The Blitz as a Catalyst for Greening London: A study of Historical Sources using a Geographical Information System

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Figure 1: Firefighters at Christchurch Greyfriars, 1940, and garden created in the ruin. Sources: Left - https://lostcityoflondon.co.uk/2020/07/03/christ-church-greyfriars/, accessed 10.04.22 and Right - Author, 2019.

Contents

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Introduction

The provision of new permanent green spaces in London was a stated aim of the planners charged with envisioning the capital's future after the Second World War. Whilst many temporary gardens and allotments were created during wartime, planners sought to deliver more permanent improvements to the lives of Londoners and this included ambitious policies to secure an increase in the number and area of green spaces. The devastation of the Blitz opened land in previously unimaginable acreages to make this possible, and new green spaces were delivered, sometimes in the teeth of opposition from those who considered economic uses and housing should take priority. Little has been written about this era of extensive new public green space provision in London.[1] Still less analysis exists of the impact of war damage in the genesis of these spaces. This dissertation addresses the lack of research on the topic by identifying green spaces created on Blitz-damaged land and analysing how public policy led to their creation.

The term 'green space' is used throughout this study to describe spaces that are controlled or constructed by people, and which provide a break in the built-up fabric of the city. The term green space describes areas such as recreation grounds, play areas, allotments, parks, nature reserves, gardens and commons. Whilst most of the sites researched are open to public use, the term is used in preference to 'open space' as it can be used irrespective of public accessibility or ownership.[2] However, the term 'open space' is used when quoting from historical or other sources that use the phrase. The phrase 'the War' is used throughout to refer to the Second World War, 1939-45.

Researching post-war land uses related to changes wrought by the Blitz is complicated by the fact that terrain opened by bombing wasn't the only land available to post-war planners. A desire to sweep away poor housing could be acted upon because new powers were made available to the public sector, which also sought to reorganise land use patterns to remove obsolete or polluting industries unsuited to London's congested urban fabric. This research will attempt to distinguish where new green spaces had bomb damage as a primary progenitor whilst acknowledging where processes of housing clearance and industrial decentralisation were additional contributory factors.

[1] Matti O. Hannikainen, *The Greening of London, 1920-2000* (Farnham, Ashgate Publishing Ltd, 2016), p. 1.
[2] Ibid., p. 4.

The dissertation will initially discuss the history of green space provision in London to examine why post-war planners sought to create new green spaces, and where these needed to be. Next, it will discuss the pattern of wartime aerial bombardment to show where land was opened by bombing for new uses, including as green space. Using a Geographical Information System, historical maps will then be analysed to identify where green spaces were most likely to have been created on bomb-damaged land in the chosen research area of the London Borough of Southwark. A case study of one of these green spaces, Burgess Park, will follow to demonstrate how the municipal authorities used new post-war planning policies and powers to organise land assembly around several keystone areas of bomb-damaged land to secure its creation. This dissertation examines, therefore, how the Blitz created the opportunity for green spaces to grow, and how post-war planners grasped the opportunity to create them after the War in ways that are unlikely to have succeeded were the land not available and the policies not in place to capitalise on it.

Chapter 1 – Historiography

Figure 2: Brenda Colvin's design for a memorial garden at Christchurch Greyfriars. Source: The Architectural Review, *Bombed Churches as War Memorials* (Cheam: The Architectural Press, 1945) p. 23.

A London devastated by bombing presented the opportunity for transformation, and new green spaces suited modernist ideals of solving the problems of an unhealthy, congested city.[3] The origin of green spaces on bomb-damaged land is sometimes obvious; for example, a board at Christchurch Greyfriars in the City (Figure 1), reveals its history. The church's shell was proposed for a garden war memorial in 1945, with plans by Brenda Colvin (Figure 2). However, the impact of the Blitz on green space creation is more frequently obscured by the passage of time; possibly exacerbated by a desire to look forwards without reference to a devastating period in the nation's history. Fred Cleary, a former Chairman of the Metropolitan Public Gardens Association, helped to create green spaces on Blitz-damaged land.[4] He recognised that the 'scars of yesterday' could become 'the gardens of today'.[5] Yet two decades later, his book *The Flowering City,* contains no reference to the Blitz even when discussing the opportunities for reconstruction, and the tone of his narrative may be reflective of a shift to a confident forward-thinking national psyche.[6] Clapson argues that victory in the War positively influenced national culture and that commemorating the

[3] Hannikainen, *Greening London*, p. 93.
[4] https://clearyfoundation.org.uk/founder/, accessed 07.04.2022.
[5] Fred Cleary, *Beauty and the Borough* (London: Headley Brothers Ltd, 1949) pp. 10-11.
[6] Fred Cleary, *The Flowering City* (London: The City Press, 1969) p. 19.

violent history of war became selective and piecemeal.[7] Memorialisation of Blitz victims was discussed in 1944 by Captain H. H. Shorter, then Chairman of the British Association of Fields and Sports Contracts, who argued that green spaces could play their part by paying 'tribute to the dead through service to the living'.[8] He advocated sports pavilions and children's play equipment as suitable memorials within green spaces (Figure 3). The gardens at Christchurch Greyfriars (Figure 1) and Hermitage Memorial Riverside, which contains a memorial to victims of the Blitz (Figure 4), form part of an uncoordinated network of memorials, some of which are recorded on the *London Remembers* website.[9]

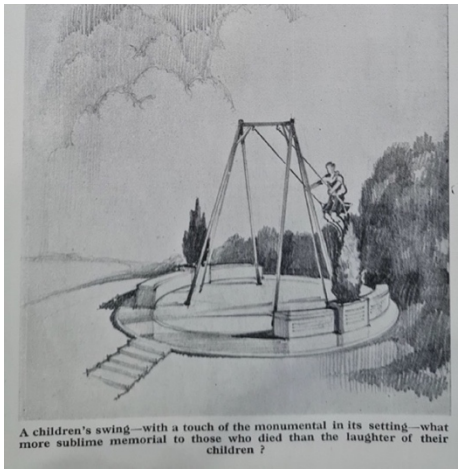

Figure 3: Illustration of a memorial swing in a park. Source: H. H. Shorter, 'Modern Trends in War Memorials', *Journal of Park Administration, Horticulture and Recreation*, Vol. 9. No. 4., 1944, p. 55.

In discussing the impact of the War on London's green spaces, Peter Thorsheim focuses on the role played by existing parks as locations for anti-aircraft gunning stations, barrage balloons, air raid shelters and temporary allotments and how parks, canals and wetlands were used for the disposal of rubble from destroyed buildings.[10] Celina Fox describes the cultivation of bomb sites during the war as temporary allotments, an example being the Fireman's Farm (Figure 5), and remarks on the blooming of wildflowers on bomb-damaged sites, a phenomenon clear in photographs of bomb sites during and after the war (Figure 6).[11] Both Thorsheim and Fox reference small gardens in the City of London created on bomb-damaged land but neither discuss the Blitz as a progenitor of a wider network of green spaces across London.[12]

[7] Mark Clapson, *The Blitz Companion: Aerial Warfare, Civilians and the City since 1911* (London: University of Westminster Press) pp. 176-181.
[8] H. H. Shorter, 'Modern Trends in War Memorials', *Journal of Park Administration, Horticulture and Recreation*, Vol. 9. No. 4., 1944 p. 54.
[9] https://www.londonremembers.com/, accessed 26.08.22.
[10] Bill Luckin and Peter Thorsheim (eds), *A Mighty Capital Under Threat: The Environmental History of London, 1800-2000* (Pittsburgh: University of Pittsburgh Press, 2020) pp. 121-122.
[11] Celina Fox, 'The Twentieth Century: Garden Suburb, Green Belt and Windowbox', in Mireille Galinou (ed.), *London's Pride: The Glorious History of the Capital's Gardens* (London: Anaya Publishers, 1990) pp. 193-194.
[12] Fox in Galinou (ed.), *London's Pride*, p. 197, and Luckin and Thorsheim, *Mighty Capital under Threat*, p. 124.

Figure 4: Wapping's Hermitage Riverside Memorial Garden, created on bomb-damaged land and containing a memorial to the residents of Tower Hamlets killed in the Blitz. Source: https://www.yelp.com/biz_photos/hermitage-riverside-memorial-garden-london?select=Y1A88411K94pQrAhKFoxaA, accessed 8.04.2022.

Figure 5: The Fireman's Farm c.1945. Source: Topfoto, www.topfoto.co.uk/asset/12877, accessed 26.11.2020.

Figure 6: Wildflowers colonising a bombsite near Cannon Street. Source: C. H. Holden and W. G. Holford, *The City of London a Record of Destruction and Survival* (London: City of London Corporation, 1950) p. 197.

The often-temporary nature of gardens during a war is described by Kenneth Helphand and Lalage Snow, both of whom write about garden creation in conflict zones.[13] Such gardens stand 'not in harmony with but in opposition to their location' and are often defined by their ephemerality.[14] During the War, and in the immediate post-war period, there was an acknowledgement of the benefits of temporarily greening spaces. Hannikainen explains how 'Londoners preferred to look at gardens instead of bomb sites with their memories of past hardship' and how communities were encouraged to engage in greening activities.[15] Temporary landscaping activities by municipal authorities were subsequently facilitated under the War Damage Act of 1949, which allowed the greening of Blitz-damaged sites for a fixed term of five years.[16] Cleary highlighted examples in the Borough of Hornsey such as that illustrated in Figure 7. The brewery company Courage and Co. had purchased the bomb-damaged site for future redevelopment but leased it temporarily to the borough council for use as a rest garden, contributing £200 to the cost of landscaping.[17] Cleary argued such gardens were preferable to the ugliness of bomb-damaged land, which became 'dumping grounds for rubbish, un-authorized car parks and an eyesore to the community'.[18]

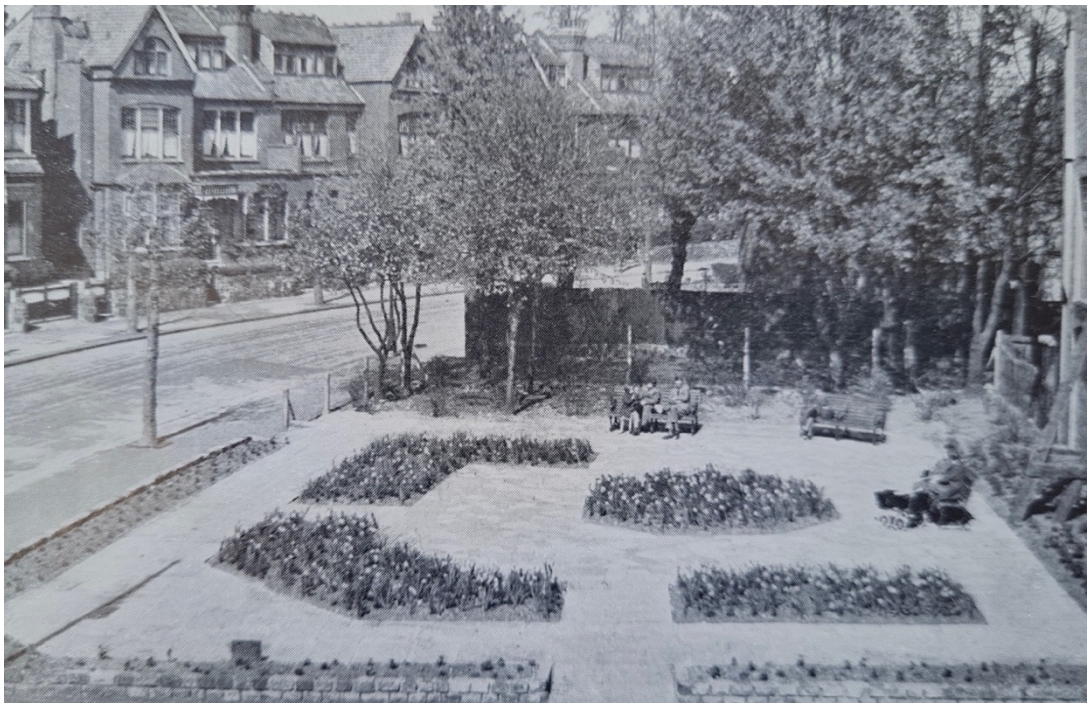

Figure 7: Garden created on a bombed site at Princes Parade, Hornsey. Source: F. E. Cleary, *Beauty and the Borough* (London: The Saint Catherine Press Ltd., 1949) p. 11.

[13] Kenneth Helphand, *Defiant* Gardens: Making *Gardens in Wartime* (San Antonio: Trinity University Press, 2006) and Lalage Snow, *War Gardens: A Journey Through Conflict in Search of Calm* (London: Quercus Editions Ltd., 2018).
[14] Helphand, *Defiant Gardens*, p. ix.
[15] Hannikainen, *Greening London,* p. 123.
[16] Ibid.
[17] Cleary, *Beauty and the Borough*, p. 10.
[18] Ibid., p. 11.

Kamvasinou and Milne describe how emptiness and vacancy do not sit well with architects and planners who seek to transform, occupy and inhabit but how temporary uses can reinvigorate empty spaces.[19] Phoenix Garden (Figure 8) situated on a bomb site and described as 'the last of the Covent Garden community gardens' is a good example of a temporary garden which later became permanent, despite intense development pressures.[20] A Japanese Garden (Figure 9), created on a nearby block no longer exists; the land having been used by the local community until a housing project could be delivered.[21] Jamie McCullough, advocated the concept of *Meanwhile Gardens* because 'shaping a piece of ground could change it' thus hinting at a desire for imaginative permanent development solutions to follow temporary ones.[22]

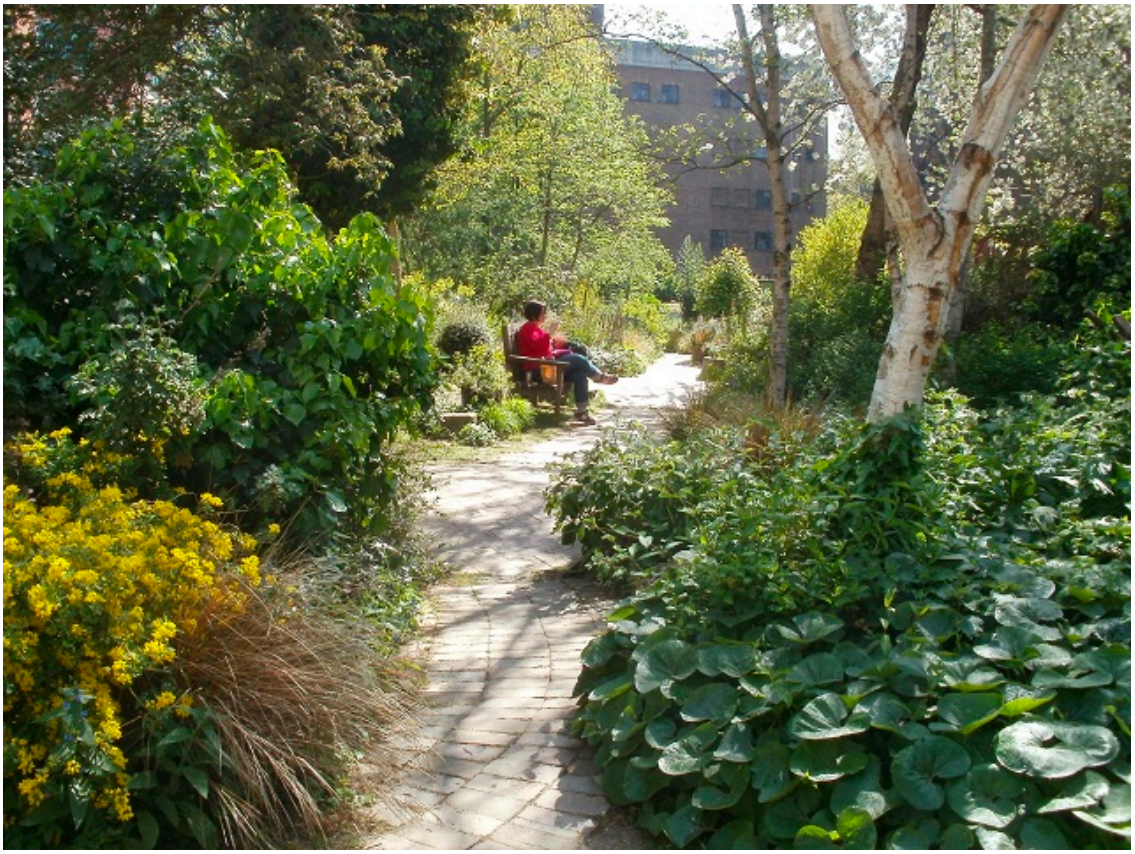

Figure 8: Phoenix Garden, Covent Garden. Photo: Lynne Eva, www.londongardenstrust.org/log2022/gardens/PhoenixGdn, accessed 27.07.22.

[19] Krystallia Kamvasinou and Sarah Ann Milne, 'Surveying the creative use of vacant space in London, c.1945-9', in Courtney Campbell, Allegra Giovine and Jennifer Keating (eds), *Empty Spaces: perspectives on emptiness in modern history - IHR Conference Series* (London: University of London Press, 2019) pp. 151-177.
[20] www.thephoenixgarden.org/about, accessed 06.04.22.
[21] www.coventgarden.org.uk/about/cgca-history, accessed 06.04.22.
[22] Jamie McCullough, *Meanwhile Gardens* (UK: Calousete Gulbenkian Foundation, 1978) p. 44.

Figure 9: Aerial view of Japanese Garden at the site of Odhams Walk, Covent Garden. Source: www.coventgardenmemories.org.uk/page_id__126.aspx, accessed 06.04.22.

No research has collated examples of temporary green spaces on bomb-damaged land in London and research on the creation of permanent green spaces after the War is also lacking. *The County of London Plan* (1943) gave 'precedence to the provision of some public open space, by allocating land cleared of buildings as a result of enemy action'.[23] However, the planners also identified sites of obsolete industry and poor housing as parallel opportunities for redevelopment, a significant factor to consider in the context of post-war landscape changes and possibly a reason for the lack of research focusing solely on the relevance of bomb-damaged land to green space creation. Over the next three decades, vacant sites from the bombing were joined by many more, prompting

[23] J. H. Foreshaw and Patrick Abercrombie, *County of London Plan* (London: Macmillan and Co., 1943) p. 41.

Charles McKean to observe 'We seem so unable to stop the rotting of our towns and cities'.[24] Changes in the economics of land use left behind 'unproductive emptiness and neglect' presenting challenges for the municipal authorities seeking to arrest the decline and improve the lives of Londoners.[25] Joyce Bellamy's dissertation describes in detail how the authorities rose to the challenge to create Burgess Park in Southwark.[26] This park was cited in an article called *Breathing Space in London* from 1960 which gave a progress report on post-war green space creation in London and concluded that bomb-damaged land and slum clearance 'could not provide all the open space that London needs'.[27] Hannikainen gives a thorough analysis of what the authorities did achieve, however, using minutes of various London authorities to track the provision of new green space and focussing particularly on Southwark and Camden. He emphasises the political and financial constraints which hampered progress and how housing remained 'the dominant use of vacant and war-damaged sites in London'.[28] He rarely discusses individual sites but provides insight into the main factors influencing green space creation and usage in the 20th Century.

Terry Farrell believes London's urban grain is mostly driven by organic or haphazard growth and describes patterns shaped by episodes of change.[29] He argues that the shape of London today is not necessarily the result of no order but that it is 'collectively planned over time…with no grand overarching, superimposed design hand or ordering plan, or geometries'.[30] In discussing green space provision, Hannikainen argues the post-war episode of reconstruction, characterised by the implementation of the London County Council's *Administrative County of London Development Plan* (1951) was more effective than has been previously recognised. He suggests that it represents 'perhaps the only period in London's [greenspace] history when its development was planned and, to a certain extent realised according to the plan'.[31] The task of understanding the extent to which war damage played a role in the delivery of these new green spaces is complicated by the parallel and interlocking changes resulting from population and industrial decentralisation, but correlations between bomb-damaged land and present-day green spaces are a starting point in understanding the relative impact of the Blitz. This dissertation will investigate examples where

[24] Charles McKean, *Fight Blight: A Practical Guide to the Causes of Urban Dereliction and What People Can do about it* (London: Kaye and Ward, 1977), Foreword.
[25] David Nicholson-Lord, *The Greening of the Cities* (London and New York: Routledge & Kegan Paul Ltd., 1987) p. 5.
[26] Joyce Bellamy, 'Burgess Park Southwark: a Study of the Development of a New Metropolitan Park', Unpublished MPhil Dissertation, University of London, April, 1981.
[27] Unknown author, 'Breathing Space in London', *Journal of Park Administration, Horticulture and Recreation* Vol. 24, No.12., May 1960, p. 668.
[28] Hannikainen, *Greening London*, p. 104.
[29] Terry Farrell, *Shaping London: The Patterns and Forms that Make the Metropolis* (Chichester: John Wiley and Sons Ltd, 2010) p. 12.
[30] Ibid.
[31] Hannikainen, *Greening London*, p. 230.

significant tracts of green space were likely to have been created using public policies designed to exploit bomb damage for public gain. The methodology used to identify green spaces with probable bomb-damage genesis is outlined in Chapter 2.

Chapter 2 - Methodology

The first stage of this research is a study of the history of green space provision in London to show how urban planners sought to capitalise on bomb-damaged land to redress past failures of provision, which had led to high-density development and a lack of green spaces in many districts. This will be followed by a study of the patterns of bombing in London to show where extensive tracts of bomb-damaged land provided a focus for new land use configurations and new green spaces. The original phase of research is the use of a Geographical Information System (GIS) to analyse the correlation between bomb-damaged land and present-day green space in a chosen research area of the London Borough of Southwark, to identify where bomb damage was a likely progenitor of green space. This will be followed by a case study of Burgess Park to examine how the policies and powers of post-war planning authorities created a public park around a series of bomb-damaged sites. The case study has been prepared using GIS to study historical maps, together with an analysis of additional archival sources. A detailed description of how GIS is used in this research is outlined below.

A GIS is a computer software programme which enables location-specific problems and opportunities to be analysed spatially, combining geographical and socio-economic data.[32] Multiple maps, overlaid on one another, can be combined with data attributes to analyse and record findings. GIS software is of growing importance to historical research as the digitisation of historical maps and data sources speeds up the spatial analysis of land uses as they once existed. Its use for the study of correlations between bomb damage and post-war green spaces is apposite as the importance of spatial patterns was recognised in the planning of London's post-war reconstruction. For example, planners used bomb damage maps to develop planning policies and identify opportunities for redevelopment.[33] At the time, the correlation between problems and opportunities had to be assessed by eye but historical map layers can now be analysed using GIS to track the implementation of post-war public sector green space policies.

This research was carried out using ArcGIS, a software package used predominantly for environmental analytics, military purposes and land use planning.[34] The Institute of Historical Research became a subscriber to ArcGIS in spring 2022 as an extension of its pioneering *Layers of London* online mapping project. *Layers of London* contains numerous historical maps to which

[32] https://www.gislounge.com/what-is-gis/, accessed 02.06.22.
[33] Laurence Ward, *London County Council Bomb Damage Maps 1939-45* (London: Thames and Hudson, 2015) p. 7.
[34] https://gisgeography.com/what-is-arcgis/, accessed 05.06.22.

users are encouraged to add stories, photographs, and memories to provide a social history resource for London.[35] The bomb damage maps produced by the London County Council (LCC) during the War were digitised as part of the *Layers of London* project and allow a spatial assessment of the correlation between areas of acute bomb damage and present-day land uses. However, ArcGIS is a more powerful tool to achieve this than the *Layers of London* mapping software, as research data can be recorded in an attributes table, enabling the grouping and presentation of findings in map form.

Figure 10: Categories of bomb damage used on LCC Bomb Damage Maps. Source: Laurence Ward, *The London County Council Bomb Damage Maps 1939-1945* (London: Thames and Hudson, 2015) p. 36.

The geographical pattern and impact of war damage in London can be studied today because it was meticulously mapped by the LCC. Damage was recorded by the Architect's Department on 1:2,500 Ordnance Survey (OS) maps from 1916, updated to 1940. At this scale, individual buildings are identifiable, enabling the extent of damage to be recorded for each property using a colour-coded system (Figure 10).[36] The sites of the impact of V1 flying bombs and V2 rocket bombs were recorded using large and small circles with the damage caused around them categorised using the colour-coded damage classifications. Also recorded in green, although not routinely, were Clearance Areas, generally areas of poor-quality housing.

[35] https://www.layersoflondon.org/about, accessed 05.06.22.
[36] Ward, *Bomb Damage Maps*, p. 6.

Figure 11: War damage to industrial property in Wapping. Source: https://www.layersoflondon.org/map/overlays/bomb-damage-1945, accessed 20.05.22.

Figure 11 shows an extract from the bomb damage maps for an area of industrial and warehouse buildings in Wapping, part of which now forms the Hermitage Memorial Riverside Park (Figure 4). The map shows the destruction of and extensive damage to many buildings (coloured black, purple and red), and some with less serious damage (coloured orange and yellow). It also shows both V1 and V2 bombs fell here, causing extensive destruction around the impact sites.

Figure 12: Extract of OS Map for the same area as Figure 11, surveyed in 1949. Source: https://www.layersoflondon.org/map/overlays/os-maps-1940s-1960s, accessed 20.05.22.

To research the correlation between bomb damage and present-day green spaces, the following three map layers are used within ArcGIS alongside the digitised version of the bomb damage maps:[37]

1. Ordnance Survey 1940s to 1960s Maps.[38] – This layer combines maps for London in the Ordnance Survey National Grid Series, 1944-1971 at the same 1:2,500 scale as the bomb damage maps. An example for the same area as Figure 11 is given in Figure 12. Bomb damage is identifiable on the maps as blank spaces where previously buildings stood, or where the word 'Ruin' indicates a seriously damaged building. Vacant buildings, still standing but damaged are not identifiable, but temporary buildings such as prefabricated houses (Figure 13) are a useful indication of potentially bomb-damaged land as cleared bomb sites were frequently used for such temporary housing. They are usually easily recognisable on the OS map series as regularly spaced rectangular buildings (Figure 14).

[37] https://www.layersoflondon.org/map/overlays/bomb-damage-1945, last accessed 24.08.22.
[38] https://www.layersoflondon.org/map/overlays/os-maps-1940s-1960s, last accessed 24.08.22.

In the chosen Southwark research area, these maps were mostly surveyed between 1949 and 1951 and published in 1951 or 1952. The date of each sheet is not specified within the mapping software but can be cross-referenced with the original OS sheets if a precise date is required.

2. Local Authority Boundary – This provides a line on the map to show the boundaries of present-day Boroughs and is used to sort green spaces by geographical area for further study.

3. Ordnance Survey Open Greenspace dataset.[39] – This map layer contains green spaces mapped in the form of polygons relating to their shape. For presentation purposes, the greenspace polygons used in this dissertation have been coloured green and are shown overlaid on maps to aid analysis. A corresponding attributes table within the software package contains a site name (where it has one) and site functions, to which additional information can be added to collate research findings.[40]

Figure 13: Prefabricated houses, Brandon Estate, Southwark, 1965. Source: London Metropolitan Archives, https://www.flickr.com/photos/londonmetropolitanarchives/8695412065/, accessed 07.07.22.

[39] https://www.ordnancesurvey.co.uk/business-government/products/open-map-greenspace, accessed 05.06.22.
[40] Ordnance Survey Ltd, OS Open Greenspace Product Guide, https://www.ordnancesurvey.co.uk/documents/os-open-greenspace-product-guide.pdf, p. 9., accessed 05.06.22.

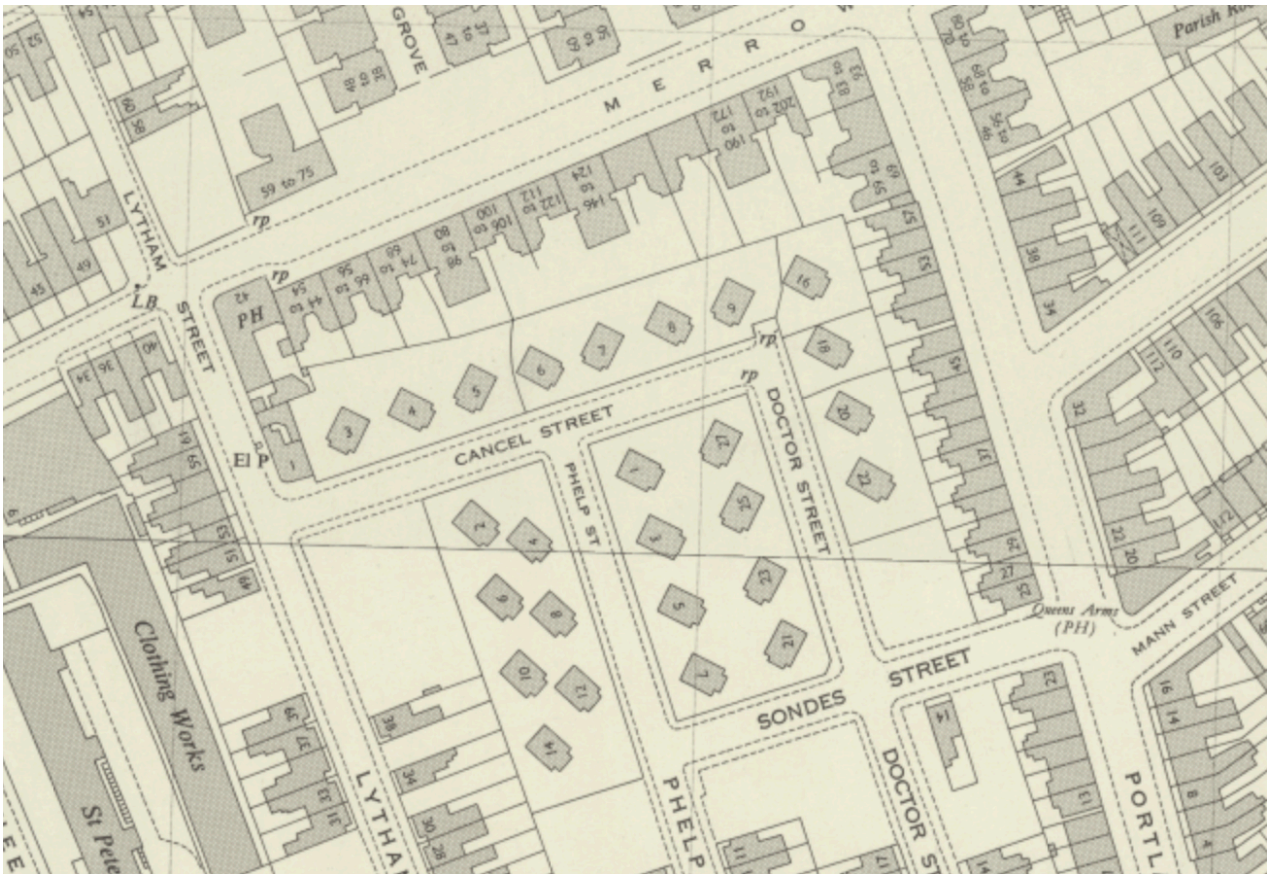

Figure 14: Site of a V1 bomb explosion in Walworth, used for temporary prefabricated homes, 1951. Source: https://www.layersoflondon.org/map/overlays/os-maps-1940s-1960s, accessed 20.05.22.

The first stage of the methodology is to combine the Local Authority Boundaries map layer with the OS Open Space layer to produce a new layer for research and data capture within a specific geographical area. Whilst GIS is an efficient tool, researching all green spaces within the London region would be beyond the scope of this dissertation, as the dataset contains over 13,000 green spaces. Instead, this study focuses on the London Borough Southwark, formed in 1963 from the former Metropolitan Boroughs of Bermondsey, Camberwell and Southwark. It has been chosen because a significant part of the north of the area was identified as being deficient in open space and because it suffered amongst the highest bombing density in London (ranging from 300-399 bombs per 1000 acres in Camberwell to 500-599 per 1000 acres in Bermondsey and Southwark).[41] The working assumption is therefore that conditions here were suited to the application of post-war green space policies as described in Chapter 3.

Present-day Southwark has 495 open spaces on the OS Greenspace map layer. The first stage of the methodology involves filtering out spaces such as bowling greens, tennis courts and

[41] Bombing densities by London District. London Topographical Society, *The London County Council Bomb Damage Maps, 1939-45* (London, 2005) p. 11.

playgrounds as these are usually contained within wider green-space settings and therefore duplicates. Playing fields which are part of wider greenspace settings are also identified and filtered out. Next, green spaces related to housing estates are identified and filtered out. Provision was made for local amenity open spaces within and around new housing developments 'to the extent of two-thirds of an acre per thousand population'.[42] Many such green spaces will be located on bomb-damaged land given the priority afforded to housing development on sites cleared by enemy action.[43] However, these green spaces were excluded from the post-war green space targets of the LCC.[44] This fact, combined with the difficulty of analysing the built versus green space forms of housing estates in relation to the bombing patterns mean they have been excluded from this research.

Once these filters are applied, 143 green spaces remain for more detailed analysis (Figure 15). Using ArcGIS, each of these is investigated by selecting every green space map polygon in turn and searching the corresponding bomb damage and OS map overlays. The transparency of each map layer can be adjusted to allow multiple layers to be visible at the same time. Bomb damage is assessed and recorded on the attribute table as High, Medium, Low or Zero. Where a correlation is High or Medium, easily accessible historical sources are researched to find further indicators of a likely bomb-site genesis. Useful resources include Local Authority websites, community group websites and local history books and websites. The strength of correlation between new green spaces and bomb damage can then be recorded as a separate attribute as being Probable, Unlikely or Pre-existing. The latter category is used where a pre-existing green space appears to have been extended due to neighbouring buildings being bomb damaged or destroyed. The final phase of analysis is the categorisation of each green space into one of the following categories: Allotments and Community Gardens, Playing Fields, Park Enlargement, General Recreation, Riverside Park and Sites Managed for Nature and Ecology.

An example of the process followed using this methodology is given below for two neighbouring parks in Southwark: Leathermarket Community Garden (Figure 16) and Guy Street Park (Figure 17), both used for general recreation. Their location, south of the River Thames in the Bermondsey area, is shown in Figure 18.

[42] London County Council, *Administrative County of London Development Plan Analysis*, (London: 1951) p. 226.
[43] Foreshaw and Abercrombie, *County of London Plan*, p. 41.
[44] Hannikainen, *Greening London*, p. 106.

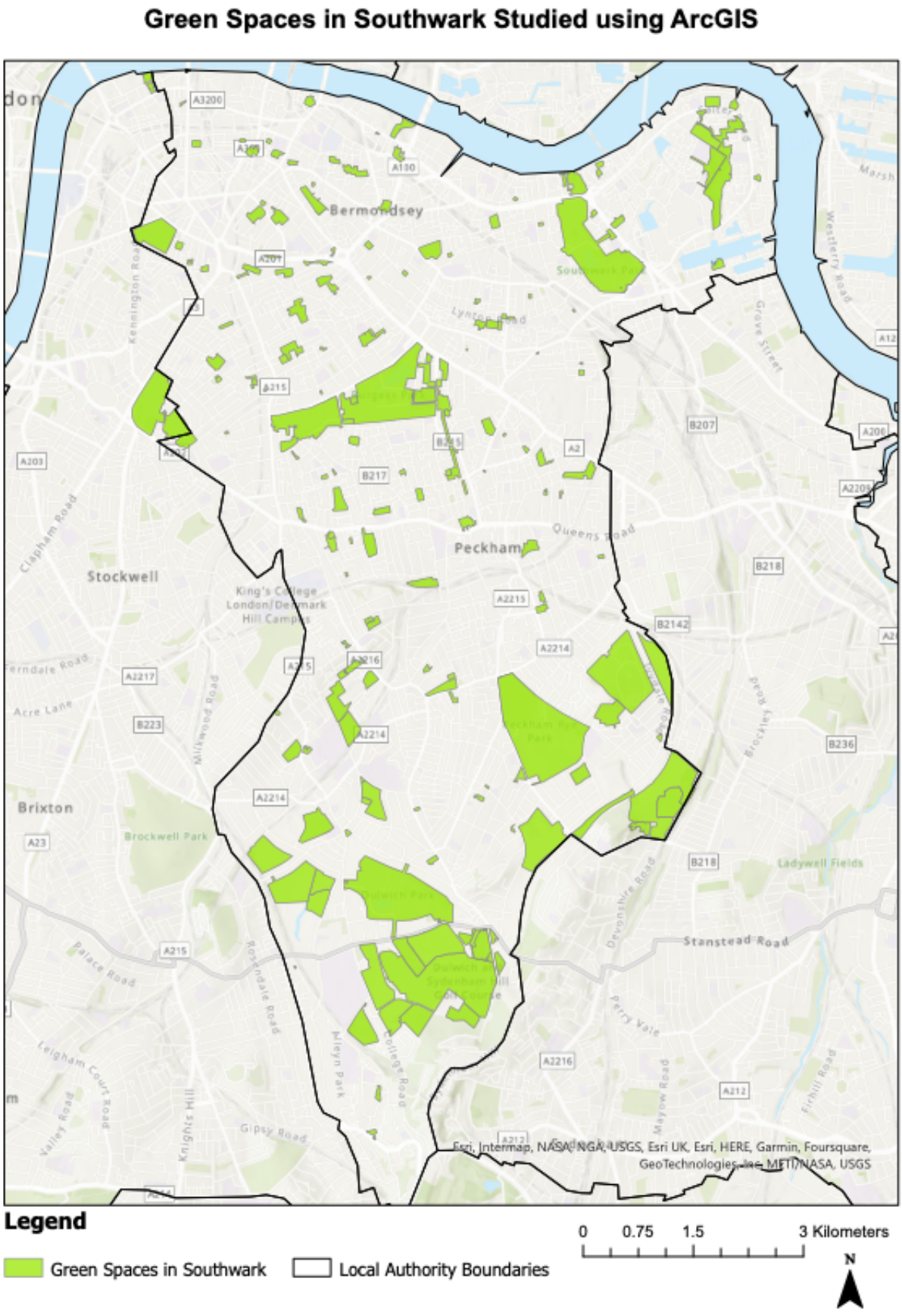

Figure 15: The 143 Green Spaces in Southwark Studied using ArcGIS. Source: Author's original research.

Figure 16: Leathermarket Community Gardens. Source: https://commons.wikimedia.org/wiki/File:The_Shard_from_Leathermarket_Gardens.jpg, accessed 05.06.22.

Figure 17: Guy Street Park. Source: https://commons.wikimedia.org/wiki/File:Guy_Street_Park_-_geograph.org.uk_-_2874917.jpg, accessed 05.06.22.

Figure 18: Guy Street Park (Left) and Leathermarket Community Park (Right). Source: https://www.ordnancesurvey.co.uk/business-government/products/open-map-greenspace, accessed 05.06.22.

Figure 19 shows how by increasing the transparency of the Greenspace and bomb damage map layers, a strong correlation between intense bomb damage at the site of these two parks (greenspace polygon shaded the colour green) is revealed, meriting further investigation. Many of the buildings in the area were destroyed or damaged beyond repair (coloured black, purple and red).

An overlay of the Greenspace layer and the 1950s OS map for Leathermarket (Figure 20) reveals many sites still vacant half a decade after the end of the war and a local community group website mentions the Leathermarket Community Park as being created on a bomb site in 1958.[45] The extensive bomb damage here, combined with the gradual decline of the leather goods and tannery trades in the area after the war, made this an appropriate site for a new park.[46] Having decided that there is a likely correlation between bomb damage and the creation of the park, the attributes fields can be completed to record Leathermarket Community Park as having a high level of bomb damage and having a probable correlation between bomb damage and new green space provision.

[45] https://bermondseystreet.london/how-did-leathermarket-gardens-come-to-be/, accessed 05.06.22.
[46] http://www.tannersofbermondsey.org/trade.html, accessed 05.06.22.

Figure 19: Overlay of present-day Guy Street and Leathermarket Community Parks with bomb damage map. Source: https://www.layersoflondon.org/map/overlays/bomb-damage-1945 and https://www.ordnancesurvey.co.uk/business-government/products/open-map-greenspace, accessed 05.06.22.

Figure 20: Overlay of the present-day Leathermarket Community Garden with OS Map, 1951. Source: https://www.layersoflondon.org/map/overlays/os-maps-1940s-1960s and https://www.ordnancesurvey.co.uk/business-government/products/open-map-greenspace, accessed 05.06.22.

Figure 21: Overlay of present-day Guy Street Park with OS Map, 1951. https://www.layersoflondon.org/map/overlays/os-maps-1940s-1960s and https://www.ordnancesurvey.co.uk/business-government/products/open-map-greenspace, accessed 05.06.22.

Figure 19 shows Guy Street Park is partially on the site of a pre-existing open space called Nelson Recreation Ground (also known as Kipling Street Park), which was laid out with the assistance of the Guinness Trust and the Metropolitan Public Gardens Association (MPGA) in 1899.[47] The OS sheet shows ruins and cleared land at the site of the highest bomb damage although buildings at the junction of Guy Street and Weston Street are still standing despite blast damage (Figure 21). These corner buildings were demolished, and the recreation ground was extended over these and the neighbouring bomb-damaged land to enlarge the park. A plaque at the site refers to bomb damage and park enlargement (Figure 22). The attribute fields for Guy Street Park are therefore marked as having a high level of bomb damage, as being related to a pre-existing park and likely to be a park enlargement due to bomb damage.

[47] https://layersoflondon.humap.site/map/records/guy-street, accessed 05.06.22.

Figure 22: Plaque at Guy Street Park. Source: https://www.londonremembers.com/memorials/guy-street-park, accessed 05.06.22

In both these examples, there is a high probability that the location and shape of the green spaces were due to bomb damage, but further detailed historical research of local archive sources, including minute books of the London County Council and possibly also the Greater London Council and the former Metropolitan Borough of Southwark, would be required to establish with certainty the significance of bomb damage to the decisions made. Further findings for Southwark using the methodology described above are presented in Chapter 5, which follows a summary of the history of green space provision in London in Chapter 3 and a description of the patterns of bomb damage in Chapter 4.

Chapter 3 – History of green space provision in London

London ranks 10th amongst 30 World Cities for green space provision, with 33% of its area covered by public open space.[48] When private gardens, farmland and golf courses are included, 50% of London is considered to be green space.[49] However, the distribution of green spaces is uneven and much of it is inaccessible to the general public meaning 50% of London's households are 400 metres or more from their nearest local park and live in places classified as Areas of Deficiency in Public Open Space.[50] Adequate access to green spaces in London remains a challenge but it is one which post-war planners sought to address, as this chapter will describe.

Terry Farrell describes how the British have a 'passionate, intense, scientific and romantic love of the countryside and nature', arguing that whilst the towns and villages of continental Europe were fortified and inward-looking, British villages were often strung out beyond a central crossroads, the fields coming up to and merging with the village.[51] As London grew, slowly incorporating the surrounding villages as it did so, the green spaces left behind were 'trapped pieces of countryside'.[52] Julian Hunt describes how this patchwork of green spaces is made up of churchyards, heaths, district parks, community gardens and royal parks, which are managed by over a hundred different organisations and which have varying levels of public accessibility.[53] Vanessa Harding notes that until the 19th century, green spaces were not generally planned for use by citizen Londoners for health and recreation. She posits that the first green space planned for public enjoyment was Moorfields, now partly still in existence as Finsbury Circus. The land was drained in 1605-07 and laid out with paths and elm trees for Londoners to walk in at leisure.[54] However, the trend was towards the privatisation of land; accentuated in the 18th and 19th centuries by the enclosure of common land. Thorsheim argues that enclosure greatly impacted London because high land values meant large profits could be gained when the land was taken into private

[48] Mayor of London, *London Environment Strategy*, Chapter 5, p.140. www.london.gov.uk/what-we-do/environment/london-environment-strategy, accessed 03.02.2022.
[49] London Assembly, *Park Life: ensuring green spaces remain a hit with Londoners*, 2017, p. 12. www.london.gov.uk/sites/default/files/environment_committee_-_park_life_report.pdf., accessed 03.02.22.
[50] Ibid., p. 14.
[51] Terry Farrell, *Shaping London*, pp. 236-238.
[52] Ibid., p. 240.
[53] Julian Hunt (Ed), 'London's Sustainability: An Overview' in *London's Environment: Prospects for a Sustainable World City* (London: Imperial College Press, 2005) p. 8.
[54] Vanessa Harding, 'Gardens and Open Space in Tudor and Early Stuart London', in Galinou (ed.), *London's Pride*, p. 49.

hands.[55] The privatisation of green space continued and in 1820 only Hyde Park was open to everyone whilst other parks only admitted the 'well behaved and properly dressed'.[56] Exclusion of the lower classes was reversed to some degree during Queen Victoria's reign as people campaigned for renewed access and new parks. Regent's Park opened anew to the public in 1838 and Victoria Park was created in East London from 1842-45 after the Queen was petitioned.[57] Following the 1848 Public Health Act, which legalised the purchase and maintenance of land for open spaces, and following the creation of the Metropolitan Board of Works in 1855, several new parks were created in the 1850s notably Battersea Park and Finsbury Park. [58] The idea that society as a whole benefited from a healthy population was promulgated by the Metropolitan Public Gardens Association (MPGA), which also promoted the creation of smaller green spaces, particularly in densely populated areas.[59] The MPGA campaigned to convert small burial grounds and derelict property into gardens and playgrounds but opportunities were shrinking as green spaces were expensive luxuries competing against potentially revenue-generating uses.[60]

Whilst the London Society stated in 1912 that no child should have to travel more than half a mile to a playground; good intentions continued to be thwarted by the relentless expansion of the city in the first half of the 20th century.[61] Hannikainen calculated that 1,223 acres of new green space were provided between the wars, despite the limited legal and financial powers of the municipal authorities.[62] This provision was dwarfed, however, by the acreages lost to buildings as London expanded. Julian Huxley noted: 'It is a terrifying fact that the amount of built-up area added to its [London] growth between the wars was as large as its entire area in 1918; and this growth was almost wholly unplanned, adding new chaos to the old.'[63] The lack of planning powers and the question of compensation and betterment to landowners were identified as the causes of limited green space delivery. Until the reform of the system for compulsory purchase in the Town and

[55] Luckin and Thorsheim, *A Mighty Capital Under Threat,* p. 112.
[56] Susan Lasdun, *The English Park: Royal, Private and Public* (New York: Vendome Press, 1992) p. 150.
[57] Luckin and Thorsheim, *A Mighty Capital Under Threat* p. 113.
[58] J. Richardson, 'The Provision of Open Spaces in Slum Clearance Areas and Congested Districts,' *Journal of Park Administration, Horticulture and Recreation*, Vol. 4., No. 5., 1939, p. 125., and Luckin and Thorsheim, *A Mighty Capital Under Threat* p. 115.
[59] Luckin and Thorsheim, *A Mighty Capital Under Threat,* p. 118-120.
[60] Flora Stephenson and Phoebe Pool, *A Plan for Town and Country* (London: The Pilot Press, 1944) p. 21.
[61] Luckin and Thorsheim, *A Mighty Capital Under Threat,* p. 120.
[62] Hannikainen, *Greening London*, p. 21.
[63] Stephenson and Pool, *Plan for Town and Country*, Foreword, p. 7.

Country Planning Acts, the authorities were reluctant to add to the rate burden of their citizens by acquiring land for open space, especially where land values were high.[64]

Proposals to provide more green space went hand in hand with those aimed at improving slum housing in congested districts, with the 1936 Housing Act seeking to 'provide places of recreation for the people for whom the houses are built'.[65] Progress was piecemeal, however, and some concluded that a more strategic approach required new powers and a consideration of where industry should be located and where workers should live.[66] A Commission on the Distribution of the Industrial Population was set up in 1938 to make recommendations on remedial measures.[67] Often referred to using the name of its Chairman, the resulting Barlow Report recommended the movement of populations out of central congested districts and suggested 6 acres of playing fields for every 1,000 people, in addition to land for amenity open spaces. At the time, London only had 1.88 acres of public open space per 1,000 people and these spaces were unevenly distributed such that Shoreditch had the lowest provision at 0.1 acres per 1,000 whilst Westminster and Woolwich had the highest at 6 acres per 1,000.[68] Proposals contained in the Barlow Report led directly to the population decentralisation and open space targets contained in the *County of London Plan*, published during the War in 1943, which set reduced population densities of 136 persons resident per acre and a target of 4 acres of open space per 1,000 people. Almost a million people would need to be moved from the areas with the highest population densities to achieve these targets.[69]

The Institute of Park Administration supported the proposals, arguing 'The cry must be for open space, and still more open space. There is no need for town workers to labour in sun-less and unhealthy places'.[70] The planners set out proposals in which all districts were amply supplied with green spaces of varying purpose and size, linked together within a regional park system and connected to the countryside beyond in ribbons of green.[71] Londoners hoped for a new life in which the best of old London would be preserved whilst the squalor of the past was vanquished.[72] The public's aspirations were matched by those in power who sought to seize the opportunity that

[64] Stephenson and Pool, *Plan for Town and Country,* p. 22, and Lord Meston, 'Compensation for Compulsory Purchase of Land', *Journal of Park Administration, Horticulture and Recreation*, Vol. 24., No.7., December 1959, p. 326.
[65] Richardson, 'The Provision of Open Spaces', p. 126.
[66] Stephenson and Pool, *Plan for Town and Country,* p. 21.
[67] *Report on the Royal Commission on The Distribution of the Industrial Population* (London: His Majesty's Stationery Office, 1940) p. 1 and pp. 76-77.
[68] Foreshaw and Abercrombie, *County of London Plan,* p. 168.
[69] Ibid., p. 156.
[70] The Institute of Park Administration, *Post-war Planning and Reconstruction as visualised by the Institute of Park Administration* (London: 1943) p. 11.
[71] Foreshaw and Abercrombie, *County of London Plan,* pp. 38-39.
[72] Gavin Weightman and Steve Humphries, *The Making of Modern London* (London: Ebury Press, 2007) p. 336.

the Blitz, for all its tragedy, had presented them with. There were nearly 3,830 acres of vacant land within London after the war and an appetite for change:[73]

> Planners and middle-class reformers began to see the destruction as opening up new opportunities. Hitler had swept away more slums in a few months than radical campaigners had in a year or even decades…The unplanned, chaotic development of London over the centuries could be replaced by a planned London.[74]

The idea of applying a strategically planned approach to London's future gained traction. A series of articles in *Country Life* entitled 'The London that is to Be' and written by influential architects such as Professor Patrick Abercrombie and Goodhart Rendel were published in January 1941.[75] Abercrombie used his article to emphasise the need for new public powers to counter commercialism.[76] In October 1942, a document called *London Replanned* was published by the Royal Academy's Planning Committee. Chaired by Sir Edwin Lutyens, the Committee presented twelve projects for London including several new green spaces, such as one at St George's Circus south of the Thames (Figure 23).[77] None of these proposals came to fruition but the ripples of a debate were spreading in favour of 'a nobler city'.[78]

When the *County of London Plan* was published on 9th July 1943, there was a genuine attempt at community engagement and an exhibition at County Hall was so popular that 'the level of enthusiasm that greeted the displays surprised the London County Council'.[79] Susanne Cowan argues that the cataclysm of the Blitz and the myth of social unity 'both bolstered interest and support for town planning and masked underlying divisions in the interests and values of British citizens' which would later emerge as discontent at some of the radical changes.[80] A desire to garner public support was evident, however, in the publication of a full-colour booklet entitled *The County of London Plan Explained*, written by E. J. Carter and Erno Goldfinger. The booklet

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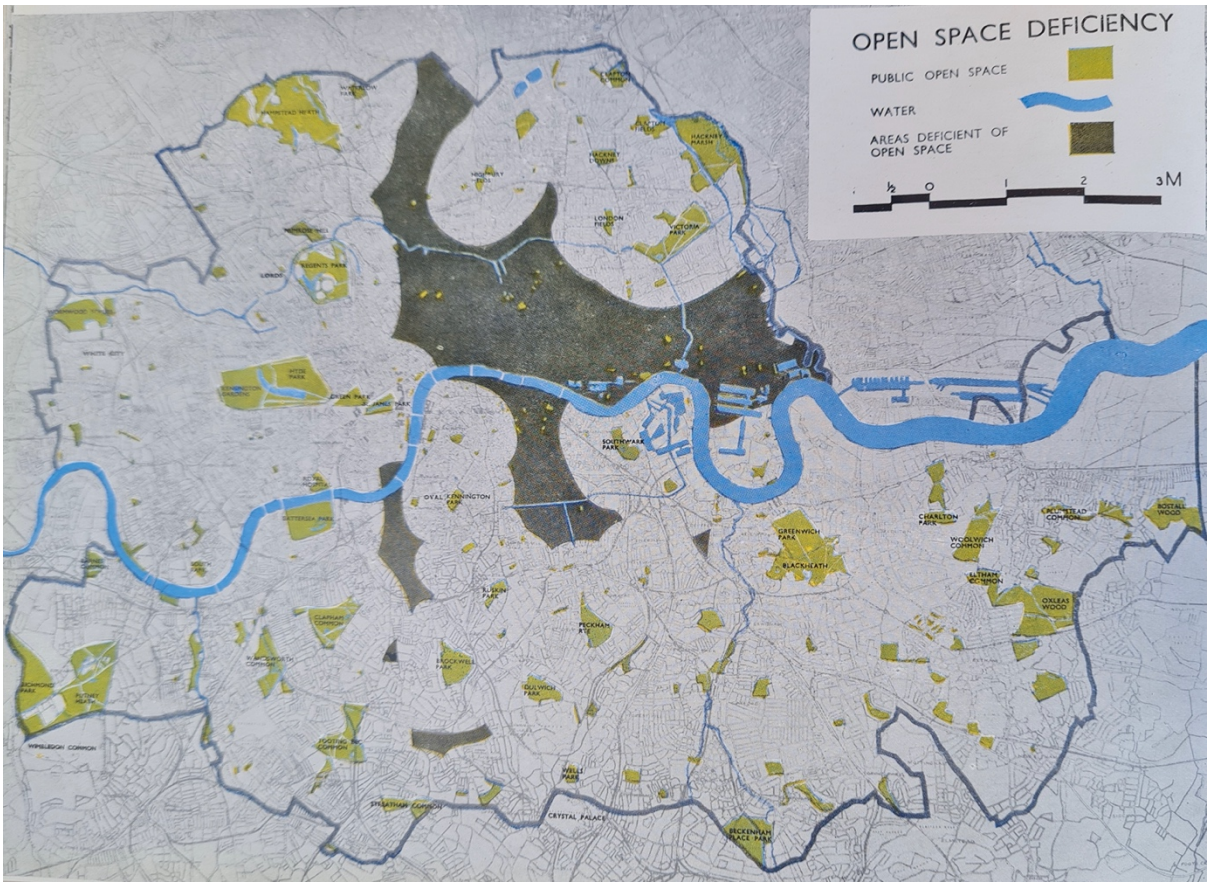
[73] LCC, *London Development Plan Analysis,* p. 28.
[74] Weightman and Humphries, *The Making of Modern London*, pp. 330-331.
[75] Patrick Abercrombie, 'London that is to be IV, Should London Architecture be Controlled?', *Country Life*, 89, 2297 January 25th, 1941, pp. 74-75, and Rendel, Goodhart, 'London that is to be IV – The principles of patchwork' *Country Life,* 89, 2294, January 4th, pp. 4-6.
[76] Patrick Abercrombie, 'London that is to be IV', p. 75.
[77] Felix Barker and Ralph Hyde, *London as it Might Have Been* (London: John Murray Ltd, 1995) pp. 178-179.
[78] Royal Academy Planning Committee, *London Replanned: Interim Report of the Royal Academy Planning Committee* (London: Country Life Ltd., August 1942) p. 5.
[79] Frank Mort, 'Fantasies of Metropolitan Life: Planning London in the 1940s', *Journal of British Studies*, Vol. 43., No. 1, p. 130.
[80] Susanne Cowan, 'The People's Peace: The Myth of Wartime Unity and Public Consent for Town Planning' in Mark Clapson and Peter J. Larkham (eds), *The Blitz and Its Legacy: Wartime Destruction to Post-war Reconstruction* (London and New York: Routledge, 2016) p. 73.

contained diagrams, graphs and pull-out maps, and described London's problems of overcrowding and muddled land uses.[81] It emphasised the importance of green spaces, arguing that they are 'not extras to a life of eating, sleeping and work; they are, or should be, an essential part of life…Because they are essentials a town plan must give space for them'.[82]

Figure 23: Proposals for a new park at St George's Circus, Southwark. Source: Royal Academy Planning Committee, *London Replanned: Interim Report of the Royal Academy Planning Committee* (London: Country Life Ltd., August 1942) p. 25.

[81] E. J. Carter and Erno Goldfinger, *The County of London Plan Explained* (London: Penguin Books, 1945) pp. 8-9.
[82] Ibid., p. 41.



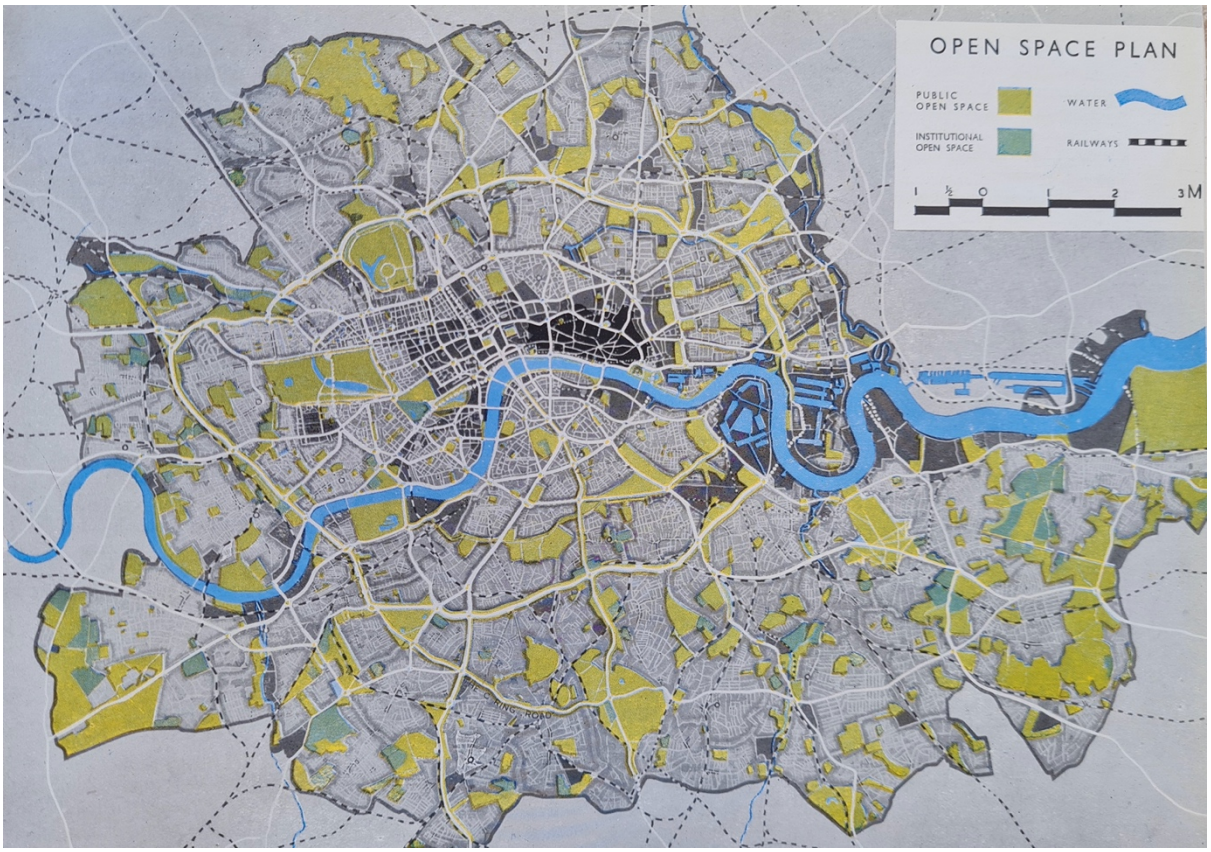


Figure 24 (Top) – Open Space Deficiency areas as mapped in the *County of London Plan* and Figure 25 (Bottom) Open Space Proposals from the *County of London Plan*. Source: E. J. Carter and Erno Goldfinger, *The County of London Explained*, pp. 44 - 45.

Those areas, where work was required to deliver the target of 4 acres of open space per 1,000 people, were mapped for the entire County area as Open Space Deficiency Areas (Figure 24) and a further map was created to show where new open spaces needed to be created (Figure 25). The plan concluded that 5,240 acres of new open space would be needed, that existing open spaces should be jealously preserved, and that increased access should be sought to private open space.[83] Priority would be given to new housing, but the provision of green space could be achieved 'by allocating land cleared of buildings as a result of enemy action', a clear recognition of the opportunity of bombsites for use as permanent new green spaces.[84]

The tower of All Hallows, Staining, from the east. It would form the focal point of the small sunken garden proposed by the consultants.

Figure 26: Plans for a sunken garden. Source: C. H. Holden and W. G. Holford, *The City of London a of Destruction and Survival* (London: The Architectural Press, 1950) p. 242.

The Corporation of London published its own substantial volume in 1947 detailing bomb damage in the City of London area and suggesting the delivery of amenity spaces within commercial

[83] Carter and Goldfinger, *County of London Plan Explained*, pp. 41-44.
[84] Foreshaw and Abercrombie, *County of London Plan,* p. 41.

districts for its workers, an example illustrated in Figure 26.[85] Outside the City, borough councils had the challenge of making plans for green spaces of less than 2 acres, whilst the county level authority, the LCC, sought to deliver larger parks.[86] The plans were bolstered by new compulsory purchase powers which allowed local authorities to purchase land damaged by the Blitz at below market rates in an attempt to override competing commercial interests and this 'marked the most crucial issue for their [green spaces] provision in London'.[87] The Labour Government's 1947 Town and Country Planning Act tied the land price to its existing use value, which helpfully suppressed the value of bomb-damaged land. Public authorities continued to be able to purchase land at below market value even after the system was abolished in 1952 because the then Conservative government recognised the need to facilitate housing development in particular. However, by 1959 compulsory purchase prices returned to market rates.[88]

Critics of the *County of London Plan* included some officers and politicians of the London County Council, for which the plan had been drawn up. The Plan was not approved as it was 'too visionary and, more importantly too expensive' and the costs of delivering the green space proposals alone would have been £40 million.[89] Whilst the Plan's emphasis on the importance of green space was significant in highlighting the need for new greening initiatives, the later *Administrative County of London Development Plan* arguably achieved more. Published in 1951 and adopted in 1955, the tone of this plan was more practical and pragmatic than its predecessor. It aimed to deliver just 2.5 acres per 1,000 people, focusing first on areas where new green space was most needed. Whilst stating that it had not abandoned the 4 acres per 1,000 people target, it had essentially done so, the aim being to achieve some progress in a shorter timescale 'as part of the attack on London's major defects'.[90] An increase to 2.5 acres per 1,000 population for areas with less than that would represent 'a staggering achievement; it would involve the purchase of some 3,000 acres of land at an estimated cost of not less than £30m'.[91] The plan aimed to use bombed areas for green spaces stating: 'sites which are already cleared of buildings, either by enemy action or through other causes, and sites which are occupied by only temporary buildings afford the best opportunities for early development for open space purposes'.[92] It set out how the difficult task of acquiring and joining together sites for green spaces could be achieved whilst

[85] C. H. Holden and W. G. Holford, *The City of London: a record of Destruction and Survival* (London: The Architectural Press, 1950) pp. 232–254.
[86] Hannikainen, *Greening London,* p. 46.
[87] Ibid., p. 108.
[88] Ibid., pp. 108-109.
[89] Ibid., p. 98.
[90] London County Council, *London Development Plan Analysis*, p. 213.
[91] Ibid., p. 220.
[92] Ibid., p. 222.

minimising disruption to homes and businesses.[93] Joyce Bellamy documented the process set out in the Plan to achieve the proposed green spaces over a period of its 20-year lifetime, and this is summarised in Table 1.

Phase 1 (1955-60)	• Focus on cleared sites, generally those war-damaged or other derelict and vacant properties. • Urgent slum clearance but no occupied properties to be purchased unless absolutely essential. • Sites given simple layout as temporary open space prior to further land acquisition.
Phase II (1960-72)	• Focus on sites previously used for temporary housing, properties in poor condition or where uses are to be relocated elsewhere. • Gradual coalescence of spaces into larger or more cohesive parks.
Phase III (1972 onwards)	• Long-term safeguarding of land for completion of parks. • Designed layout of cohesive spaces.

Table 1: Summary of phases of land assembly for new green space provision within the *Administrative County of London Development Plan*. Source: Bellamy, *Burgess Park*, pp. 31-32.

Whilst the LCC had a clear strategy, delivery was often slow, complicated, and frustrated by strong commercial interests, community resistance and limited finances. The timeframes for park assembly were so long that the pre-war uses and bombing history became just one small part of the story of their creation, which saw the destruction of not just slum housing but better-quality homes too, together with pubs, shops, and long-standing communities. Figure 27 shows an unidentified grid of terraces in East London and illustrates both the opportunity for and difficulty of capitalising on war damage in similar streets for green space provision. Whilst considerable sections of the terraces were destroyed by bombing, many are still standing but possibly damaged. The powers given to the local authorities meant that if an area like this were to be zoned for green space, bomb-damaged sites could be laid out temporarily as green space, repairs to houses still standing could be paused, and the houses subjected to compulsory purchase and eventually cleared for laying out as green space.[94] By May 1948, the LCC had 'earmarked most of the areas it aimed

[93] London County Council, *London Development Plan Analysis*, p. 226.
[94] Hannikaienen, *Greening London*, pp. 109-111.

to develop into new public green space' and this zoning, combined with new legal powers, appears to have worked in applying a brake on speculative development in these areas.[95] Understandably, debates raged around whether repairable homes and good-quality buildings should fall prey to demolition for new green spaces. Some questioned whether they were worth so much destruction and it was difficult to sell the vision of a new green space to those directly affected when the processes required for their completion could take 20 years or more.[96] Meanwhile, those in the worst homes were upset by the lengthy process; a petition was signed by residents of several streets in Camberwell requesting that the Greater London Council (GLC) expedite the demolition of their homes to make way for Burgess Park, as they were living with no hot water and no bathrooms.[97]

Figure 27: Bomb damage to houses in the East End of London, 1960s. Source: Steve Lewis/Getty Images https://www.gettyimages.co.uk/detail/news-photo/bomb-damage-to-houses-in-the-east-end-of-london-1960s-news-photo/86379594, accessed 07.07.22

Land assembly for new green spaces would take patience, persistence, and an assiduous adherence to the task at hand in the face of myriad criticism and competing interests. As the Chairman of the

[95] Hannikaienen, *Greening London*, p. 111.
[96] Bellamy, 'Burgess Park', pp. 258-260.
[97] Petition to GLC by residents of Longcroft, Brymer, Dartnell, Secretan, Silcote, Odell, Calmington, Kempshead and Sandover Roads, 1970. LMA Ref GLC/DG/AR/06/008/002 North Camberwell Open Space, later Burgess Park.

Town Planning Committee said: 'The Londoner of 1971, will, I hope, find this city a much better place to live in than it is now' and described open spaces as being a key ingredient in the redeveloped neighbourhoods. He did not underestimate the task at hand, though, stating 'We shall need all our courage and persistence to achieve our aims'.[98] Hannikainen believes that whilst acquisition was inevitably slow and piecemeal, the municipal authorities were generally successful in securing land for green spaces.[99] Between 1951 and 1965 the LCC acquired 570 acres of land for green space and the boroughs councils a further 276.[100] The LCC eventually delivered over 800 acres of public green space as a result of having a coherent town plan and corresponding new legal powers; an area falling significantly short of initial targets but an achievement not possible without these powers.[101] The location and form of the new green spaces in London depended on many factors: political will, planning policy, finances and land availability. The problem of limited land availability, particularly in the heavily built-up areas most devoid of green spaces, was solved at least in part by wartime aerial bombardment, land which was later joined by neighbouring vacant plots created by housing clearance and industrial obsolescence. To understand how patterns of post-war green space provision were influenced by war damage, it is necessary to understand the patterns of destruction to land and property created by the Blitz and this is discussed in Chapter 4.

[98] LCC, *London Development Plan Analysis*, p. vi.
[99] Hannikainen, *Greening London*, p. 101.
[100] Ibid., p. 113.
[101] Ibid., p. 94.

Chapter 4 - Patterns of aerial bombardment and destruction in London

Several types of bombs fell on London during the Blitz; the choice of munitions and targets varied with Germany's war objectives and technological advances. The term Blitz derives from the word *Blitzkrieg* (lightning war), originally coined to describe a rapid invasion of enemy territory. Initially, it described the first phase of aerial bombardment of Britain as a precursor to potential invasion and an attempt to blockade Britain and force a capitulation.[102] However, it evolved to describe the entire episode of bombing spanning four and a half years, starting in the summer of 1940 with trial bombing sorties and lasting on and off until March 1945 (Table 2).

Dates	Name of attack	Bombs used	Type of destruction
Summer 1940	Trial sorties	Incendiaries and High Explosive Devices (HED)	Fires and structural damage
7th Sept 1940 – 10th May 1941	Blitz (Primary phase)	Incendiaries and HEDs	Widespread fires and structural damage from HEDs
10th May 1941- December 1943. Irregular frequency and intensity.	Tip and run raids	Fast-moving fighter bombers with 1000lb bombs	Localised structural damage from explosions.
Jan 1944 – May 1944	Baby Blitz (Operation Steinbock – reprisal raids)	Incendiaries and HEDs	Fires and structural damage from HEDs
13th June 1944 – 27th March 1945. Intermittent attacks disrupted by allied forces.	Vengeance weapons /V weapons (Vergeltungswaffen)	V1 flying bombs (doodlebugs) V2 flying rockets	Extensive damage at site of impact and radiating outwards through shock waves.

Table 2: Summary of main phases of the Blitz and types of damage sustained. Source: Laurence Ward, *The London County Council Bomb Damage Maps* (London: Thames and Hudson, 2018) pp. 8-14.

Hitler was thought to doubt the strategic benefits of bombing; being heard to say 'In the end victor or vanquished, we shall all be buried in ruins'.[103] Nonetheless, the decision was taken to bomb Britain, with a geographical focus on London and other industrial and port towns.[104] The early phases targeted economic, administrative and military targets using incendiary bombs to start fires, followed by High Explosive Devices to cause further destruction and hamper the efforts of firefighters. So-called terror raids on civilian targets were not sanctioned in the first phases of the War, although vengeance weapons (V weapons) were later deployed indiscriminately to spread terror in reprisal for British action in Europe. [105]

[102] Richard Overy, *The Bombing War: Europe 1939-1945* (London: Allen Lane, 2013) p. 60.
[103] Quoted in Ibid., p. 59.
[104] Overy, *The Bombing War*, p. 60.
[105] Overy, *The Bombing War*, p.60 and https://www.iwm.org.uk/history/the-terrifying-german-revenge-weapons-of-the-second-world-war, accessed 23.07.22.

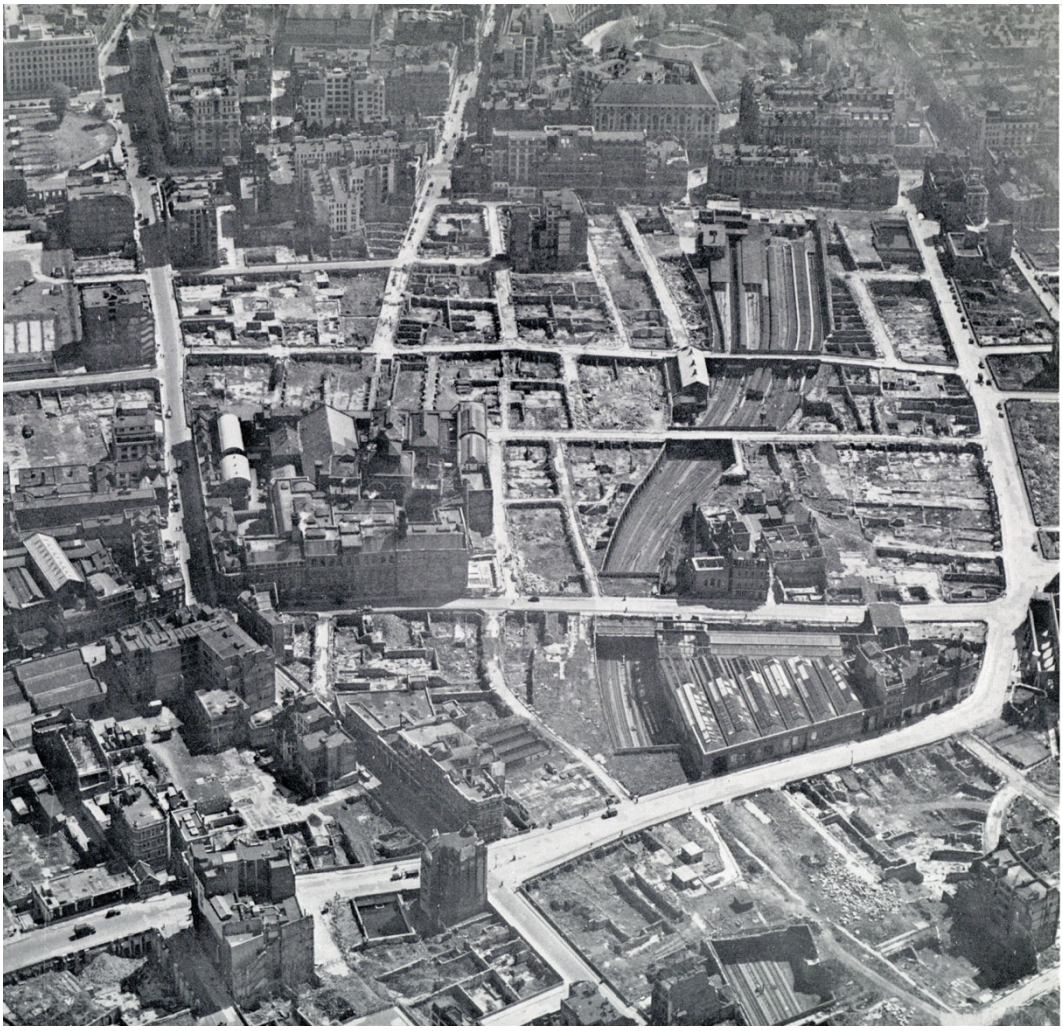


Figure 28: Bomb damage to the Cripplegate area. Source: https://www.barbicanliving.co.uk/timeline-1940-1959/, accessed 30.08.22.

The most intense phase of London's bombardment was from September 1940 to May 1941. There were 57 consecutive nights of raids in October and November and several later large-scale night raids, most notably on 31st December 1940 and 10th May 1941, the latter destroying swathes of south and east London.[106] Whilst civilians were not explicitly targeted, the accuracy of the bombing was low and when conflagrations took hold, they were hard to extinguish, spreading indiscriminately through industrial and residential areas. An aerial photo of Cripplegate gives a sense of the intensity and breadth of destruction in the City of London, mostly by fire (Figure 28). The Royal Air Force estimated that only 10-30% of German bombs found their target and Germany's meteorologists knew that England's weather would hamper accuracy.[107] This

[106] Gavin Mortimer, *The Longest Night 10-11 May 1941, Voices from the London Blitz* (London: Phoenix Books, 2005) p. 353.
[107] Luftwehrgeographische Beschreibung Von Grossbritannien, 7th February, 1940 p. 99 quoted in Overy, *The Bombing War*, p. 71.

inaccuracy made the destruction of homes and lives inevitable because London's factory and dock workers often lived in high-density housing close to their employment.[108] Some buildings could be rapidly repaired but large areas of vacant land remained, 90% of this damage caused by incendiaries.[109] The pattern of destruction from this first phase of the Blitz was localised damage across much of London, including the West End and outer suburbs, but with a concentration in the City, the East End, southeast and south-central London. The Home Office mapped the number of bombs that had fallen in the London region from the start of hostilities until October 1941 and this shows the concentration of impact sites in central London and the industrial and port areas of south and east London (Figure 29).

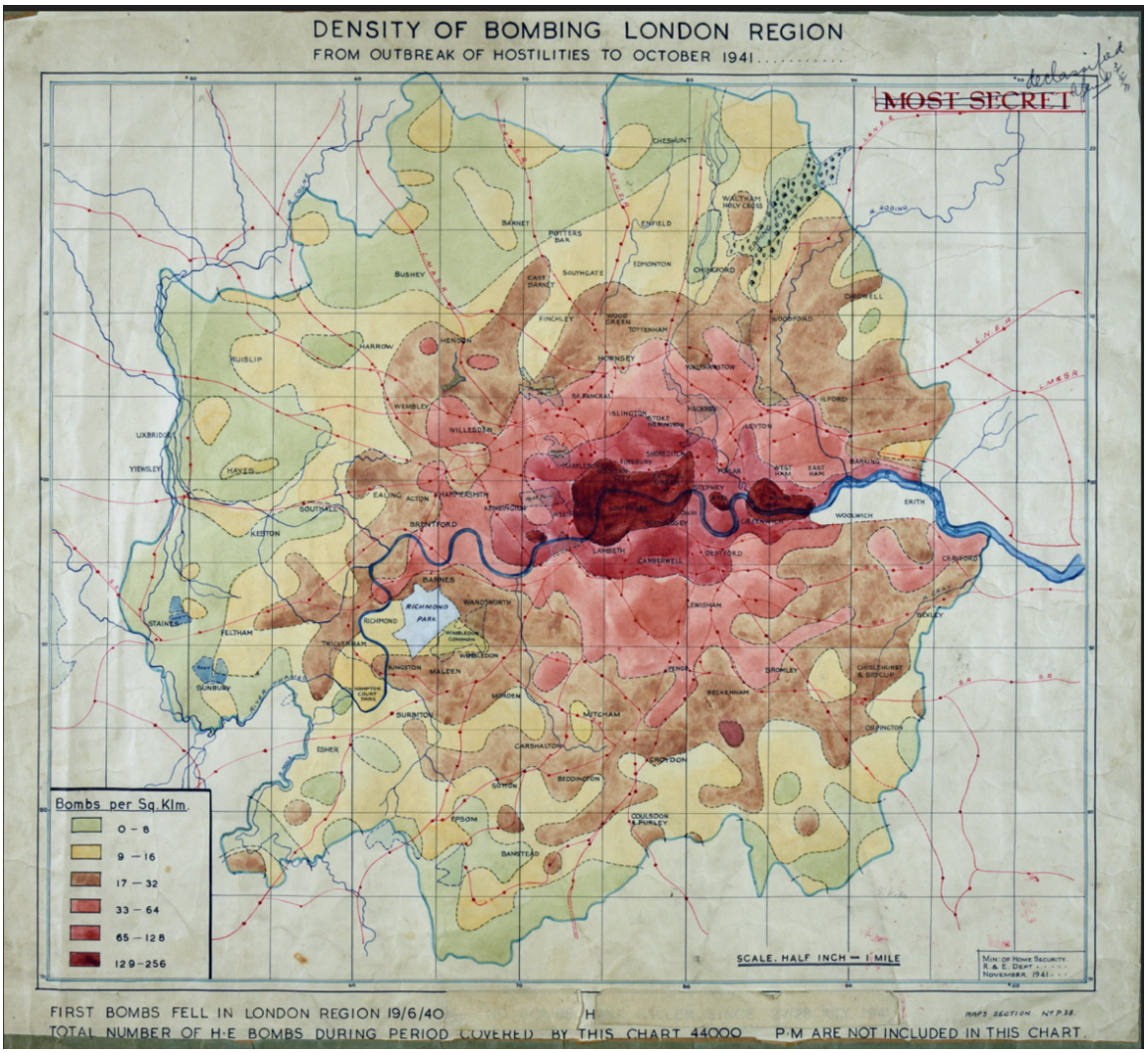


Figure 29: Bombing Density Map, London Region, to October 1941. National Archives Kew, HO193/45, www.flickr.com/photos/nationalarchives/29282975318/in/photostream, accessed 13.05.22.

[108] Overy, *The Bombing War*, p. 95.
[109] Ibid., p. 163.

A new phase of terror and destruction was entered in 1944 with the deployment of V weapons; from which the patterns of destruction were different but no less devastating. The location of the impact sites of the vengeance weapons was skewed to east and south London because of the location of the launch sites in France, Belgium and the Netherlands.[110] Whilst some fires were created when V weapons landed, damage largely resulted from the initial explosion and subsequent shock waves. The V weapons created an exceptional level of damage at and near the impact site, fell day and night, and because they fell randomly and without warning, shelters were useless.

V1 bombs were high explosive warheads carried by pilotless aircraft with a crude autopilot system, meaning their range was not fully controllable.[111] However, forty percent of V1s fell in London's inner core; an area where 28% of its 1944 population lived on only 16% of its land area.[112] Figure 30 shows damage wrought on Mercator Road in Lewisham resulting from a V1 flying bomb, killing 10 people and completely destroying 13 houses. The impact sites of V2 rockets (Figure 31) are shown in Figure 32. When they landed in built-up areas, considerable damage was sustained as the V2 could make a crater 10 feet deep and cause a shock effect that 'could crack washbasins a quarter of a mile away.'[113] Figure 33 shows the level of destruction to property caused by a V2 bomb in Stepney.

Figure 30: Damage from V1 flying bomb at Mercator Road in Lewisham, 23rd June 1944. Source: The LCC Photograph Library, SC/PHL/02/1268/F2175, reproduced in Weaver, *Bomb Damage Maps*, p. 7.

[110] http://www.flyingbombsandrockets.com/V2, accessed 12.05.22.
[111] Ward, *Bomb Damage Maps*, p. 12.
[112] Stephen G. Evans and Keith B. Delaney, 'The V1 (Flying Bomb) attack on London (1944-45); the applied geography of early cruise missile accuracy', *Applied Geography,* 99, 2018, p. 44.
[113] Ibid.

Figure 31: V2 on launching Platform. Source: Imperial War Museum CL 3405 https://www.iwm.org.uk/collections/item/object/205087580, accessed 21.08.22.

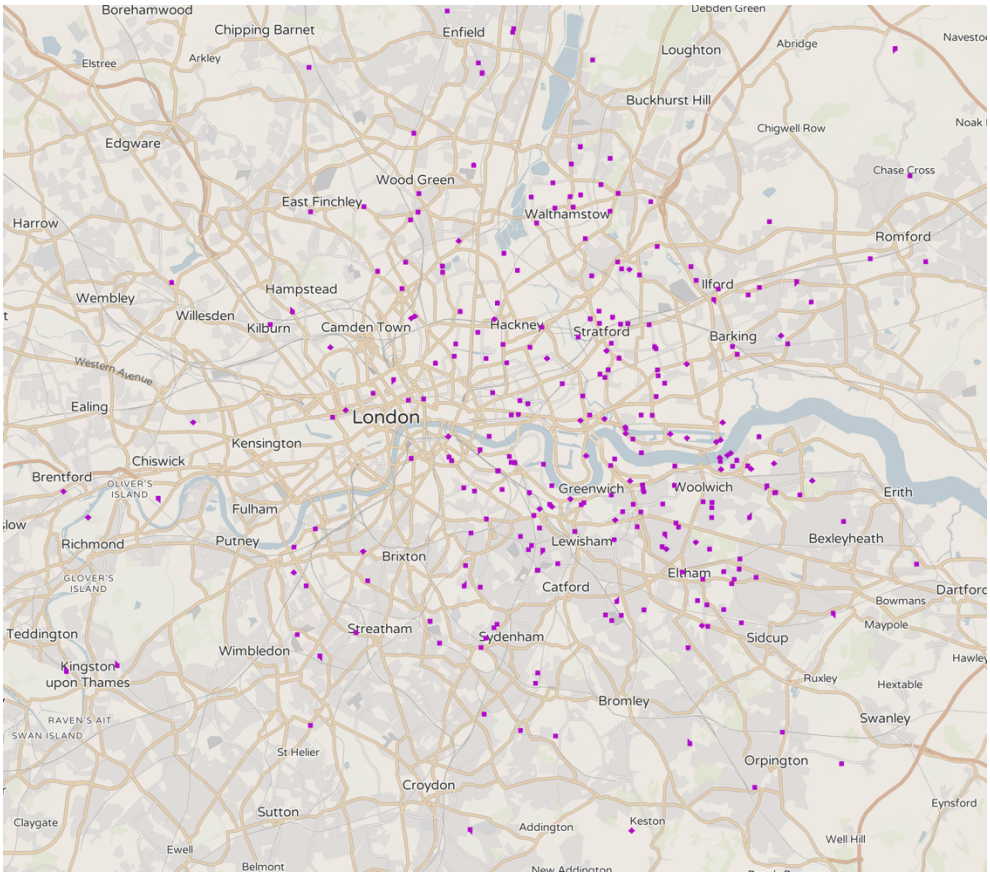


Figure 32: Impact sites of V2 rockets in London. Source: https://www.layersoflondon.org/map/overlays/bomb-damage-1945, accessed 12.05.22.

Figure 33: Damage from a V2 rocket at Hughes Mansions, Vallance Road, Stepney, 27th March 1945. Source: Imperial War Museum HU88802 https://www.iwm.org.uk/collections/item/object/205022153, accessed 13.05.22.

No. OF BOMBS PER 1,000 ACRES

OVER 600		300 – 399		100 – 149	
500 – 599		200 – 299		50 – 99	
400 – 499		150 – 199		UNDER 50	

1	Chelsea	25	Battersea	49	Willesden	72	Beckenham
2	Fulham	26	Camberwell	50	Acton	73	Bexley
3	Hammersmith	27	Lambeth	51	Ealing	74	Bromley
4	Kensington	28	Southwark	52	Brentford and Chiswick	75	Chislehurst and Sidcup
5	Westminster	29	Wandsworth	53	Feltham	76	Crayford
6	Hampstead	30	Cheshunt	54	Hayes and Harlington	77	Erith
7	Paddington	31	East Barnet	55	Heston and Isleworth	78	Orpington
8	St. Marylebone	32	Edmonton	56	Staines	79	Penge
9	St. Pancras	33	Enfield	57	Sunbury	80	Barnes
10	Islington	34	Hornsey	58	Twickenham	81	Epsom and Ewell
11	Stoke Newington	35	Southgate	59	Yiewsley and West Drayton	82	Esher
12	Bethnal Green	36	Tottenham	60	Southall and Norwood	83	Kingston on Thames
13	City of London	37	Wood Green	61	Barking	84	Malden and Coombe
14	Finsbury	38	Friern Barnet	62	Chigwell	85	Merton and Morden
15	Hackney	39	Potters Bar	63	Chingford	86	Richmond
16	Holborn	40	Elstree	64	Dagenham	87	Surbiton
17	Poplar	41	Finchley	65	East Ham	88	Wimbledon
18	Shoreditch	42	Bushey	66	Ilford	89	Banstead
19	Stepney	43	Barnet U.D.	67	Leyton	90	Beddington and Wallington
20	Bermondsey	44	Harrow	68	Waltham Holy Cross	91	Carshalton
21	Deptford	45	Ruislip and Northwood	69	Walthamstow	92	Coulsdon and Purley
22	Greenwich	46	Hendon	70	Wanstead and Woodford	93	Croydon
23	Lewisham	47	Uxbridge	71	West Ham	94	Mitcham
24	Woolwich	48	Wembley			95	Sutton and Cheam

Figure 34: Bombing densities by London District. Source: London Topographical Society, *The London County Council Bomb Damage Maps, 1939-45* (London, 2005) p. 11.

London experienced areas of intense damage but a fragmented pattern overall.[114] High levels of destruction were common across much of central, east and south London as demonstrated in a bombing density map by Borough (Figure 34), resulting in large acreages of post-war vacant land. In 1949, the London County Council estimated that there were 2,615.4 acres of vacant land or land containing war-damaged buildings and a further 1,213.3 acres of land containing temporary buildings.[115] The boroughs suffering the greatest proportion of land area with vacant land, war-damaged buildings and temporary buildings were concentrated in the central, eastern and southern-central areas with 22% of land in Stepney categorised as vacant, war-damaged or containing temporary buildings, 20% in Shoreditch, 15% in Bermondsey and Holborn, and 14% in Southwark.[116]

The extent of vacant and war-damaged sites provided planners with an opportunity to create new green spaces in areas where there had previously been a shortage, as outlined in Chapter 3. As described in Chapter 2, Geographical Information Systems can combine overlays of historical maps to facilitate a study of the correlation of bomb-damaged areas with post-war green space creation. The results for Southwark are outlined in Chapter 5.

[114] Clapson and Larkham (eds), *The Blitz and Its Legacy*, p. 2.
[115] LCC, *London Development Plan Analysis*, p. 32.
[116] Ibid., p. 28.

Chapter 5 - Green spaces in the London Borough of Southwark with a probable bomb damage genesis

The London Borough of Southwark is home to approximately 320,000 people and covers an area of 28.9 km^2.[117] It ranges from densely populated wards in the north, bordering the Thames and forming part of the economic area of central London, to less densely populated areas in the south. In the post-war period, and until the creation of Southwark Borough Council in 1965, the area was split into three Metropolitan boroughs: Southwark, Bermondsey and Camberwell (Figure 35). These boroughs suffered severe bombing, leaving sizeable areas of land vacant or with war-damaged and temporary buildings (Table 3). This provided an opportunity to create new green spaces using the powers and policies outlined in Chapter 3; provision being focused on areas of greatest need first.[118]

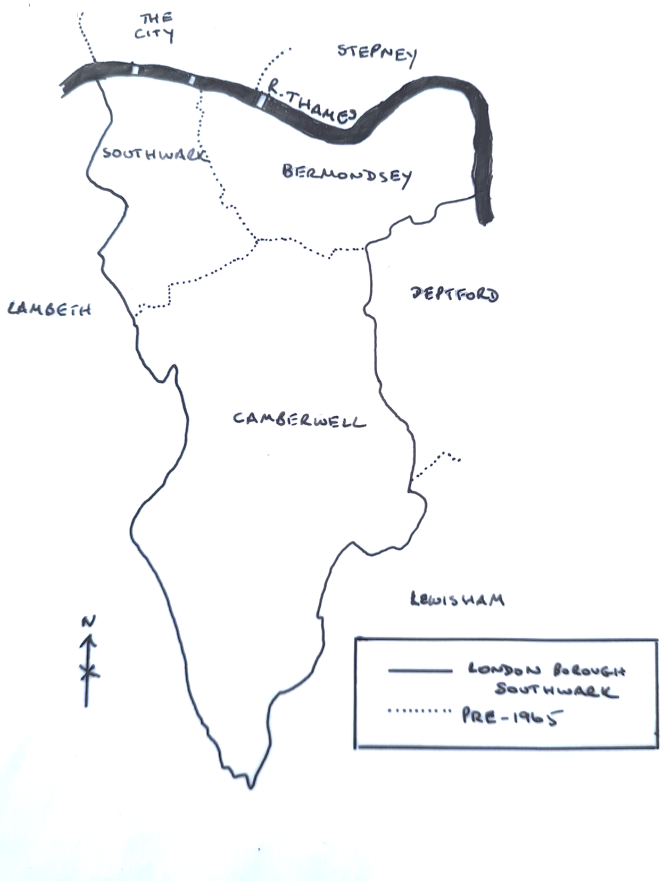


Figure 35: Pre-1965 Metropolitan Borough Areas within the present-day London Borough of Southwark Boundaries. Not to scale. Source: Author's drawing.

[117] https://www.citypopulation.de/en/uk/london/wards/E09000028__southwark/, accessed 20.06.22.
[118] London County Council, *London Development Plan Analysis*, p. 213.

		Vacant land, war-damaged and temporary buildings	
Borough	Total Acres	Acres	% of Total
Bermondsey	695	106	15
Camberwell	2,590	288	11
Southwark	702	101	14

Table 3: Extent of vacant land, war-damaged and temporary buildings by Metropolitan Borough Area, 1949. Source: LCC, *Administrative County of London Development Plan Analysis* (London: 1951) p. 28.

The three boroughs were amongst nineteen which fell below the green space target of 2.5 acres per 1,000 population.[119] Only Shoreditch (at 0.22 acres per 1,000) and Islington (at 0.26 acres per 1,000) had a worse standard than Southwark Metropolitan Borough. In order to hit the target, 467 acres of new green space needed to be created across the three boroughs, 17% of the 2,750 acres required across the County. Provision was to be phased over a 20-year time span, with only 28% to be delivered in the three boroughs over this timeframe and significant acreages to be delivered into the 70s and beyond (Table 4).

Borough	Open Space Acres per 1,000 population.	Open Space Required (acres) to give 2.5 acres per 1,000 population.	Open space proposals (acres) to be delivered in the first 20 years.
Bermondsey	1.29	74	36
Camberwell	1.47	185	83
Southwark	0.36	208	14
TOTAL 3 boroughs		467	133
TOTAL London County		2,750	1,071

Table 4: Open space requirements and proposals for Camberwell, Bermondsey and Southwark. Source: LCC, *Administrative County London Development Plan Analysis* (London: 1951) p. 221 and p. 225.

The *County of London Plan* had provided indicative locations for new green spaces in Southwark (Figure 36) including a large new park to the north of Camberwell Borough, several new smaller parks between this and the river and several park enlargements (shown as dark green shading

[119]LCC, *London Development Plan Analysis*, p. 221.

around existing parks coloured cyan). The subsequent *Administrative County of London Development Plan* took these ideas forward and reinforced the idea of the large park, with the working title of the North Camberwell Open Space (now called Burgess Park), along with several smaller ones for general recreation (Figure 37).[120] New green space provision was to be concentrated in the northern areas, where open space deficiency was most acute.

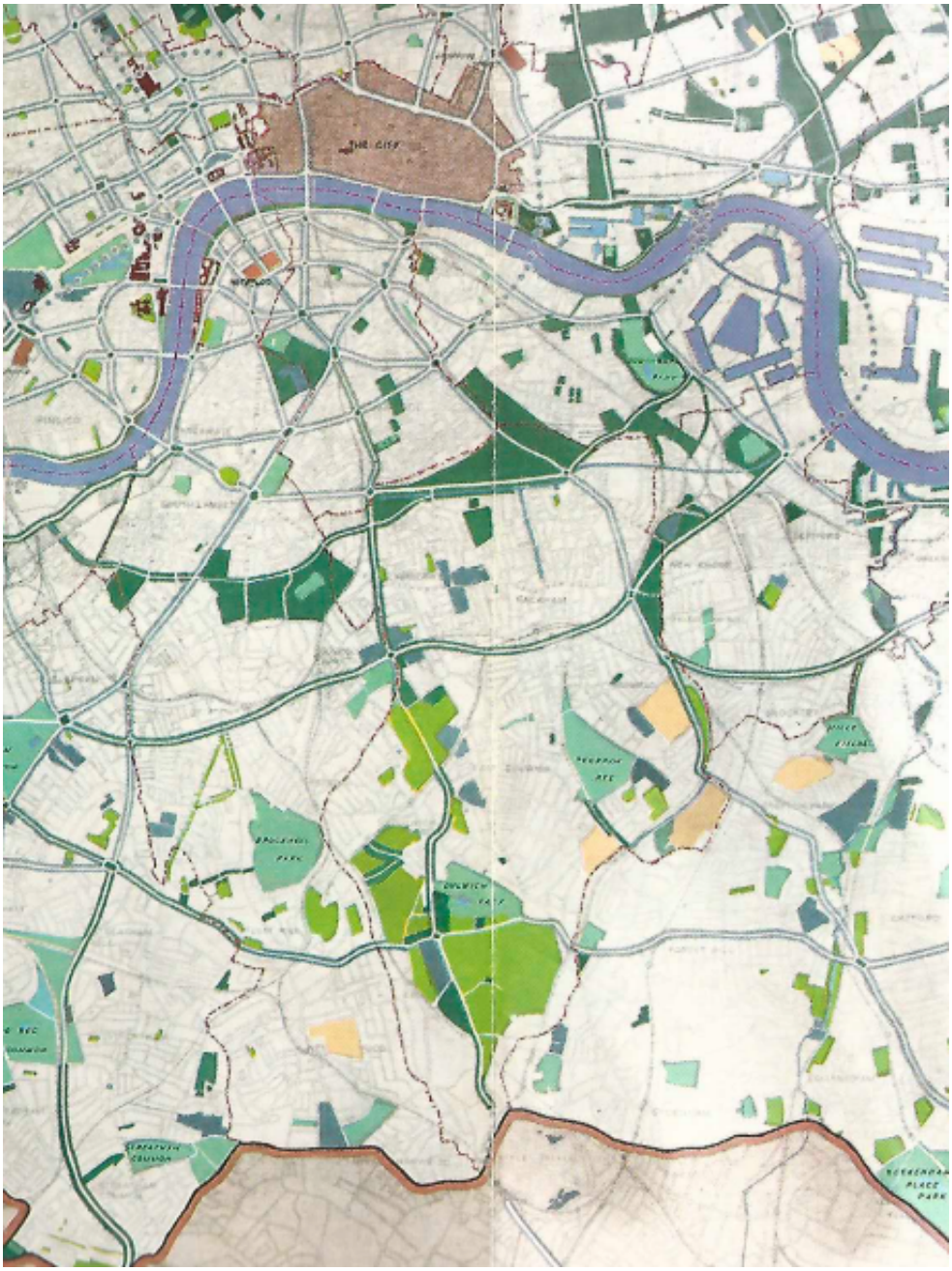


Figure 36: Extract of Open Space Plan centred on Southwark, Bermondsey and Camberwell. Foreshaw and Abercrombie, *County of London Plan* (London: Macmillan and Co. Ltd., 1943), facing p. 46.

[120] Bellamy, 'Burgess Park', p. 36.

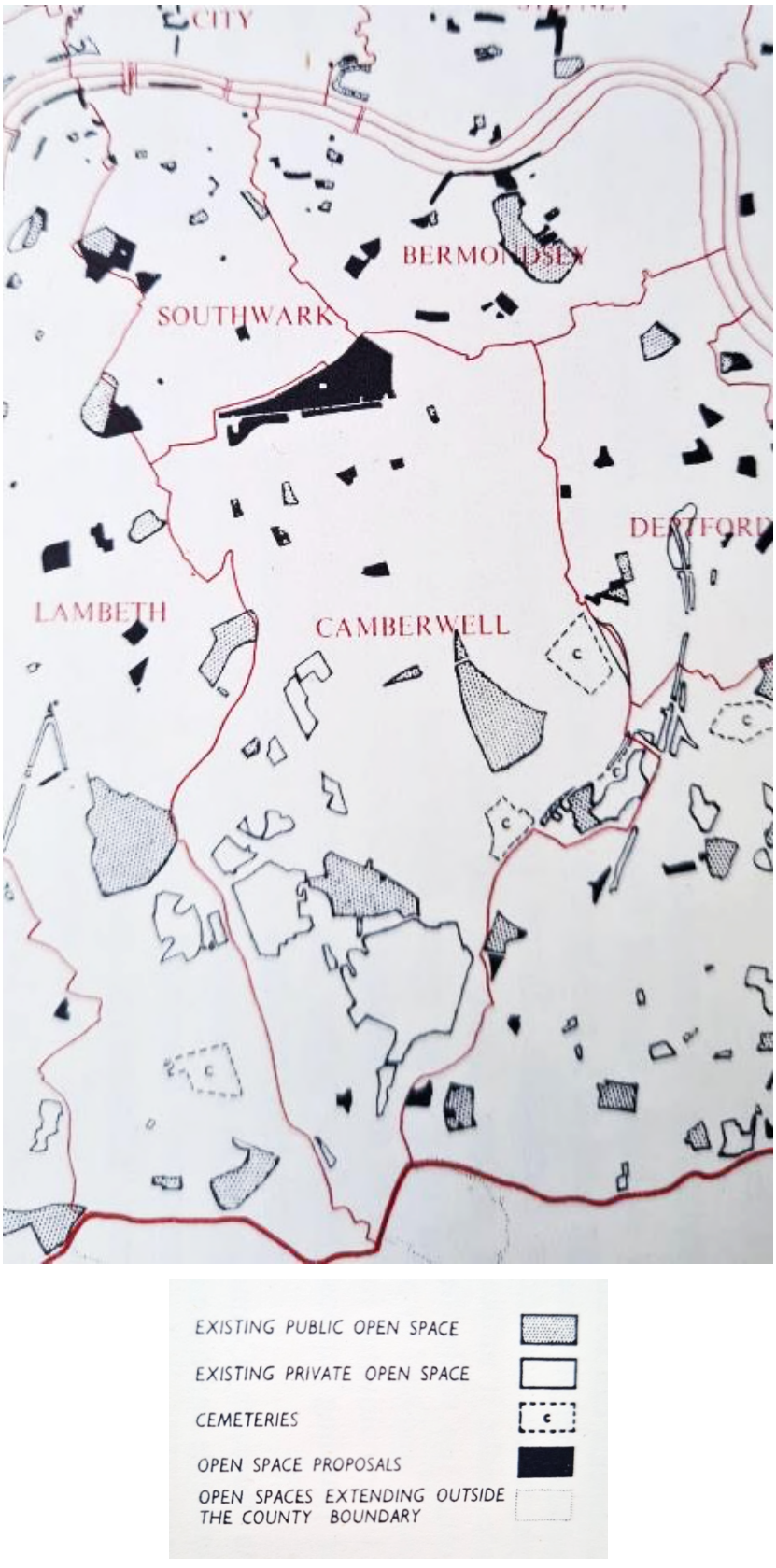


Figure 37: Extract from Administrative County of London Development Plan Analysis, 1951, Open Spaces Proposal Map, centred on Boroughs of Bermondsey, Southwark and Camberwell. Source: LCC, *Administrative County of London Development Plan Analysis* (London: 1951) p. 227.

Borough	1951	1955	1964
Bermondsey	76.5	84.0	100.0
Camberwell	260.3	273.3	305.3
Southwark	34.3	35.8	40.6

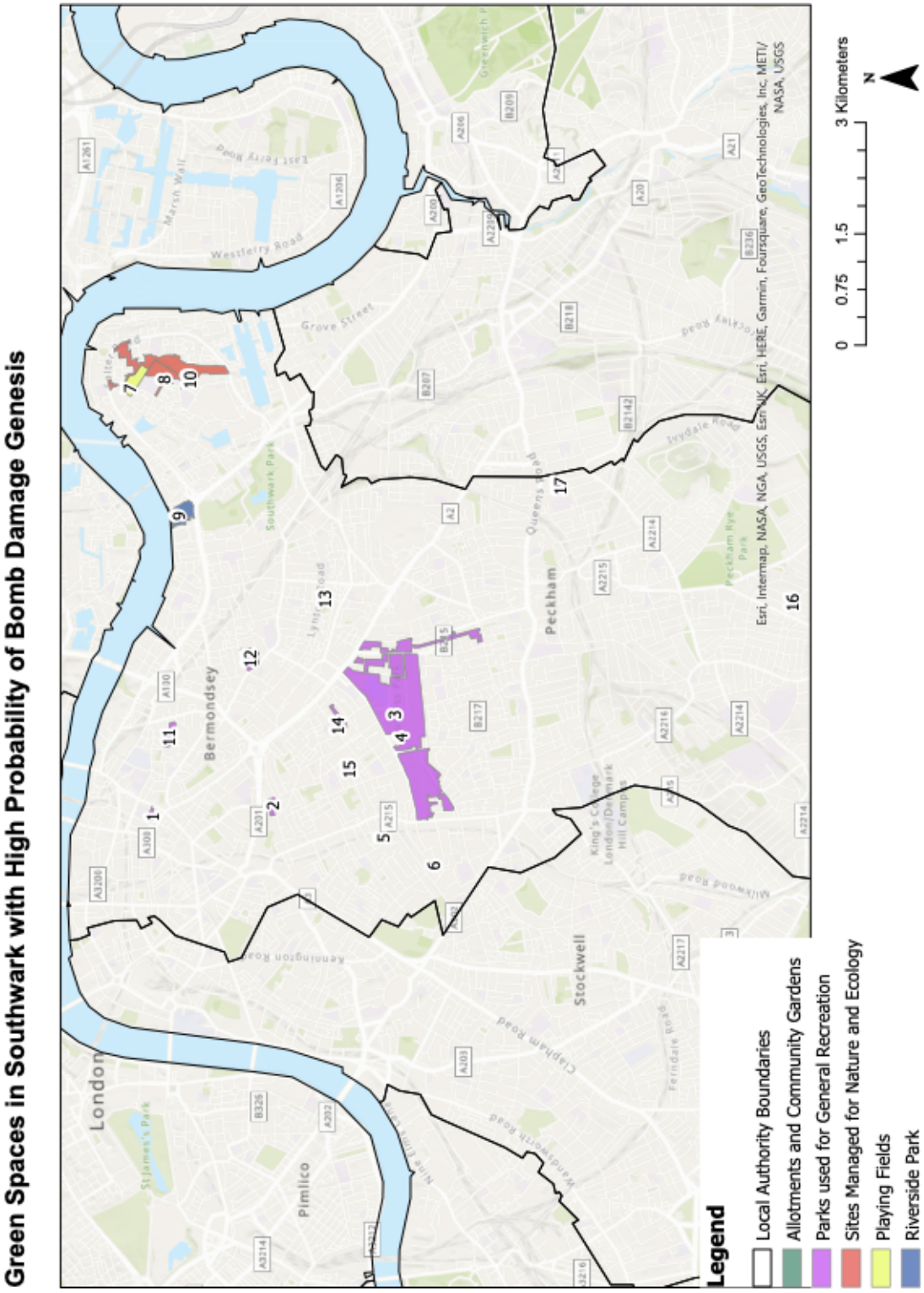
Table 5: Area of Green Space (Acres) created in Boroughs of Bermondsey, Camberwell and Southwark, 1951-1964. Source: Hannikainen, *Greening London*, Table 3.3, p. 114.

The three-phase programme for open space creation summarised by Bellamy and outlined in Chapter 3, was to be used to lay out quick win open spaces on bomb-damaged land first, often as keystone sites around which larger green spaces could gradually be assembled.[121] Hannikainen has calculated how the acreages of public green space increased between 1951 and 1964 (Table 5). Using the methodology outlined in Chapter 2, Southwark's green spaces have been analysed to discover where bomb-damaged land correlates with present-day green spaces. The analysis identified 17 sites with a high probability of bomb-damage genesis (Figure 38) and 9 pre-existing parks extended onto bomb-damaged land, which will be discussed later in this chapter (Figure 53, p.63). As was to be expected given the planning policies in place at the time, the analysis reveals the highest correlation between bomb-damaged land and post-war green spaces in the northern sectors of the Borough, where there was a high level of bomb damage and obsolescent property within areas identified as being deficient in public open space.

Large new green spaces

Of the new green spaces created on land with a high level of bomb damage, the largest are Burgess Park and the nature and ecological park at Stave Hill and Russia Dock Woodland. The history of Burgess Park and the relevance of bomb damage to its creation is discussed in Chapter 6. Burgess Park was proposed in the development plans but the obsolescence of the Surrey Docks on which the Russia Dock Woodland and Stave Hill Ecological Park are located was not foreseen in the Plan, and neither was this area identified as being deficient in open space, largely because the extensive water docks and warehousing meant it had a very low population density. The use of the docks for the importation of softwood timber from Norway, Russia and Sweden declined after the war until their closure in 1969.[122]

[121] Bellamy, 'Burgess Park', pp. 31-32.
[122] http://www.lddc-history.org.uk/surrey/index.html, accessed 20.06.22.



1. Little Dorrit Park
2. Victory Community Park
3. Burgess Park
4. Chumleigh Community Gardens
5. Pelier Park
6. Grosvenor Community Gardens
7. Mellish Sports Ground
8. Stave Hill Ecological Park
9. King Stair's Gardens
10. Russia Dock Woodland
11. Leathermarket Community Park
12. Bermondsey Spa Gardens
13. Lynton Road Playing Fields (City of London Academy)
14. Surrey Square Park
15. Aylesbury Road Allotments
16. Underhill Road Allotments
17. St. Mary Frobisher Park

Figure 38: Green Spaces in Southwark with a probable bomb-damage genesis. Source: Author's research using ArcGIS.

The parkland was developed by the London Docklands Development Corporation in the 1980s to create wooded areas and an ecological park, laid out with native grasses, water channels and ponds.[123] Whilst industrial obsolescence was a reason for the timing of its new use, bomb damage was significant (Figure 39), leaving large tracts of cleared land or ruined buildings on either side of Russia Dock, which remained vacant (Figures 40 and 41) despite the docks being partially operational. Pioneering work in urban ecology by the Ecological Parks Trust at the William Curtis Ecological Park in nearby Bermondsey Dock during the 1970s has been transferred here.[124] The area continues to be managed for 'grassland, woodland, scrub and wetland habitats which support a wide variety of wildlife'.[125] Despite the relative infancy of both Burgess Park and Russia Dock; their significance for nature conservation is growing. Figure 42 shows Southwark's Sites of Importance for Nature Conservation, with Russia Dock Woodland and Stave Hill Ecological Park already attaining Borough Importance Grade 1.

Figure 39: Bomb damage at Surrey Quays, site of Russia Dock Woodland and the Stave Hill Ecological Park. Source: https://www.layersoflondon.org/map/overlays/bomb-damage-1945, accessed 22.06.22.

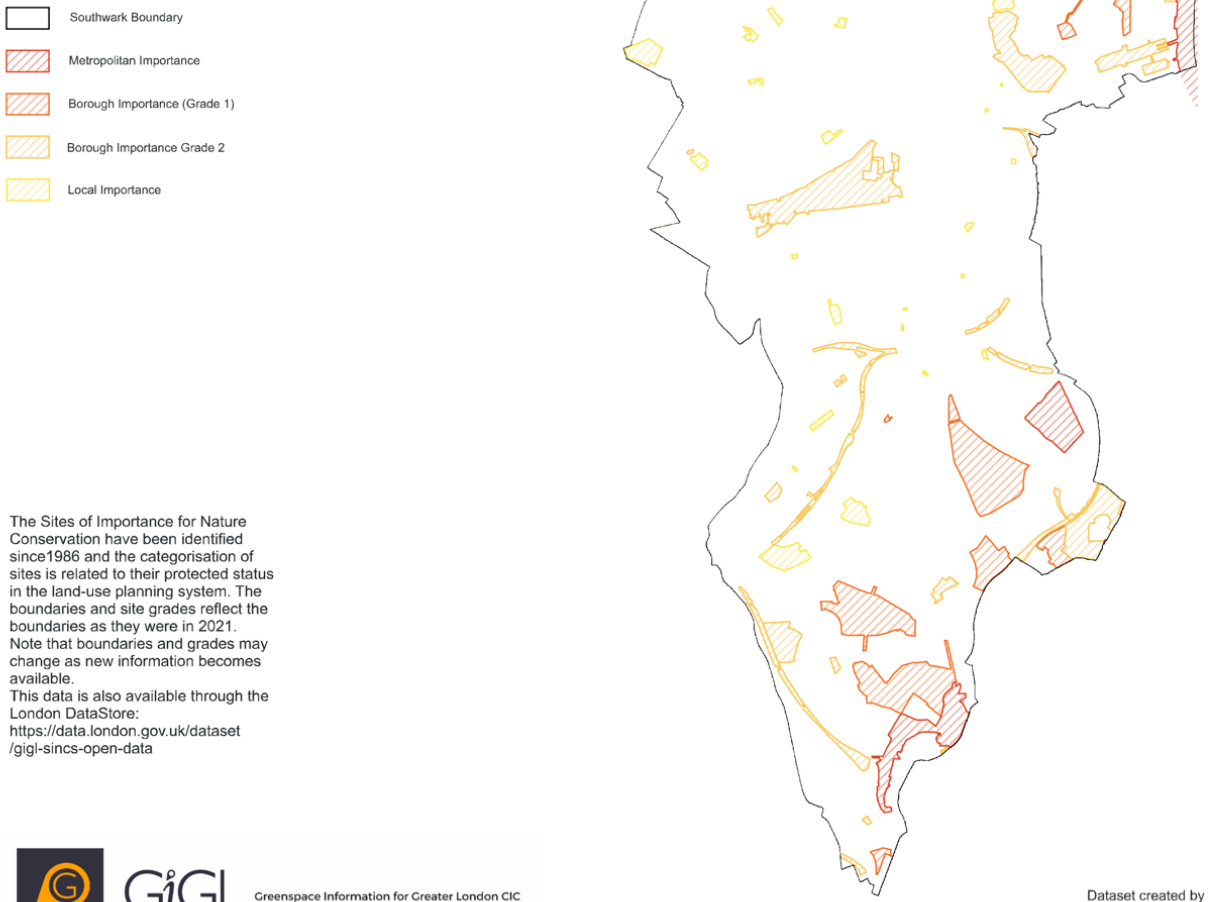
[123] https://www.southwark.gov.uk/parks-and-open-spaces/parks/russia-dock-woodland, accessed 20.06.22.
[124] Nicholson-Lord, *The Greening of the Cities*, p. 122.
[125] https://www.tcv.org.uk/london/urbanecology/urban-ecology-sites/stave-hill-ecological-park/, accessed 20.06.22.

Figure 40: Vacant and bomb-damaged land at Surrey Commercial Dock, site of Russia Dock and Stave Hill Ecological Park, 1951. Source: https://www.layersoflondon.org/map/overlays/os-maps-1940s-1960s and https://www.ordnancesurvey.co.uk/business-government/products/open-map-greenspace, accessed 22.06.22.

Figure 41: Annotated aerial image of Surrey Commercial Docks, Rotherhithe in 1952, showing large tracts of vacant land on either side of Russia Dock. Source: HES Archives Reference No. EAW043641 https://britainfromabove.org.uk/, accessed 24.08.22.

Sites of Importance for Nature Conservation (GiGL Open Data)

Maps produced for Katharine Hersee
Southwark Open SINCs 13 July 2022



The Sites of Importance for Nature Conservation have been identified since1986 and the categorisation of sites is related to their protected status in the land-use planning system. The boundaries and site grades reflect the boundaries as they were in 2021. Note that boundaries and grades may change as new information becomes available.
This data is also available through the London DataStore: https://data.london.gov.uk/dataset/gigl-sincs-open-data

GiGL Greenspace Information for Greater London CIC
the capital's environmental records centre

Scale 1:20000 at A3

Figure 42: Sites of Importance for Nature Conservation in Southwark. Source: Greenspace Information for Greater London CIC, GiGL data, 2022.

Parks for General Recreation

Analysis using ArcGIS has identified several green spaces in the north of the borough on bomb-damaged land which now serve as spaces for general recreation: Little Dorrit Park (created around a pre-existing play yard), Victory Community Park, Pelier Park, Grosvenor Community Garden, Leathermarket Gardens (Chapter 3, pp. 23-4), Surrey Square Gardens, St. Mary Frobisher Park and Bermondsey Spa Gardens. The largest of these is Bermondsey Spa Gardens, developed on the heavily bombed residential streets of Spa Road, Canon Murnane Road, Keyse Road and Alscot Road (Figure 43). Before being developed as terraced housing, a chalybeate spring had been found here circa 1770, where the artist Thomas Keyse established an open-air tea garden and entertainment venue in the style of Vauxhall Pleasure Gardens.[126] Figure 44 shows large tracts of cleared land here in the 1950s providing the basis for the future land assembly of the park. It was opened in 1954 but laid out simply to grass, due to financial restrictions.[127] The park now contains trees, open grassland, flower beds, play areas and a running track and is pictured in Figure 45.

Figure 43: Bomb damage at site of present-day Bermondsey Spa Gardens. Source: https://www.layersoflondon.org/map/overlays/bomb-damage-1945, accessed 22.06.22.

[126] Jennie Howells, 'Taking the Waters at Bermondsey Spa', *Bermondsey Street Back Stories* No. 14, pp. 2-4. https://bermondseystreet.london/bermondsey-street-back-stories/, accessed 23.06.22.
[127] Hannikainen, *Greening London*, p. 116.

Figure 44: Extensive tracts of cleared land at the site of Bermondsey Spa Gardens, 1951. Source: https://www.layersoflondon.org/map/overlays/os-maps-1940s-1960s and https://www.ordnancesurvey.co.uk/business-government/products/open-map-greenspace, accessed 22.06.22.

Figure 45: Bermondsey Spa Gardens. Source: https://www.flickr.com/photos/maggiejones/31831165032/in/photolist, accessed 22.06.22.

Community Gardens and Allotments

Reduced demand for allotments following the war was predicted by planners; leaving 'only the consistent enthusiasts'.[128] Proposals sought to replace temporary allotments in parks with 228 acres of permanent allotments across London, only 3.75 acres of which were to be in Camberwell and none in Bermondsey or Southwark.[129] It is unsurprising, therefore, that analysis using ArcGIS reveals just two allotment sites on bomb-damaged land in the Southwark research area, Aylesbury Road Allotments and Underhill Road, although others will have been created at sites of housing clearance and within new housing estates. Aylesbury Road Allotments occupies a small site at the corner of Aylesbury Road and Bretell Street; the site of a central yard and eight houses damaged or destroyed by bombing (Figure 46). The 1950 OS map reveals three temporary prefabricated homes at the site (Figure 47), whilst present-day images reveal a thriving allotment (Figure 48).

Figure 46: Houses destroyed at the corner of Aylesbury Road and Bretell Street. Source: https://www.layersoflondon.org/map/overlays/bomb-damage-1945, accessed 22.06.22.

[128] Foreshaw and Abercrombie, *County London Plan*, p. 44.
[129] LCC, *London Development Plan Analysis*, p. 230.

Figure 47: Aylesbury Road Allotments created on site of a yard and prefabricated houses, 1950. Source: https://www.layersoflondon.org/map/overlays/os-maps-1940s-1960s and https://www.ordnancesurvey.co.uk/business-government/products/open-map-greenspace, accessed 22.06.22.

Figure 48: Aylesbury Road Allotments. Source: https://d3n8a8pro7vhmx.cloudfront.net/southwarkcans/pages/475/attachments/original/1491485894/CommunityGrowing-WalworthCAN-WS-23Mar17.pdf?1491485894, accessed 22.06.22.

Riverside Parks

The County of London Plan eulogised the River Thames as 'the largest single open space in the County'.[130] It noted that access to the river's frontage, even of narrow depth 'gives the general public the impression of a large, continuous open space, full of life and changing interest', then suggesting the use of bomb-damaged land for new riverfront green spaces.[131] The South Bank was seen as a 'dreary industrial scene, with its many damaged buildings' and was suggested as the site of a new riverside walk.[132] The resulting walkway, which is partially in the London Borough of Southwark, is not identified on the OS Greenspace maps used for this research so it does not appear on the maps generated by ArcGIS, but the existence of extensive bomb-damaged wharves in this area, revealed in Figure 49, was a significant factor in its proposed development (Figure 50).

Figure 49: Aerial photo of the central South Bank Area showing large tracts of damaged and cleared land at the riverfront. Source: LCC, *Administrative County of London Development Plan Analysis* (London: 1951) p. 277.

[130] Foreshaw and Abercrombie, *County of London Plan*, p. 46.
[131] Ibid., p. 47.
[132] Ibid., p. 126.

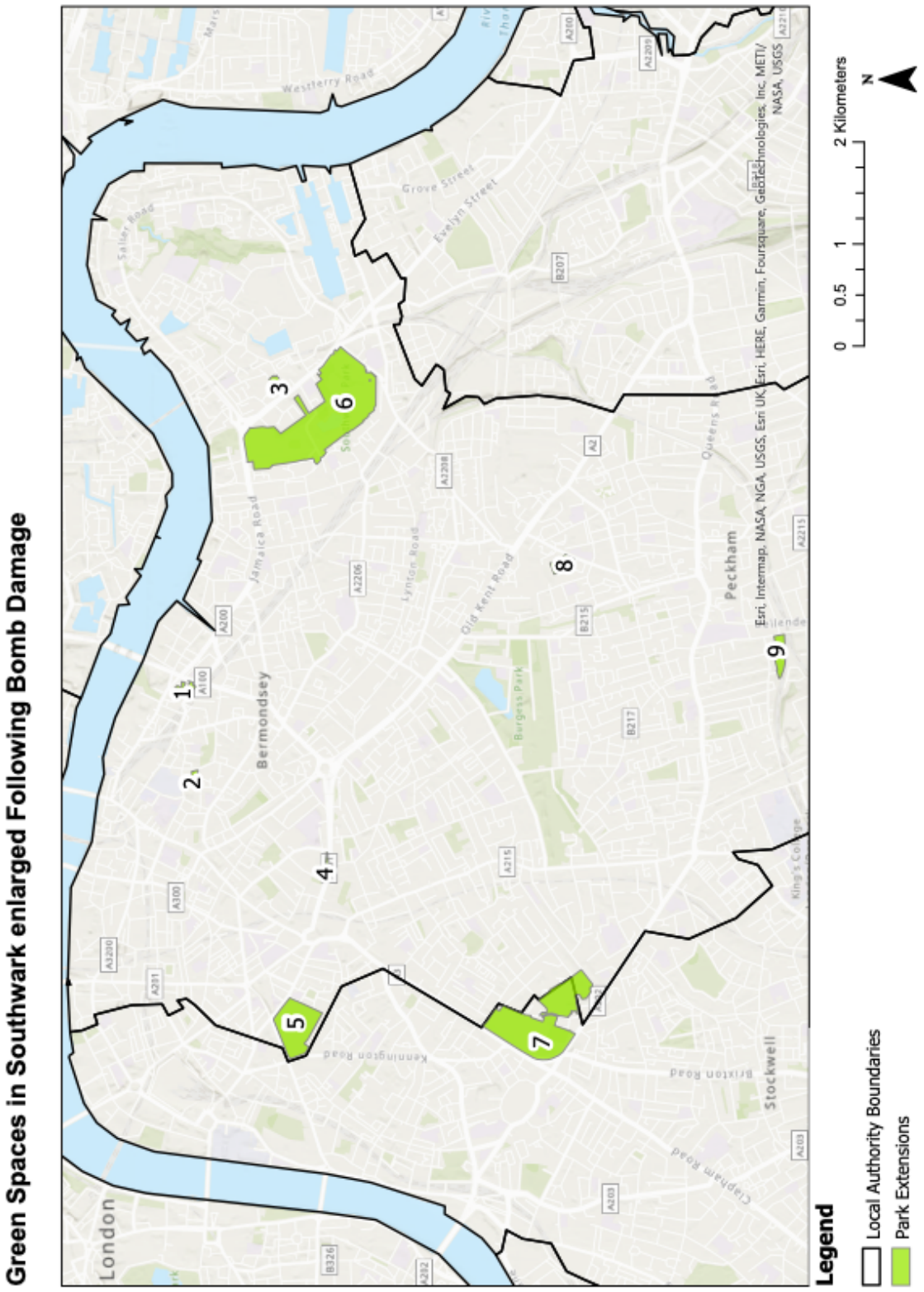
Figure 50: Open space proposals at the South Bank, including for a new riverside walk. Part of the walk is in the London Borough of Southwark. Source: LCC, *Administrative County of London Development Plan Analysis* (London: 1951) p. 281.

Figure 51: Open space proposals within the Bermondsey Area of Comprehensive Development. LCC, *London Development Plan Analysis* (London: 1951) p. 273.

Further east, a sizeable new riverside park in Bermondsey, King Stairs Gardens, was proposed as it could 'be provided with least interference with the Thames-side users' probably because of bomb damage and declining wharf usage.[133] Its name derives from the water steps used by Edward III to access his manor house at the site.[134] The creation of the gardens, with views of Tower Bridge and the City, formed part of detailed plans for an 'Area of Comprehensive Development' covering 121.42 acres of land in Bermondsey.[135] The development area contained 2.52 acres of temporary buildings and 31.42 acres of vacant land and war-damaged buildings meaning a quarter of the land in this area was available for redevelopment.[136] The riverside park (now King Stairs Gardens) was planned between Jamaica Road, Brunel Road and the river (Figure 51). It would connect visually to Southwark Park (south of Jamaica Road but not shown on the plan) which would itself be enlarged, the extensions being indicated on the plan to the west of the junction between Jamaica and Brunel roads. King Stairs Gardens was constructed on land with a moderate level of bomb damage and these sites provided the first temporary open spaces around which land from clearance of tenements and obsolete factories could be added to create the park. Land assembly was not completed until the 1980s, a photograph of the resulting unattractive blight highlighted by McKean (Figure 52).

Figure 52: Site of the partially assembled King's Stair's Gardens at Bermondsey in the 1970s. Source: Charles McKean, *Fight Blight: A Practical Guide to the Causes of Urban Dereliction and What People Can do about it* (London: Kaye and Ward, 1977) p. 26.

[133] LCC, *London Development Plan Analysis*, p. 273.
[134] Southwark Borough Council, *Edward III's Rotherhithe Conservation Area Appraisal*, June 2012, p. 5. https://www.southwark.gov.uk/planning-and-building-control/design-and-conservation/conservation-areas?chapter=13, accessed 23.06.22.
[135] London County Council, *London Development Plan Analysis* pp. 267-274.
[136] Ibid. p. 269.



1. St John's Churchyard
2. Guy Street Park
3. King George's Fields
4. David Copperfield Garden
5. Geraldine Mary Harmsworth Park
6. Southwark Park
7. Kennington Park
8. Leyton Square
9. Warwick Gardens

Figure 53: Green Spaces in Southwark Enlarged Following Bomb Damage. Source: Author's original research using ArcGIS

Park Enlargements

The opportunity to extend existing parks onto bomb-damaged land after the war was mooted because 'by purchase of small areas of land adjoining a park, advantage can be taken of magnificent views'.[137] Opportunities for park enlargements identified in the *County of London Plan* included Southwark Park, Peckham Rye and Kennington Park. This research has not revealed extensions to Peckham Rye because of bomb damage but has discovered extensions to Southwark and Kennington parks and enlargements to seven further parks of varying sizes (Figure 53). Southwark Park was created by the Metropolitan Board of Works in 1869.[138] It was enlarged northwards after the War to create a frontage with Jamaica Road, and eastwards over Culling Road using land containing severely bomb-damaged housing. A third enlargement to the southeast corner of the park, towards Hawkstone Road, was also likely to have been prompted by bomb damage.

Similarly, the enlargement of Geraldine Mary Harmsworth Park was minimal in scale but significant in impact. The park, which surrounds the Imperial War Museum, was created by the London County Council in 1934.[139] Enlargements to the curtilage of the park have been revealed through ArcGIS, with bomb-damaged housing at the northwest corner near the junction of Kennington Road and Lambeth Road (Figure 54), cleared in the 1950s (Figure 55), meaning the park could be extended towards this significant junction. The park was also extended at its eastern boundary, onto land cleared at the junction of St George's Road and Geraldine Street and marked on the OS map as ruins.

[137] Foreshaw and Abercrombie, *County London Plan*, p. 42.
[138] Bellamy, 'Burgess Park', p. 19.
[139] Ibid.

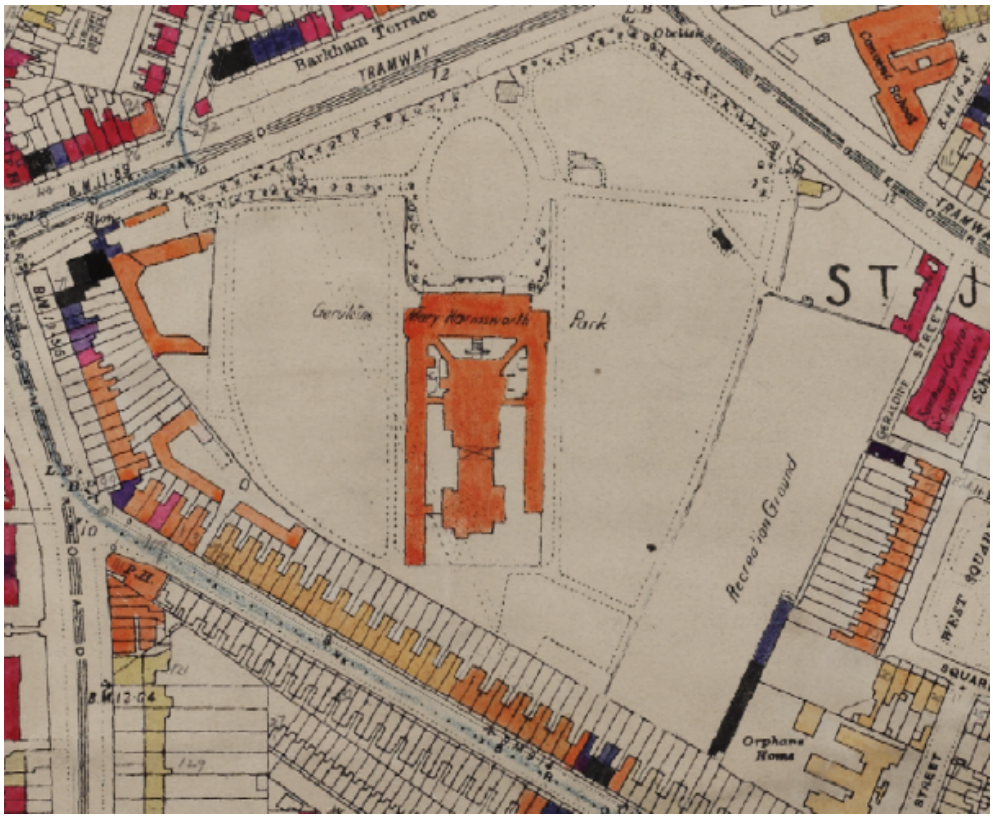


Figure 54: Bomb damage to buildings to western and eastern boundaries of Geraldine Mary Harmsworth Park. Source: https://www.layersoflondon.org/map/overlays/bomb-damage-1945, accessed 22.06.22.

Figure 55: Land cleared at western and eastern boundaries of Geraldine Mary Harmsworth Park, 1950, onto which the park was later extended. Source: https://www.layersoflondon.org/map/overlays/os-maps-1940s-1960s and https://www.ordnancesurvey.co.uk/business-government/products/open-map-greenspace, accessed 22.06.22.

Kennington Park, largely within the Borough of Lambeth, was created in 1852 and was enlarged significantly after the War in a south-easterly direction into Southwark.[140] The London Gardens Trust states that extensions resulted from slum clearance and this is likely to be true for some parts, but the extent of bomb-damaged buildings will also have been a factor.[141] Analysis using ArcGIS reveals extensive damage to properties on Warham Street, caused by a V1 bomb, and further destruction north of the junction with Bolton Crescent (Figure 56). The OS map from 1950 shows both these locations containing prefabricated housing (Figure 57). This land, combined with land cleared of housing, was later subsumed into the park with properties on St Agnes Place, Bolton Crescent, Lucas Grove and Hillingdon Street cleared in the process.

Figure 56: Extensive bomb damage to properties along Warham Street and Bolton Crescent Junction. Source: https://www.layersoflondon.org/map/overlays/bomb-damage-1945, accessed 22.06.22.

[140] Bellamy, 'Burgess Park', p. 19.
[141] https://londongardenstrust.org/conservation/inventory/siterecord/?ID=LAM022, accessed 22.06.22.

Figure 57: OS map from 1950 showing land onto which Kennington Park was enlarged south-eastward including onto bomb-damaged land at Warham Street and Bolton Crescent. Source: https://www.layersoflondon.org/map/overlays/os-maps-1940s-1960s and https://www.ordnancesurvey.co.uk/business-government/products/open-map-greenspace, accessed 22.06.22.

Figure 58: Warwick Gardens, Peckham. Source: https://peckhampeculiar.tumblr.com/post/108456019724/azenby-road-1905-which-became-warwick-gardens, accessed 23.08.22.

Figure 59: Extensive bomb damage to properties on Azenby Road, surrounding a playground. Source: https://www.layersoflondon.org/map/overlays/bomb-damage-1945, accessed 22.06.22.

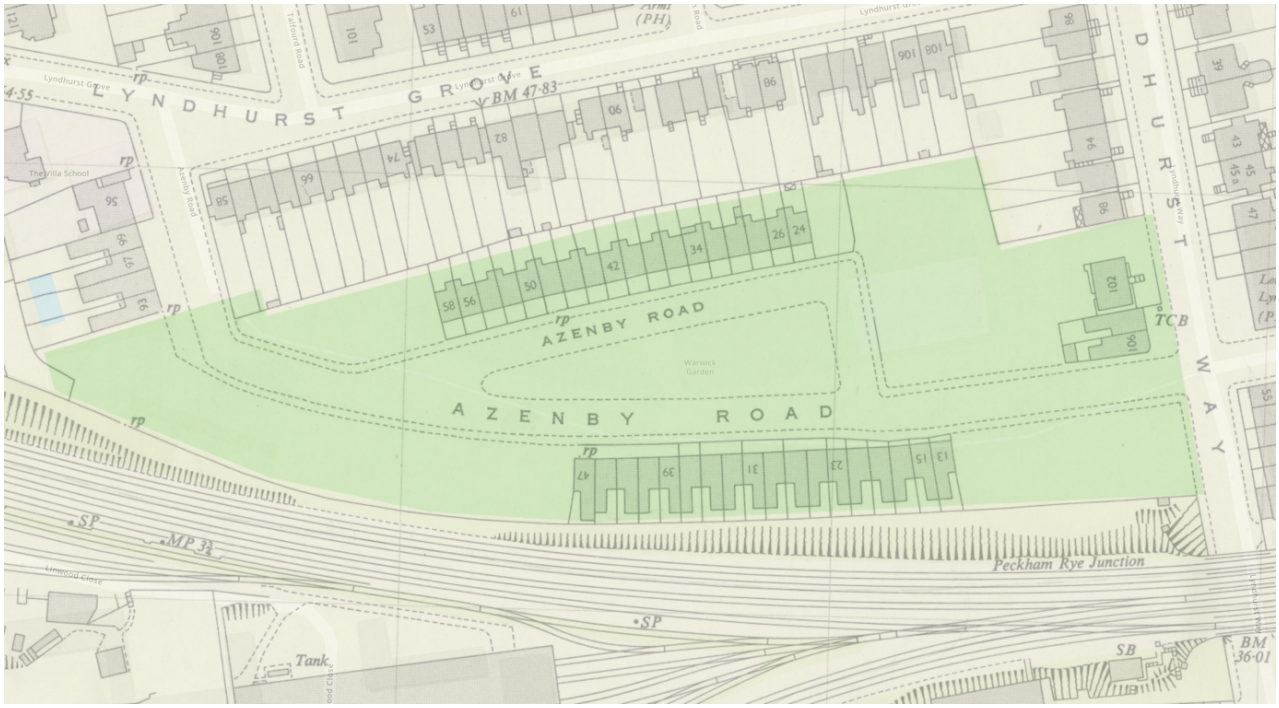


Figure 60: Extensive land clearance around Azenby Road, 1951. Source: https://www.layersoflondon.org/map/overlays/os-maps-1940s-1960s and https://www.ordnancesurvey.co.uk/business-government/products/open-map-greenspace, accessed 22.06.22.

Not all enlargements were to notable parks. An example of such is the extension to Warwick Gardens in Peckham (Figure 58), where extensive bomb damage is illustrated in Figures 59 and 60, the remaining houses destroyed to make way for the enlarged park.

This research has revealed 26 green spaces in Southwark with probable bomb damage genesis or existing green spaces extended as a result of bomb damage. Some spaces, such as Russia Dock Woodland, were not conceived of for many years, the closure of the docks prompting redevelopment of vacant land alongside plots that had long lain vacant following bomb damage. However, the application of post-war green space policies was likely to have been behind the creation of the majority of the sites identified through this research. This will often have been a long and complicated process; green spaces initially conceived of in the 1950s only being completed in the 1970s and 1980s. Investigating the detailed process of land assembly for each of the green spaces identified to give a definitive history of their genesis is outside the scope of this dissertation. However, Chapter 6 provides a case study of the development of Burgess Park, revealing how the location of sites cleared through bombing provided the keystones around which it was assembled.

Chapter 6 - Burgess Park, Southwark

Until the creation of the 560-acre Queen Elizabeth Olympic Park in 2012,[142] Burgess Park (Figure 62) was the most extensive park to have been created in London since the 215-acre Victoria Park was opened in 1845.[143] Burgess Park was created initially by the London County Council (LCC), with responsibility transferring to its successor authority, the Greater London Council (GLC) in 1965. The park was initially known as the North Camberwell Open Space but was named in 1973 after Jessie Burgess, the first lady Mayor of Camberwell.[144] The park provides an informative case study because bomb damage influenced both its location and the land assembly process used for its creation.

Figure 61: Aerial photograph of Burgess Park, looking east over the boating lake towards Rotherhithe, Bermondsey and Deptford. Source: Jason Hawkes. https://www.jasonhawkes.com, accessed 07.07.22.

[142] https://www.queenelizabetholympicpark.co.uk/the-park accessed, 06.07.22.
[143] https://historicengland.org.uk/listing/the-list/list-entry/1000178?section=official-list-entry, accessed 06.07.22.
[144] http://www.bridgetonowhere.friendsofburgesspark.org.uk/the-story-of-burgess-park-heritage-trail/heritage-trail-a-l/jessie-burgess-and-the-abercrombie-plan/, accessed 06.07.22.

Figure 62 illustrates the impact of the bombing here with devastation concentrated in four main areas, shown in segment extracts (Figures 63-66). To the west, damage or destruction to buildings was experienced along Cheam Place and New Church Road, either side of the western reaches of the Surrey Canal and to the west of St George's church (Segment 1, Figure 63). The area with the most extensive damage is in the centre of the site at Cunard Street, Chumleigh Street, Scarsdale Road, Neate Street, Calmington Road, and Jardin Street, comprising both residential and industrial property (Segment 2, Figure 64). To the northeast, concentrations of destruction can be seen at Trafalgar Avenue, Waite Street and Glengall Road (Segment 3, Figure 65) and in the southeast, destruction is concentrated on either side of the canal, at Willowbrook Grove, Goldie Street and Waite Place (Figure 66).

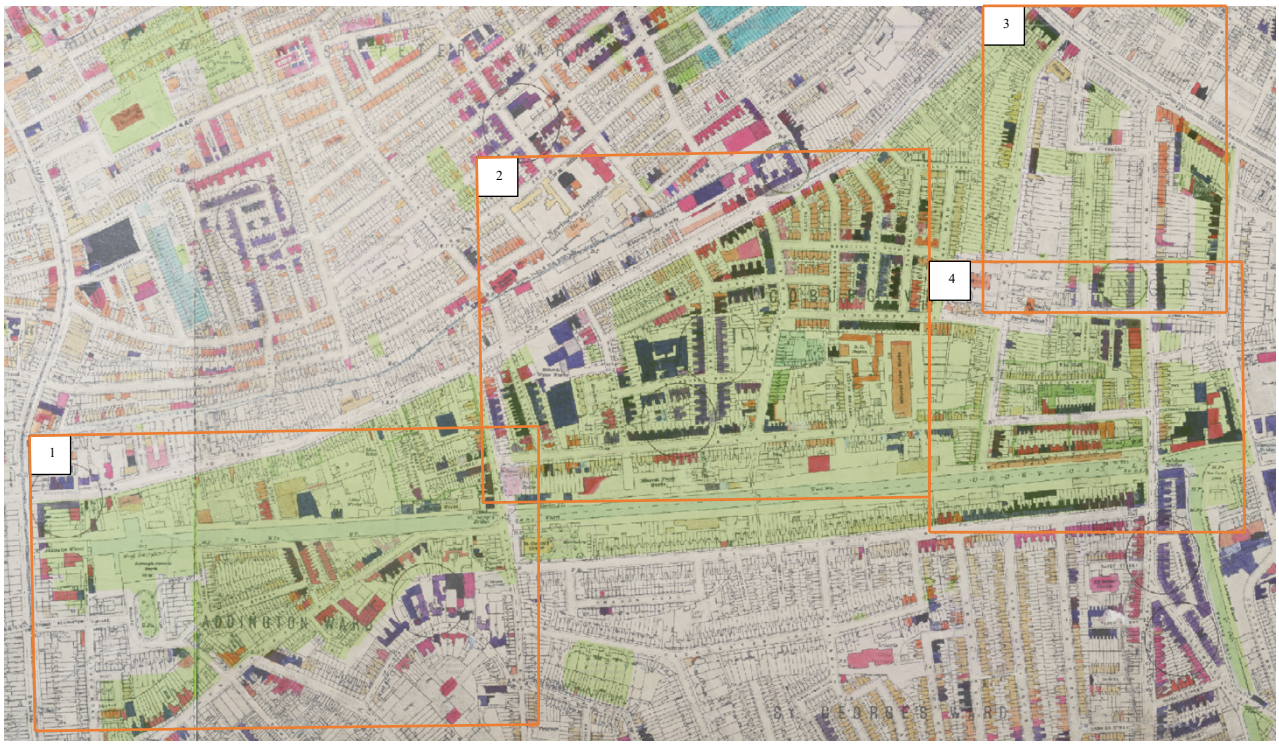


Figure 62: Overlay of present-day Burgess Park with bomb damage maps. Numbered segments relate to close-up extracts (Figures 63-66). Annotations by Author. Source: https://www.layersoflondon.org/map/overlays/bomb-damage-1945 and https://www.ordnancesurvey.co.uk/business-government/products/open-map-greenspace, accessed 07.07.22.

Figure 63: Segment 1 – Land to the west of St George's Church: Surrey Canal, Cheam Place and New Church Road. Source: https://www.layersoflondon.org/map/overlays/bomb-damage-1945 and https://www.ordnancesurvey.co.uk/business-government/products/open-map-greenspace, accessed 07.07.22.

Figure 64: Segment 2 – Central area to north of Surrey Canal and Neate Street. Source: https://www.layersoflondon.org/map/overlays/bomb-damage-1945 and https://www.ordnancesurvey.co.uk/business-government/products/open-map-greenspace, accessed 07.07.22.

Figure 65: Segment 3 – Northeast area including Waite Street, Trafalgar Avenue and Glengall Road. Source: https://www.layersoflondon.org/map/overlays/bomb-damage-1945 and https://www.ordnancesurvey.co.uk/business-government/products/open-map-greenspace, accessed 07.07.22.

Figure 66: Segment 4 – Southeast area including Surrey Canal, Neate Street (east), Trafalgar Avenue (south) and Willowbrook Grove. Source: https://www.layersoflondon.org/map/overlays/bomb-damage-1945 and https://www.ordnancesurvey.co.uk/business-government/products/open-map-greenspace, accessed 07.07.22.

An aerial image from 1946 gives a clear view of the area, looking from the southwest over the Surrey Canal, towards the Thames (Figure 67). Bomb sites cleared of debris can be seen and prefabricated houses are also visible, with many other buildings vacant and severely damaged, evidenced by a lack of glazing. The area had less than the target of 2.5 acres of open space per 1,000 people yet the problem of poor green space provision here had 'been regarded as irremediable until the process of post-war reconstruction…provided the opportunity for wholescale clearance of a wide tract of land in north Camberwell to serve as public open space'.[145] It is easy to see why the LCC concluded that 'the precise location of the project was influenced by the extent of war damage and the character of the remaining properties'.[146]

[145] Bellamy, 'Burgess Park', Abstract.
[146] LCC, *Note for a Party from Camberwell to be Conducted by the Chairman of the Parks Committee Accompanied by the Leader of the Council and the Chairman of the General Purposes Committee, 1960*. LMA Ref: Burgess Park (North Camberwell Open Space) General Papers 1957-63 CL/PK/2/125.

Figure 67: The Grand Surrey Canal, housing and cleared area on the site of what is now Burgess Park and environs, Walworth, from the southwest, 1946. Source: HES Archives Reference No. EAW000540 https://britainfromabove.org.uk/, accessed 18.07.22.

Approval for the park was given by the LCC in 1945 but agreement on the first seven sites for priority development as green space was not given until February 1947. At the same time, a zoning policy was agreed upon to 'constrain intensification of built development or urban renewal over the balance of the park site'.[147] The aim of this was to limit new development until 'the whole open space objective can be obtained'.[148] This involved the LCC gaining Government approval to limit repairs to or redevelopment of war-damaged buildings, a policy which secured the genesis of a large area zoned as green space.[149] However the resulting piecemeal acquisition process lead to blight and uncertainty for the following three decades, creating detractors of the

[147] Bellamy, 'Burgess Park', p. 67.
[148] LCC, quoted in Ibid., p. 69.
[149] Bellamy, 'Burgess Park', p. 70.

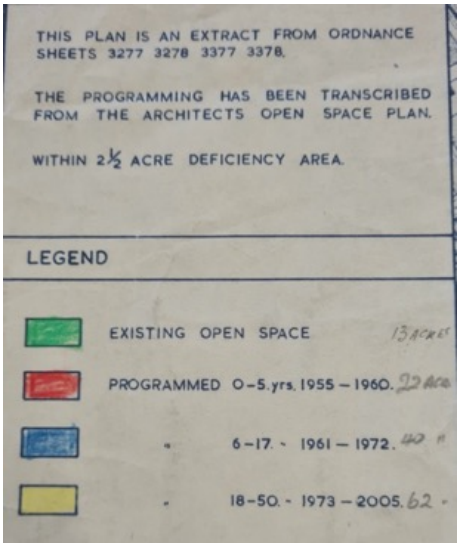
park and of the green space policies in general.[150] Nevertheless, the LCC had a clear process to build a new park here: to lay out several bomb-damaged sites as temporary open spaces, limit the development or repair of other buildings and gradually acquire sites around the initial keystone green spaces, to create the park over 50 years.

Initially, the proposed park extended to 120 acres although changes to its shape and area took place over time as sections were included or excluded from its proposed curtilage.[151] Figure 68 shows an undated programme plan, which is likely to date from circa 1955. By this time, the decision to fill the Surrey Canal for incorporation into the park had been envisaged and the LCC aimed to gradually piece together sections totalling 137 acres, starting with bomb-damaged sites. Analysis using ArcGIS reveals areas coloured green (existing open space), red (22 acres of open space programmed for development 1955-1960) and blue (40 acres of open space to be created 1961-1972) all contain significant areas of bomb damage, cleared sites and land used for temporary prefabricated housing. Careful phasing was important as the LCC needed to ensure displaced families could be rehoused before incorporating their homes, prefabricated or otherwise, into the park. *The Administrative County of London Development Plan Analysis* envisaged the creation of the park would displace 7,804 people, but only 546 in the first five years, as the initial focus was on sites already cleared or mostly vacant.[152] Those areas coloured yellow contain the least amount of bomb damage and were for later development; between 1973 and 2005 (62 acres). The LCC anticipated complete assembly would take several decades, although, after an acceleration of acquisitions under the Greater London Council from 1972 onwards, it was finally completed in the 1980s.[153]

A Progress Map, from February 1960 (Figure 69 with close-up segments in Figures 70-73) shows the green space sites laid out between 1950 and 1960. There are 25 in total, although site 12 is outside of the Park. The sites appear to be numbered in the order of their creation and analysis of the bomb damage and OS maps using ArcGIS confirms that all were on sites that had experienced high levels of bomb damage.

[150] Bellamy, 'Burgess Park', pp. 255-259.
[151] Ibid., pp. 67-68.
[152] Ibid., p. 72.
[153] https://www.southwark.gov.uk/parks-and-open-spaces/parks/burgess-park, accessed 24.08.22.

Figure 68: North Camberwell Open Space D.P. 270 Programme Map, c.1955. LMA Ref: GLC/RA/D6/03/037. (Key overleaf)



Key to Figure 68.

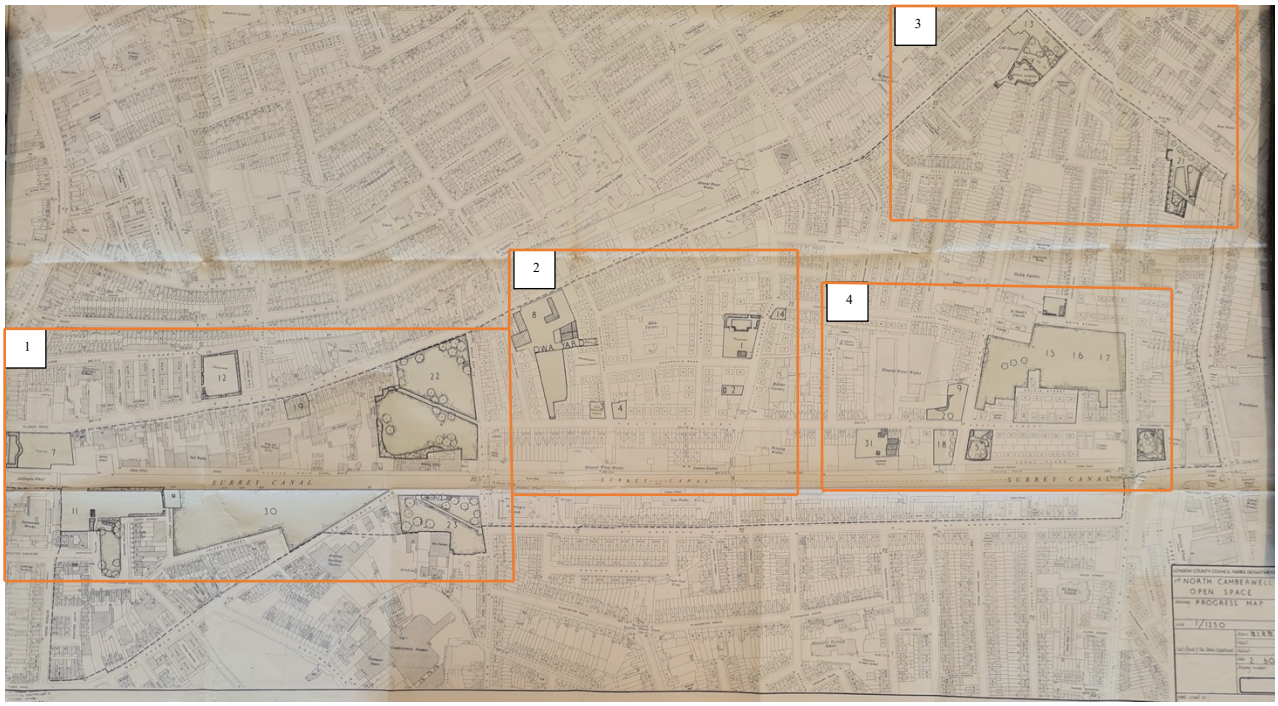


Figure 69: North Camberwell Open Space Progress Map, February 1960. Numbered segments relate to Figures 70-73. LMA, Burgess Park (North Camberwell Open Space) General Papers. Ref: LCC/CL/PK/2/125. Annotations by Author.

Figure 70, Segment 1 of Figure 69.

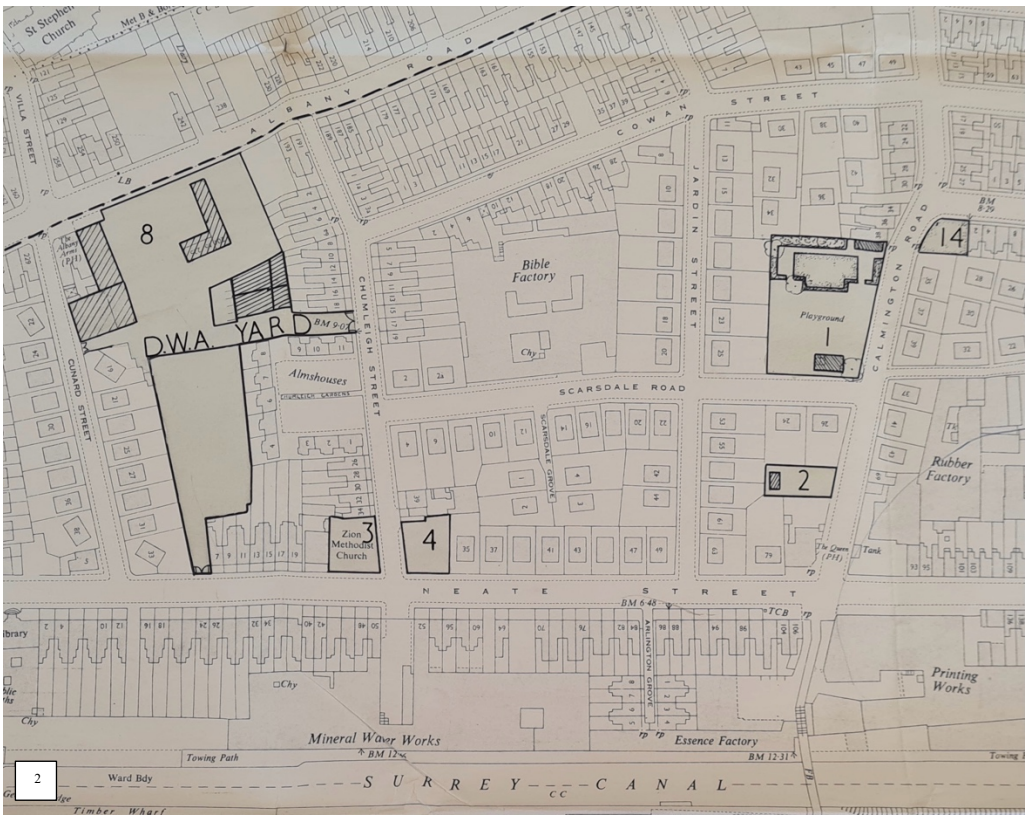


Figure 7, Segment 2 of Figure 69.

Figure 72, Segment 3 of Figure 69.

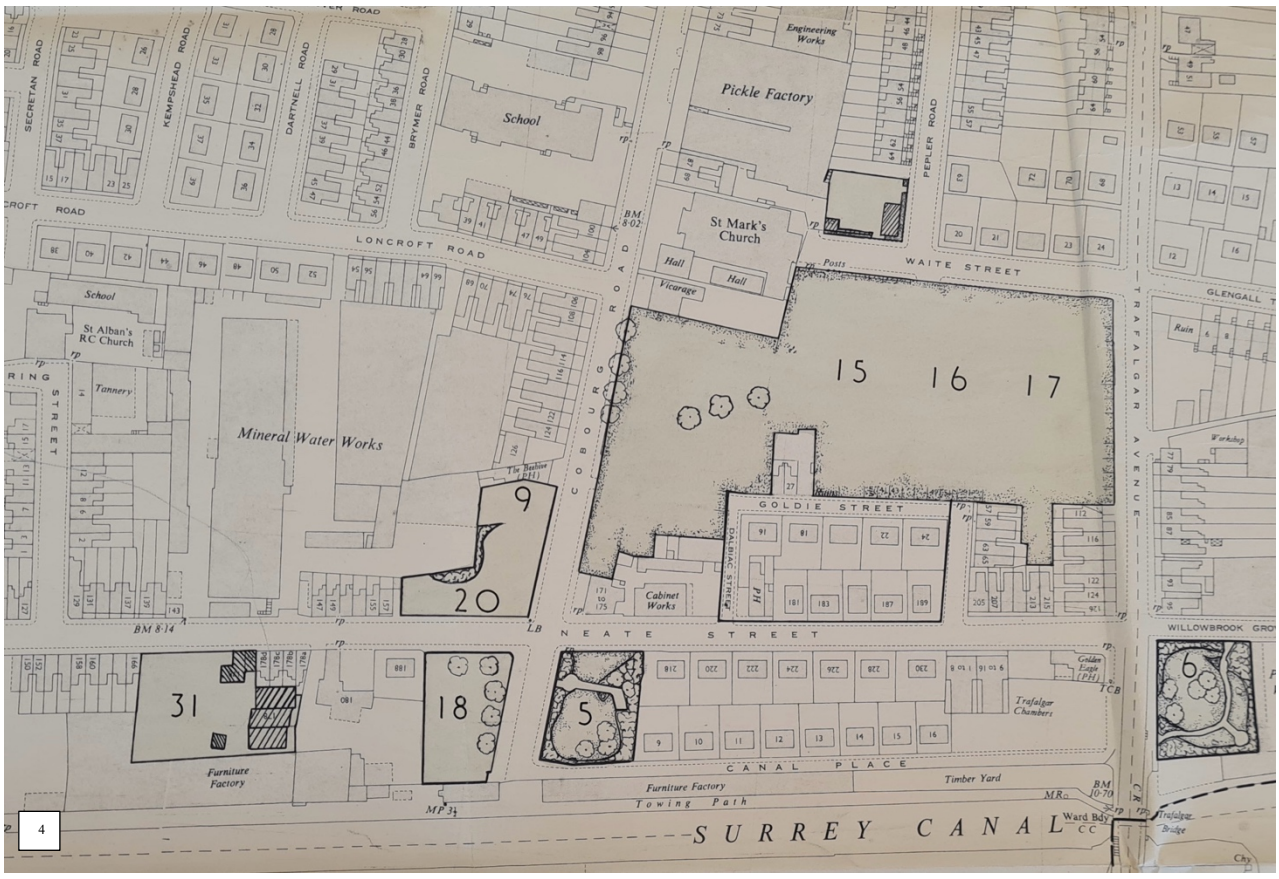


Figure 73, Segment 4 of Figure 69.

Site No.	Site Location[154]	Initial site layout[155]
1	Scarsdale Road Playground	Hard surface playground
2	40-42 Calmington Road	Store Yard
3	Chumleigh Street/Neate Street Junction	Hard surface playground
4	Chumleigh Street/Neate Street Junction	Hard surface playground
5	143-147 Coburg Road	Enclosed garden area
6	Willowbrook Road	Enclosed garden area
7	Camberwell Road	Garden, sitting-out area and temporary play space.
8	Site of Mineral Water Works Cunard Street (R Whites Lemonade Factory)	Grassed area
9	136-148 Coburg Road	Playground
11	Addington Square Gardens	Reinstatement following war use as storage and a bomb shelter.
12	NOT IN BURGESS PARK	
13	Rolls Garden Extension to Old Kent Road	Garden, grassed area, trees and shrubbery
14	Woolcombe Green	Small pre-existing memorial garden
15	Villette Place, Aboukir Street, Waite Place, 105-123 Coburg Road and buildings fronting Trafalgar Avenue	Grassed area and playing fields.
16	As above	Grassed area and playing fields.
17	As above	Grassed area and playing fields.
18	Golden Eagle Pub and Trafalgar Chambers	Grassed area
19	319-329 Albany Road	Grassed area
20	Coburg Road/Neate Street (combined with site 9)	Playground and grassed area
21	Glengall Mews/Old Kent Road frontage	Garden and playground
22	Harling Street and Wells Way/Albany Road frontage	Large landscaped space
23	New Church Road close to St George's Church	Grassed area and trees
30	New Church Road/Caldew Road and land adjacent to Surrey Canal	Grassed area
31	178 Neate Street (Factories)	Grassed area
No number	15-21 Waite Street	Grassed area.

Table 6: First sites at North Camberwell Open Space, 1950-60 and initial landscape treatment.

Table 6 summarises the 25 sites, describing the initial landscaping treatment of each. Most areas were laid to grass, some as playgrounds and a few with additional shrubs, trees, pathways and

[154] Surmised from Bellamy, 'Burgess Park', pp. 70-73., https://www.layersoflondon.org/map/overlays/os-maps-1940s-1960s, accessed 07.07.22 and North Camberwell Open Space Progress Map, February 1960 LMA, Burgess Park (North Camberwell Open Space) General Papers, Ref: LCC/CL/PK/2/125.
[155] North Camberwell Open Space Progress Map, February 1960 LMA, Burgess Park (North Camberwell Open Space) General Papers, Ref: LCC/CL/PK/2/125.

benches. One of the first sites laid out for public enjoyment was the ½-acre Scarsdale Road Playground (Figure 74) constructed in the grounds of a bombed school and opened in 1950.[156] A photograph of Site 23, fronting St George's Church (Figure 75) shows a more typical landscape treatment, with cleared land grassed over, new trees and many benches for public use. The image of Site 30 (Figure 76), reveals a less appealing area, simply grassed and with little amenity value. Some people, frustrated at the slow progress or distressed at the loss of buildings and communities described the nascent park as a 'joyless expanse',[157] having the appearance of 'a giant drawing board',[158] and looking like 'a featureless, level plain'.[159] However drab, this simple landscaping was important as it signalled the intentions of the LCC to open land as green spaces for public use until further land assembly could take place. Bellamy describes how the aim was to find appropriate temporary uses as gardens, playgrounds, and sitting-out areas; 'Our priority was to minimise blight by grassing over in a very simple way these little pockets of cleared land.'[160]

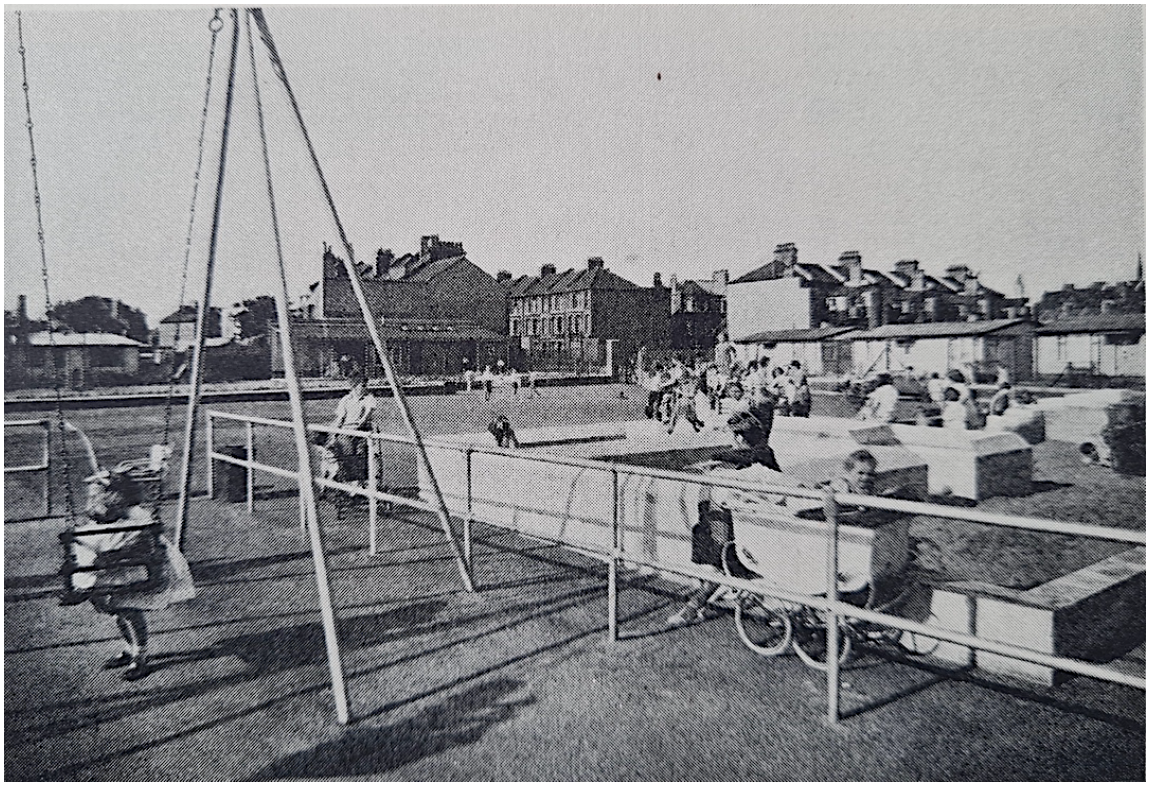


Figure 74: Scarsdale Road Playground, North Camberwell Open Space. Source: LCC, *London Development Plan Analysis*, p. 224.

[156] Bellamy, 'Burgess Park', p. 70.
[157] McKean, *Fight Blight,* p. 176.
[158] Letter to Cllr Harold Sebag-Montefiore in support of Addison Square Conservation Area. LMA Ref: GLC/DG/AR/06/08/001.
[159] 'North Camberwell Open Space, A Wasted Opportunity', Undated newsletter of an unknown local society. LMA Ref: GLC/DG/AR/06/008/003.
[160] Friends of Burgess Park, 'The Making of a Modern Park', Podcast, 23rd May, 2015, http://www.bridgetonowhere.friendsofburgesspark.org.uk/podcast/the-making-of-a-modern-park/, accessed 28.06.22.

Figure 75: Site 23, New Church Road near St George's Church, June 1959. Mature trees were retained and bombed buildings were cleared and grassed over. Source LMA Ref: SC/PHL/02/Box 1125.

Figure 76: Site 30, New Church Road and Caldew Road and alongside the filled-in Surrey Canal, July 1961. Source LMA Ref: SC/PHL/02/Box 1125.

Bellamy emphasises how a complicated and piecemeal approach over many years was necessary, as the land was acquired using compulsory purchase orders, often becoming available at short notice.[161] Land assembly also involved stopping orders on public roads and the acquisition from the Port of London Authority of the Surrey Canal, a disused waterway and accident blackspot which was filled in and incorporated into the park.[162] The slow accretion of land also involved the removal of temporary prefabricated homes on bomb-cleared land once replacement housing could be found for the tenants. Figure 77 shows how prefabs were to be removed and the land joined with three existing open spaces, illustrating why expensive landscaping would have been wasteful until land assembly had progressed further.

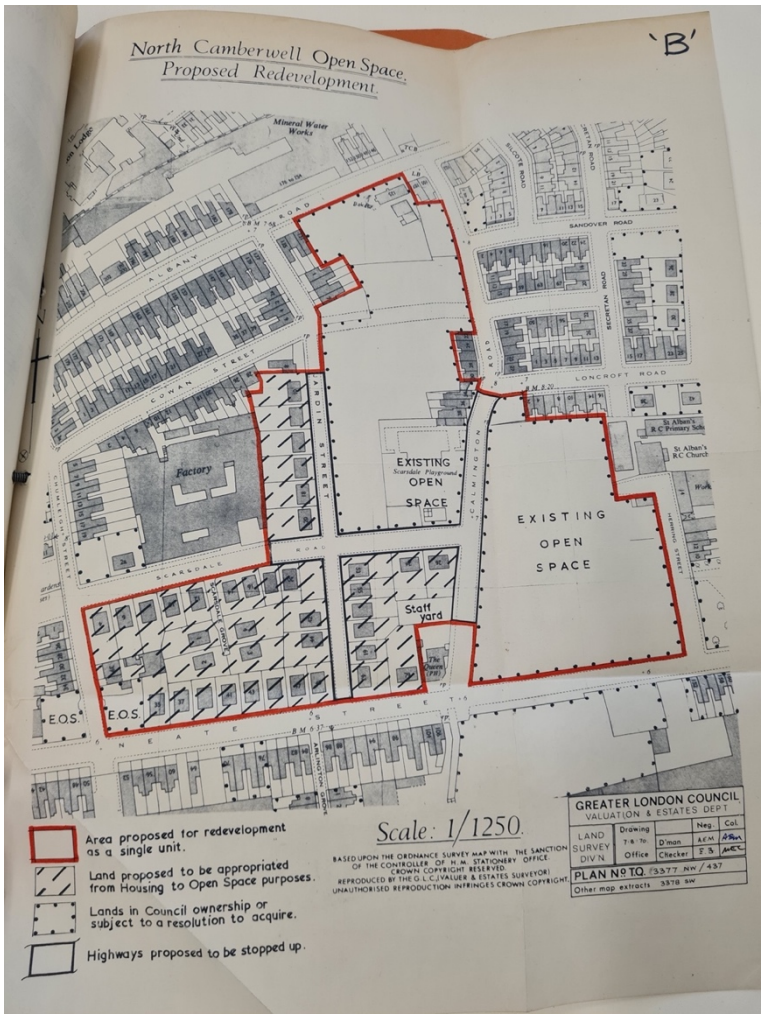


Figure 77: GLC Valuation and Estates Department: North Camberwell Open Space Proposed Redevelopment, undated but post-1965. LMA Ref GLC/DG/AR/06/008 North Camberwell Open Space, later Burgess Park.

[161] Friends of Burgess Park, 'The Making of a Modern Park'.
[162] Richard Saville, 'An Open Space in Southwark', *Building*, 22nd June 1973, p. 103.

Figure 78: Burgess Park Progress Map, undated but likely to be the early 1970s. LMA Ref: GLC/DG/AR/06/008/003.

In this way, 34 acres of land were laid as green space by 1960[163] rising to 60 acres under the GLC's ownership by 1972.[164] A second progress map (Figure 78) shows the extent of land laid out as green space by the early 1970s. Existing open spaces are shaded green and marked E.O.S and sites edged with green lines are in the Council's ownership or due for acquisition, indicating the next sites to be incorporated into the embryonic park, many of them areas of prefabricated temporary housing. With further land purchases still required, the GLC continued to keep landscape treatments simple. Figure 79 shows a basic layout of grass and saplings at Coburg Road, adjacent to Rolls Gardens (Site 13, Figure 72) in the northeast of the proposed park area, where houses at Coburg Road had been destroyed or damaged.

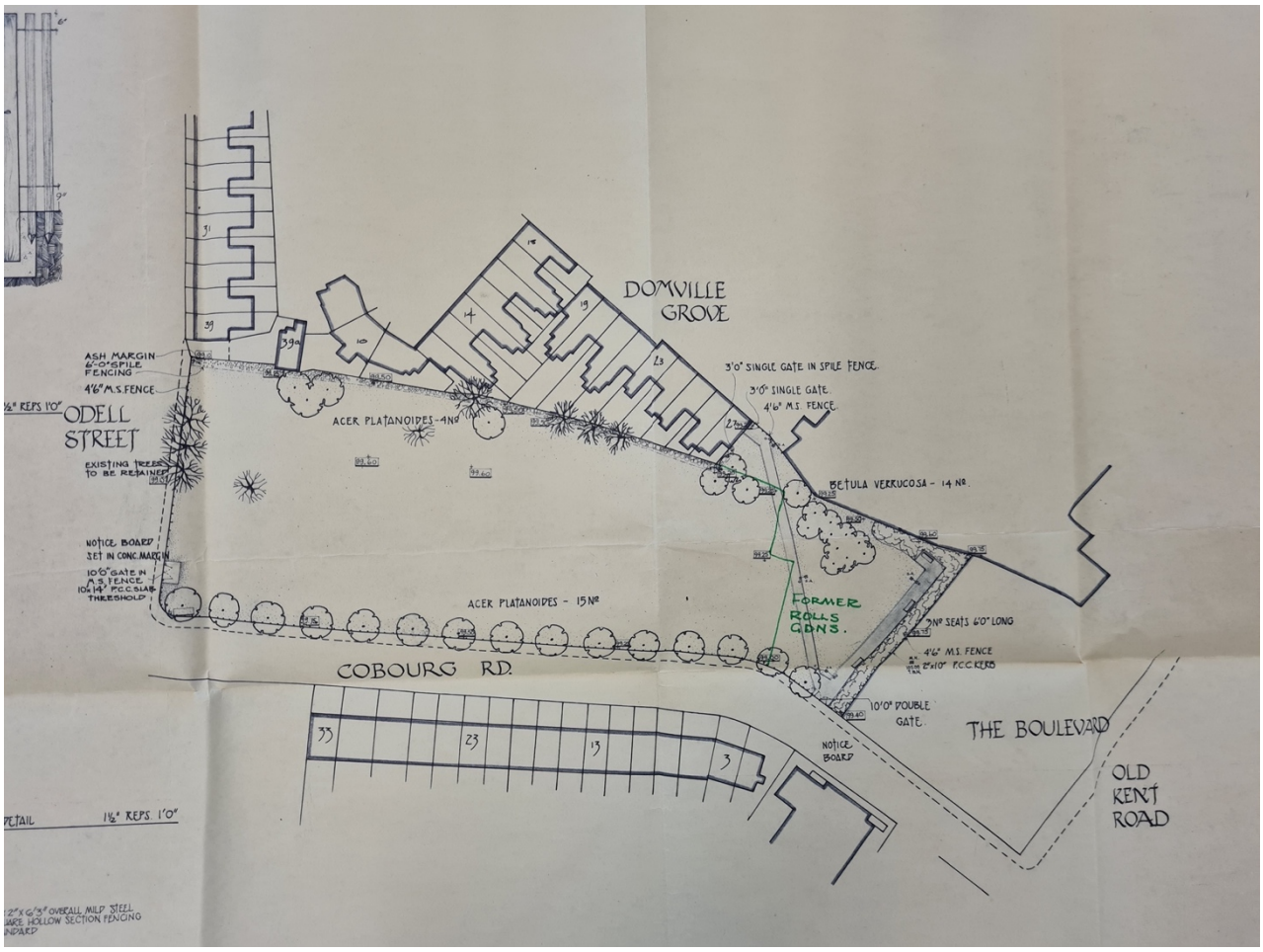


Figure 79: North Camberwell Open Space Coburg Road – Rolls Garden Clearance and Layout Drawing, April 1970. GLC Parks Department. LMA Ref: GLC/DG/AR/06/008

[163] Unknown Author, 'Breathing Space in London', *Journal of Park Administration, Horticulture and Recreation*, Vol. 24, No.12, 1960, p. 668.
[164] GLC Press Office, Press Release No. 257, May 17th, 1972. LMA Ref: GLC/DG/PRB/35/017.

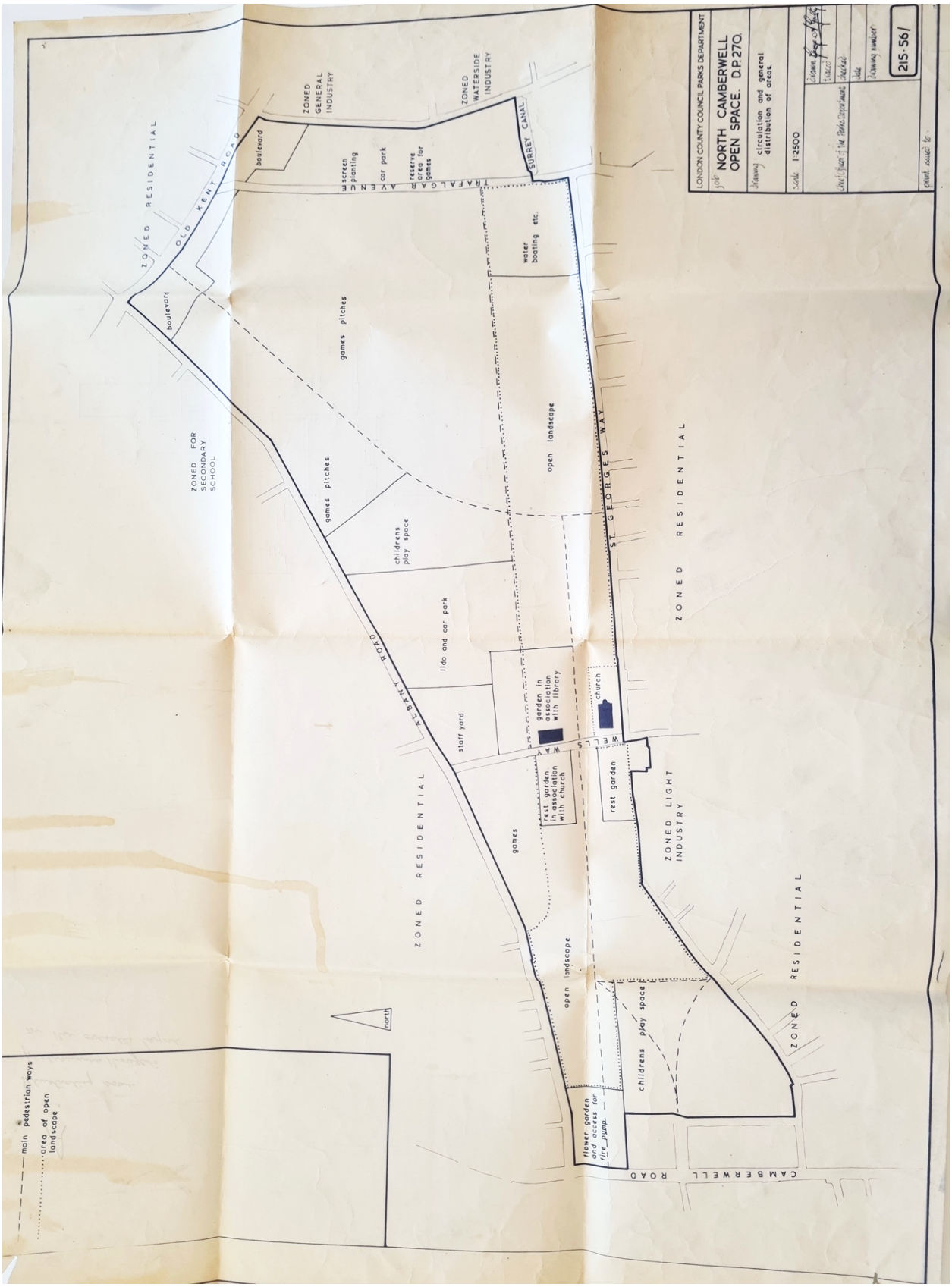


Figure 80: London County Council Parks Department, North Camberwell Open Space D.P. 270, Circulation and General Distribution of Areas. Undated. LMA Burgess Park (North Camberwell Open Space) General Papers, LCC/CL/PK/2/125.

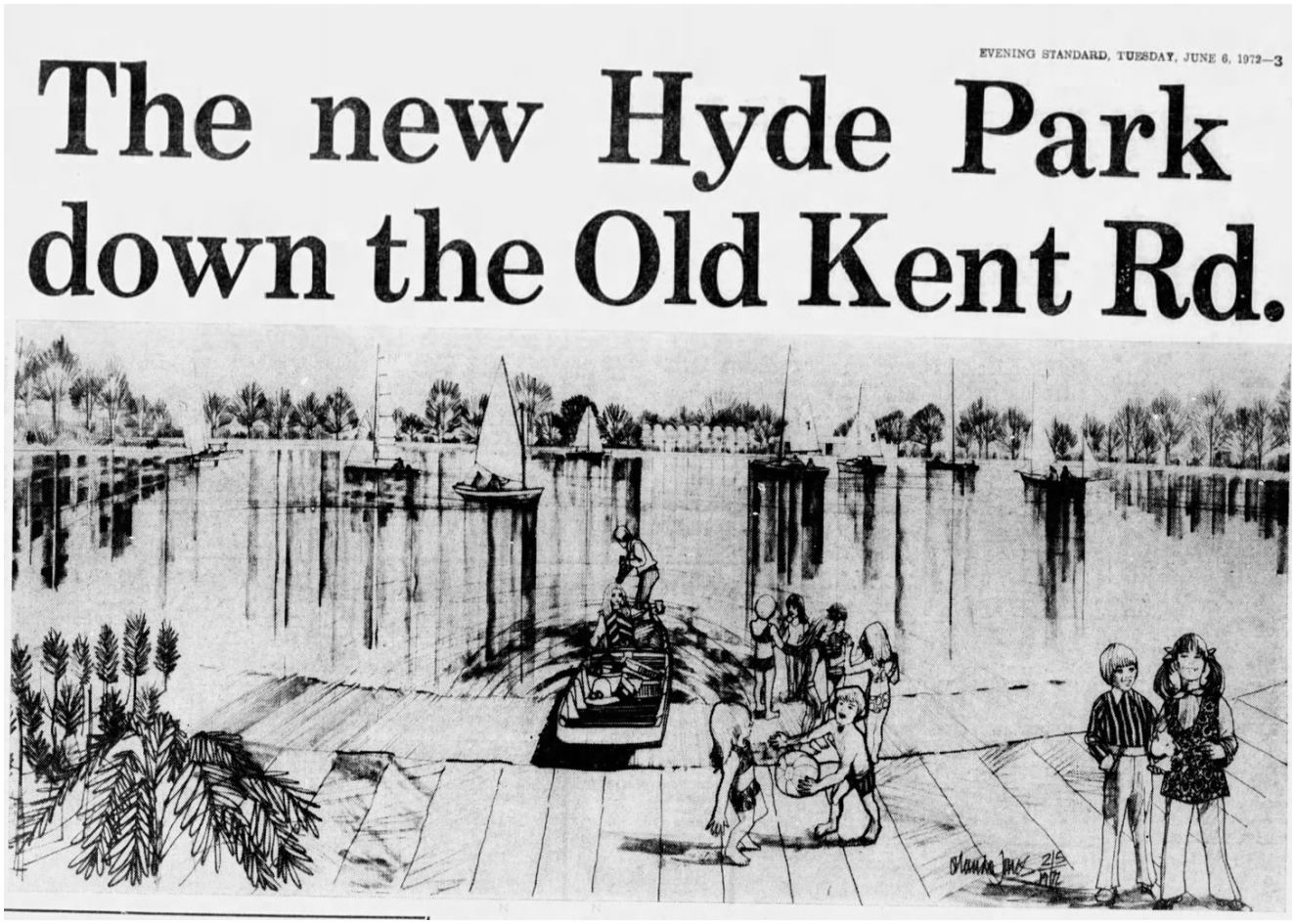
Communication with the public about how the Park might eventually look was lacking and despite public pressure, the LCC refused to produce a plan for many years until a sketch of a potential scheme was produced in 1964.[165] An undated plan probably from this time (Figure 80) has a hand-written note on the reverse saying it is 'illustrating some preliminary thoughts on the overall layout'.[166] Bellamy's dissertation contains an illustration of a similar plan which was accepted by the outgoing Parks Committee in July 1964, shortly before the transfer of municipal responsibility for the park to the GLC in April 1965.[167]

Figure 81: Photograph of a model of the proposed development of the North Camberwell Open Space, 27th March 1972. LMA Ref: SC/PHL/02/Box 1125.

In 1972, the GLC finally published a master plan to aid consultation and a model showing a proposed boating lake, sports pitches, gardens and playgrounds was built (Figure 81). The aim of the consultation was to 'seek the ideas of everyone who is interested in the park'.[168] It also sought 'to keep people promptly and properly informed and to allay anxiety'.[169] More than twenty years had passed since the first bombed sites had been acquired and temporarily laid out, and residents had lived with uncertainty for many years, leading to the denigration of the park from many quarters. By 1972, the GLC was set to embark on an important new phase in land assembly which

[165] Bellamy, 'Burgess Park', p. 78.
[166] London County Council Parks Department, North Camberwell Open Space D.P. 270, Circulation and General Distribution of Areas. LMA Burgess Park (North Camberwell Open Space) General Papers, LCC/CL/PK/2/125.
[167] Bellamy, 'Burgess Park', p. 81.
[168] GLC Press Office, 'Speech by Mrs Harold Sebag-Montefiore, Chairman of the GLC Arts and Recreation Committee, At the North Camberwell Open Space Press Conference', Press Release No. 290, June 6th, 1972. LMA Ref: GLC/DG/PRB/35/017.
[169] GLC Press Office, Press Release No. 257, May 17th, 1972. LMA Ref: GLC/DG/PRB/35/017.

would disrupt the lives of many through the acquisition of 21 acres of land on which stood 400 houses, a mission, four public houses, shops, two doctors' surgeries and many commercial premises and factories. Eight hundred families would be affected, and the cost of land acquisition would be £2,267,000.[170] Images sought to convey how major features such as the boating and fishing lake might look (Figure 82) but despite progress in land assembly and the existence of a draft masterplan, the Park remained a disjointed set of non-contiguous sites throughout the 1970s, which meant that temporary layouts needed to continue until permanent landscaping would become possible.


EVENING STANDARD, TUESDAY, JUNE 6, 1972—3

The new Hyde Park down the Old Kent Rd.

Figure 82: Newspaper article containing an artist's impression of the proposed lake at Burgess Park. Source: David Wilcox, 'The new Hyde Park down the Old Kent Rd.', *Evening Standard*, Tuesday, June 6th, 1972, p. 3.

[170] GLC Press Office, Press Release No. 257, May 17th, 1972. LMA Ref: GLC/DG/PRB/35/017.

Tender documents dating from the 1970s show temporary landscape treatments and costs for numerous individual sites within the Park. One example is a contract to lay out a bombsite on St George's Way and shows the cost of breaking up concrete bases, preparing the ground, laying a path, providing bench seating, laying turf and planting trees and shrubs (Figure 83) was £11,410 in 1975.[171]

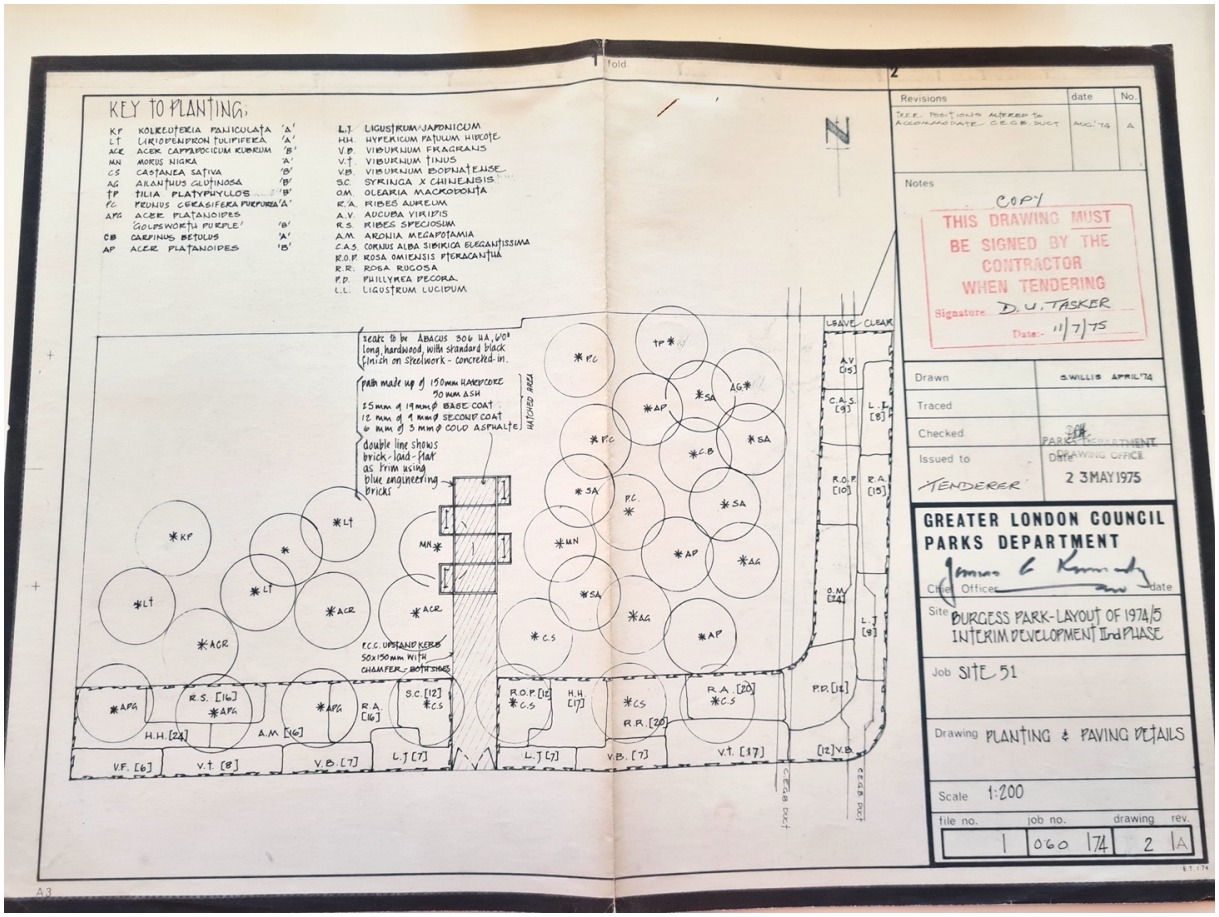


Figure 83: Clearance and Site Layout Plan for site at St George's Way, Burgess Park, Site 51, 1974. LMA Site 51 – Clearance and Layout. Ref: GLC/RA/D2G/07/026.

Whilst Site 51 was land where a building had been completely destroyed in the Blitz; completion of the Park required good quality homes and operational businesses to be seized too. A successful campaign to preserve buildings at Addington Square and Glengall Terrace and to incorporate these into Conservation Areas in 1971 could not be replicated across the area, and not all buildings valued within the community could be spared.[172] A telling quote sums up the mood: '"why does the LCC label everything it does an improvement?" an aggrieved householder asked as he

[171] Receipt on Final Account, Constable Landscaping Limited, 6th February 1978. LMA Site 51 – Clearance and Layout. Ref: GLC/RA/D2G/07/026.
[172] Bellamy, 'Burgess Park', p. 87.

surveyed the ruins of his home and the little neighbourhood in which he'd grown up'.[173] A decade later, an article in *Building* magazine argued that were it not for the park plans, such buildings would be spared given the newly emerging conservation-led doctrine of the time.[174] The article concludes, however, that demand for recreation from those living in high-density housing nearby meant that 'despite the park's detractors…the project has almost certainly gone too far to be pulled back'.[175] Bellamy addresses such criticisms, and others, by arguing that the long-term benefits of the Park were yet to become apparent even by the early 1980s, but that once permanent facilities were delivered, the park's rawness would be reduced and its value for recreation could build.[176]

By 1982, most of the land required to complete the Park had been acquired and connected at an estimated cost of £45 million and work could begin on laying out permanent facilities, most notably the lake, created in the northeast of the site, rather than in the southeast as the initial masterplan had proposed (Figure 84).[177] As a more homogenous park structure emerged, its status within the community grew and it became a well-used green space.[178] Following the abolition of the GLC in 1986, the Park was transferred to Southwark Council and it is now managed by Groundwork Southwark. It underwent an £8 million redevelopment project, completed in 2012, and a BMX track was opened to the west of Wells Way in 2013 (Site 22, Figure 70).[179] These developments indicate how the Park continues to evolve in ways impossible to imagine at the time of its inception, but true to the vision of those who recognised the need for recreational green space here, even as war raged.

Detractors of Burgess Park still exist; Tom Turner describes it as an 'ongoing disaster' criticising 'the acres of vacant green space for exercising gang mowers'.[180] However, it could be argued that its very existence is the core fact worthy of salutation. It was decades in the making and required the public authorities behind its inception, assembly and layout to work assiduously over decades.

[173] Unknown Author, 'Breathing Space in London', p. 668.
[174] Richard Saville, 'An Open Space in Southwark', *Building*, 22nd June, 1973, p. 104.
[175] Ibid., p. 99.
[176] Bellamy, 'Burgess Park', p. 261.
[177] Tim Charlesworth, *The Story of Burgess Park: From an Intriguing Past to a Bright Future* (London: Groundwork Southwark, 2000) p. 42 and GLC, 'London's Park Development to be Halted?' Draft Press Release LMA Ref: GLC/DG/AR/1/1 quoted in Hannikainen, *Greening of London*, p. 186.
[178] https://www.friendsofburgesspark.org.uk/history-in-burgess-park/the-history-of-burgess-park/, accessed 24.08.22.
[179] https://www.southwark.gov.uk/parks-and-open-spaces/parks/burgess-park, accessed 24.08.22.
[180]https://www.gardenvisit.com/landscape_architecture/london_landscape_architecture/visitors_guide/burgess_park_landscape accessed, 23.08.22.

Figure 84: Burgess Park Lake, 1982. Source: Southwark Local History Library, reproduced in http://www.bridgetonowhere.friendsofburgesspark.org.uk/the-story-of-burgess-park-heritage-trail/heritage-trail-m-w/the-lake/, accessed 07.07.22.

Figure 85: Cherry trees along the route of the former Surrey Canal with St George's Church in the background and a bridge that used to span the Surrey Canal. Source: Springtime in Burgess Park by Malc McDonald, CC BY-SA 2.0, https://commons.wikimedia.org/w/index.php?curid=107761929, accessed 07.07.22.

Its delivery required the authorities to be taken on trust by the residents and businesses directly affected to a degree almost unimaginable today.[181] Previously inconceivable disruption to the urban fabric caused by wartime damage provided the impetus the authorities needed; the visible devastation arguably made further far-reaching changes more palatable to those affected. Early landscaping, however basic, provided much-needed signals that a new park would eventually be delivered. This case study shows how bomb damage was not just the catalyst for the Park's inception but the nuclei around which it was built. Tim Charlesworth believes 'Other parks in London may be more richly landscaped and planted but they cannot evoke the past in the same way as Burgess Park.'[182] Signs of the old Camberwell remain in the red 'Bridge to Nowhere' which previously spanned the canal and which now crosses a long tree-lined path along the route of the old waterway (Figure 85), but much of its history exists only in the archives and in the memory of those still alive who used to live and work there.

[181] Bellamy, 'Burgess Park', p. 261.
[182] Charlesworth, *The Story of Burgess Park,* p. 3.

Chapter 7 – Conclusion

Land in London is a costly commodity. When it is used as green space its value is hard to quantify in financial terms but its amenity value to those who live and work in the capital is undoubtedly significant. The history of green space provision in London described in Chapter 3 shows its existence is rarely accidental; someone decided there are benefits to leaving land economically sterile and that lost profits or public sector outlay are worth the opportunity cost. Consequently, green space provision usually takes an active decision and its implementation in competition with profitable activities and intense demand for housing is rarely easy. Yet there are times when land is blighted, when it sits idle, unused, or unusable, a reminder of significant loss and unexploited latent potential. In times of relative economic prosperity, when land held in abeyance is a rarity, it is hard to imagine that there have been times when blank unused spaces even existed, let alone in abundant acreages.

The extensive bombing of London during the Second World War created the almost unimaginable expanses of dereliction described in Chapter 4, sometimes for decades after. These spaces were joined by others caused by post-industrial blight so that the origins of Blitz-blighted sites became obscured by those of economic origin. It is hard to explain why the relationship between bomb-damaged land and the creation of green spaces is not more widely remarked on or researched but one explanation could be that as derelict spaces became commonplace people 'almost ceased to question why they are there'.[183] Yet, as this research has demonstrated, London's municipal authorities were acutely aware of where such land lay and they saw that it was quantified, analysed and mapped. These same authorities chose to use war damage as a catalyst to harness policy, action and finances for the delivery of new green spaces within London's vast agglomeration. The Blitz, a completely unplanned and thoroughly devastating event, had provided the vacant land and political impetus for comprehensive redevelopment.[184]

Using GIS map overlays, this dissertation has shown how green spaces were created in Southwark on bomb-damaged land, or bomb-damaged land combined with terrain made available through economic decline and housing clearance because those with the power to do so chose to deliver them. Twenty-six sites have been identified where there is a strong correlation between extensive bomb damage and a present-day green space and where consultation of easily accessible historical sources appears to corroborate the relevance of bomb damage to their genesis or enlargement.

[183] McKean, *Fight Blight*, p. 9.
[184] Hannikainen, *Greening London*, p. 94.

Further research of archives could confirm their attribution to the destruction of bombing and could identify the existence of others where the evidence was too weak for inclusion in these findings. Included in the 26 are a riverside park, allotments and parks of varying sizes used for general recreation as well as 9 examples of where extensions were made to existing green spaces, including the well-established Southwark, Kennington and Geraldine Mary Harmsworth Parks. Any one of these 26 sites could form the basis of further detailed research, with analysis of minute books from the LCC, Borough councils and GLC likely to reveal further evidence of the reasons behind their creation, not least the value judgements taken by the authorities as they sought to balance the competing needs of housing and economic uses to create the land use patterns seen today.

The delivery of these new green spaces required patience and tenacity; a fact well demonstrated by the history of Burgess Park outlined in Chapter 6. The LCC took seriously the policies laid out in the *Administrative County of London Development Plan* to use bomb-damaged land as the keystones around which larger green spaces could be assembled. The length of time this took and how difficult it was to balance the competing views of those who questioned its value is well outlined by Bellamy. This research builds on hers, using GIS map analysis and archival material to summarise the initial sites around which it was assembled, how these were landscaped and tracking the progress and master planning which led to the much-loved open space it is today. Few using the Park now will have any sense of what was there before, let alone the painstaking process behind its assembly, yet more information exists in the archives than could be analysed within the scope of this dissertation and this could provide further detail on the evolution of its landscaping. The same methodology used to create Burgess Park will have been used in many of the Southwark sites identified in this research as well as in other parts of the County, most notably the East End, where open space deficiency and bomb damage was more acute even than south of the river. Further research using GIS can identify green spaces elsewhere in London with a Blitz genesis and if researched London-wide, an assessment of the locations and acreage of green space in London on bomb-damaged land is achievable, enabling a more thorough assessment of the role of bomb damage in the creation of post-war green spaces than is possible in the scope of this dissertation.

David Hare's 2022 play, *Straight Line Crazy*, dramatises the story of Robert Moses, an American planner blind to the communities affected by his policies. Despite being one himself, he is irritated

by the term planner because they 'plan, plan and never do'.[185] As this dissertation demonstrates, the planners of post-war Britain did 'do' and positive outcomes were derived from the municipalisation of green space provision in the post-war era.[186] Some may overlook these achievements believing the *Brave New World* of post-war planning to be problematic; the title of Huxley's dystopian novel is used to frame the planning system as one designed to deliver a society not to everyone's benefit.[187] Post-war planning policies would impact London's urban fabric, how it looked and operated, and where and how people lived in ways that are often now regarded as having failed, thereby undermining public confidence 'in the efficacy of a planned society'.[188] This dissertation does not debate whether these plans and policies changed London overall for the better or worse, but it does focus on a sparsely researched area, provides clear research pathways for further study and demonstrates how bomb damage led to the creation of new green spaces which are unlikely to exist otherwise.

Some have argued that once built on, land will always be built on.[189] This dissertation disproves such assertions, demonstrating where green spaces were woven anew into London's post-war urban fabric and how the Blitz served as a catalyst for greening London. As the *Journal of Park Administration, Horticulture and Recreation* enthusiastically reported in 1960: 'Meanwhile in the congested County, the sites are being cleared and filled, the topsoil and the turves laid, the grass sown and trees planted to provide much-needed breathing space.'[190]

[185] David Hare, *Straight Line Crazy* (London: Faber and Faber Ltd., 2022) p. 27.
[186] Hanikainen, *Greening London,* p. 126.
[187] McKean, *Fight Blight*, Foreword.
[188] Frank Mort, 'Fantasies of Metropolitan Life' p. 121.
[189] Luckin and Thorsheim, *Mighty Capital under Threat*, p. 129.
[190] Unknown Author, 'Breathing Space in London'-p. 669.

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