true commercial value, but is a much lower one based on having working-class housing erected on the land that must remain as working class housing for a stipulated period (typically, from 60 years to 'in perpetuity'). The value applied to the completed scheme was important to the Council as it made up one element of the sinking fund used to control the full-life costs of all schemes. This sinking fund is described in more detail later in this chapter.

The Council were aware of the possible criticism they would receive for the high costs when compared to philanthropic builders such as the Peabody and Guinness Trusts. The latter did not have to carry the costs of purchasing and clearing the slums, but were able to purchase the cleared site at a knock-down price because it could only be used for long-term working-class housing. Such was the difference between the inevitable high cost to purchase the slums and the low commercial value of the cleared site that the Council openly wrote off the purchase costs when promoting the cost-effectiveness of their building schemes.

The funding of all the schemes came out of the Dwelling House Improvement Fund which was never large enough for the schemes and so the Council would often apply for Treasury loans at advantageous rates, which were usually $3\frac{1}{4}\%$ or even $3\frac{1}{8}\%$. These loans were originally to run for 40 years, but were extended in 1903 to 80 years for housing and 60 years for land, and to 80 years for both in 1909.

5.2. Managing the construction costs

When the architects designed the required blocks or cottages they will have calculated the estimated cost of construction based on known labour and material costs. This estimated cost was vital to ascertain the cost-effectiveness of any plan based on the number of tenancies and the expected weekly rents. Once the Council's own designs were completed the invitation to tender went out to local builders (and to their own Works Department in many cases), and the builders submitted their tenders to construct the buildings. The Council would often take the lowest tender but other factors may come into play and a higher tender accepted. The tenders were often remarkably close to the architect's estimates indicating that either the contractor knew the estimate in advance, or that the parameters of the architect's calculations were public knowledge. The truth is probably a combination of the two. Anyone who is involved in bids for contracts for the Government and local authorities today will know that their sales force will have knowledge of the contract value the customer is expecting, and will also have been given guidelines as to the expected detailed costs that make up to total value.

Despite this early period of government accounting, there were guidelines and expectations placed on the contractors as to material and labour charges. A search of the archives has failed to unearth documents that detail these expected costs for contracts before World War 1, but a very detailed contract breakdown has been found from 1920. This schedule of labour cost stipulates the hourly wage of all the tradesmen who may be used on a contract. The detail is quite remarkable and one wonders what the purpose was of enforcing such a detailed

breakdown when the Council could have simply insisted on a fixed-priced contract with no questions asked about how the contractor was going to carry out the work. However, government accounting has a history of cost over-runs and the schedule, illustrated on the following pages, would have been vital to ensure that any over charges were not the result of the contractor paying wages over the stipulated amount, unless agreed in advance. It should be borne in mind that skilled labour was in very short supply following WW1 and this Schedule was probably drawn up to control the wages of the labourers to help prevent rampant inflation. One could argue that it was successful as inflation after WW1 was controlled, although the Council would have been just one of many government organisations introducing the same controls. Conversely, the Council was more guilty than many in allowing excessive pay rises resulting from union pressure. Many of the Council's own workers enjoyed considerable success in getting their wages increased after WW1, excessively so in some cases. An example of the problems that caused is illustrated in the section covering the Carrington Lodging House in Greenwich.

THE SCHEDULE.

RATES OF WAGES AND HOURS OF LABOUR.

The Lists of wages and hours of labour in Part I. and Part II. of this Schedule are severally to be binding upon the Contractor, subject to the following proviso, which is to be considered as included in each part of the Schedule, that is to say—

Provided always that if at any time or times and so often as the same may happen during the continuance of this Contract in any trade mentioned or referred to in this part of this Schedule a different rate of wages or different hours of labour from the rate of wages or hours of labour respectively provided for in this part of this Schedule, shall after the date of the Contractor's Tender be agreed to between the associations of employers and the union of employees in such trade in the district in which the work is being or is to be done, then, from the date of any such agreement, and so long only and to such extent only as the same shall be in force, the rate of wages or hours so agreed upon shall be considered as substituted in this part of this Schedule for the rate of wages or hours provided for in this part of this Schedule for the same class of labour; and Clauses Nos. of the conditions of this Contract shall be construed and have force and effect in all respects as if the substituted rate of wages or hours had originally been provided for in this part of this Schedule instead of the rate of wages or hours therein provided for, and for this purpose any such agreement as aforesaid between the associations of employers and the union of employees in any trade in the London district shall be considered as applying to all work done in that trade at the site mentioned in the Specification or elsewhere within the radius mentioned in Part I. of this Schedule.

500 (O. 23344)—2.11.20—60287

Fig. 6: Page 1 of the 1920 Schedule

THE SCHEDULE—*continued.*

RATES OF WAGES AND HOURS OF LABOUR.

PART I.

For all work done at the site mentioned in the Specification or elsewhere within a radius of 20 miles measured in a straight line from Charing Cross in the County of London.

Trades.	Rate of pay per hour.	Hours of labour per week.	Rate of pay for night gangs and for Overtime when worked at request of employer.
BUILDING TRADES—			
Carpenters	2s. 4d.	44¶	First two hours time and a quarter, next two hours time and a half; double time thereafter and for Sunday work, Christmas Day and Bank Holidays. Night gangs 3d. an hour in addition to ordinary rate.
*Joiners			
Masons	2s. 4d.		
Masons (fixing)	2s. 5d.		
Masons (granite work) ..			
*Bricklayers	2s. 4d.		
Bricklayers (cutting and setting gauged work)	2s. 5d.		
Plasterers	2s. 4d.		
Plumbers	2s. 4½d.		
Plumbers' mates	2s. 1d.		
‖Wood-cutting machinists ..	2s. 4d.		
Builders' labourers	2s. 1d.		
Timbermen and scaffolders ...	2s. 2d.		
Glaziers	2s. 3d.		
§Painters			
‡Electric derrick drivers ...	2s. 3½d.	As arranged<	
Steam derrick drivers	2s. 5d.		
Drivers of travelling cranes and overhead travellers (steam or electric)	2s. 2d.		
Drivers of portable and stationary engines	2s. 1½d.		
Boiler attendants and derrick signalmen when engaged on crane stage	2s. 1d.		
GLAZING TRADE—			
Glaziers	1s. 11½d.	In accordance with the agreement between the workmen's union and the London Glaziers Employers' Federation.	
Glaziers' assistants	1s. 9d.		
ASPHALTERS—			
Spreaders	1s. 9d.	In accordance with agreement dated 29th September, 1919, between the National Union of Asphalte Workers and the London Master Asphalters' Association.	
Potmen and labourers	1s. 6d.		
†CARMEN—			
Drivers		In accordance with the agreements, dated 30th January, 1919, between employers' associations and federations and the National Transport Workers' Federation.	
Assistant horsekeepers and stablemen			
Vanguards			

* This rate of pay is to apply to a "joiner" or "bricklayer" when working on civil engineering construction works.
† The rates of pay in the agreement include war wage advances previously granted. They are subject to the addition of a further war advance under award No. 645 of the Court of Arbitration, dated 6th August, 1919, and of the war advance under award No. 225, dated 31st March, 1920, of the Industrial Court.
§ Subject to employers having the option to allocate certain defined work to labourers at labourers' rate of pay.
‖ Spindle and four cutter hands, 1d. an hour extra.
¶ Plumbers to work 41¼ hours during the first 12 weeks of winter.

Fig. 7: Page 2 of the 1920 Schedule

Trades.	Rate of pay.	Hours of labour per week.	Rate of pay for overtime when worked at request of employer.
Electrical Trade—	Per hour.		
††Electrician	2s. 6d.	47	
Auxiliary workman assisting electrician	~~1s. 9d.~~ 2-0		
	In accordance with the agreement, dated 27th February, 1920, between the National Federated Electrical Association and the Electrical Trades Union.		
§Engineering Trades (Mechanical)—	Per week.		
Brass finishers	56s. to 59s.	47	*First two hours*—Time and a quarter. *After first two hours until 6 a.m.*—Time and a half. *Sunday work*—Double time. *Night shifts*—Time and a half.
Turners			
Fitters and erectors ...			
Millwrights			
Smiths			
Borers			
Slotters and planers ...			
Coppersmiths	59s.		
Pattern makers...	61s. 4½d.		
Hammermen	11½d. per hour		
Labourers	10½d. hour		
Drillers	7s. 2d. and 8s. 2d. a day	—	—
Civil Engineering Construction Works Trades—			
Navvies	x (now 2s. 1d.)†		
Fitters	x plus 2½d. to 3½d.		
Navvy drivers	x plus 3d. to 4d. according to size of machine		
Wheelsmen	x plus 1d. to 2d.		
Catchmen	x plus 1d.		
Derrick drivers	x plus 2d. to 3d.		
(On high scaffolds)	x plus 4d.		
Grab drivers	x plus 3d.		
Loco drivers	x plus 3d.		
Crane drivers up to 5 tons ..	x plus 2d.		
Crane drivers over 5 tons ...	x plus 3d.		
Roperunners	x plus 1d.		
Portable and pump drivers (men)	x		
Navvy firemen (men)	x		
Blacksmiths	x plus 2½d. to 3½d.		
Strikers (men)	x plus 1d.		
Gangers	x plus 3d. and upwards		As arranged
Timbermen	x plus 2d.		
Do. labourers	x plus ½d.		
Wagon fettlers	x plus 2d. to 3d.		
Pile drivers, charge hands ...	x plus 3d.		
Laddermen	x plus 1d. to 2d.		
Gang	x plus ½d.		
Platelayers (not labourers in gang)	x plus 1d. to 2d.		
Earthenware and cast iron pipe-layers and jointers ...	x plus 2d.		
Jointer's mates	x plus 1d.		
Tunnel miners	x plus 8d.		
Labourers	x plus 6d.		
Scaffolders	x plus 1d. (height money allowed in addition)		
Boys and youths (14 to 16) ...	⅓ x		
(Doing boy's and youth's work) (16 to 18)	½ x		
(18 to 20)	⅔ x		
Various Trades—			
Wheelwrights	In accordance with the agreement dated 5th March, 1920, between the Trade Unions and the Employers' Associations.		
Lath-renders	Piecework prices as per trade list.		
	Per hour.		
*Paviors and other labourers on road construction and sewer work	x (now 1s. 11d. in City and County of London)	47	As fixed by the Public Works Conciliation Board on 11th March, 1920.
*Paviors	x plus 4½d.		
*Wood-block layers	x plus 1d.		
‡Barge builders	2s. 3d.	48	5 p.m. to 7 p.m. time and a half; all other overtime double time.
Watermen and lightermen ...	Per day 16s. 0d.	48	In accordance with the agreement of May, 1920.
	Per hour		
‡Zinc workers	1s. 3d.	47	As arranged
French polishers	2s. ~~3½d.~~ 4	47	
Heating and domestic engineers	2s. 3½d.	47	In accordance with the agreement dated 14th Jan., 1919, between the National Association of Master Heating and Domestic Engineers and the National Union of Heating and Domestic Engineers and General Metal Workers.

See Notes on next page.

Fig. 8: Page 3 of the 1920 Schedule

* Not applicable to staff employees and to employees in the tramways department, whose full working week is guaranteed.

† This rate of pay is only applicable on civil engineering works carried out within towns and other congested areas; outside these areas the rate shall be as fixed by the Civil Engineering Construction Conciliation Board.

†† This rate is applicable to all qualified journeymen who are employed by electrical contractors, except such employees as may be engaged for full time on manufacturing work under agreed engineering conditions.

‖ These rates include 7s. a week originally given as war wages and 6s. a week granted under award No. 189 of the Industrial Court. They are subject to the addition of war wages advances of 26s. 6d. a week and a bonus on earnings of 12½ per cent.

§ This rate of pay covers war advances and the 12½ per cent. bonus.

‡ Subject to the addition of war wages at the rate of 39s. 6d. a week and a bonus of 12½ per cent. on earnings.

Trades.	Rate of pay and hours of labour.
Printing—	
Hand compositors	The rates of wages and hours of labour recognised by associations of employers and trade unions, and in practice obtaining in London in the trade; or, where no such rates are so recognised, the rates in practice obtaining in London.
Machine compositors ...	
Machine managers	
Operative printers' assistants	
Platen machine minders ...	
Printers' warehousemen ...	
Cutters	
Packers	
Posters and loaders... ...	
Women folders, sewers, etc.	
Printers' readers	
Lithographic printers ...	
Machine rulers	
Bookbinding—	
Letterpress binders	In accordance with the award of 20th March, 1903, and any scales of prices or variations agreed by the London Letterpress Piece Price Board formed in pursuance thereof, and any variations otherwise agreed between associations of employers and trade unions, or in practice obtaining in London.
Account book and other binders (other than letterpress)	Except as otherwise provided, the rates of wages and hours of labour recognised by associations of employers and trade unions, and in practice obtaining in London in the trade, or where no such rates and hours are so recognised, the rates and hours in practice obtaining in London.

Part I. of this Schedule is believed to include all the trades which the Contractor may require to employ in or about the execution of this Contract at the site mentioned in the Specification or elsewhere within the radius aforesaid. If, however, he should employ at the site aforesaid or elsewhere within the radius aforesaid any employee or employees in any trade not so included, the rate of wages and rate of wages for overtime to be paid to such employee or employees are not to be less, and his or their hours of labour are not to be more, than the rate of wages and the rate of wages for overtime and hours of labour, respectively, recognised by associations of employers and trade unions and in practice obtaining in London, or where no such rates and hours are so recognised, the rates and hours which in practice obtain in London, and such rate of wages, rate of wages for overtime, and hours of labour are to be deemed to be included in this part of this Schedule and governed by the proviso preceding Parts I. and II. thereof.

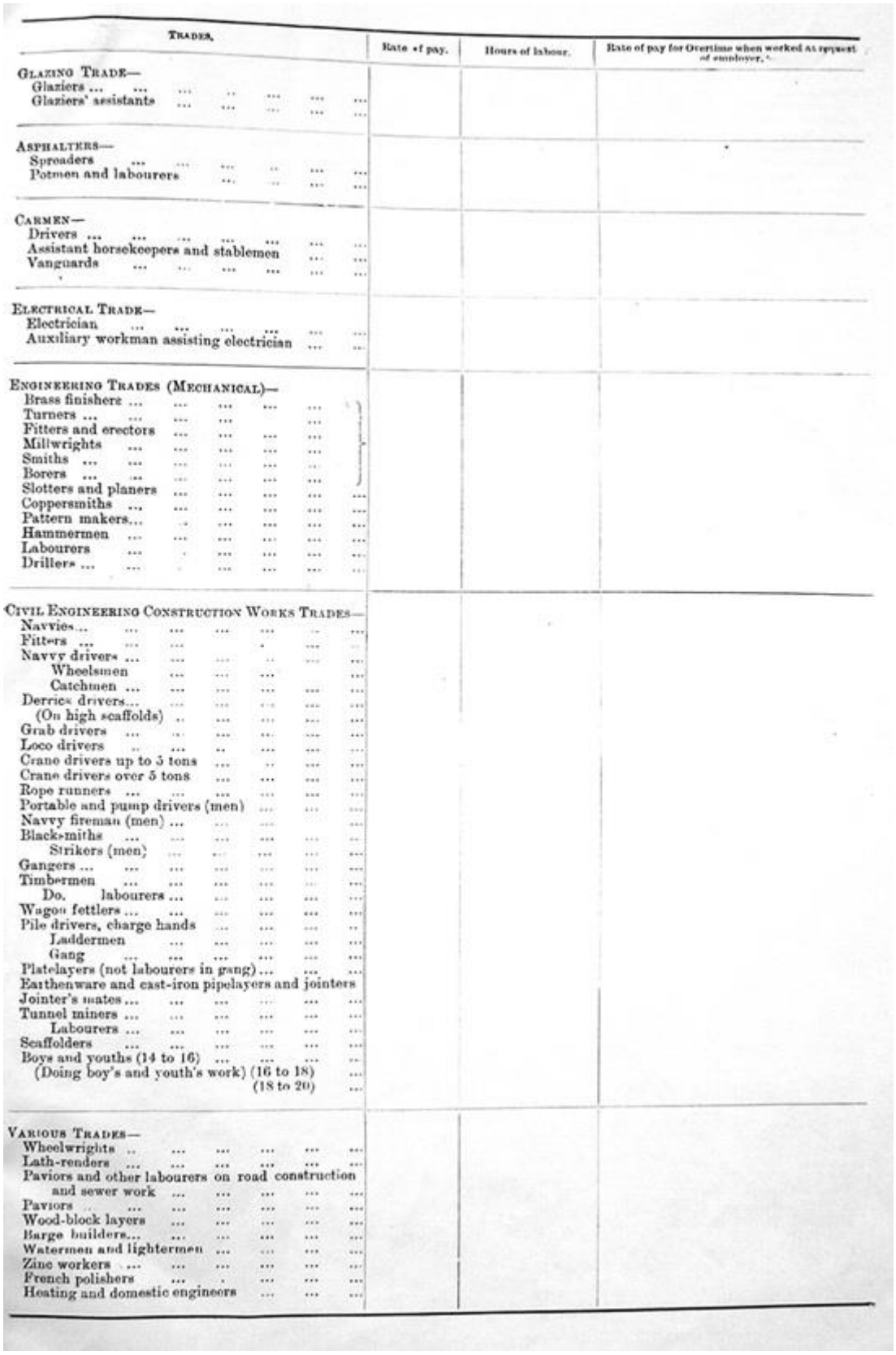
PART II.

For all work done outside the site aforesaid and a radius of 20 miles measured in a straight line from Charing Cross, in the County of London, namely, at

where all work not done on the site or elsewhere within the radius aforesaid is intended to be done.

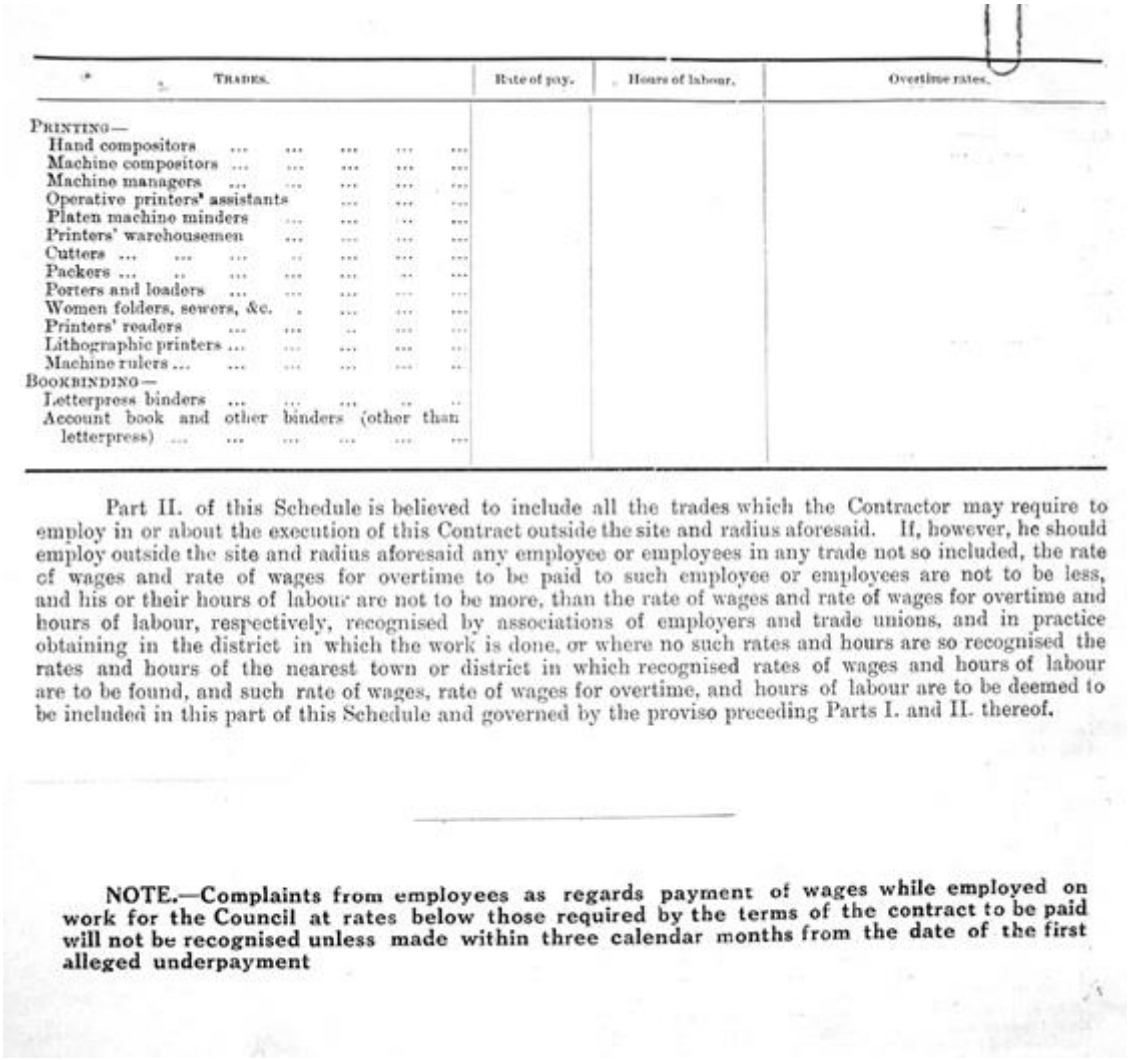
Trades.	Rate of pay per hour.	Hours of labour per week.		Rate of pay for night gangs and for Overtime when worked at request of employer.				
				Week-days (except Saturdays).			Saturdays	
		Summer.	Winter	Until 8 p.m.	8 p.m. until 10 p.m.	After 10 p.m.	Until 4 p.m.	After 4 p.m. and Sundays and Christmas Day.
Building Trades—								
Carpenters								
Joiners								
Masons								
Masons (fixing)...								
Masons (granite work)... ...								
Bricklayers								
Bricklayers (cutting and setting gauged work)								
Plasterers								
Plumbers								
Plumbers' mates								
Wood-cutting machinists ..								
Builders' labourers								
Timbermen and scaffolders ...								
Glaziers								
Painters								
Electric derrick drivers ...								
Steam derrick drivers								
Drivers of travelling cranes and overhead travellers (steam or electric)								

Fig. 9: Page 4 of the 1920 Schedule



Trades.	Rate of pay.	Hours of labour.	Rate of pay for Overtime when worked at request of employer. *
Glazing Trade—			
Glaziers			
Glaziers' assistants			
Asphalters—			
Spreaders			
Potmen and labourers			
Carmen—			
Drivers			
Assistant horsekeepers and stablemen			
Vanguards			
Electrical Trade—			
Electrician			
Auxiliary workman assisting electrician			
Engineering Trades (Mechanical)—			
Brass finishers			
Turners			
Fitters and erectors			
Millwrights			
Smiths			
Borers			
Slotters and planers			
Coppersmiths			
Pattern makers			
Hammermen			
Labourers			
Drillers			
Civil Engineering Construction Works Trades—			
Navvies			
Fitters			
Navvy drivers			
Wheelsmen			
Catchmen			
Derrick drivers			
(On high scaffolds)			
Grab drivers			
Loco drivers			
Crane drivers up to 5 tons			
Crane drivers over 5 tons			
Rope runners			
Portable and pump drivers (men)			
Navvy fireman (men)			
Blacksmiths			
Strikers (men)			
Gangers			
Timbermen			
Do. labourers			
Waggon fettlers			
Pile drivers, charge hands			
Laddermen			
Gang			
Platelayers (not labourers in gang)			
Earthenware and cast-iron pipelayers and jointers			
Jointer's mates			
Tunnel miners			
Labourers			
Scaffolders			
Boys and youths (14 to 16)			
(Doing boy's and youth's work) (16 to 18)			
(18 to 20)			
Various Trades—			
Wheelwrights			
Lath-renders			
Paviors and other labourers on road construction and sewer work			
Paviors			
Wood-block layers			
Barge builders			
Watermen and lightermen			
Zinc workers			
French polishers			
Heating and domestic engineers			

Fig. 10: Page 5 of the 1920 Schedule



Trades.	Rate of pay.	Hours of labour.	Overtime rates.
PRINTING—			
Hand compositors			
Machine compositors			
Machine managers			
Operative printers' assistants			
Platen machine minders			
Printers' warehousemen			
Cutters			
Packers			
Porters and loaders			
Women folders, sewers, &c.			
Printers' readers			
Lithographic printers			
Machine rulers			
BOOKBINDING—			
Letterpress binders			
Account book and other binders (other than letterpress)			

Part II. of this Schedule is believed to include all the trades which the Contractor may require to employ in or about the execution of this Contract outside the site and radius aforesaid. If, however, he should employ outside the site and radius aforesaid any employee or employees in any trade not so included, the rate of wages and rate of wages for overtime to be paid to such employee or employees are not to be less, and his or their hours of labour are not to be more, than the rate of wages and rate of wages for overtime and hours of labour, respectively, recognised by associations of employers and trade unions, and in practice obtaining in the district in which the work is done, or where no such rates and hours are so recognised the rates and hours of the nearest town or district in which recognised rates of wages and hours of labour are to be found, and such rate of wages, rate of wages for overtime, and hours of labour are to be deemed to be included in this part of this Schedule and governed by the proviso preceding Parts I. and II. thereof.

NOTE.—Complaints from employees as regards payment of wages while employed on work for the Council at rates below those required by the terms of the contract to be paid will not be recognised unless made within three calendar months from the date of the first alleged underpayment

Fig. 11: Page 6 of the 1920 Schedule

To the Council's credit, the costs of the constructions of the blocks and cottages before WW1 do seem to have been controlled well with some even being completed under-budget. There are very few examples of final costs being far in excess of estimates and these often had good reasons such as a change of the architect's plans before or during construction, or due to unexpected problems with the sub-soil. With a history of grossly-overrunning civil engineering contracts in modern times, this control of the early LCC housing construction costs is to be admired and applauded.

5.3. Calculating the full-life costs

So how did the LCC recover these costs? Quite simply, from the rent collected over a given period, which was usually a maximum of 60 years. To control the recovery of costs each scheme had a set of accounts and any profit (or loss) went into a sinking fund which was designed to include allowances for periodic refurbishment and especially for a major modernisation towards the end of the loan period. To achieve this, the sinking fund was expected to result in a minimum profit of $2\frac{1}{2}\%$ per annum, and ideally $3\frac{1}{2}\%$. Working back from this bottom line of profit, each scheme would have needed to return a profit from rents of $2\frac{1}{2}\% + 3\frac{1}{4}\%$ (say) to cover the loan interest = $5\frac{3}{4}\%$. Some treasury loans had a slightly lower interest rate, but the principles are the same.

The final financial consideration was the ability to recover the costs over the set Treasury loan period. Each year the Council produced detailed accounts for all of the buildings to ensure the

rental income was not less than the costs (including the interest payments on the loan). These calculations were initially carried out when designing the building. If the estimated income was less than the costs, the Council could not simply increase the planned rents as this would inevitably increase the number of vacant tenements at any one time, and the Council were committed to charge the same rents being charged for similar property in the area. The only choice the Council had was to either apply to reduce the numbers to be re-housed, or make the new housing cheaper to build. Any deficit at the end of the year had to be recovered from the county rates and this was always very unpopular with the rate-payers. To reduce the numbers to be re-housed (under Part I or II of the Housing Act) the Council had to apply to Parliament with a business case to reduce the provision for the new housing.

It does not take much to work out that the margin between financial success and financial failure was a narrow one. The architects tried their best to design the best housing within the financial constraints.

The LCC architect's designs came with an estimated cost to build which was compared to the responses from the potential builders following the invitation to tender. The first builder to be asked to tender was usually the Council's own Works Department and they were often successful with their tender. One assumes that the architect's estimate was known to them in advance as many times they declined to tender knowing that they could not match the estimate. There are also cases where the Works Department turned down a tender because they had insufficient manpower to carry out the work.

Many schemes failed to find a builder who was willing to erect the dwellings within the architect's estimate. This always resulted in the architect having to modify the plans. In reality, this meant reducing costs by lowering the standards or by reducing the size of rooms. In the case of buildings carried out under Part III of the 1890 Act, the change in provision could be made on the needs of the area rather than any re-housing rules from slum clearance.

One immediate impact of the difficulty of having to design cost-effective buildings was that the initial building standard of a maximum of 4 storeys had to be raised to 5 storeys to increase maximum occupancy. The speed of this impact can be judged from the fact that the first block erected by the LCC (Beachcroft Buildings, Limehouse) was 4 storeys, but the second (Yabsley Street, Poplar) had another floor added to the top of the original building plan. The minimum ceiling height and stairway width were also early victims, with the former reduced from 9 feet to 8' 6" and the latter from 4 feet to 3' 6" in 1893 – just 4 years after the building regulations were brought in. Although there were further detailed changes to the standards over the years, there was a commendable restraint as regards making the dwellings even smaller. In fact, following experiences with the Boundary Street scheme, the minimum size of certain rooms was actually increased. There were differing regulations depending on whether the scheme was under Part I, II or III of the 1890 Housing of the Working Classes Act, but the principles of airiness, space, light and accessibility remained ingrained. One other factor that also remained was the quality of the buildings erected before WW1. The high standard of construction and fittings was something of which architects could proudly boast. Only when building materials were in very short supply after WW1 did the standards have to come down.

5.4. Rents

Returning to the issue of rents charged, it is worth reiterating that Council rents should not be higher than those for equivalent property in the area but needed to be high enough to return a profit of at least 5¾% pa to allow for loan repayments and sinking fund contributions.

The Council believed that they could charge a premium rent for their property based on the high quality of the dwellings and the generous proportions of the rooms. But is that what the working classes wanted, or could afford? Inevitably, the rents charged were higher than those for nearby philanthropic housing and not many people were willing to pay the higher rents, even if the quality of the accommodation was high. More importantly, the residents evicted from the slums were usually simply unable to afford the rents and unwilling to abide by the strict tenancy rules such as: no sub-letting; no commercial undertakings (including the taking in of washing); and regular payment of rent. To be fair, all the successful philanthropic housing had the same rules, but at least their rents were usually lower.

A comparison of the rents between the LCC and Peabody dwellings is illustrated in Table 8.

		1 room	2 room	3 room	4 room	5 room
Boundary Street estate	Bethnal Green/Shoreditch	3/- to 4/-	5/- to 8/-	7/- to 10/6	9/- to 13/-	10/6 to 14/-
Goldsmith Row cottages	Shoreditch		5/6	7/6 to 8/6		
Peabody	Spitalfields	2/6 to 3/6	3/9 to 4/6	5/7 to 8/6	7/9	
Peabody	Bethnal Green	2/3 to 2/6	4/9	6/3		
Peabody	Whitechapel	3/- to 3/3	4/4 to 5/3	5/7 to 6/6	7/6	
Bekesbourne Buildings	Stepney		5/- to 6/-	6/6 to 7/6	8/- to 8/6	
Brightlingsea Buildings	Stepney	3/6 to 4/-	5/- to 5/6	6/6 to 7/6	8/- to 8/6	
Brook Street dwellings	Stepney		5/6	7/- to 8/-		
Cable Street dwellings	Stepney	4/6 -to 5/-	5/6 to 6/6	7/6		
Peabody	Shadwell	2/3 to 2/6	3/9 to 4/-	4/9 to 5/-		
Barnaby Buildings	Bermondsey		5/6 to 6/-	7/6 to 8/-		
Borough Rd dwellings	Southwark		6/6 to 8/-	9/5 to 10/-		
Cobham Buildings	Southwark		6/- to 6/6	8/6 to 9/-		
Albury/Cladon/Merrow/Ripley Buildings	Southwark	4/6 to 5/-	6/6 to 7/-	8/6		
Holmwood Buildings	Southwark		8/- to 9/-	11/6		
Webber Road	Southwark	5/-	5/6 to 7/6	8/- to 10/-	9/-	11/6
Peabody	Bermondsey	3/-	4/9 to 5/-	6/9		
Peabody Blackfriars Rd	Southwark	2/8 to 3/2	4/1 to 4/10	5/3 to 6/3		
Peabody Stamford Street	Southwark	2/8 to 2/11	4/6 to 5/3	5/11 to 6/11	8/-	
Peabody Southwark Street	Southwark	2/4 to 3/-	4/10 to 5/7	6/- to 6/6	8/1	

Table 8: LCC and Peabody rents in comparable areas

The Peabody buildings are not self-contained and typically had 2 separate WC's shared between 4 tenements. Another major philanthropic developer, Sidney Waterlow, built dwellings that were all self-contained and comparable to most LCC dwellings, and with rents typically 6d per room higher than Peabody's. It is significant that Sydney Waterlow stopped building his philanthropic dwellings in 1896 as they were not cost-effective to build based on the rents he would needed to have charged.

All rents are inclusive of local rates but the collection of the rates was not always simple. The local authorities (the borough) gave a discount on rates when they were collected by landlords, but the amount of discount was always under pressure from the local authority accountants. Initially the discount to the landlords for collecting the rates was as much as 25%, but this was soon under pressure from local authorities and some reduced the discount to as little as 10%, which usually made it uneconomic for the landlords. Many felt it was not worth their time and effort to collect rates. Some landlords, and this included Peabody, decided to remove the rates from the rent payments and made the tenants responsible for paying their own rates, but the LCC always collected the rates with the rents[5]. This needs to be taken into account when comparing rates in Table 8 above although adding the rates into the rents will never account

for the all the pronounced difference between the rents charged. For the Garden Estates, the LCC did not include the rates in the rents, and the tenants had to pay the rates quarterly.

5.5. The Sinking Fund

Local Government accounting at the time placed great importance on the sinking fund to measure the profitability (or otherwise) of any scheme. This fund would be set up to ensure that any construction would result in a fund to be used to modernise or re-build at the end of the expected life of that building. The term 'sinking fund' is a bit misleading as it suggests the fund is at its maximum at the start of the scheme and at zero at the end. This may have been how the fund was originally envisaged, but by the time the LCC was applying it the fund tended to work in the opposite direction and built up over a period of time.

The fund, in its simplest form, is best described as a 'pot' into which the residual profit from each scheme is added each month. Profit from rents would be used to repay loans and what is left over (if anything) gets put into 'the pot' for the scheme each month.

The amount added each month may vary and so the Council needed to have a measure or target for each scheme based on the life of the Treasury loan, which was typically 60 years. This target was the market value of the property and the Council used the rateable value of the property (or 'site' as it was usually called) as the target. If a particular scheme resulted in property with a (rateable) value of, say, £5000 the Council would only need to recover a profit each month of approximately £7 for the whole property for the period of 60 years (£7 x 12 x 60 = £5040). However, this does not allow for refurbishment or replacement of the buildings at the end of the 60 years, or for inflation. As a result, the sinking fund was a relatively flexible account that was used as a notional target to assess profitability when the scheme was first proposed (based on estimates) and then generally tracked throughout its life. This notional target created some interesting account practices for some of the schemes. The Council was quite open about the likelihood of some schemes never being profitable. The majority of these would be where they were forced to re-house people displaced from street improvement schemes (including those for bridges, tunnels and tram routes), but there were also some unprofitable schemes carried out under Parts I and II of the 1890 Housing of the Working Classes Act. All Part III schemes were proactive and should have always made a profit, although the Council did suffer some spectacular failures under this part of the Act. Where the cost of the housing to be built was estimated to result in an accounting loss it has already been mentioned that the architect would try and reduce the estimated costs of the construction, or the Council would attempt to reduce the numbers to be rehoused. If none of these actions were successful the Council would resort to an accounting ruse of artificially lowering the rateable value of the site This had the double impact of reducing the rates payable and reducing the size of sinking fund 'pot'. They sometimes got away with it in the early days of the Progressive-led Council, but the Conservative members would usually spot this ruse and reject the proposal as submitted to the Housing Committee. The result was that some rehousing schemes never ever made a profit.

Of course, as with all profit and loss accounting, the profits from one scheme would be used to offset losses from others to come up with, ideally, a profit for the whole housing stock for the Council. Unfortunately, the reality was that a number of housing schemes were seriously unprofitable and funds were needed to offset the losses for those in particular to stop them having such a major negative impact on the profitability for all the Council's housing stock. The Council would apply for funds out of the rates and this was always considered a last resort because of the political embarrassment it caused. Section 5.7 details the profitability of each scheme based on the Council's Housing Committee accounts for the year 1913-14.

When the laws were changed in the 1930s to allow for the rates to be used for funding housing, the Council, and all local authorities, could develop true social housing for all working classes without having to balance the books using rental income alone.

5.6. Managing the running costs

One area where the LCC differed from nearly all the other philanthropists, entrepreneurs and developers is in the method of managing the buildings and the tenants.

The LCC decided to manage the buildings from the headquarters, with local building superintendents having little power to make decisions. The superintendent would report to the area representative or County Hall direct regarding Notices to Quit, applications for tenancy, problems, employment of porters, etc. In a further difference from the way other organisations ran their housing, the LCC employed dedicated rent collectors who might cover a different set of housing than the superintendent, although, in the early days, they did tend to work together. The superintendent was responsible for the fabric of the building and managing the porters and the general condition of the estate, and the rent collectors did just that. Initially the superintendent and rent collector worked for the Valuer's department, which became the Valuers and Estates department and, later, the Estates and Valuers department. In 1900 the superintendents and porterage staff were transferred to the Housing Department on the foundation of that new Department. This left the two key staff, superintendent and rent collector, reporting into two different LCC Departments.

This method of management is at odds with the practice of the time which had been developed from the success of Octavia Hill where she appointed a female manager for every building purchased, and they also collected the rents. She astutely observed that the real home makers were the wives and mothers left in the tenements during the day whilst the male head of household was out most of the day working (or drinking in the evening). The female managers encouraged the wives to look after the property and the wives, in turn, ensured the husbands did not upset the scheme. As the tenant's behaviour improved, and their rents were paid regularly, so the facilities in the buildings were improved stage by stage as a reward. This was important in old buildings where she took over the management. Bad tenants and those who could not or would not pay the rent regularly were summarily evicted by the manager, although one assumes that a family on temporary hard times was dealt with sympathetically as there was never any bad press regarding her style of management. This idea of self-improvement fitted the Victorian ideal of how the poor should behave.

Most of the successful philanthropic organisations adopted the 'Octavia Hill system' of building management although most employed male building managers. These managers would vet and take on tenants; issue NQs (Notices to Quit); manage the maintenance of the building; manage the staff employed (generally called porters); maintain the registers; collect the rents; enforce the regulations; and report back to HQ each month. This system of having an authority on site worked very well and was used by the Peabody Trust until very recently.

The LCC decided that the cost of having these staff on site for the majority of the estates was an overhead they did not want and most supervisors covered a number of blocks in the area, as did the rent collectors. Most NQs and all financial transactions were issued from County Hall. Whilst an accountant could prove the benefit of this method in the short term because of the lower wage bill, the long term implications were often significant and the problems were many. These included: the long time taken to evict bad tenants which had the knock on effect of generating poor morale amongst the immediate tenants who were having to suffer the bad ones; the rent arrears were usually higher than in locally managed dwellings; the maintenance could be higher due to increased vandalism; and the extra time a vacant dwelling remained empty

could run into weeks as the Housing Department would have to approve the new tenants. Another advantage of having a local superintendent is one that is nearly impossible to value – the feeling of security and convenience that comes from having a representative of the landlord on site and generally available. From 30th September 1901 the LCC adopted a different approach for the large Boundary Street Estate where, in addition to existing duties, the resident superintendent also collected rents, received application for tenancies and issued the first notice of arrears in the weekly rent[6]. The headquarters staff still selected the tenants from the applications and managed rent arrears. This model was later applied to the Millbank Estate. The success of this management method was measured purely in financial terms of lower vacancies and lower rent arrears.

The LCC never wavered from its 'management from a distance' approach for all but the largest estates and the GLC saw no reason to change when it took over in 1965. Only in the last 2 decades have the benefits of local management been recognised by the local authorities and many London boroughs now employ on-site caretakers or managers in all the tower blocks and estates to the benefit of the council and residents. Unfortunately some have started to revert back to managing from a distance via neighbourhood offices with maintenance provided by contracted service companies.

The costs of maintaining the Council's buildings seems to be extraordinarily high according to the Council's own figures, but the term 'maintenance' included all costs to run the buildings, such as labour, rates, taxes and general repairs. Interest on the Treasury loans are not included in these costs. Table 9 below shows the percentage of outgoings (costs) against income for all the property completed by 1910.

The table is in ascending sequence of the cost to maintain, with the most effective buildings at the top. It is not surprising to find all four Lodging Houses in the bottom four places. These buildings required staff to maintain the building whilst the blocks and estates just required a few staff to act as porters for local maintenance.

Dwellings	Borough	Date	1905-6	1906-7	1907-8	1908-9	1909-10	Avge%
Bearcroft Buildings	Fulham	1906		28	21	21	21	23
White Hart Lane Estate*	Tottenham	1907	31	27	28	27	24	27
Briscoe Buildings	Lambeth	1906		11	27	34	41	28
Mallory Buildings & Union Bldgs	Holborn	1906		25	25	32	32	29
Caledonian Estate	Islington	1906		25	26	36	37	31
Totterdown Fields Estate*	Wandsworth	1903	37	31	34	33	35	34
Bourne Estate	Holborn	1902	34	35	34	35	35	35
Russell Court Dwellings	Westminster	1903	35	35	35	35	35	35
Valette Buildings	Hackney	1905	26	37	35	37	38	35
Wessex Buildings	Islington	1905	35	38	26	39	39	35
Millbank Estate	Westminster	1900	37	36	36	36	36	36
Shelton Street Dwellings	Holborn	1896	34	36	35	37	37	36
Wenlake & Chadworth Buildings	Finsbury	1905	38	38	34	34	35	36
Webber Row Estate	Southwark	1906		30	35	38	39	36
Churchway Dwellings	St Pancras	1902	37	37	36	37	37	37
Durham Buildings	Westminster	1904	31	36	38	39	39	37
Herbrand Street Dwellings	Holborn	1901	36	37	36	37	37	37
Norbury Estate*	Croydon	1906		44	36	32	34	37
Battersea Bridge Buildings	Battersea	1901	38	38	37	39	40	38
Bekesbourne Buildings	Stepney	1907			37	39	39	38
Darcy Buildings	Hackney	1904	38	37	35	38	40	38
Duke's Court Dwellings	Westminster	1902	38	38	37	38	37	38
Idenden Cottages	Greenwich	1896	42	38	36	37	38	38
Preston Road Dwellings	Poplar	1904	33	43	37	38	41	38
Swan Lane Dwellings	Bermondsey	1903	30	38	36	41	43	38
Wandsworth Rd Dwellings	Lambeth	1905	36	38	37	38	39	38
Brightlingsea Buildings	Stepney	1904	36	42	38	40	41	39

Cobham Buildings	Southwark	1900	36	37	39	42	43	39
Cranley Buildings	Holborn	1897	38	39	38	39	40	39
Hughes Fields Cottages	Deptford	1895	43	38	35	36	42	39
Hughes Fields Dwellings	Deptford	1904	38	41	38	38	39	39
Sylva Cottages	Deptford	1903	40	39	37	37	40	39
Borough Road Dwellings	Southwark	1900	39	39	39	41	42	40
Green & Gun Street	Southwark	1897	37	38	39	42	43	40
Hardy Cottages	Greenwich	1901	43	42	39	41	40	41
Cable Street Dwellings	Stepney	1901	41	43	42	42	41	42
Cotton Street Dwellings	Poplar	1894	46	41	36	41	44	42
East Greenwich Cottages	Greenwich	1894	44	42	40	41	41	42
Goldsmith Row Cottages	Shoreditch	1901	43	42	41	41	42	42
Boundary Street Estate	Bethnal Green	1901	46	46	41	41	42	43
Brook Street Dwellings	Stepney	1900	45	44	41	43	43	43
Ann Street Dwellings	Poplar	1901	47	44	40	42	45	44
Barnaby Buildings	Bermondsey	1904	45	47	39	43	44	44
Council Buildings	Poplar	1894	50	48	43	41	45	45
Holmwood Buildings	Southwark	1901	44	43	42	45	49	45
Carrington House (lodging)	Deptford	1903	50	50	50	48	47	49
Bruce House (lodging)	Westminster	1906		54	54	55	54	54
Dufferin Street. (lodging)	Finsbury	1891	58	57	56	57	59	57
Parker Street. House (lodging)	Holborn	1893	71	68	69	68	67	69

* Garden Estate

Table 9: % of total costs for maintenance as a proportion of the rent received for the years 1905 to 1910[7]

No comparable figures for the philanthropic organisations can been calculated to act as a comparison, but many LCC buildings were using over 40% of the rents to pay for maintenance at the time, which is a figure that no modern organisation would tolerate.

From the table it is interesting to note that the White Hart Lane Estate is the second most economical of all the schemes. This estate came in for severe criticism at the time from the Council's opponents because of the size and cost of the scheme, yet appears to be a cost-effective one from the financial records of the time. Note how the most economic buildings are predominantly the later ones, indicating that the Council became better at designing buildings to match the requirements.

5.7. The balance of accounts

The real test on the viability of any of the Council's developments is whether they make a profit. The previous section dealt with the costs for some of the buildings, but these costs do not include the cost of the loans and the repayments, and are therefore just the maintenance and running costs. To be able to measure the success, the balance of the accounts for all the schemes they need analysing for the same year. As this paper covers the period up to World War 1 it would seem sensible to look at the figures for the last financial year before WW1 – 1st April 1913 to 31st March 1914. Not only does this include the majority of the schemes but it gives a chance for any early fluctuations in income or expenditure to be ironed out as the Council had been in place 25 years and would have developed and refined all its financial working practices.

To reiterate what would have been considered a success or failure in the eyes of the Council, the buildings needed to return a profit of at least 5¾% per annum to cover any repayment of loans and to add the remainder to the sinking fund to ensure sufficient funds for renovation or rebuilding at the end of the set period.

Although one year's profits may not be repeated every year, the 1913-14 financial year is a good one to take as an example. London was a successful city with a large manufacturing base. It also had a thriving white-collar commercial base, particularly in Banking and Insurance. All these industries needed honest, hard-working and well trained workers to maintain the success and growth, and these workers needed clean and healthy housing. WW1 would change the lives of many and the depression in the 1930's affected London as much as anywhere, but London

just before WW1 was a good place to live and work if you had the ambition to succeed. Table 10 lists all the schemes as per the Council accounts for Working Class Dwellings for the financial year 1913-14.[8] The list has been sorted with the worst scheme first, based on profits from the income.

As can be seen from the table, there are some developments that are disastrous for the Council and it is very surprising to see that the two worst performers were both cottages and in the Deptford/Greenwich area. Many philanthropists and campaigners, including from within the working classes themselves, were advocating that what the working classes really wanted (or needed) were cottages with gardens. This was always going to be expensive for the Council in any meaningful numbers in the inner London area. But here was an opportunity to build the cottages on cheap land, and in these two cases they were a failure because the costs and rents were high for the area. The 3rd worst scheme was Durham Buildings and is not a surprise. The building was erected very reluctantly by the Council as a legal requirement to re-house those displaced by street improvements in Battersea, which had taken place some years earlier. No one seemed to want the building, including the Council and the local working classes. It always had a bad reputation and became sheltered accommodation before being demolished in the 1960s. The 4th worst was Council Buildings in Poplar which was only the second building designed by the Council architects and is therefore excusable. The next in the table is a well-documented disaster for the Council and the worst-performing lodging house – Carrington House. The saga of the inability of the Council to make this huge building pay its way is documented later in this paper. This is followed by yet another development in Deptford. These Deptford blocks (and Carrington House) were built pro-actively by the Council under Part III of the 1890 Housing of the Working Classes Act and cannot be excused by the Council being forced to build to re-house displaced people they knew would not be suitable as tenants for their new buildings.

Scheme	Buildings	Act	Type	Date	Expenditure	Income	Difference	Profit on %	Employees %	Demolished
Millbank Estate, Westminster	Numerous	Part III & Improvements	Block	1899-1902	£15,357	£18,790	£3,433.00	18.27%	0.55%	
Churchway, Camden	Wellesley, Somerset & Seymour	Part I	Block	1901	£3,193	£3,858	£665.00	17.24%	0.51%	
Webber Row, Southwark	Algar, Delarch, Overg, Dunceg & Mayesley	Part I	Block	1906	£3,974	£4,783	£809.00	16.91%	0.82%	
Clare Market, Herbrand Street	Thackeray, Dickens & Coram	Improvement Acts	Block	1904	£2,334	£2,747	£413.00	15.03%	0.19%	
Clare Market, Duke's Court	Beaumont, Fletcher and Sheridan	Part I & Improvements	Block	1902	£2,046	£2,398	£352.00	14.68%	0.11%	
Old Oak Estate, Hammersmith		Part III	Cottages	1907	£4,133	£4,798	£665.00	13.86%	0.65%	
Aylesbury Place & Union Buildings, Clerkenwell	Mallory	Part I	Block	1906	£777	£902	£125.00	13.86%	0.19%	
Brooke's Market, Holborn	Cranley	Part II	Block	1897	£242	£280	£38.00	13.57%	3.19%	
Mare Street widening, Hackney	Valette	Improvement Acts	Block	1906	£1,441	£1,635	£194.00	11.87%	0.92%	
Clare Market, York Street	Sterling & Siddons	Part I & Improvements	Block	1903	£1,328	£1,500	£172.00	11.47%	0.14%	
Garden Row, Roby and Honduras St, Clerkenwell	Wenlake	Part I	Block	1905	£1,680	£1,892	£212.00	11.21%	0.65%	
Mill Lane, Greenwich	Sylva Cottages	Part II	Cottages	1902	£414	£463	£49.00	10.58%	1.12%	
Clare Market, Bourne Estate, Clerkenwell	Shene, Ledham, Skipwith, Dengs, Frewell, Scrope, Redman, Radcliffe	Improvement Acts	Block	1903	£11,840	£13,220	£1,380.00	10.44%	1.05%	
Rushworth & Pocock Street, Southwark	Cobham	Part II	Block	1900	£1,003	£1,119	£116.00	10.37%	1.15%	Yes
Caledonian Estate, Holloway	Bruce, Knox, Burns, Scott & Wallace	Part III	Block	1906	£4,843	£5,402	£559.00	10.35%	2.74%	
Boundary Street, Bethnal Green	Numerous	Part I	Block	1897-1901	£24,133	£26,503	£2,370.00	8.94%	0.87%	
Fulham Palace Rd Improvement, Fulham	Bearcroft	Improvement Acts	Block	1906	£750	£823	£73.00	8.87%	3.62%	
Green & Bogfield Streets, Southwark	Clandon, Albury, Ripley & Merrow	Part III	Block	1897	£1,575	£1,717	£142.00	8.27%	2.76%	
Totterdown Fields, Tooting		Part III	Cottages	1903-11	£26,811	£29,118	£2,307.00	7.92%	0.75%	
White Hart Lane, Tottenham		Part III	Cottages	1907	£18,971	£20,540	£1,569.00	7.64%	0.33%	
Clare Market, Strand	Bruce House	Improvement Acts	Block	1906	£7,008	£7,553	£545.00	7.22%	0.19%	
Cable Street, Limehouse	Bewley & Dellow	Part I	Block	1894	£2,721	£2,914	£193.00	6.62%	0.75%	
Ann Street, Poplar	Adelaide, Sydney & Melbourne	Part II	Block	1901	£1,924	£2,059	£135.00	6.56%	2.35%	Yes
Shelton Street, Holborn	Aldwych, Wimbledon, Powis, Lindsay & Colleton	Artizans' Dwellings Act	Block	1896	£1,456	£1,546	£90.00	5.82%	0.18%	Partly
Garden Row, Roby and Honduras St, Clerkenwell	Chadworth	Part I	Block	1907	£2,871	£3,043	£172.00	5.65%	9.41%	
Nine Elms Lane, Vandsworth	Lennox Buildings and Clere Cottages	Improvement Acts	Block/Cottages	1905	£847	£896	£49.00	5.47%	0.36%	Yes
Norbury Estate, Croydon		Part III	Cottages	1906	£10,415	£11,004	£589.00	5.35%	0.51%	
Wedmore Street, Holloway	Wessex	Part III	Block	1905	£3,823	£4,038	£215.00	5.32%	2.18%	
Borough Rd, Southwark	Gardiner, Hunter, Murphy	Part II	Block	1900	£1,738	£1,828	£90.00	4.92%	0.82%	
Aylesbury Place & Union Buildings, Clerkenwell	Union	Part I	Block	1907	£5,667	£5,908	£241.00	4.08%	2.58%	
Cotton Street, Poplar	Toronto, Montreal	Improvement Acts	Block	1901	£1,061	£1,101	£40.00	3.63%	5.19%	Yes
Shelton Street, Holborn	Parker Street House	Part III	Lodging House	1893	£3,156	£3,266	£110.00	3.37%	0.25%	
Whitecross Street, Finsbury	Dufferin Street House	Part III	Block	1899	£583	£600	£17.00	2.83%	1.23%	
Battersea Bridge, Battersea	Battersea Bridge Buildings	Improvement Acts	Block	1901	£1,023	£1,035	£12.00	1.16%	7.01%	Yes
Rotherhithe Tunnel, Wapping	Brightlingsea	Improvement Acts	Block	1904	£1,006	£1,017	£11.00	1.08%	4.38%	Yes
Mare Street widening, Hackney	Darcy	Improvement Acts	Block	1904	£704	£705	£1.00	0.14%	2.13%	
Brixton Hill, Lambeth	Briscoe	Part III	Block	1906	£2,442	£2,444	£2.00	0.08%	2.57%	
Blackwall Tunnel south, Greenwich	Idenden Cottages	Improvement Acts	Cottages	1894	£1,116	£1,108	-£8.00	-0.72%	0.47%	Yes
Rotherhithe Tunnel, Wapping	Bekesbourne	Improvement Acts	Block	1907	£1,229	£1,220	-£9.00	-0.74%	0.22%	Yes
Long Lane & Tabard St, Southwark	Barnaby Buildings	Improvement Acts	Block	1904	£1,385	£1,373	-£12.00	-0.87%	2.51%	Yes
Trafalgar Rd, Greenwich	Hardy Cottages	Artizans' Dwellings Act	Cottages	1901	£862	£842	-£20.00	-2.38%	unknown	Partly
Southwark Street, Southwark	Holmwood	Part III	Block	1900	£361	£344	-£17.00	-4.94%	5.60%	
Brook Street, Limehouse	Beachcroft Buildings and Cranford Cottages	Part I	Block/Cottages	1894/1900	£1,045	£988	-£57.00	-5.77%	2.35%	Partly
Boundary Street, Bethnal Green	Goldsmith Row Cottages	Part I	Cottages	1895	£485	£457	-£28.00	-6.13%	1.26%	yes
Preston's Road, Poplar	"Canadian" Estate	Part I and Part III	Block	1904	£1,803	£1,608	-£195.00	-12.13%	14.62%	Yes
Rotherhithe Tunnel, Swan Lane, Bermondsey	Winchelsea, Rye, Sandwich, Hythe and Seaford	Improvement Acts	Block	1902	£4,107	£3,542	-£565.00	-15.95%	13.13%	
Hughes Field, Deptford	Benbow & Raleigh	Part III	Block	1904	£1,292	£1,072	-£220.00	-20.52%	14.02%	Partly
Blackwall Tunnel north, Poplar	Council Buildings	Improvement Acts	Block	1894	£961	£762	-£199.00	-26.12%	4.47%	Yes
Mill Lane, Greenwich	Carrington House	Part III	Lodging House	1903	£5,896	£4,671	-£1,225.00	-26.37%	28.07%	
Battersea Street Improvements	Durham Buildings	Improvement Acts	Block	1904	£1,603	£1,237	-£366.00	-29.59%	21.10%	Yes
Hughes Field cottages, Deptford	Lewisham Cottages	Part I, Part III & Improvements	Cottages	1895	£2,199	£1,662	-£537.00	-32.31%	17.59%	Yes
Blackwall Tunnel south, Greenwich	Westview, Armitage and Collerston	Improvement Acts	Cottages	1894	£1,740	£1,281	-£459.00	-35.83%	2.18%	Yes

Table 10: Comparison of profitability of all LCC schemes 1913-14

Analysis of the remainder of the schemes in the table above will show that there is no obvious pattern of what constitutes a good or bad development. There is a bias towards the later developments being most cost-effective, and it would be surprising not to see that trend as the Council surely got better at both designing and accounting during the period.

The two big block estates, Boundary Street and Millbank, were profitable. The garden estates do well with the worst one, Norbury, returning a 5.35% profit. This estate was a very long way from London for the time without the advantage that White Hart Lane Garden Estate had of cheap workman's trains to London, and was only partly completed by the outbreak of WW1. The real success appears to be all the re-housing development from the Clare Market Clearance scheme that was combined with the Aldwych and Kingsway street improvement. The numbers to be re-housed were spread across five sites and these were Duke's Court and Russell Court (sometimes referred to as York Street) in nearby Drury Lane, Herbrand Street a mile to the north, the large Bourne Estate also to the north, and within one block in Millbank to the southwest. The financial success of these buildings is rooted in the fact that the Council combined two large schemes and spread the cost of housing and street clearance across many re-housing schemes. The Council also sold much of the valuable land on the cleared site for commercial purposes.

Many of the buildings still stand which indicates that the profitability of the buildings was not necessarily the only way for them to survive into the modern age but must have been an important factor. Table 10 indicates that most of the unprofitable buildings have been demolished even though some of those were modernised in the 1960s. The reasons for demolition may not be a black-and-white case of not being profitable in early life as other factors may have contributed. These include poor maintenance due to difficulty in the profitability, location, WW2 bomb damage, street improvements, and a simple one of demographic changes taking the potential tenants elsewhere. A surprising number of cottages have been demolished, but this may be because of difficulties in cost-effective conversions to larger dwellings. The quality of the original construction would have been a major factor as cheaply constructed buildings are difficult to modernise profitably. As proof, nearly all the original Peabody Buildings remain and some have recently had their second complete modernisation. Peabody Buildings were noted for their quality of construction.

Each scheme has its own story to tell as regards its success or failure and the buildings are described in detail in Part 3.

Footnotes

[1] All quotations and photographs in the chapter: GLC; The Architectural Dept of the LCC. A Personal Record; undated; LMA ref: GLC/AR/DA/02/001
[2] LCC Minutes; Minutes of the Housing of the Working Classes Committee; 3rd December 1889; held at LMA
[3] The Housing Question in London; LCC; pp49-50
[4] After the Great Exhibition, the Model Dwelling was dismantled and re-erected in Kennington Park, Lambeth, opposite the Kennington Rd. It can be seen today.
[5] Daunton, M.J.; House and Home in the Victorian City: Working Class Housing, 1850-1914; Edward Arnold; 1983; pp207-209
[6] LCC Committee Minutes; 16th September 1901.
[7] LCC; Housing of the Working Classes; LCC; 1909-10; p18
[8] H.E.Haward; LCC Working Class Dwellings Accounts to 31st March 1914; LCC; LMA ref LCC/HSG/GEN/02/006