



GROUNDbreakers *Immersive Trail & Guide*

telling the back story of the Queen Elizabeth Olympic Park site from the Bronze Age to the Digital Age

Guidebook

Dedicated to the past, present and future makers of the Park, and to the host communities and volunteers whose generosity made the 2012 Games such a memorable occasion.

Developed by the Livingmaps Network, in partnership with Hyperactive Developments, Heritage 5g and the Queen Elizabeth Olympic Park with grants from the Heritage Lottery Fund, the Foundation for Future London and the Raphael Samuel History Centre.

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Welcome to the Groundbreakers Guide

As you walk around Queen Elizabeth Olympic Park you will notice many new buildings, new housing, schools, workplaces, offices and hotels, even a new university campus and cultural quarter, as the London 2012 Olympic and Paralympic legacy materialises on the ground. It is easy then to think that there was nothing much here before 2012, and indeed much of the official media coverage portrayed the site as a semi-derelict wasteland awaiting regeneration. In fact, the area now occupied by the Park has a long and complex history of human settlement, manufacture, and recreational use, as well as a changing population of plants and animals. In these ways the site has continually responded to the larger forces at work in London - and the world - over the past centuries.

The transformation of Stratford from a small rural hamlet to a railway town built around a concentration of 'dirty' industry in the Victorian period caused a dramatic disruption of long established pre-industrial patterns of life and labour, some of which adapted while many more disappeared and were replaced by new technologies of work and leisure.

The late twentieth and early twenty-first centuries have seen east London change once more from an industrial heartland to a cosmopolitan hub of global information and a predominantly services-based economy. The step change associated with the coming of the 2012 Olympic and Paralympic Games has been a much more abrupt process, disrupting many patterns of East Enders' established ways of life; some of these impacts are still being worked through and are weekly dramatized in the nation's most popular TV soap, as East Enders adapt to the new circumstances and opportunities, and weigh up what has been gained and lost.

As always, the impact of change has been uneven. East London has one of the most socially and ethnically diverse populations in Britain and, over the last 150 years, its communities have found themselves at the forefront of many struggles to improve living and working conditions and establish more open and democratic institutions. Out of this has grown a vibrant local culture expressed in sport, popular music, theatre, and the arts.

In setting out to tell this story, *The Groundbreakers* online guide will unearth and bring to life some of the histories whose physical traces, like the rivers and tunnels which criss-cross the Park, are now largely forgotten or hidden from sight. Did you know that the site once contained a Roman bridge? A network of now lost waterways? An anti-aircraft gun emplacement? A sweet factory? A speedway and greyhound track whose popularity rivalled that of football in the 1950s? All these and more await you in this guide.

In digging down into this buried past we aim to show you its relevance to our lives today. For example, during the 'Dig, Design and Demolish' phase of Olympic Park construction, archaeologists discovered evidence of a prehistoric settlement beneath what is now the London Aquatics Centre on Carpenters Road. But archaeology is not just for professional archaeologists. In 2006, Paul and Gary, a father and son team of riggers, whose job it was to drill down for soil samples to help direct the giant boring machines driving two tunnels across the site, discovered coins, bottles, clay pipes, perfumes and shrapnel, each of which tell their own story about an aspect of the area's past.



One of the finds (Photograph: Phil Cohen)

For Gary's eighteenth birthday his dad made him a special version of a Monopoly board, with each site renamed to depict an event or situation that had occurred in and around the Park during its construction, each property acting as a prompt for the recounting of a story (see '[Gary's Olympic Game](#)' at the end of this guide).

We think that these stories are as much part of the 2012 legacy as the London Stadium, the ArcelorMittal Orbit, the Copper Box Arena and the Lee Valley Hockey and Tennis Centre. So too are the plants and animals, whose presence, and sometimes absence, has done so much to give this environment its distinctive character. A connecting thread is provided by the theme of 'groundbreaking', considered as both a disruptive material process in which capital, labour and technology interact with the non-human environment to transform the landscape, whether for better or worse, *and* as a statement about the collective human hopes and dreams invested in that enterprise. In bringing these two sides of the story together in a single conversation about the past, present and future of this site, we hope to live up to the project's title.

How to use this guide

The material in the guide is organised thematically, and within each theme, chronologically. It has been designed for those who prefer a paper copy, to take with you on your walk or read up beforehand to help plan your visit, but all the content of this guide can be found on the Groundbreakers [online map and guide](#).

For brevity we haven't included a map for each point interest in this printed guide – the map with all these locations can be [viewed online](#). In addition, we have nine Augmented Reality heritage hot spots accessible via a QR code on signs in the Park. These are designed for on-site use, but the QR codes can also be used at home and found on the trail leaflet in the '[resources](#)' section of the website. In this guide, we have included video links to give you an idea of what it is like to view the augmented reality experiences that were recorded in the testing phase of the project.

GROUNDBREAKERS - WHOLE MAP



The Groundbreakers website includes scrollable maps for each theme.

The four themes are as follows:

Fluid Histories traces the entangled flows of people, goods, water, electricity, and waste that have shaped the landscape.

Encampments and other dwellings documents patterns of human habitation and home making from the Bronze Age to the digital age and the impact they have had on the local environment.

Edgelands remade looks at the many ways the site and its inhabitants both human and non-human, have been transformed as it is excavated, engineered, polluted, demolished and re-built.

Level Playing Fields? examines changing patterns of local labour and leisure in the nineteenth and twentieth centuries as communities struggle to improve their conditions of life, including through sport and leisure activities.

Digging deeper

- If you have enjoyed this guide, you may be interested in [The Young Person's Guide](#) to the Queen Elizabeth Olympic Park, co-produced by the Living Maps Network.
- If you want to explore the history of a site in greater depth, each entry has suggestions for further reading.

Fluid Histories: with and against the flow

This theme traces the flows of people, goods, water, electricity, and waste that have shaped the park landscape.

Queen Elizabeth Olympic Park has been host to many different comers, stayers and goers over the past two centuries. They may not all have left much by way of records, but their stories can still be told, at least partly through the hidden history of the landscape itself. There is the Northern Outfall sewer, a monument to the genius of Joseph Bazalgette, the great Victorian civil engineer, built as a response to the Great Stink of 1857 when London was threatened with an all too palpable form of human pollution. Until recently the River Lea, and its linked canal system, was an important conduit of commerce, carrying flows of coal from South Wales and Sunderland, wool from Canada, and many other goods. It was not for nothing that the River Lea became known as London's breadbasket. But elsewhere on the site, rivers and streams have been built over and are now underground, whether by accident or design. You can read their story in the poem [Wild Swimmers](#), which was commissioned for the 2012 Games and is now displayed close to the London Aquatics Centre.

With the advent of new clusters of industry around Stratford, great volumes of energy flowed here, along narrow, purpose-built conduits: canals, railways, roads, power cables and production lines where workforces were concentrated. These workers operated machines and other equipment that allowed stores of energy and manufactured goods to circulate. Their strategic position in these flows gave the labour force opportunities to create new forms of self-organisation, including trade unions and forge a new kind of political democracy, which included, for the first time in the 1880s, unskilled workers.

These developments made this area into a major transport hub and an area for settlement, as many people moved from the surrounding countryside (and beyond) to find work here. Stratford New Town, just to the east of the site, was built from the 1840s onwards to provide housing for workers employed in the enormous Stratford Railway works, constituting what might be called a new 'labourhood'.

One important material symbol of the age of Industry, and of the shift away from steam power as its main engine, was a chain of huge electricity pylons that strode across the landscape carrying the powerlines that kept the city's economy going. For some they were proud symbols of modernity, but more recently, with the advent of a post-industrial economy, they have come to be seen as an unsightly scar on the landscape.

As the site was transformed into the main venue for the 2012 Games the pylons were the first to go; the electricity cables were buried in two giant tunnels spanning the Park, along with fibre optic cables powering the new information economy. The tunnels were built by a workforce assembled from all over the country. Some of the older workers were ex-miners from the coalfields in Kent, the Midlands and the North closed in the 1980s; many others came from Ireland as well as the EU. Tunnelling is a highly skilled, dangerous and physically demanding job and the men who do it form a

close-knit community as they travel the country from one major construction project to the next. They are a very special kind of migrant workforce.

The tunnellers were following in the footsteps of East Enders over a long period, so many of them immigrants and refugees from the trouble spots of Europe and from the ex-colonies, bringing with them new ideas and ways of life; some settled and put down roots others moved out, further east in search of greener pastures, and in a few cases less diverse communities. More recently those on low incomes have found themselves pushed out because they cannot afford to live in an area where house prices have gone through the roof.

We are used to thinking about human and animal populations as being on the move, but we still tend to see plants as rooted to the spot and ignore both their own hidden lines of communication and how their direction of travel is shaped. Every stage in the development of east London's transport network has had significant impact on our native wildlife. Groundbreaking can have a negative impact on the natural environment, breaking up species habitats and reducing biodiversity, but it can also facilitate the spread of various forms of wildlife. The building of canals created a corridor along which waterside plants could migrate from the countryside. The abundant cargoes once carried along the canals, especially grain and the substance known as 'wool shoddy', inadvertently carried and spread seeds from many different parts of the world, giving the local flora a cosmopolitan aspect that mirrored the area's human population.

The advent of new flows of people coming into the Park, some as visitors from London, the UK and abroad, some to work, study and live in the new neighbourhoods, is also re-shaping the landscape. People love to wander off the beaten track and this process of improvised footfall, sometimes called a 'line of desire' is slowly creating a new network of pathways across the Park. This unofficial do-it – ourselves form of commoning is an increasingly important form of urban place-making and a sure sign that the Park is a living environment.

Flows of sewerage



Unknown Boy Fishing, circa 1900 (© London Borough of Newham Heritage Service)

Crossing the Park between Hackney Wick and Stratford is a footway and cycle track raised onto an embankment called the Greenway. It offers dramatic views towards sporting venues, public spaces and new development across Queen Elizabeth Olympic Park. But the embankment has a much older purpose – it contains a sewer, bearing a constant flow of North London’s wastewater towards treatment works at the margins of London. Huge pipes contain the sewage, bearing it aloft across all the meandering rivers.

Flows of river water and waste were not always so effectively separated in this part of the Lea Valley, nor in London more broadly. In the mid-nineteenth century, London had no sewer network, and this was increasingly recognized as a major contributory factor in the prevalence of deadly diseases such as Cholera and Typhus. The city’s rivers were open sewers, including both the Thames and the River Lea. A major outbreak of Cholera in 1853-1854 which claimed 10,000 lives across the city finally provided a key stimulus for the civil engineer Joseph Bazalgette to design a sewer network while Parliament was finally driven to take action by the Great Stink of 1858, when the smell of the Thames made working in Westminster unbearable. Eventually completed in 1875, the development of this network was instrumental in improving public health.

The Northern Outfall Sewer which lies beneath the Greenway is one of the main intercepting sewers in the network. As with other sewer lines, it works by force of gravity, drawing in waste from various branch sewers along its length. In certain places in the network, pumping stations were required to bring waste-water from local branches up to the level of the main sewer. One of those was Abbey

Mills, which lies just south of Queen Elizabeth Olympic Park. Abbey Mills pumping station is named after former water mills that were managed in the same location by the Cistercian monks of the long vanished Medieval Abbey of Stratford Langthorne. Dubbed the 'Cathedral of Sewage', the pumping station was designed in a florid Byzantine style which, if surprising at a time when industrial buildings are rarely more than sheds, evokes a sense of triumphant conquest of urban ills by Victorian innovation and technology.

Bazalgette was chief engineer of London's first city government, the Metropolitan Board of Works, and the safe flow of sewage is an important legacy of this institution. It is also part of a wider story of how London's infrastructure, and unruly urban fabric, has been progressively reordered through city-level government intervention since the nineteenth century. The sewer's construction also reflects a key moment in the history of public health reform in London, a political process which had been fraught with disagreement regarding the links between poverty, dirt, development, morality and disease, but which was boosted by rapid advancements in epidemiology from the mid-nineteenth century.

In Hackney Wick, where the sewer runs overground as a result of the low levels of the floor of the Lea Valley, local lives were transformed by its construction, along with many other neighbourhoods in London. Hackney Wick was a poor, overcrowded place on marshy ground where homes lay cheek by jowl with industry. It was reliant on cesspools and the local rivers for waste disposal, until it was linked up to the sewage network in the 1860s. On occasion, floods would cause raw sewage to spill out onto unpaved roads where it would subsequently fester or dribble back into the soil and waterways. However, it would seem that sanitary practices did not change overnight on the construction of the sewerage system. A local missionary reported in 1882 that 'excrement is still floating around in the river' where it joined the toxic effluent of factories and dead animal carcasses. However, according to an 1885 government report into working class housing, 'the paving and draining of the places [had] improved Hackney Wick immensely' by then.

As it shaped health in the metropolis, the construction of sewers removed waste from the urban experience – no longer was it visible, nor a constant contributor to the city's olfactory landscapes. This of course is something we take for granted today. However, you can still find places near the ventilation grilles along the Greenway where wafts of sewage, like memories of the 'Great Stink' of 1858, may be detected. In turn, at the places where the exposed sewerage pipes can be seen under the Greenway bridges that cross roads and rivers in the Park, the scale of the transformation, along with the skill and craftsmanship, involved in Victorian sewer construction, can be appreciated.

JD

Augmented reality hotspot (video of on-site experience): the [Northern Outfall Sewer](#)

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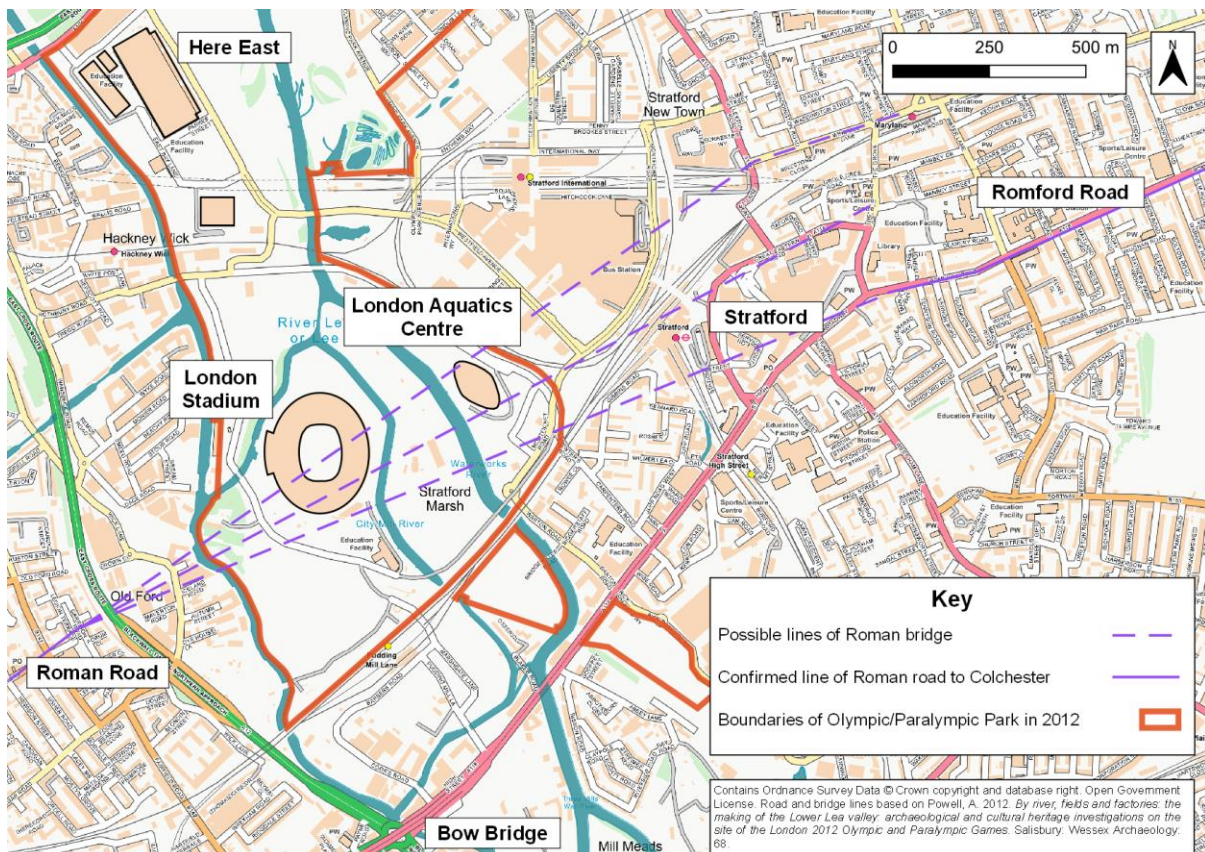
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A Missing Bridge

During the 2007-8 excavations of the Olympic and Paralympic Games site at Stratford, one of the most important things the archaeologists searched for was evidence for the earliest bridge across the River Lea.

Today there are many crossing over the Lea, with the largest being Bow Bridge to the south of the Park and the A12 at Hackney Wick. Two thousand years ago the situation was very different. The area was still deep in the countryside, the River Lea was far wider, and the land much more boggy. What is now Stratford lay far away from the newly founded Roman city of London (then called *Londinium*) which was focused around today's Bank and the Square Mile. There was *no* London before the Romans arrived in c. 50 AD, though there were many small prehistoric settlements like the one you can read about at the London Aquatics Centre.

The Romans' road building skills are still famous today and they built a huge network radiating outwards from London to other towns and cities. One of these roads led out towards Essex and a city then called *Camulodunum* (now Colchester). However, to get there, this road first needed to cross the Lea and the surrounding marshes. It was this bridge that the archaeologists hoped to find in the Olympic excavations.



The possible routes of the Roman road across today's Queen Elizabeth Olympic Park

In 1722 the famous author Daniel Defoe wrote that he had heard reports of stone ruins close to Hackney Wick that he thought must have been part of the Roman road to Essex. This was said to meet the Essex side of the River near to today's Lee Valley VeloPark. Defoe was one of the sources of evidence the archaeologists used to inform their search. However, his account was challenged by

more direct evidence seen in Bow, just to the west of Queen Elizabeth Olympic Park. Here archaeologists found a five metre-wide gravelled road, complete with small, separate 'pavements' for pedestrians and drainage ditches. This was at the Lefevre Walk Estate, not far from Roman Road Market (the name is a give-away!). This section of road lined up towards *Camulodunum* in a direction that, if projected onwards, would seem to cross the Lea and Queen Elizabeth Olympic Park near today's London Stadium (the former Olympic stadium). This seemed to be the most likely candidate for the line of the road and bridge rather than Defoe's Hackney Wick theory or the crossing site of Bow Bridge to the south.

Bow Bridge itself was originally built around 1110 AD. Prior to this, people had crossed the River here using a ford but after a number of accidental drownings – and Good Queen Maud (wife of Henry I) 'herself had beene well washed' trying to cross – the bridge was constructed.

During the excavations, the archaeologists looked high and (very) low, up and down the Lea for the Roman Bridge in a series of trenches. Today, after thousands of years of flooding and dumping, the foundations of the bridge would be all that remain buried deep in the mud and it was hoped that these wooden posts could have still survived. Unfortunately no sign of the bridge was found, despite the diggers' best efforts.

However, archaeologists *did* find pottery and drainage ditches from the Roman period, suggesting people were farming and managing the land at this time, even this far away from *Londinium*. As Queen Elizabeth Olympic Park and the surrounding areas continue to develop, more excavations will have to take place and hopefully some of these will find more conclusive evidence of the bridge in future.

JG

Further reading

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[How Queen Matilda's Dip in the Lea created Bow Bridge](#), Roman Road London.

The Pudding Mill Boat

Walking along the towpath of the Old River Lea just outside the hospitality suite of London Stadium (the former Olympic stadium), you might notice a strange dog-leg in the river wall covered in reeds. This former inlet is all that remains of the Pudding Mill River, a stream that was filled-in for the

Games construction in 2007.



The infilled inlet of the Pudding Mill River today. The boat excavation was located just beneath the London Stadium's hospitality suite (at left). The River was infilled in 2007 to enable the stadium and other venues' construction. Photograph by Jonathan Gardner, CC BY-NC 4.0]

During the Games excavations archaeologists (pictured below) found an almost intact rowing boat at the bottom of an older part of the Pudding Mill River just to the northeast. This boat, dating from the early nineteenth century, was made of overlapping planks and covered in a thick layer of coal tar to help waterproof it. This also helped preserve it for over 200 years in the mud and eventually under the backyard of Parkes Galvanizing until the Park was built in 2007. The boat was about 4.5m long and 1.5m at its widest. It was much repaired and showed signs of a diverse career before its abandonment: large rings set into the top of the keel may have originally been used for lifting the boat, suggesting the possibility it was once used as a 'launch' to get on and off much larger sea-going ships.



Archaeologists excavating an early nineteenth century rowboat in a disused channel of the Pudding Mill River in late 2007. ©MOLA

By the time the boat ended up on the Pudding Mill it seems to have had a very different function: being used as a 'gun punt' for hunting ducks and other wildfowl on the Bow Back Rivers. The archaeologists found lead shot rattling around in a locker in the middle of the boat as well as signs of modifications which may have indicated the mounting of a large duck-hunting gun on the front (the hunters would have lain down to aim and fire this, having near-silently approached their quarry). Intriguingly, a child's toy cutlass was found in the mud just beneath the boat, suggesting that its final use was more playful!

The boat was lifted whole out of the ground by the archaeologists and was donated to Bournemouth University to help archaeology students learn how to document ancient watercraft.

JG

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Summary available from the [Archaeology Data Service](#).

Temple Mills through time



© Victoria and Albert Museum, London

The White Hart, on the River Lea at Temple Mills, Hackney Marshes painted by J.T. Wilson in 1869. Now beneath the M11 link road. © [Victoria & Albert Museum](https://www.vam.ac.uk), London

The northeast of Queen Elizabeth Olympic Park, near the Lee Valley VeloPark, is part of an area called Temple Mills. This small area shows evidence of almost continuous industrial development running from medieval times until the twentieth century that saw the use and modification of the River Lea with watermills, weirs and the cutting of new channels.

The name Temple Mills comes from the Knights Templar (a religious military order, most famous for their role fighting in the Crusades) who established several water mills here by 1185. These mills produced flour for London and were later taken over by the Order of St John of Jerusalem, whose priory buildings can still be seen near Farringdon in central London. At Temple Mills, flour and other types of mill remained in operation until the late nineteenth century, including one which made gunpowder (this accidentally blew up in 1690!). The mills also saw a pub established in 1513 called The White Hart. This (pictured above) survived in much modified form until 1995 and the building of the A12-M11 link road, by which point it had been called variously, 'The Spooky Lady', 'The Flamingo', 'Flappers' and 'The Wax Club' (famous for its club nights).

The River Lea was an important source of waterpower for the mills to grind grain, but also an important source of transport before reliable roads or the coming of the railways. River transport allowed produce to be brought down from the rich agricultural lands of the Upper Lea Valley.

Archaeologists searched for these mills to the northwest of the Velodrome during the Games' largest dig in the summer of 2008 – a trench 40m long, 20m wide and 7m deep. Although no clear signs of the earliest medieval mills were found (which were likely to have been slightly further north, under the route of the A12-M11 near the pub), many traces of other milling and industrial buildings were discovered. The earliest of these were dated to the late sixteenth century (deduced from pottery

and tobacco pipes found with them), and one was associated with a large timber-lined channel, which could have contained a waterwheel to power machinery.

The archaeologists, with the help of old maps, showed that extensive changes had been made to the River Lea's course and a channel called the Tumbling Bay Stream was constructed to the east. This was later filled-in, but would have carried water to and from the mills and originally split off from the main River Lea Channel in East Marsh to the north. A 'tumbling bay' is an old name for a weir – a small dam across a river used to control the flow of water to help ensure mills' waterwheels had enough power to turn. In the past, all these modifications and weirs sometimes caused problems downstream, particularly in dry periods of weather. There are accounts of bargemen and fishermen complaining that Temple Mills' millers were holding back so much water that the lower stretches were an insufficient depth for them to earn a living.

By the early nineteenth century, a street was also constructed here with six brick-built cottages down its western side. The foundations and lower parts of the walls of these cottages survived remarkably intact and were associated with a long 'cobbled' street made of thousands of granite blocks. Archaeologists also found a neat pavement of flagstones and granite kerbs and lead gas pipes running into the houses, the latter having been added at the beginning of the twentieth century. From census records, we know the jobs of some of the people who lived here in the mid-nineteenth century; these ranged from millers, to silk weavers and 'cow keepers'. Records also show that the original mills built next to the White Hart Pub were demolished in 1854 and that, by the 1930s, the cottages themselves seem to have been abandoned. A 'rough shoot' (rubbish dump) was established here in 1893 by the London County Council and, by the 1930s, more extensive dumping of ashes and rubbish from Hackney and elsewhere took place on a larger dump known as the West Ham Tip. This operated until 1967 and eventually entirely buried all of the cottages and the cobbled street (and is the reason why the archaeology trench was over 7 m deep).

Elsewhere in this guide you can read about the Manor Garden Allotments, the WWII anti-aircraft defences, Civil Defence Corps site and the Eastway Cycle Circuit, all of which sprung up here around Temple Mills. Today this site's long history is remembered in the name of the nearby 'Tumbling Bay Playground' just to the south, Temple Mills Lane and the Temple Mills Eurostar train depot to the north. The granite blocks and kerbstones from the street and the cottages were reused throughout Queen Elizabeth Olympic Park as stepping stones – keep an eye out for them!

JG

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MOLA Team (2008) [Cobbled street unearthed on London 2012 site](#), MOLA, London

Industrial flows



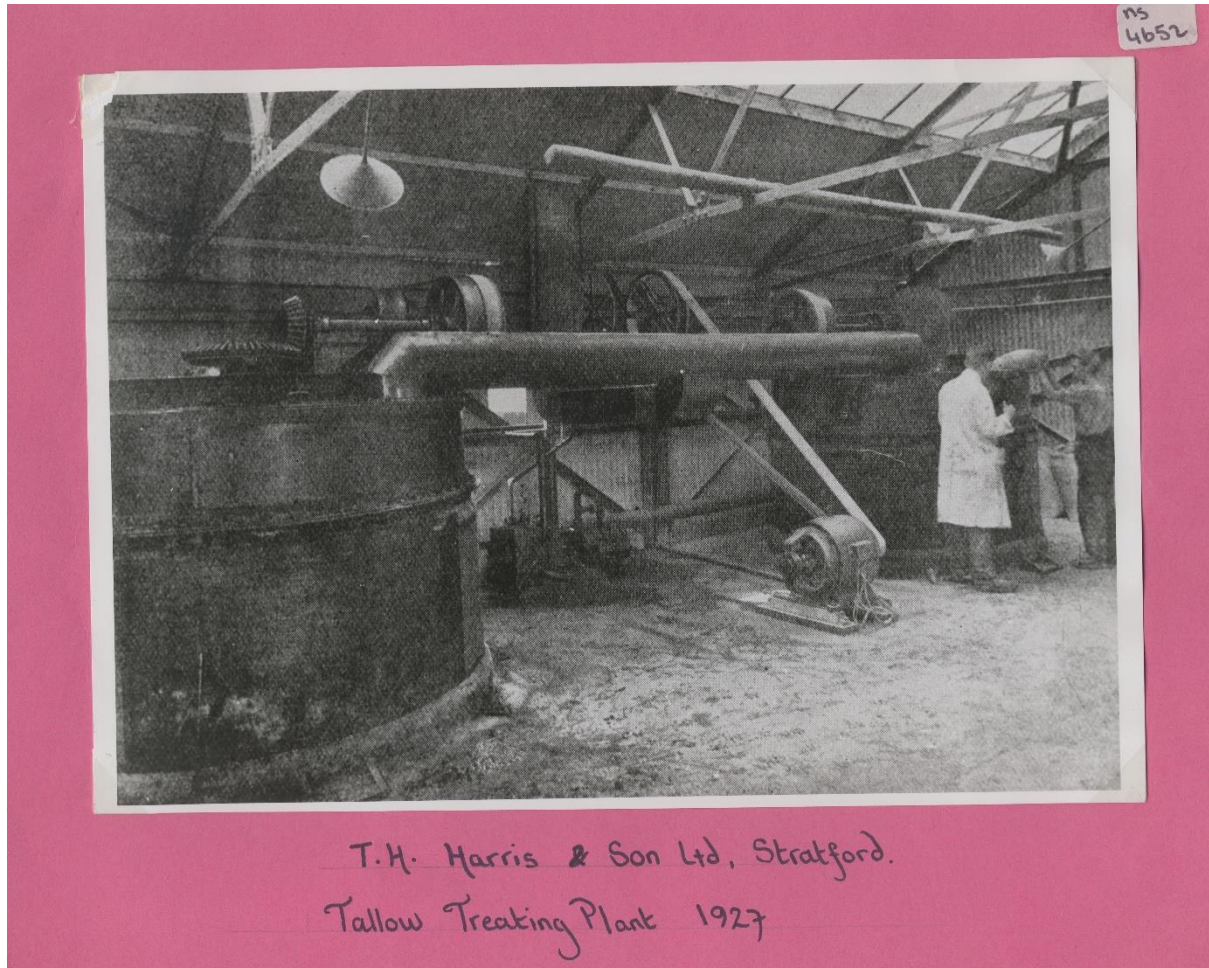
Carpenter's Road and Environs, Stratford, 1921 (Historic England Aerofilms Collection)

When London won the bid for the 2012 Olympics in July 2005, the area that was to become Queen Elizabeth Olympic Park accommodated 284 businesses, employing some 5,000 people. Diverse products were made and assembled here from clothing and textiles to smoked salmon, chemicals, glass products, theatre sets and galvanized metal. There were also several waste and recycling firms, motor vehicle repairers, bus depots and garages, wholesale food suppliers, offices and cafes. The range reflected not only London's economic diversity but also its multiculturalism, the product of historical flows of goods and people into and through London over time.

After the site for today's Park was assembled for the Olympic and Paralympic Games and legacy transformation, these firms were relocated far and wide. Many moved out to industrial areas further east from central London, although some were forced to close, and others left London altogether. In general, these movements marked a new stage in the history of the decline and dispersal of manufacturing in London.

Many businesses were not more than a few years old in 2005, yet the history of industry in the Lower Lea Valley reaches back far further. The first industry within the Park's boundaries was a mill thought to have been built by the Catholic order of the Knight's Templars in 1185 for milling flour. Over the centuries, the same mill was used to power numerous industries from leather to smalt to utensil fabrication. However, until the mid-nineteenth century, the area was largely rural, a marshy place, utilized for grazing rather than settlement or production. In the eighteenth century, its western fringes began to industrialize, firms specializing in textiles, brewing and glass, amongst

other things. But from the 1850s, it began to accommodate the so called 'offensive trades' which the Metropolitan Building Act of 1855 evocatively defined as 'blood-boiler, bone-boiler, fellmonger, slaughterer of cattle, sheep, or horses, soap boiler, tallow-melter [and] tripe-boiler'. By the start of the twentieth century, the range also encompassed chemicals and oil works, matchworks, printing inks, colour works and a distillery.



T.H. Harris and Son Ltd, Stratford - Tallow Treating Plant, 1927. (© London Borough of Newham Heritage Service)

Change in this topography of industry was continuous throughout the twentieth century, shaped by complex forces including changing consumer markets and technological advancements, but also geopolitics, including two World Wars and the decline of Britain's Empire. Urban growth (as London continued to expand up until 1939) and the city's planning strategy from the 1930s also influenced the changes. Abercrombie and Forshaw's Greater London Plan of 1944, produced as a plan for the revitalization of London after the Second World War, strongly advocated the decentralisation of industry. In many ways, the Olympic project can be seen as bringing that strategy finally to fruition, after many decades.



J Bowden and Son Ltd - Glass Works (Juliet Davis, 2007)

Although Stratford was still known as 'Stinky Stratford' in the 1960s, a steady reduction in the prevalence of offensive trades occurred throughout the twentieth century. Printing and paint-making continued for much of this period, as did some chemicals, but furniture and clothing, engineering packing and construction firms flowed into in the area in the wake of trades such as soap and tallow. From the 1970s, larger firms tended to move out and many collapsed in the wider contexts of the decline of London's port and deindustrialisation across the UK. The spaces they vacated were reoccupied over the final years of the century by the sorts of smaller firms that the Olympic project went on to displace. Now salvage, recycling and repair, along with retail, took the place of production-focused activity from the industrialisation period.

2005 is not, however, the end of the story of manufacturing on the site of the Park. Today, years after the Olympics, the set of buildings formed to house media activities and the press during the Games is billed as a new centre of entrepreneurialism and innovation that, while rooted in the digital economy, builds on the legacy of earlier industry.

JD

Augmented reality hotspot (video of on-site experience): the [development of industry around the City Mill River](#).

Further reading:

Davies, M., J. Davis and D. Rapp (2017). *Dispersal: picturing urban change in east London*. Swindon: Historic England Publishing.

Hall, P. (2007 [1962]). *The Industries of London Since 1861*. Abingdon, Oxon: Routledge.

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Marriott, J. (2011). *Beyond the Tower: A History of East London*. New Haven and London: Yale University Press.

Carpenters Road Lock



Carpenters Road Lock from Marshgate Lane, 2007. (Gordon Joly Creative Commons [CC-BY-3.0](#))



Carpenters Road Lock, 2017 (Toby Butler)



Passenger boat using the lock at the East London Waterways Festival, 2017 (Toby Butler)

The waterways around Queen Elizabeth Olympic Park not only shaped the river marsh natural landscape but with a combination of dredging, channelling and engineering they became essential sources of drinking water, power and freight transport. Within the Park Carpenters Road Lock is a dramatic and unique example of waterway engineering, originally completed in 1934. After a particularly bad flood in 1928 which put Stratford Railway works underwater, the lock was designed to be strong enough to resist and regulate the flow of flood water to preserve safe river levels, as well as allow for convenient passage for boats between Waterworks River (which as its name suggests, was a major source of drinking water in east London) and City Mill River (which supplied water power to waterwheels for grinding corn into flour).

Water transport, once essential to supply materials and transport goods from the factories and works in the area, was eclipsed by rail and road freight companies in the twentieth century. After decades of disuse, the vertical lift radial lock gates have been restored by the Canal & River Trust as part of a £1.8m restoration project. They are unusual because they are designed for flood defence as well as river traffic – in fact they are the only lock gates of their kind in the country, and since completion of the restoration are now in use by commercial, leisure and working vessels for the first time since 1960s.

The restored lock was officially opened in 2017 at the East London Waterways Festival a fanfare of activities. The Canal Choir sang and Olympians Jessica Eddie (rower) and Joe Clark (canoeist) formally declared the gates open. A large crowd of 200-300 people stood on the towpath, bridges or in boats to watch the proceedings, or sat watched from terraces built into the earthworks (which later that evening became the auditorium for an outdoor cinema).



The Canal Choir at the opening ceremony (Toby Butler)

TB

Augmented reality hotspot (video of on-site experience): [Carpenters Road Lock](#) and [canal building around the Lea Navigation](#).

Further reading

Canal and River Trust: [Carpenters Road Lock](#) website, including a facility to book a boat trip around the London Stadium and through the lock. The Trust also has a [site specific /mobile friendly web page](#), including images and recordings of the [restoration process](#) and audio [walking trails](#).

'[West Ham: Ancient Mills](#)' in *A History of the County of Essex: Volume 6*. Originally published by Victoria County History, London, 1973, p. 89-93.

M11 Link Road

The M11 link road is a four mile stretch of road opened in 1999 to increase traffic flow between the Docklands and the M11 (Cambridgeshire). The scheme was part of a post-war urban 'ringways' scheme, based on Abercrombie's 1944 *Greater London Plan* for a series of concentric motorways in greater London. The link road scheme involved the demolition of over 350 homes and a thousand people were displaced. It was a controversial scheme fiercely resisted by those who felt that motorways should not be built so close to residential communities, and objected on environmental grounds, the loss of green space and the destruction and division of communities.

The scheme was the site of the biggest road protest in Europe with dramatic scenes of protesters occupying almost an entire road of condemned housing (Claremont Road in Leyton, just over a mile north-east of the Park) locking themselves to chimneys and being forcibly removed by police and security officials.

Adjacent to the Park the road scheme involved the destruction of a pub/hotel, the White Hart (situated at the south end road intersection with Temple Mills). It catered for cyclists and football players/supporters as it was so close to the sports pitches and facilities in and around Hackney Marsh; see the 'Temple Mills through time' section for more details.



Image showing the location of the M11 link road superimposed on to a 1947 OS Map, overlaying a modern satellite image (red line added to original, base maps reproduced with the permission of the [National Library of Scotland](#)).

One of the displaced residents, artist Graeme Miller, made 'Linked' a sound installation featuring 20 transmitters along the route. Receivers (available free from local libraries) allow walkers to listen to edited interviews with residents remembering the streets/communities displaced by the road.

It was the last major trunk road to be built before the new Labour government announced a shift in transport policy which cancelled many major road schemes and introduced a Congestion Charge to discourage car travel to central London in 2003.

TB

Further reading

Abercrombie, P. (1945) *Greater London Plan 1944*, HMSO, London.

[M11 Link Road Protest](#), Wikipedia

Early images of the White Hart have been [published online](#) by Alan Russell and [Pubwiki](#)

Miller, G. (2003) [Linked](#)

Butler, T and Miller, G (2005) 'Linked: a landmark in sound, a public walk of art', *Cultural Geographies* 12,1 77-88 and reprinted in Perks, Robert and Alistair Thompson (eds.) *The Oral History Reader* (2nd Edition) London, Routledge, 2006, 425-433.

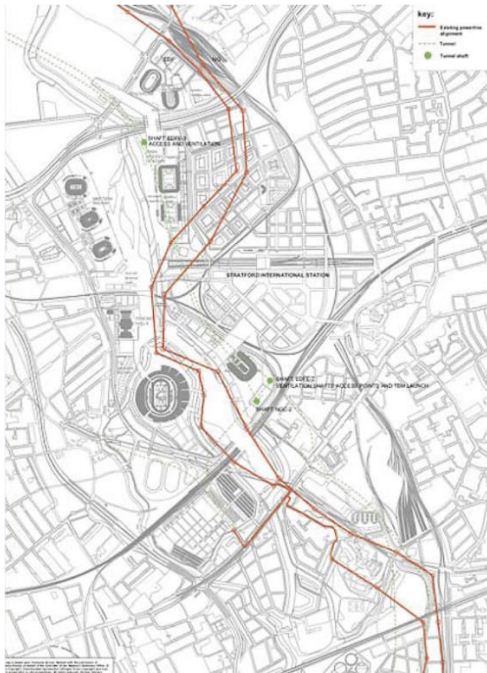
The Museum of London has archive material from the Road protests and extensive video footage has been published on YouTube by Neil Goodwin in the [The Lock 'n' Rollie Years](#)

The tunnellers: power lines



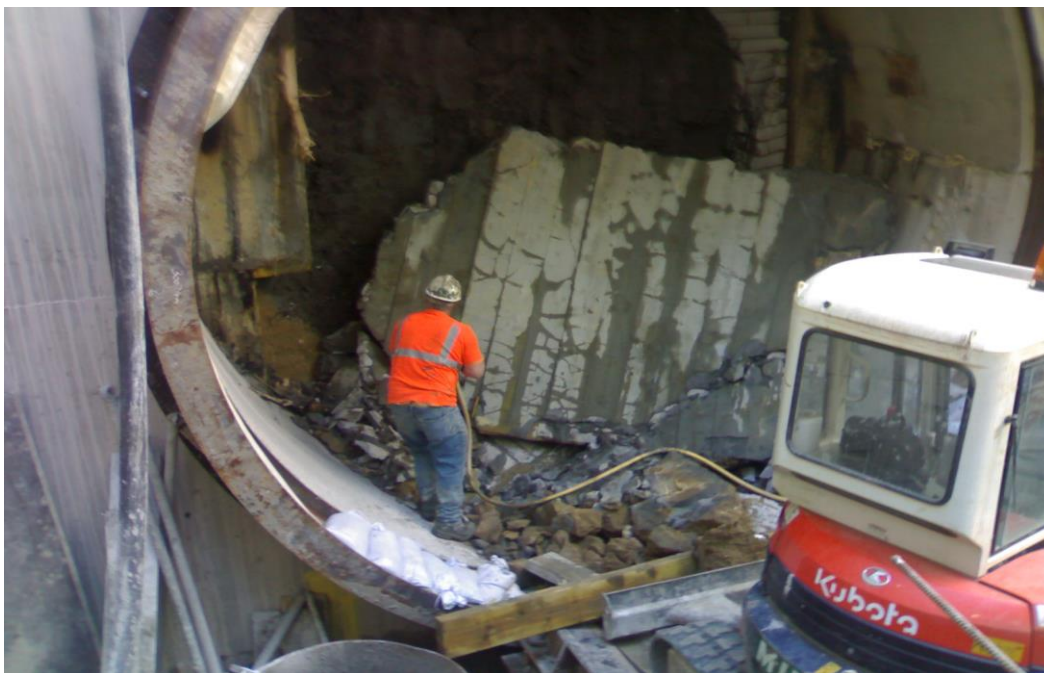
Demounting the pylons (Phil Cohen)

The Powerlines project was part of the first phase of the construction process for the Olympic Games which started in 2006. It involved digging two large tunnels across the whole site, extending for several miles between West Ham and Hackney, in order to reroute underground the power cables from the electricity pylons that dominated the site, and which were due to be demolished. At the same time the site was being cleared and prepared for the actual construction phase, and this involved demolishing many buildings, and treating heavily polluted soil.



Map indicating powerline routes (provided by Phil Cohen)

Between September 2006 and April 2007, during the last phase of the project when the tunnels were nearing completion, Phil Cohen interviewed surface and underground workers as well as managers on site, and also conducted site observations. The interviews focused on the workers' backgrounds – how they had come to be in this line of work – their experiences of working on the site, and their views on the Olympics. Some members of the local community were also interviewed. What follows are extracts from what they had to say. Names have been altered to preserve anonymity.



Breaking through (Phil Cohen)

Kevin McManus (chief engineer)

I grew up in Barrow on Furness, at a time when shipbuilding was still going strong, and I became fascinated by what people can make with their hands and with technologies. But then the shipyards closed, and when I left school I decided to go to mining college instead. I'd always been interested in geology, so this seemed like a good move. But then the pits started to close so I moved sideways into tunneling. It's an interesting industry because very little of it can be formally taught. The learning process involves gaining an understanding and respect for the ground. We are groundbreakers, we have to negotiate with the ground and reach agreement with the forces of nature. Steering a full-faced tunnel boring machine is like steering a submarine blind underground. You have to have a feel for the earth, as well as all the technical information you need to keep it on course.

Sean McKusker (rigger)

There's a lot of contaminated ground on the Olympics site, and we have to find out what's there so when the boring machine goes through they know what it is going to hit. Otherwise they are drilling blind. We hit gases twice which knocked us out... now we all have gas alarms and special protective clothing. You find a lot of nasties, oil, contaminants, some interesting stuff too. We have found dolls, shoes, nice bottles, some real antiques – still waiting for the unexploded bomb.

Alan Peake (concrete finisher)

When you go down there, in the tunnel, you lose all sense of whether it's day or night. In the summer it's not so bad, but in the winter it's a bit funny, because you go down when it's dark and you come up when it's dark. You begin to wonder whether you are ever going to see the sunlight again. It's like being a mole. But you get used to it. It may not suit everyone, but the job has its bright side, the lads are good crack and the money is not bad.

Colin Laughton (miner)

Tunneling is a special kind of job. It's in your blood. We look after one another; it's like a family in a way. If someone is off sick, or has an accident, we have a whip-round to make sure his family is all right. You don't get that same spirit in most other jobs; it's usually everyone out for themselves. It's something to do with the danger. Your life depends on the people you're working with. I like a challenge. I drove lorries in Iraq for the Americans after the fall of Baghdad. It was dodgy, some people got blown up, but the money was good. I came back because I was missing my family and the sense of community in work and I heard about this job.

Rohan Mistry (banksman and Newham resident)

I was working as a traffic marshal to make some extra cash while I was at college studying science and computers, and I met this guy who said 'why don't you go for training as a banksman?' I thought he meant working in a bank, but then he explained it was a bit like what I was doing already, only more skilled and more money, plus it was for the Olympics. So I went for my ticket and I got it. The banksman is responsible for the slinging and securing of loads that go into and out of the pit shaft. The crane man is blind, he can't see over the edge into the pit bottom, so you have to be his eyes, and produce signals that tell him exactly what to do. If the load isn't strapped right and properly balanced, if it goes down wrong and slips, then people could get hurt. It's a team effort. We have a solid gang – the craneman, the banksman on the surface, the pit boss below. On the site health and

safety is very strict because of the Olympics. It's quite different from India, where there are lots of accidents in construction. Still there they have eight-hour days, five days a week, whereas here it is twelve-hour shifts and you could be working seven nights in a row. That is bound to affect your concentration and can lead to accidents. When the tunnelling is over I want to stay on site and get a job in construction, because I live nearby in Newham. I feel that the Olympics is a big chance for us in Newham and also for my community, and we have a responsibility to make the most of it.

Pat Loughrane (crane driver)

You don't get Irish lads over any more. It's been prosperous there until recently, so they don't have to go abroad looking for work. A lot of them are going to college now and getting an education and they don't want to get their hands dirty. So that generation is going and now we are looking to the East Europeans. This town won't function without the East Europeans and all the other immigrants. They are hard workers. That's the way it is, that's the way it should be and that's the way it's always been in east London. It's great. We are all immigrants here. I'm an immigrant. The East End is where people come to get a start in life.

Les Mawson (grouter)

This new shift system we've got, seven days on, four off, it really ruins your social life. Because one week you may get only two days work and the next you'll be on nine shifts. It varies from month to month. It means you can't plan much ahead. And it could cause problems with budgeting. One week you may have a lot coming in and the next hardly anything. It's good for the lads from Manchester or Ireland, it means they can go home and see their families, but it's ruined my social life. I don't really have one at the moment. I think the only reason they brought it in is so they get more flexible working arrangements and save money. But there's no union, so there's not much we can do about it.



South shaft (Phil Cohen)

John Wild (Rigger)

None of the sites I've worked on have been unionised. Some of them are very dodgy as regards health and safety and they have very poor facilities. Like you need to be able to go and wash to get contaminants off your hands. But if you ask for toilets or washing facilities they regard you as a troublemaker and you don't get asked back. But on this site, because it's the Olympics, they are running a tight ship. I remember the UCATT strikes [[Union of Construction, Allied Trades and Technicians](#)]. I went to one of the meetings and asked them what was it about and they said, 'never mind, just put up your hand to vote for the strike'. I thought I can't be doing with this. As a driller you're your own boss. There's no-one on your back, and as long as you give them what they want they leave you alone. If you don't like the conditions on a job, you just move on to another site, not go whingeing to a shop steward. We're not usually on a site for more than a fortnight anyway. This Olympics job, eighteen months, is very unusual. Mind you when there's a recession, we're the first to get hit. No one is going to employ you.

Mark Pollard (pit boy)

I got the job through my dad. He's a loco driver and one day the pit boss was asking around if anyone knew someone looking for a job so my dad put me forward and here I am. The first day I was here it was a bit weird. There was an accident and someone got crushed when a load fell off the train. My job is to load up the train that goes to the face: the skips, the grout cart, the bogies that carry the concrete rings for the tunnel. I work with this other lad. We're skivvies really, we fetch and carry a lot of stuff for the pit boss. I was worried I'd get a lot of funny stuff from the men, stitching the new boy up, what with being the youngest there, but perhaps 'cos my dad was around, and there wasn't time, they left me alone. I enjoy the banter, but you have to be careful who you try it on with, because some of the men think it's disrespectful coming from a young kid. It's an old fashioned kind of job.

Bill Chappell (health and safety engineer)

It's like being the conscience of both management and workforce. On one side you have the managers saying 'we need this job done'. On the other the workers saying 'no way, it's too risky'. You're in the middle, and you have to do a balancing act. You have to put systems in place to reduce the risk to a level acceptable to the workforce, and you have to run the zone to ensure that the job gets done on time and the firm's profits don't suffer. I see my job as keeping the workers out of hospital and the management out of court. You have to look at the Olympic site as a disaster waiting to happen, and everyone on it as potentially acting with suicidal stupidity. The site itself is marshland, it's heavily contaminated, and because of the war it's a potential bomb site. If you don't get it right you could end with a dead body. My job is a bit like a goalkeeper's. If I keep a clean sheet, no-one notices I'm there. If I make a few spectacular saves, I get noticed and congratulated, but if I let in too many goals I lose my place in the team.

Martin McDonagh (miner)

Office workers look at us and just think hard hats, navvies... yeah they lump us all together but each one of us is different... you get all sorts down here, jokers, professors who think they know it all, piss artists, people who know how to handle a guitar as well as shovel... we look after each other and each one of us counts.

Peter Campbell (steel fixer and local resident)

I live in Stratford, but I don't think the Olympics is going to benefit ordinary working-class people. It's more likely to price us out of the area. I know this old woman, she lives in one of the council tower blocks overlooking the Olympic site and they're going to knock it down to ten storeys. She lives on the twelfth floor, so they moved her out, but they didn't find her anywhere local, they moved her to Mile End where she doesn't know anyone. All because of the Olympics. And if you walk round this site now and ask how many people come from round here, you'll be lucky to find a handful.

PC

Further Reading

Cohen, P. (2013) *On the Wrong Side of the Track: East London and the Post Olympics* London: Lawrence and Wishart (particularly chapter 5: 'In the Zone')

Encampments and Other Dwellings

This theme documents patterns of human settlement, habitation and home making, both transient and permanent, from the Bronze Age to the digital age and the impact they have had on the local environment.

The Covid 19 pandemic and the climate emergency has highlighted the centrality of our domestic arrangements and lifestyles for our chances of survival. Over the centuries, this site, now world famous as the once-upon-a-time home of the London 2012 Olympics, has provided a local habitation and a name, not just an address, but a source of identity and belonging for diverse human populations. For some it has offered a temporary refuge from the storms of history, a makeshift encampment amidst the ruins of previous lives. For others, this location has offered a dwelling space, a prospect and a stepping-stone to a better, more settled and secure existence.

Putting down roots can be a complicated long drawn-out affair, and in some ways humans can be less adaptable than plants and animals to a rapidly changing environment. The ecological niches established by local fauna and flora have proved remarkably resilient.

The inhabitants of the Bronze and Iron Age village would have made the most of the resources of the natural environment to maintain their subsistence economy yet remained vulnerable to vagaries of climate and disease. In the Middle Ages, when most of the site was still un-reclaimed marshland, the inhabitants were mainly farmers and millers, with a few roadside settlements around Stratford.

Fast forward to the Victorian period and we see rows of narrow terraced dwellings springing up to house the thousands of men, women and children who crowded in from the countryside to work in the new industries that were making east London the hub of Imperial trade. For many of these new city dwellers, allotments and back gardens provided important links to a less urban existence as well as providing fruit and vegetables for the table when times were hard.

A popular music hall song of the time gently pokes fun at the intense pride many east Londoners felt in cultivating their own little patch of Eden:

If you saw my little backyard/'Wot a pretty spot', you'd cry/It's a picture on a sunny summer day/Wiv the turnip tops and cabbages/Wot people doesn't buy/It makes it on a Sunday look all gay...

Oh! it really is a very pretty garden/And Chingford to the Eastward could be seen/Wiv a ladder and some glasses/You could see to 'Ackney Marshes/If it wasn't for the 'ouses in between.

(You can hear Tom Carradine perform [the full song here](#))

If industry was one compelling force in relocation, war brought a different kind of involuntary resident to the area. During the First World War Germans living in London found themselves interned in a camp in Stratford giving rise to its re-branding as 'Little Germany'. During the Second World War German prisoners of war were held in barracks nearby. A few POWs remained behind to marry local girls, and some became staunch supporters of West Ham United after being taken to watch a game at The Boleyn, the club's home ground since 1904 and a home from home to generations of Hammers fans, until the team moved to the refurbished Olympic Stadium.

For all too many of the area's comers and goers the attempts to settle have been disrupted by powerful economic forces beyond their control. The coming of the 2012 Olympics proved a mixed

blessing in this regard. Some local inhabitants who wanted to remain were forced to leave. The traveller's encampment on the edge of the site was demolished. So too was Clay's Lane Estate, a self-managed housing co-operative which provided cheap affordable housing for a community of students and young people. New accommodation was found, but the community itself was dispersed.

This important housing legacy is in danger of being forgotten as the Olympic regeneration effect takes hold and the market value of land and housing threatens to make the area uninhabitable for those on low incomes. The emergence of 'tent cities' on our streets, providing temporary accommodation for the homeless, is one sign of these new times.

However, 'gentrification' is not a new phenomenon in east London. When Daniel Defoe visited Stratford in 1722, he reported it had '...increased in buildings to a strange degree, within the compass of about 20 or 30 years past at the most...this increase is, generally speaking, of handsome large houses... being chiefly for the habitations of the richest citizens, such as either are able to keep two houses, one in the country, and one in the city; or for such citizens as being rich, and having left off trade, live altogether in these neighbouring villages, for the pleasure and health of the latter part of their days'.

Some, like the young mothers living in Carpenters Estate, have resisted these processes of displacement. Threatened with eviction and the demolition of their tower blocks, they occupied some of the empty houses on the estate and have since broadened their campaign to address issues of relevance for today's 'generation rent'.

The new student accommodation which has now been built in and around the Park means that the young and mobile will have a strong if transient residential presence, alongside the affluent globe trotters of the corporate economy housed in luxury apartments within the International Business Quarter. Today when only a privileged few can look forward to a job for life, and many lack the financial security to afford a permanent home, dwelling has become a much more precarious affair. In addition to its well-off 'floating population', Newham continues to host a 'sinking population' of people living precariously on the edge of poverty.

Fortunately, there are initiatives which buck these trends. The ex-Olympic village has brought together people on low incomes paying social rents, with more affluent residents paying full market rents but sharing the same level of accommodation and facilities; it is a bold social experiment which is attempting to create a more level playing field to empower a new generation of east Londoners to settle and build a community in keeping with the Olympic ideal and the legacy promise of 2012.

Another form of experiment in creating more inclusive kinds of urban habitat can be observed on summer evenings on the steps leading down from the bridge linking Westfield shopping centre to Stratford's indoor street market. Here hundreds of young people have taken to congregating and watching a parade of street entertainers. This impromptu amphitheatre has been called the Piccadilly Circus of east London.

With the advent of global warming, with flood and fire an increasingly ever-present hazard, temporary and easily moveable structures are likely to become an essential part of our future urban fabric. This is a branch of architecture pioneered in the UK. In this context it is perhaps worth remembering that the Olympics and Paralympics are a moveable feast and that many of the buildings put up for the 2012 Games were temporary, demountable structures, including, originally, the main Stadium itself. Perhaps this capacity to put up, take down and transport human habitats may yet prove to be the lasting legacy of London 2012.

Prehistoric settlement



A Neolithic handaxe discovered during the Olympic excavations by archaeologist Veysel Apaydin in 2008. (Jonathan Gardner, CC BY-NC 4.0)

People have lived on the banks of the River Lea for thousands of years. The river was filled with fish, while its floodplain attracted wild game and, later, provided fertile land for farming.

Though flint tools found further up the Lea Valley dated between 337,000–301,000 BC suggest forms of early human species lived here as early as the Lower Palaeolithic, there is little evidence for any such early settlement in Queen Elizabeth Olympic Park itself. It was only with the end of the last ice age (about 10,000 BC) that we can see more sustained signs of modern humans (*Homo sapiens*) settling here.

During the 2007-8 archaeological excavations, fragments of Mesolithic (c. 9,000–4000 BC) flint were found within the Park area, suggesting hunter gatherers were utilising the Lea Valley's supplies of fish and animals, and probably living in temporary campsites before moving on. Evidence for the first farmers (in the Neolithic period: 4000–2500 BC) – who would have lived in more established settlements – remains sparse, but a beautiful flint hand axe dated to this period was found under a car park during excavations on Stratford High Street in 2008 (pictured above).

The first clear evidence of houses being built in what is today Queen Elizabeth Olympic Park comes with the Middle Bronze Age (between 1500 and 1000 BC). At excavations undertaken south of today's London Aquatics Centre, the traces of several 'roundhouses' were found. These small circular buildings were located on a patch of dry land that rose above the flood plain which would have helped protect them from the worst of the River Lea's flooding.

This small settlement was rebuilt several times and the cattle, sheep and goat bones and burnt wheat grains that were found here, alongside ditches and field boundaries, show that farming was taking place. Archaeologists also found two human cremation urns here dating to the Late Bronze Age (1000–700 BC), showing that people were putting down roots and not simply passing through.



An Iron Age skeleton being excavated by an archaeologist in early 2008 on the site of the London Aquatics Centre. (© MOLA)

Occupation of this site continued on and off into the Iron Age. Four human skeletons were found buried here, all dating to the Middle Iron Age (400–100 BC). Intriguingly, a single goat burial was also found from this period. It is unusual to bury an animal that could have otherwise been used for food, so this would suggest that the goat had special significance. This was most likely to do with sacrifice or ritual but it's tempting to speculate that it might have instead been someone's beloved pet!

With the coming of the Roman invasion in 43 AD and the founding of London less than four miles to the southwest, this site was abandoned, although the wider surrounding area continued to be used for agricultural purposes.

JG

Augmented reality hotspot (video of on-site experience): the [Iron Age Village at the London Aquatics Centre](#)

Further reading

Powell, Andrew, 2012. *By River, Fields and Factories: the making of the Lower Lea valley: archaeological and cultural heritage investigations on the site of the London 2012 Olympic and Paralympic Games*. Salisbury: Wessex Archaeology: chapters 2–4 (see sections on ‘Trench 9’).

Symonds, Matthew. 2012. [The Archaeology of the Olympic Park - London’s first East Enders](#). *Current Archaeology* (269).

Living and working in the Lower Lea Valley before the Industrial Revolution

The Lower Lea Valley only became densely settled with the coming of the Industrial Revolution when the marshy land was drained and many new homes and businesses were built. But people had lived and worked here for centuries before this, drawn to the rich resources provided by the River Lea and surrounding land. The fertile marshland was an ideal place to grow crops and graze animals, and the area was also especially valued for the availability of water-power from the river and the wind power from the open marshes.

Several different water and windmills sprung up from the medieval period onwards, in what is today Queen Elizabeth Olympic Park. These were initially for grinding grain to make flour, but were also later used for making chemicals and gunpowder. At least eight watermills were recorded by the Domesday Book in the eleventh century, soon after the Norman Conquest, including at Temple Mills, and the Pudding Mill and Saynes Mill – these last two near to Stratford High Street. Windmills were also established here, including one close to today’s London Stadium at Nob’s Hill (the site of the boat discussed elsewhere in the guide) and others at St Thomas’ Mill (nearby to Pudding Mill DLR station) and at Stent’s Mill, near to today’s UCL East site and London Aquatics Centre. These windmills would have been used mainly for grinding corn into flour, but also provided extra power for times when river levels were too low for the watermills to work efficiently.

It is likely that people lived and worked very nearby to these early mills – for example, a cottage was built next to Nob’s Hill windmill and survived until the 1940s. With these isolated mills and cottages accompanied only by a few roadside pubs and the odd farm, compared to the growing city of London and its rapidly expanding East End, this place would have felt very rural until the late nineteenth century.

Most of the mills were knocked down by the late nineteenth century as steam power (and then electricity) took over, powering the Valley’s industries, but you can still visit a surviving water mill that was built in 1776 just to the south of the Park at Three Mills (the House Mill).

JG

Further reading

Powell, Andrew, 2012. *By River, Fields and Factories: the making of the Lower Lea valley: archaeological and cultural heritage investigations on the site of the London 2012 Olympic and Paralympic Games*. Salisbury: Wessex Archaeology: chapters 5 and 6.

Summary of excavations at Sayne’s Mill (2008): <https://www.mola.org.uk/blog/150-stratford-high-street>

Full article on Sayne's Mill: Wroe-Brown, Robin. et al. 2014. [Saynes Mill: excavation of a tide mill on the River Lea](#), London. *Post-Medieval Archaeology* 48(2): 357–387.

Defending London at Bully Fen



A 3.7-inch anti-aircraft gun, similar to those that were based at Bully Fen in the north of today's Queen Elizabeth Olympic Park (Public Domain)

Although a different kind of 'encampment' from the others discussed in this section, a small patch of land called Bully Fen (near today's Lee Valley VeloPark) did once house soldiers and civilians who were engaged in protecting London; first in the Second World War and then during the Cold War.

In 1938 four heavy anti-aircraft guns were built here in preparation for war, along with a magazine and cordite store. A 'gun-laying' radar was added in 1940 to help the guns find Luftwaffe bombers in the dark. A picture of similar 3.7-inch guns in their concrete octagonal pit can be seen above (this one was in Richmond Park). During the war these guns were said to be the first in London to shoot down bombers in 1940 and were later upgraded to a higher calibre to cope with V1 and V2 rocket attacks. Excavations during the preparations for the Olympic and Paralympic Games found the concrete bases of the guns and the buildings, as well as some of the soldiers' protective helmets.

Between 1953 and 1968 Bully Fen became a Civil Defence Corps training ground and was once again used for the defence of London, though this time it was run by civilian volunteers rather than soldiers. The Corps were set up by the Home Office in 1949 to counter the threat of nuclear war and the site was used to train volunteers to rescue and care for people in the aftermath of expected atomic bomb (and later, hydrogen bomb) attacks on the UK. An entire 'ruined' village was constructed at Bully Fen for volunteers to practice at 'saving' people from bombed-out rooms and to

learn how to dig out casualties from piles of rubble, while volunteer nurses and a welfare section provided first aid and field kitchens.

The training site initially reused roads and buildings from the anti-aircraft defences but later saw around 20 purpose-built 'ruined' structures erected. These included an array of mocked-up residential and industrial buildings, some of which reused real rubble, doors and furniture from buildings that had been bombed during the Second World War.

In an effort to increase recruitment, the site hosted open days and ran competitions between different London Boroughs' Civil Defence sections. These events drew volunteers and visitors from all over London. The Civil Defence Corps was ultimately disbanded by the government in the late 1960s and this site was demolished and filled in with soil after it was taken over by the Lee Valley Park Authority.

Further reading

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You can watch Pathé newsreel footage of the [Civil Defence Corps Training Ground in use in 1963](#)

Internment and Prisoner of War Camps



Stratford Camp Mess Hall (© Imperial War Museum and Newham Archives)

At the start of the First World War there was a growing fear that Germans living in Britain might become spies or agents for the enemy. In Stratford (amongst other places) German-owned shops were attacked by violent mobs. The government adopted an internment policy and eventually

24,000 German and Austrian men who were of military age were kept in guarded camps where they could be watched and protected from abuse, although the men concerned had committed no crime, and often had English wives and English children. Some had lived in Britain so long that they themselves had children serving on the frontline against the Germans.

The Stratford Camp housed up to 740 internees and was situated in the William Ritchie & Sons jute spinning factory on Carpenters Road. Conditions could be tough with confined living quarters, almost no privacy and vulnerability to aggression and violence from guards and fellow detainees. One internee described the Stratford Camp as a 'veritable hell'. Hostile crowds could gather around men leaving or entering the camp - 'they spat, they insulted, they jeered, they threw things' – recalled Mr Cohen-Porteim, a prisoner at Stratford. To relieve boredom gambling was common and the camp had a [small theatre and a piano](#) for internees to make their own entertainment. It closed in 1917.

In the Second World War another camp was established, this time for captured Prisoners of War (housing them became a major task, with more than 400,000 POWs in Britain by 1946). At its peak 1,500 prisoners were housed in Camp 30, and the inmates were forced to work on nearby farms, yards and public works. They lived in huts and buildings located near to what is now the London Aquatics Centre; we have struggled to find the exact location. An English Heritage report [camp list](#) gives a map reference close to the Arcelor Mittal Orbit but we feel this is too distant from Carpenters Road and this area was dominated by railway lines.

All prisoners were graded A, B or C for their political views and housed accordingly in segregated huts. The most hardcore Nazis were kept separate from others in a barracks in nearby Victoria Park. Prisoners were taught English and underwent 're-education' and assessment before they could be repatriated.

After the war, the relationship with local people seemed better compared to the earlier camp; prisoners visited West Ham Football Club and prisoners played football against local club sides. Their orchestra was invited to give a recital in nearby Leyton Public Gardens and some prisoners were taken to council meetings in Chingford, presumably to see local democracy in action. They were also given access to newspapers and radio to learn about the outside world.

The camp didn't close until 1948. Many prisoners resented being held long after the war was over, but some were considered extremely high-risk, and for many prisoners return home was both difficult and dangerous as so much of Germany was now occupied by Soviet troops.

TB

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Allotments of Eton Manor



Eton Manor Allotments, 1920 (The Bishopsgate Institute)



Manor Allotments (Juliet Davis 2006)

Although they were not an encampment in the usual sense of the word, the Manor Garden Allotments which occupied a spit of land between the Lea and Channelsea Rivers certainly

resembled temporary living quarters, and to an extent functioned as such. The gardens accommodated eighty plots, tended by members of an ethnically, culturally and socioeconomically diverse and intergenerational community, some members of which had gardened there since their childhood, some as far back as the 1920s. Typically each plot included a tool shed, along with raised bed and trellises of various sorts for growing food, although some sheds accommodated far more than tools – tables and chairs, pictures, rudimentary cooking equipment, pots, kettles and pans. The elements of each plot were often assembled from off-cut or salvaged, repurposed materials – for example second-hand floorboards, old doors and sash windows, electrical cables and milk bottles – to produce a creatively ad-hoc environment within which no two plots were the same.

The gardens were established by the aristocrat and philanthropist Major Arthur Villiers in 1924. At the time, allotments provided important means for deprived families to supplement their incomes by growing their own food, and this was also seen as a wholesome activity for the poor. A veteran of the First World War, Villiers was a son of the Earl of Jersey, a director of Barings Bank, and an Eton College Old Boy.

This was a part of London's fringes in which this elite public school had taken an interest for some time, first funding a mission outpost in Hackney Wick, informed by the religious and political philosophy of Christian Socialism, in 1883. Sport quickly became a key focus of the programme of educational and moralising activities which the Mission established for 'rough boys'. In 1909, along with several other Old Etonians, Villiers had played a lead role in the establishment of a clubhouse for 14–18-year-olds as an offshoot of the mission which led to the proliferation of clubs connected to different sports including rowing, swimming and football. After the War, he extended the facility by purchasing 30 acres of a former ballast pit which had once formed part of the landholding of a medieval Manor known as Chobhams (the site of today's legacy community, Chobham Manor) to form the Eton Manor sports ground. A slice of this land became the allotments. The area was known as 'The Wilderness' and was a focus for training, skill-building and sporting contests up until the 1960s.

As well as hosting games locally, the activities of Eton Manor included the organisation of numerous camps, including the annual members' camps at Cuckoo Weir on the River Thames at Eton. These gave young people a flavour of life outside east London while also serving to build team spirit and a sense of loyalty and community.

JD

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Gypsy and Traveller Encampments and Decampments



Romany Gypsies on Hackney Marshes ([Hackney Archives](#))



Hackney Marshes, 1973 (Helmut Zozmann, 1973 / cc-by-sa/2.0)

Before the Olympics, there were two council-run sites for Gypsies and Travellers. The Clay's Lane Estate Traveller site, which was in Newham, was established after the Caravan Sites Act of 1968 mandated local authorities to designate lands for travelling groups in their areas. The Waterden Crescent site in Hackney was formed in response to the same legislation although later, in the early 1990s. Under the flyover of the A12, there was a third, unofficial encampment of a few caravans which sheltered under the dual carriageway beside the River Lea, eventually moving on in 2007.



Waterden Crescent, 2005 (Juliet Davis)

The Clays Lane site provided fifteen pitches while Waterden Crescent provided twenty, each typically associated with a family. Many of the families that occupied them had been settled there since the beginning, living in a mix of mobile homes and bungalows. By the turn of the twenty-first century, travelling for these groups was limited to the holidays, when the sites would temporarily hollow out as the families decamped for fine weather at the coast.

But the communities were quite different from one another. The Clays Lane group was of Roma Gypsy descent, very possibly with longstanding links to the Lea Valley through patterns of seasonal work, historic routes across the Thames into Hertfordshire and

established temporary dwelling grounds. In contrast, the Waterden Crescent families were of Irish Traveller descent, arriving homeless in England in the 1980s.

The Lea Valley has been associated with travelling communities for as long as five centuries. Once, they gravitated to the common lands of Hackney, Walthamstow, Leyton and Tottenham Marshes, where they could park caravans, graze horses and pitch canvas tents. Much of the green space associated with these lands survived the expansion of London in the nineteenth and twentieth centuries but fell under different rules of occupancy as Metropolitan Open Land. Indeed, it was the steadily accruing impacts of the enclosure of common lands and of other rules governing itinerant ways of life across the UK that created the context for the 1968 Act.

In 2007, after protracted negotiations including a hearing at London's High Court, the Clays Lane community was resettled on a single site while the Waterden Crescent community was divided across three small sites. All sites were more closely integrated spatially with other London residential communities than the Lea Valley sites had been. The new accommodation, designed with community involvement, included both homes and pitches to reflect the preferences of individual families. As built, all sites reflect a further shift in terms of the traditions of Gypsy and Traveller dwelling from encampment to lasting settlement and fixed abode.

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Clays Lane Housing Cooperative



The Clays Lane complex (C. Syrett, [Bishopsgate Library](#))

The Clays Lane Housing Cooperative began life in 1977 on the site of former allotments, industries and a playing field, squeezed between a freightliner terminal and the Eastway Cycle Circuit. Initially funded by Newham Council, the University of East London, The Society for Cooperative Dwellings and the Housing Corporation, it was later managed as an independent cooperative housing association. It provided its members with an attractive combination of low-cost housing and the possibility of self-governance.

The housing was purpose-built for single people and was an experiment in design aimed at fostering social interaction and cultivating mutual support networks. It consisted of 50 self-contained dwelling units and a further 57 six to ten-bed shared houses. These were distributed around a series of ten courtyards, with access to each home provided off these spaces. The courtyards were each named after a key figure in the foundation of the UK's Cooperative Movement. They operated as units within the cooperative's governance structure, each having a representative who sat on the estate's management board.

As well as offering access to the homes, the courtyards included seating and gardens which were a focus for communal life and activity. Living rooms and kitchens were positioned in each home to face the courtyards, becoming thresholds spaces between fully communal activity and private life. The complex also included a community centre, café and shop which were additions formed in 1984. According to one former resident interviewed by Juliet Davis in 2008, because of its location, the estate was 'a kind of island,' but one which 'had created connections within itself' that distinguished its sense of community from many other housing estates.

As with all housing associations, the cooperative was overseen by the Housing Corporation. In 2000, the Housing Corporation instigated a statutory inquiry into the management of Clays Lane. The result was a report by the Audit Commission outlining a series of issues of building management and governance. Its final recommendation was that, in order to address its findings, the housing should be transferred to the Peabody Trust. Clays Lane Housing Cooperative appealed against this as it would lose its mutual status, with implications for local participatory democracy. The Housing Corporation rejected its proposal and the transfer eventually went ahead in 2005. Clays Lane Estate as it was now known was subsequently managed by the Waltham Forest Community Based Housing Association but only for a short time as, by 2005, demolition and relocation options were being actively pursued by the London Development Agency.

By July 2007, all 430 residents had received orders to leave and move on, resulting in the dispersal of the community across London rather than as a community in the manner that many residents favoured. For many, these evictions appeared to starkly contradict the notion that the Olympics would lead to the development of sustainable communities in the manner claimed by government and planner. The vacated Estate was demolished in September 2007.

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Edgelands made and re-made

This theme looks at the many ways the site and its inhabitants both human and non-human, have been transformed as it is excavated, engineered, polluted, demolished and re-built.

The opening sequence of the opening ceremony of the London 2012 Olympics featured a pastoral scene complete with sheep, Maypole dancing and a cricket match. This romantic vision of England's Once Green and Pleasant Land was rudely interrupted by the 'peasants' literally removing the common ground from under their feet, in a do-it yourself version of the eighteenth-century enclosure movement and then being herded into mines, mills, foundries and factories.

In reality, commons, or 'lammas lands', as they were called, with their customary rights to pasture persisted in certain areas, especially those located on the edge of urban developments. Agricultural uses and lammas lands persisted in places long after London had swelled well beyond its border into Essex. As late as 2007, some of these territories became the focus of campaigns by local residents opposed to the loss of amenity in the plans for the 2012 Olympics site.

At that time, just before the site was cleared, it was made up of a rich mix of other sorts of edgelands, both economic and ecological. Scrap metal yards, car repair workshops, small family run enterprises, many of them part of east London's informal economy dotted the landscape, while all manner of wildlife flourished in the interstices, making it a favoured destination of local naturalists.

In this segment of our story we are going to trace how these edgelands were made and remade. from the practice of common ground-making to the compost-enriching of soil for allotments, from the reclaiming of marshy ground to its in-filling from the building materials waste left over from the bomb damage, from traditional landfill to the creation of fridge mountains.

Underlying these developments is the continual use of the Lea River to mark boundaries both social and jurisdictional. For centuries, the River was a county boundary and also marked the limits of parishes and estates, their common lands extending into the marsh. It marked the eastern edge of the jurisdiction of London's first government from 1855-1889, and of the County of London from 1889-1965. On the formation of Greater London in 1965, aimed at containing the city's spillage over its boundaries, it remained as a limit between Inner and Outer London boroughs.

These evolving boundaries shaped the transformation of the area around Stratford in significant ways. The Metropolitan Buildings Act of 1844 meant that noxious and dangerous industry could not be located within 50 feet of other buildings, ensuring their re-location to the outskirts of London. It was east London's historical status as an edgeland which enabled Stratford and its environs to become an engine of the city's economic growth, linked to the docks and railways, and a major hub of its trade with the rest of the world. Fast forward to the 1980s, however and it was its carefully engineered status as a de-industrialised edgeland that enabled it to become the focus of a regeneration strategy that pivoted on its transformation into the main site for the 2012 Games bid.

This move was the culmination of the shift in London's economic centre of gravity and growth from west to east which begun with the building of a new financial quarter in Canary Wharf, the site of the old West India Docks in the 1980s. The historical reputation of east London as a dangerous and unruly edgeland gave way to a new image of fashionable, and safely consumable, edginess.

This pattern – of what appears to be marginal, generating a powerful dynamic of more-than-local change – is a connecting thread in the site's material history. It is present in the great engineering works of Brunel, and the tunnelling works under the site carried out as part of the Demolish, Dig,

Design phase of Queen Elizabeth Olympic Park's construction. It is there in the negative impact of industrial pollution on the local population of plants and animals, and on human health; and it is evident in the environmental impact of the site's waste management strategies as these developed in the twentieth century.

Today with the evolution of east London's response to the global climate emergency, a more positive outcome might yet be possible. Perhaps we will see urban farming developing on the Park, supplying locally sourced fruit and vegetables to the population, as well as being host to bio-tech industry as it pioneers advances in medical and environmental science? In fact, one of the original 2012 legacy plans was for the building of a Science Park. Might University College London, which is establishing a new campus on the site, become an intellectual leading edge in the transition to a green economy which works for the many, and not just the few?

A common landscape



Hackney Marshes, 1920 (Courtesy of the Eton Manor Archive, Bishopsgate Institute)



Hackney Marshes (Juliet Davis, 2009)

Before industry came to the Lower Lea Valley, its meadows and marshes were shaped for centuries by agriculture and grazing. Surviving pre-nineteenth century accounts portray the valley as moist and green, providing ample food for livestock. From as far back as the 9th century in the reign of Alfred the Great, large tracts were common lands associated with local parishes and Manors. East Marsh along with the wide expanse of the Hackney Marshes beside it fell into this category. They were of a particular sort of common land known as Lammas Lands, and were part of the Hackney Manor of Lordshold.

Lammas was the day that marked midsummer and the beginning of the harvest in the Celtic calendar. After 1752, when the Julian calendar was replaced with the Gregorian calendar which we use to this day, Lammas Day was designated as 12th August. Between this date and the date used to mark the Feast of the Annunciation in the Christian calendar, Lady Day, on 25th March, commoners used the open marshes to pasture their animals. But from Lady Day until Lammas, the landscape transformed dramatically as they were able to subdivide the marshes according to their tenancies with stakes. These set out a series of narrow strips of land in which they could cultivate arable crops. The seasonal formation of the landscape by commoners, in other words, was deeply interwoven with customs associated with land ownership, religion, class and food production under feudalism.



Hackney Marshes and East Marsh Lammas Lands located (in pale green) amid the field patterns and routes through the landscape in 1800 (Juliet Davis, 2009)

Hackney Marshes and East Marsh survived as Lammas lands until the late nineteenth century, even as industry and workers' housing developed all around, as the villages of Hackney, Bow and Homerton were absorbed into London, and as manors such as Lordshold were gradually divided and sold off piece by piece. At least in part, fierce defence of customs and rights on the part of the commoners of Homerton and Hackney were key to this survival. This included resisting all incursions onto their lands by trespassers, even travellers seeking pasture for their horses or setting up seasonal fairs. Not far away in the commons of Leyton Marshes in 1892, commoners resisted the encroachment of the East London Water Company on their territory, suggesting acute awareness in the Valley of the politics of enclosure in Britain and the significance of lost rights to land for ordinary people in Britain's capitalist economy.

At last, in 1894, the 337 acres of the Hackney Marshes were acquired by the London County Council by purchasing the landowner's interest and the commoners' rights for £75,000. Thus began their transformation by the local State after more than 900 years into a recreational landscape as metropolitan open land. But many locals appear to have remained disgruntled, *The Morning Post* of July 23rd 1894 claiming that 'the proceedings were somewhat marred by the hostile attitude of a section of the crowd.'

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Impacts of industrial pollution



The Clarnico Works, Hackney Wick, 1921 (Historic England Aerofilms Collection)

The middle of the 1800s to the late 1960s was a century of soot. Tens of thousands of chimneys, both industrial and domestic, poured out smoke into the urban atmosphere, darkening the skies, coating every surface and releasing deadly loads of sulphur dioxide. So dense was the concentration that it sometimes produced the phenomena known as 'smogs' or 'pea-soupers', thick, sickly yellow

fogs reducing visibility to just a few yards and causing innumerable deaths through respiratory complaints.

The effect on plant life was also dramatic. The layers of smoke reduced light levels, with winter sunshine dipping by as much as 50 per cent, slowing plant growth, killing off most urban conifers and causing deciduous trees to shed their leaves earlier in the season. More significant still were the effects of airborne pollution, with sulphur dioxide having a toxic effect on plants. Tree growth slowed or ceased and many of the most familiar species of tree remaining on our streets today are those which were best adapted to resist this onslaught; poplar, plane, ash and sycamore.

At the other end of the scale are the lichens; small, crusty growths commonly found on walls, roofs, pavements and the bark of trees. Small though they are, they have a scientific significance and have been used to map and measure levels of airborne pollution. In the period up to the 1960s, they were reduced to just a few surviving species in London, giving rise to what was known as a 'lichen desert'. Those few that did survive were largely of exotic origin; species that had initially evolved, for example, around places like sulphur springs.

The smoke and smogs also had a detrimental effect on insects and other invertebrates, reducing the numbers, especially of species like ladybirds. The loss of invertebrates led to a reduction in the numbers of urban bats and of insect-eating birds, such as swifts and house martins. One other impact of pollution on insect populations has been much discussed as it is thought to represent evolution in action. Common in urban areas, the Peppered moth is whitish but sprinkled with darker dots, its colouration providing a camouflage against the bark of trees on which it rests. Sometimes however it produces a form that is almost black and as the bark of trees darkened with soot from industrial smoke, it was noted that the camouflage of the white form was no longer effective and that the darker form was becoming more and more common. A similar effect was noted with other insect species.

Airborne pollution would always have been particularly bad in the East End of London, including Stratford. The prevailing winds in this country are from the west, blowing the smog and the pollutants eastwards. For this reason, the smelliest and most 'noxious' industries were banned from the City of London and concentrated here on its eastern borders. Even before the Industrial Revolution the area was a centre for slaughterhouses, fat renders, bone yards, tile kilns and potteries, and later for factories, car breakers, chemical works and refineries. As well as atmospheric impacts this was to lead to very high levels of soil pollution, with high concentrations of copper, zinc, boron and, most of all, lead. This is particularly destructive of the micro-organisms in the soil, which form the basis of the web of life, reducing their quantities by as much as 50 per cent and for decades to come. When the Olympic site was being prepared, thousands of tons of chemically polluted soils had to be removed from the site.

Chemical works that settled in the Stratford area in the nineteenth century were makers of the landscape not just as they led to the development of London's industrial borderlands, but also as a result of the contaminants they left behind in soils and water. Chemical manufacturing began in the area in the 1840s, and they became an important focus for development in the area just north of the High Street between Bow and Stratford. Here these industries benefitted from proximity to road and rail infrastructure, as well as to rivers and water. Products made here included sulphuric acid, pharmaceuticals, perfumery and flavour chemicals, explosives and matches, paint, varnish, dye and printing inks, and the refining of mineral oil and tar.

Crown Chemical Works

One such firm was the Crown Chemical Works on Marshgate Lane. Established in 1863 by a T.D. Scott and Co., by the 1920s, it made a range of chemicals for largely pharmaceutical, agricultural and cleaning purposes including mineral acids, phosphoric acid, acetic acid, arsenic acid, phosphorous, 'Crown' brand 'Sulphur Flowers' and 'Liver of Sulphur'.

The social researcher Charles Booth visited the Crown Chemical Works in 1893 as part of his broad study of trades, industries and the related life of people in London at the end of the nineteenth century. As described in Volume 6 of the *Life and Labour of the People in London*, Chemical industry work was typically strenuous, dangerous, poorly paid and relatively unskilled. This was true at the Crown Chemical Works where he observed a chemical worker manning a 'salt cake furnace' that emitted unhealthy and 'disagreeable' gases and odours. 'The furnace,' he notes, 'was in an open shed, simply roofed over but nevertheless whenever the door was opened either to rake out the stuff or for some other reasons, very pungent fumes came out and for a few moments at least this man was compelled to inhale them to some degree.'¹

Workers at the plant included ordinary labourers such as this man, several foremen or 'gaffers', a carman who took care of wagons and horses, a cooper (who, he noted, was 'half-drunk') and a managing chemist. Except for the trained chemist, the work was 'not very skilled', wrote Booth, though it was regular as demand for chemicals was relatively constant throughout the year, peaking in the summer months. There were no union members among the employees reflecting a wider lack of political organisation among workers in the chemical industry at the time. He saw the harshness of the work reflected in the appearance of the foreman he spoke to noting that 'he said he was 45! He was already much grizzled so that he looked over 50.' Workers were also seen to take advantage of the proximity of a public house, well positioned at the very end of Marshgate Lane to collect up tired workers, 'especially on Saturday evenings.'

Crown Chemical Works ceased operations in the 1930s. Products manufactured by Crown were present in the ground in the vicinity of Marshgate Lane however in 2014. This included arsenic, long-term exposure to which can be very harmful to humans.

Hemingway and Co.

Another polluting chemical works in the area was Hemingway and Co at 28 Marshgate Lane, north of the Crown Chemical Works and close to the site of today's Olympic Stadium. Established in the early 1870s, this was a manufacturer of dyes, fungicides, herbicides insecticides, the former of which were used in a range of other industrial processes. The chemicals it made over its period in operation were varied, including Arsenic Acid, Arsenic Metal, Calcium Arsenate, Copper Arsenate and Copper Oxy Chloride (Paste Powder), Kuprokyl (Copper Fungicide), Lead Arsenate (Powder Paste Colloidal), Lead Nitrate, Orpiment, Paris Green, London Purple, Sodium Arsenite, and a series of rare earth chemicals including Thorium Oxide (which is radioactive).

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As with the Crown Chemical Works, Charles Booth visited this factory in 1893. He noted that, at the time, its main colour product was red, made from oxide of iron. He also concentrated on the production of the insecticide power known as 'London Purple,' which contained arsenic. This was exported to America from the 1870s where it was used to kill a range of leaf-eating insects including the 'potato bug.' Exposure to oxide of iron in the colour works was associated with respiratory conditions and fever while London Purple carried a series of severe health implications given not only the arsenic content but also the way the product was manufactured. Booth described how, when the 'product is dried or ground, the air is filled with particles' which workers inhaled, settling in their lungs and affecting life-expectancy.² Danger seems to have been recognised though with meagre financial recompense as every cask of the product produced and packed gave 'to those men who had a hand in working it' an additional penny on their regular wages. As elsewhere in the chemical industry at the time, work was hard, Booth noting that one worker he interviewed did a regular 90-95 hours of labour a week.

Hemingway and Co. ceased operations in Stratford in the 1960s. As with the other chemical industries in the area, the ground where Hemingway and Co. stood was found to be heavily contaminated, forming part of the soil remediation programme carried out by the London Development Agency in 2007-2008. There is some suggestion that contaminants from the works

may also have ended up in West Ham tip, which was positioned beneath today's Velodrome up until 1974. This may have included radioactive waste from the uses of Thorium in the post-War period.

Since the decline of heavy industry in London and the Clean Air Acts of the late 1960s, levels of sulphur dioxide in London have decreased by nearly 90 per cent. Many plants have been able to stage a come-back and this has been particularly obvious in the case of ferns. Species like Maidenhair spleenwort, Black spleenwort, Wall rue and Polypody, which once grew on urban walls, had almost completely disappeared from London. Now they have made a rapid and striking recovery, providing a very visible symbol of the decrease of sulphur pollution.

Where one form of pollution has declined, however, another has increased. While heavy industry and coal-burning fires have virtually disappeared, road traffic has increased dramatically. Cars, as well as lorries and vans, are, in effect, the new chimneys, pouring out not sulphur dioxide but nitrous oxides and particulates, including lead and heavy metals. Some plants are changing their habits of growth as a result of this, and it is, once again, the lichen that are showing an impact. The species that were able to survive the sulphur pollution are now being replaced by another very limited group that can withstand high levels of nitrogen. It is the invertebrates, however, that are causing the greatest concern with overall numbers in free-fall and many species, including urban butterflies and many of our vital pollinators, under threat. With the loss of our insects we are continuing to lose the birds that depend on them. Among many of our commonest species numbers are still declining. They include blackbirds, starlings, swifts, house martins and even our familiar sparrows, once the very emblem of life in the city.

BG and JG

1. Booth, C 1893 'Interview with Mr Johnson, Crown Chemical Works, Marshgate Lane, Stratford' in *Survey Notebook B93*, 61-62
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Biodiversity of the pre-Olympic and the current site



Wild Verges (Juliet Davis, 2007)

The 2012 London Olympics, it was proclaimed, would be ‘the greenest Olympics ever’, transforming an area of ‘neglected and contaminated land’ into a stunning new park and an ‘outstanding aesthetic experience’. This ‘ribbon of gold’ would be planted with 4,000 trees, 150,000 perennials and 15,000 square metres of lawn. Better still, said the horticulturalists, it would be ‘driven by biodiversity and sustainability objectives’, with an area the size of ten football pitches being sown with wild flowers and accompanied by the erection of bird and bat boxes and the creation of new wetland habitat.

The idea that the area, pre-Olympics, was merely ‘neglected and contaminated land’ was key to the development of the site. Its depiction as a sort of derelict zombie wasteland was used to justify the huge scale of compulsory purchase and the wholesale dislocation of the existing community. The same thinking was applied to the biodiversity of the site which was regarded as virtually zero. In fact the pre-Olympic Lower Lea had at least two significant habitats, both of which were lost as the site was developed.

The first was the tidal nature of the river itself. The mudbanks of the complex of channels that constitute the ‘Bow Back Rivers’, daily revealed as the tide rose and fell, supported a wealth of

wildlife including molluscs, burrowing worms and a multiplicity of insect species. These, in turn provided a rich source of food for fish, birds and bats. A key element of the Olympic development, with the help of a £21.5 million new lock, was to dam the river at Three Mills. Above this point it became no longer tidal; more suitable perhaps for luxury riverside living and expensive marinas, but no longer a resource for biodiversity.

Even less appreciated as a natural resource was the complex patchwork of factory yards, small enterprises, railway embankments, allotments and brownfield sites that made up the area. Far from being ecological deserts, such post-industrial sites are rich in biodiversity with a mass of flowering plants such as goat's rue, common and purple toadflax, white and yellow melilot, tansy and everlasting pea. Brownfield sites actually support 15 per cent of all our scarcest insect species, as well as the black redstart, one of our rarest birds.

What then was the overall biodiversity impact of the development of the Park? Since no systematic studies to compare pre- and post-development were conducted, it is impossible to quantify exactly. On the plus side, the construction of new wetland habitats, particularly those just south of the Timber Lodge, have provided a new resource for wildlife. The Park also has a [biodiversity action plan](#) which includes sympathetic land management, for example meadows are cut on rotation to ensure over-wintering habitat is always available, and some of the grasslands receive a spring cut too, with the aim of creating a mosaic of habitat to help bees and other insects through the seasons. A variety of bees (as well as other invertebrates) have been identified. Fifteen [bat detectors](#) were installed by researchers to record and [map sonic bat activity](#) in the Park. Next to the Stadium and along the Greenway, the large scabious mining bee and hairy-legged mining bee have been recorded and the brown-banded carder bee has also been found on the Here East Green roof and North Park meadows. The Park also has a mix of native and ornamental planting areas across ten different soil types to encourage a variety of other fauna and flora.

Elsewhere, the news is not so good. Among other effects, the damming of the Lea will almost certainly reduce stocks of native fish species which depend on migrating up and down the river. Although the new lock was fitted with a 'fish gate', this is very different to the free passage of large numbers of estuarine fish. According to the newsletter of the London Natural History Society, early surveys showed a big decline in their numbers, while a walk up the river will sometimes reveal the presence of numbers of Crucian or Mirror carp; exotic, introduced, leisure species which do away with many other forms of wildlife. Other surveys reported in the same newsletter showed a decline in the number of bats – despite the erection of those bat boxes. A survey along the river in 2006, before the development, detected 36 'passes' by bats of six species. By 2012 this had reduced to 11 passes by five species, and in 2013, just 6 passes by 2 species.

Much was made in the publicity for the Park of the creation of the wild-flower meadows. What should be remembered is that this is just as much a form of gardening as formal, herbaceous borders, introducing species from outside the area which require intensive year on year maintenance to retain the same look. Huge levels of investment went into ensuring that the 'wildflower' meadows looked their very best for the games, but such a look is hard to sustain, and it is highly unlikely that the same levels of spending will be continued. More important, however, is the loss of the local. The creation of the meadows in the imaginary image of some lost English countryside, actually involved removing all the plants that already thrived in the area. Among these, the Danewort, or Dwarf elder, was iconic; a scarce species that had colonised the Stratford marshes but which was bulldozed out for the creation of managed 'wild' meadows.

Queen Elizabeth Olympic Park, overall, can be seen as a carefully controlled and managed concept of 'wildlife' imposed on the chaotically creative pre-existing one. Ecology is a long-term business, and it will be some time before we can properly evaluate the overall gains and losses of the site. One thing, however, is certain. With the continued growth of new residential development, greater pressures of usage, with the related increase in light and noise pollution, the continuing impacts on the biodiversity of the area can only be negative.

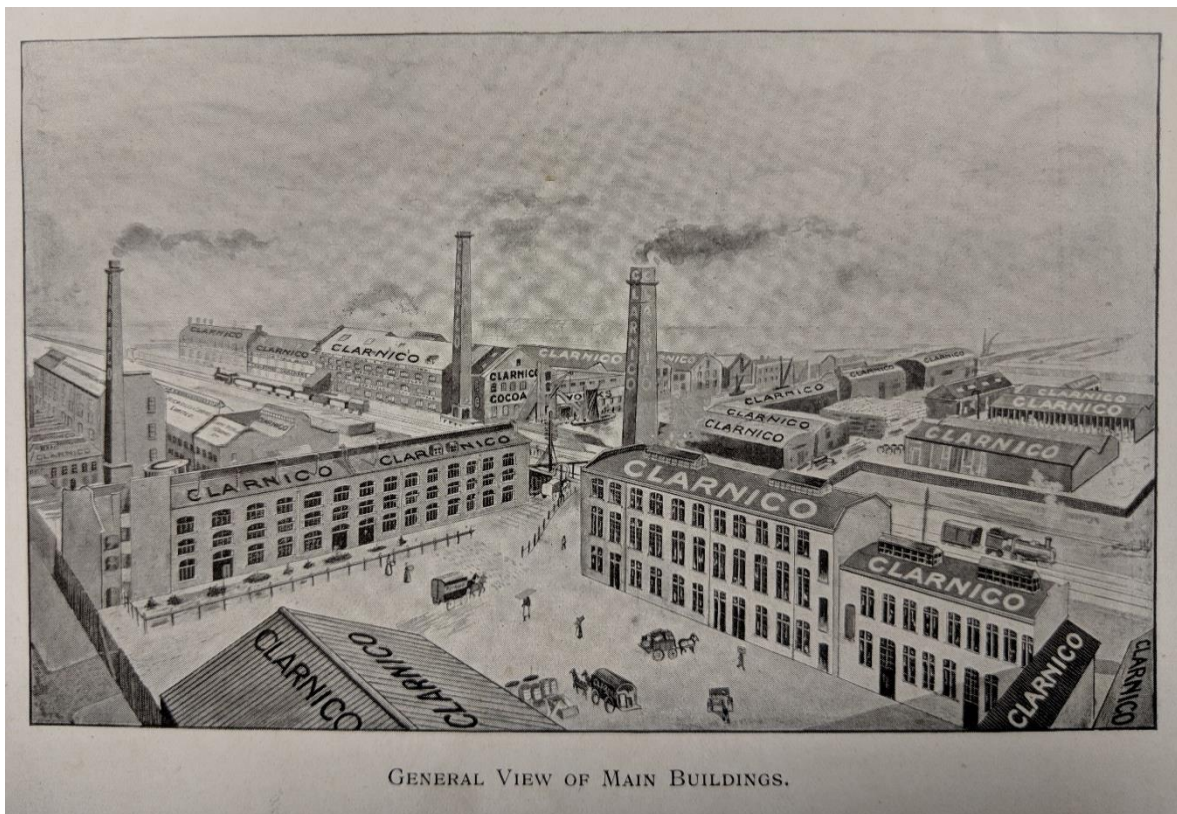
BG

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Clarnico Sweet Factory



General view of the main buildings, (Clarke, *Clarnico Specialities: Illustrated* Nicholls and Combs Ltd (1906))

If you walked along the canal in the early twentieth century you would have been able to smell chocolate, strawberry and peppermint – the smellscape of industrial east London wasn't all bad. The

Clarnico sweet factory was a huge complex of buildings with three big chimneys. Between the wars, Clarnico was the largest sugar confectionery company in Britain. On the canal bank furthest from Queen Elizabeth Olympic Park was the chocolate factory, and the barges delivered cocoa beans, sugar and fruit. Other works made liquorice, jam, jellies and lozenges. According to the export prices list, over 700 different varieties of sweets were produced and shipped all over the world. The sweet names were wonderfully evocative and exotic: Nutty Nougat, Paradise Fruits, Parma Violets, Parrot Eggs, Turkish Delight, Mint Creams, Indian Pearls, Chinese Pig Tails, New Colonial Fruits and Dolly's Musical Bottles.



Sweet selections (Clarke, *Clarnico Specialities: Illustrated* Nicholls and Coombs Ltd (1906))

The name Clarnico was a contraction of the founder's names, Clarke, Nicolls and Coombs, who established their first factory here in 1872. They paid a Swiss chocolatier, Karl Layh, to provide them with instructions on how to make chocolates on a large scale. Layh also recommended ways to keep their recipes secret, like having fake thermometers showing the wrong cooking temperature or keeping locked in the office a stock of vanilla essence, labelled as 'secret ingredient' to add to the mixture.

The business grew to employ over 2,500 people, and almost all of them were girls and women. The work could be hot, particularly boiling sugar in big pans or jelly melting, or repetitive with the sweet wrapping, decorating and chocolate box packing tasks that were all done by hand. Staff suggestion forms from 1935-42 included requests to add lights to the darkest offices, how to better dispose of waste so not to attract vermin, and a complaint that girls emptying buckets of dirty water in the river not only risked their lives doing so, but also made the company look bad to visitors. A local school

group visiting the new factory in 1959 was struck by the amount of manual labour still done by staff members; they observed men carrying sacks of sugar on their backs all day and others moving gigantic slabs of toffee without the help of any machinery.



A ROOM IN THE CARAMEL DEPARTMENT.

A room in the Caramel Department (Clarke, *Clarnico Specialities: Illustrated* Nicholls and Combs Ltd (1906))

But in several respects Clarnico was a progressive employer and there were several perks; workers who dealt with molten chocolate took home any accidental spillages on their aprons, which [oral history accounts](#) tell us could be taken home and peeled off in chunks. Better still workers with satisfactory work records were annually given a share of the profits, paid in April and given out in a ceremony at the People's Palace in Mile End; the Works band played, and the choir sang songs while the workers queued up for their money. The profit-share scheme was established in 1890 and was almost unheard of; a journalist in the magazine *Truth* wrote about Clarnico: 'The whole great enterprise has an interest to anyone interested in social movements very much greater than could be claimed by any purely commercial concern, however excellent and worthy'. In addition, when women got married, they would be eligible for a £5 dowry to help set up home and the company also paid £5 funeral expenses for long-term employees, and the firm was one of the first to introduce non-contributory pensions.

Employees could also have a full social life through work, and Clarnico often organised dancing nights including cabaret and musical shows. The firm encouraged all sorts of activities. The Clarnico Fire Brigade constituted of more than 100 military-trained employees and served the surrounding four boroughs. The Clarnico Brass Band was well known, playing locally at concerts in halls and public parks (the Band was only open to male employees). It received international recognition, playing in France and Belgium at Clarnico's expense. The company was so proud of their success that the company gifted them all silver-plated instruments. A choir was founded later, in 1902, which was also open to women. It counted 200 voices and won several prizes in borough competitions. Practice was held every Tuesday after work.

The confectionary works were badly bombed in the war, but it was rebuilt and was in operation until 1973. The firm was slow to mechanise and after making a loss was sold to Trebor for £900,000 in

1969. Trebor discontinued all but the most famous products like Clarnico Mint Creams and soon moved production outside London. Some of the works buildings were demolished but a few remain, like the old Kings Yard starch factory which became part of a biomass power station for the Olympics. The old recipe books were acquired by Mr. Alexander Horn, one of the senior managers of the company; they were inherited by his son George and subsequently donated to Newham Archives. Most of the recipes are hand-written and very difficult to read, but they are there to decipher should you wish to try your hand at Clarnico sweet making.

TB (drawing on extensive research from the project volunteers)

Augmented reality hotspot (video of on-site experience): [Clarnico Sweet Factory](#)

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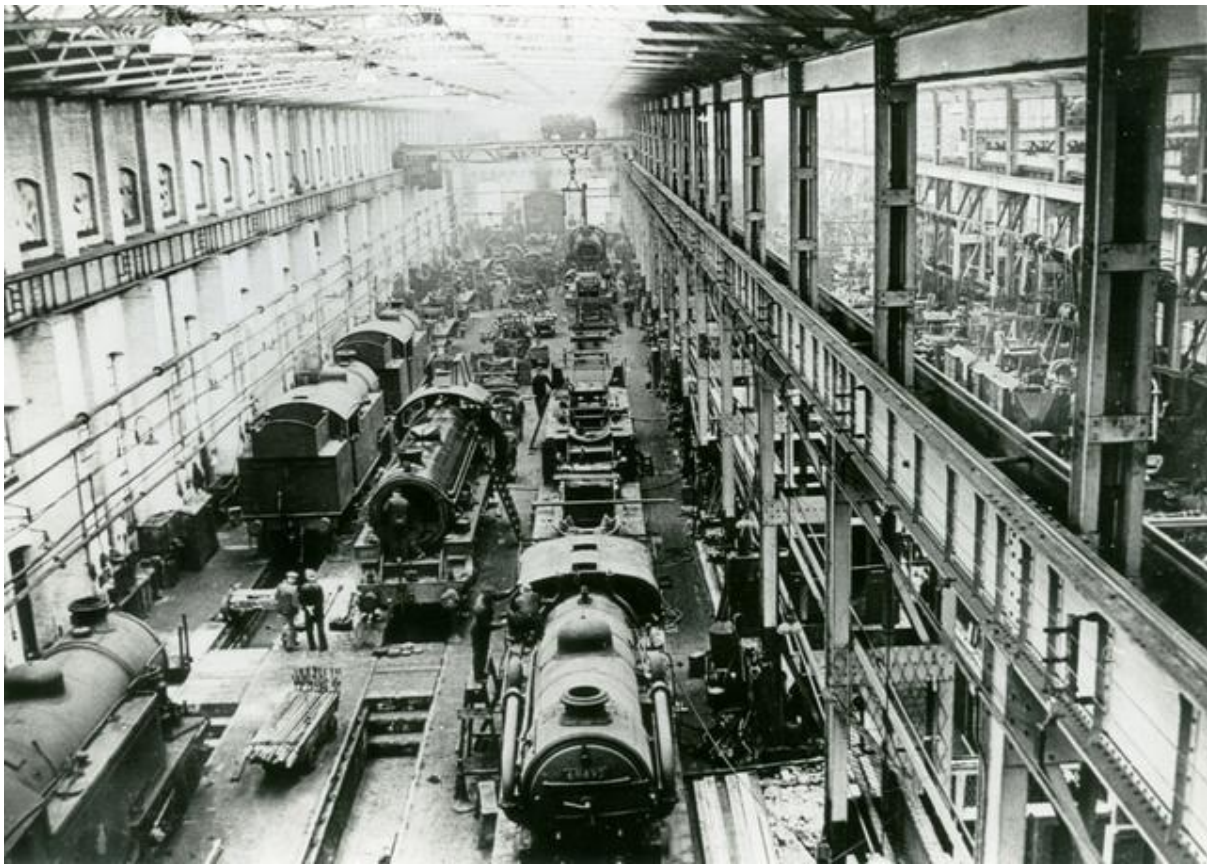
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Stratford (Railway) Works



Engine repair shop, Stratford Works, 1950s (public domain)

A vast area adjacent to Queen Elizabeth Olympic Park was one of the biggest railway engineering works in the world. The impact of the Works (and the railway lines that surrounded it) on the historical geography of Stratford can't be overstated. Yet apart from a plaque in the station there is little to remind us of these works, beyond the railway lines that still run on the outskirts of the park and an old steam train that has been placed outside Stratford Station (although Robert 0-6-0ST has no historical connection with the Works, as it was built in 1933 in Bristol, and spent its working life in Northamptonshire).

The railway works were established in 1840. Starting out with a sixteen-rail engine shed it rapidly expanded to make and repair locomotives and carriages for the Great Eastern Railway. It was a huge employer; by 1912 it had 6,500 workers; there were so many that a Stratford New Town (known as Hudson Town after 'railway king' George Hudson) was built to house them all.

The site spread out over 20 acres of sidings and works buildings, including a tender shop, smithy, steam hammers, testing house, coppersmith, boiler shop, turntables, chemical laboratory, painting, pattern and repair shops, brass and iron foundries. Overall Stratford Works built 1,702 locomotives, 5,500 passenger coaches and 33,000 goods wagons.



Plan of Stratford Works, 1914

(Credit: davidvaughanwells, [Creative Commons](#))

Perhaps the lowest point in the Work's history was on the 12 August 1851 when 178 railway workers handed in their notice in protest because of pay cuts enacted by the works Superintendent John Viret Gooch. Gooch had been told to reduce costs and was promised 2.5 per cent of any savings made. He introduced fines for late running or any mechanical failure and forced staff to reapply for their jobs at a lower wage. The board of directors backed Gooch, and the workers were blacklisted so they would struggle to find railway work elsewhere, although a few years later Gooch's employment contract was not renewed and he retired young, but now a wealthy man.

Throughout its history the works needed a skilled workforce. Training was given through the apprenticeship system and funded Stratford Mechanics Institute which held evening classes for City and Guilds qualifications and gave them access to a library.

In 1891, the Works set a new world record for building a steam locomotive - a Class Y14 six-wheeled tender locomotive was built in 9 hours 47 minutes from the time the frames were stamped out in the iron works to functional completion.

In 1970 the works were acquired by a company to develop the Chobham Farm Container Depot, said to have been the largest in Europe. Two years later the site was the scene of more industrial unrest which led to a dock strike on a national scale (see the *Cold Store Strike* entry in this guide for more information).

The last part of the original works, a diesel repair shop, closed in 1991 and the depot was eventually demolished in 2006. However, Stratford remains a busy and regionally significant rail hub for overground and underground networks and is on the country's only High Speed rail route, HS1 which serves the South East. Stratford International is however, something of a misnomer. It was designed to be the London stop for international trains using the Channel Tunnel, bypassing St Pancras for a quicker path to other destinations in Britain. So far these services have not yet been established and much to the anger of local politicians, Eurostar trains don't actually stop at the station.

TB (including research from the project volunteers)

Augmented reality hotspot (video of on-site experience): [Stratford Works](#)

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The National Archives contains the [Stratford Locomotive Works photographic collection](#).

A Story of a displaced cat



Miss Miggs (Juliet Davis, 2020)

In Charles Dickens's *Barnaby Rudge* (which was serialised in 1841), Miss Miggs – or Miggs as she is more often referred to – is described as 'slender and shrewish, of a rather uncomfortable figure, and though not absolutely ill-looking, of a sharp and acid visage.' Though a 'handmaid', someone who would have typically been overlooked, Miggs plays a key role in the book's plot which unfolds in the true historical context of the anti-Catholic Gordon Riots in London in 1780.

As a name for a lost kitten, Miss Miggs may seem a curious choice. In November 2007 in Hackney at about 6 o'clock in the evening, over the noise of buses and cars, came a faint mew at a lower ground floor window. Outside was a thin, tiny tabby kitten with a badly infected eye and a distinctly 'acid visage.' The kitten was alone and undomesticated, running away as soon as anyone came near. So small was she that, as one member of the household approached, she was able to flee into a narrow drainpipe, set into a wall separating two light wells. No one in the house had cat food, but remnants of gourmet products from Broadway Market were found to entice her out – smoked salmon and

organic roast chicken pieces. Once out, she was not strong enough to jump back up the steps she had come down, yet her bite and claws were strong, drawing blood from the hand of her rescuer.

She was put in a box overnight where she was furious, paws flying out of the top with claws extended. Eventually, she succeeded in breaking out, toppling the box and finding refuge initially behind a piano and, a little later, up a chimney flue. Like Dicken's Miggs, very quickly the captive cat turned jailor though, captivating the attentions of the household, making them sit for hours on the stairs with bits of sausage to draw her out, soot covered, from the chimney, and treat her bad eye. Worse than Dickens's depiction of Miggs, she *was* 'absolutely ill-looking' – 'more rat than cat,' they remarked, wondering at their compassion.

The same month marked the culmination of efforts to remove some 187 identified feral cats and kittens from the Olympic site, around 2.5 miles away, as bulldozers moved in to demolish all existing development. By the end of November, 186 cats had been caught but the Celia Hammond Trust, tasked with undertaking this task, claimed that there was still one cat at large, at risk of being crushed by vehicles, machinery and falling buildings. Although the Trust's work was largely suspended at this point, it was able to carry out a few further visits, finally capturing the last cat, 'Blackjack,' in July 2008. Likened to Macavity the Mystery Cat for his ability to disappear, he was said to be 'as wild as anything,' highlighting the extent to which this piece of land was wilderness, with its own urban wildlife. The cats had lived on bits and pieces from the bins of a salmon curing plant and a Chinese supermarket. Several colonies included kittens very like Miggs.

If wild little Miss Miggs was indeed from one of those colonies, then her first meal of smoked salmon will have tasted entirely familiar rather than exotic or posh. Perhaps that's why she guzzled the lot, dropping her guard enough to be caught. And, if she is, then, like Dicken's Miggs, she is a naturally overlooked yet actually rather important character in the story of urban change in east London. Her eviction from the site, along with the other cats, in turn is part of the process of spatial marginalization that attends the remaking of image, landscape and even ecology in the context of regeneration. As a tiny, ill kitten, separated from her mother, though the vet reckoned she was only 8 weeks old, her story also speaks to the trauma of displacement, though this is usually seen through the lens of human experience.

Beyond this, however, Miggs's story is a happy one. She settled into her new home in London, moving a few years later to a rural village in Cambridgeshire called Great Wilbraham. At the time of writing, she is 14 – still a tiny tabby cat but a beautiful one with huge eyes and a high-pitched purr. She's rather portly now, a slender young thing no more, and has lost the kittenish spring in her back legs. She also lost all her fierceness, no longer living up in any way to the 'spite and spleen' of her namesake in Barnaby Rudge, though continuing to share with her a capacity to make her voice heard and a certain rebelliousness (where anything to do with visit to the vet is concerned).

It's been a long time since she had smoked salmon for her supper.

JD

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The mysterious creatures of the primordial Park



The City Mill River flowing south past London Stadium. (Jonathan Gardner, CC BY-NC 4.0)

Besides the feral cats that were rescued from the Park in the process of its construction there were reports of other, more mysterious, animals lurking here in 2007. An archaeologist working on the excavations at the time swears that she saw a Lynx lurking in the undergrowth near to Carpenters Road Lock. The Eurasian Lynx is a species of big cat that went extinct in the British Isles over 1000 years ago, and is still common in Scandinavia; tentative plans are today being made to reintroduce them to the UK.

While it therefore seems unlikely that there could have been a Lynx in Stratford in 2007, mysterious paw-prints were nonetheless said to have been found in the mud of the construction site which could not be accurately identified.

In 2011 attention turned to strange goings-on in the Park's river channels. One eye-witness told the BBC that they saw a full-grown Canada goose sucked down 'vertically' into the River Lea as if pulled by some great force beneath. The goose did not re-emerge and, along with other earlier accounts of unfortunate disappearing wildfowl, this led some to speculate that a crocodile or similarly large amphibious creature cruised the waterways of the Bow Back Rivers. Others theorised a mink or even a giant catfish. Like the Lynx this was a mystery that was never solved. The truth is out there.

JG

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Waste and wastelands



Beneath the A12 (Juliet Davis, 2007)

Immediately before the construction of London 2012 this area was often called an ‘industrial wasteland’ and portrayed as a place only characterised by waste and dereliction. Whilst parts of the site were polluted and some areas were left derelict, many businesses and residents were still present here right up until 2007. Part of this wasteland story arose from the industrial history of the site itself and the pollution left behind, but this also seems to have been down to the area’s long history of waste management and recycling. Whilst such activities may be visually unappealing (and sometimes smelly!) they are and were vital parts of London’s existence: without places to deal with waste products like rubbish and sewage the city would grind to a halt.

The site’s association with waste goes back to the nineteenth century when Bazalgette’s Northern Outfall sewer was constructed through it. In the early to mid-twentieth century, the northeast

corner of the site was developed as a landfill site which raised the level of the ground considerably. Reputedly, this included the by-products of industrial production elsewhere on the site, including radioactive waste. During the Second World War, the site was heavily bombed. Numerous buildings were damaged or destroyed and much of the arising rubble and bomb debris were dumped locally, again reshaping topography.

Rubbish was not only buried but also piled up on the site by the various firms located there that dealt with waste. Fridge Mountain is perhaps the best known example of this, reputed in some accounts to be as tall as a six-story building, a monument to household waste, and the biggest stockpiled heap of its kind in Europe. Firms based on the site in the early twenty-first century including Docklands Waste (Recycling), Bedrock Crushing and Recycled Materials and Bywaters each had a niche in waste management including the removal of contaminants, sorting construction waste and crushing rubble ready for landfill. These firms were relocated as part of the Compulsory Purchase Order to industrial areas east of Stratford. But the site was also associated with fly-tipping and the traces of temporary markets and dwellings.

Besides the history of waste management in the area before and during the Games' construction, the idea of the wasteland, however 'true' or not, captured peoples' imagination. Numerous artists challenged and complicated the idea of what counts as a wasteland and used the area as inspiration for their work. For example, Lara Almarcegui documented, in her project *Guide to the Wastelands of the Lea Valley* (2009), not only the rich history of different sites in the area, but also showed how they had become spaces rich in wildlife and alternate uses while they 'waited' for the Olympics to arrive.

In a different use of the wasteland idea in 2007, Hilary Powell took the terrain of the pre-Olympic Park and its environs as the staging ground of a DIY version of the Olympics. Here, athletes competed on mounds of demolition material piled up in advance of the construction project and under pylons, with this 'home-made event', suggesting that perhaps clearing of the whole site and its inhabitants was an unnecessarily destructive act. The potential to visibly reclaim rather than merely vanish and relegate waste has been suggested by creatives such as Scout Ltd whose temporary cinema 'Films on Fridges' in 2011 was made out of fridge doors, acting as a homage to Fridge Mountain, and 'The Cut', a vast pencil drawing by Jessie Brennan of waste products that could (once) be seen along the canal bordering the park, as if they had been carefully collected and stored along the roof of a narrowboat by hundreds of tiny people.

Though it is important to not romanticise the industrial decline and pollution that for sure existed here in places before the Games, such artists recognised that there was a complexity to the history of this place which was being forgotten in a story of rapid Olympic-driven improvement that ignored the rich stories of the likes of the workers in the factories, the allotment gardeners and the inhabitants of Clay's Lane. As the Olympic artist in residence Neville Gabie himself said 'regeneration which wipes out or ignores the past is at best unwise'. Whether one agrees that this place was 'wasted' or not before the coming of the Games, it is hoped that the stories in this Guide also bring alternative views of the history of the site to the surface whilst changes continue take place here.

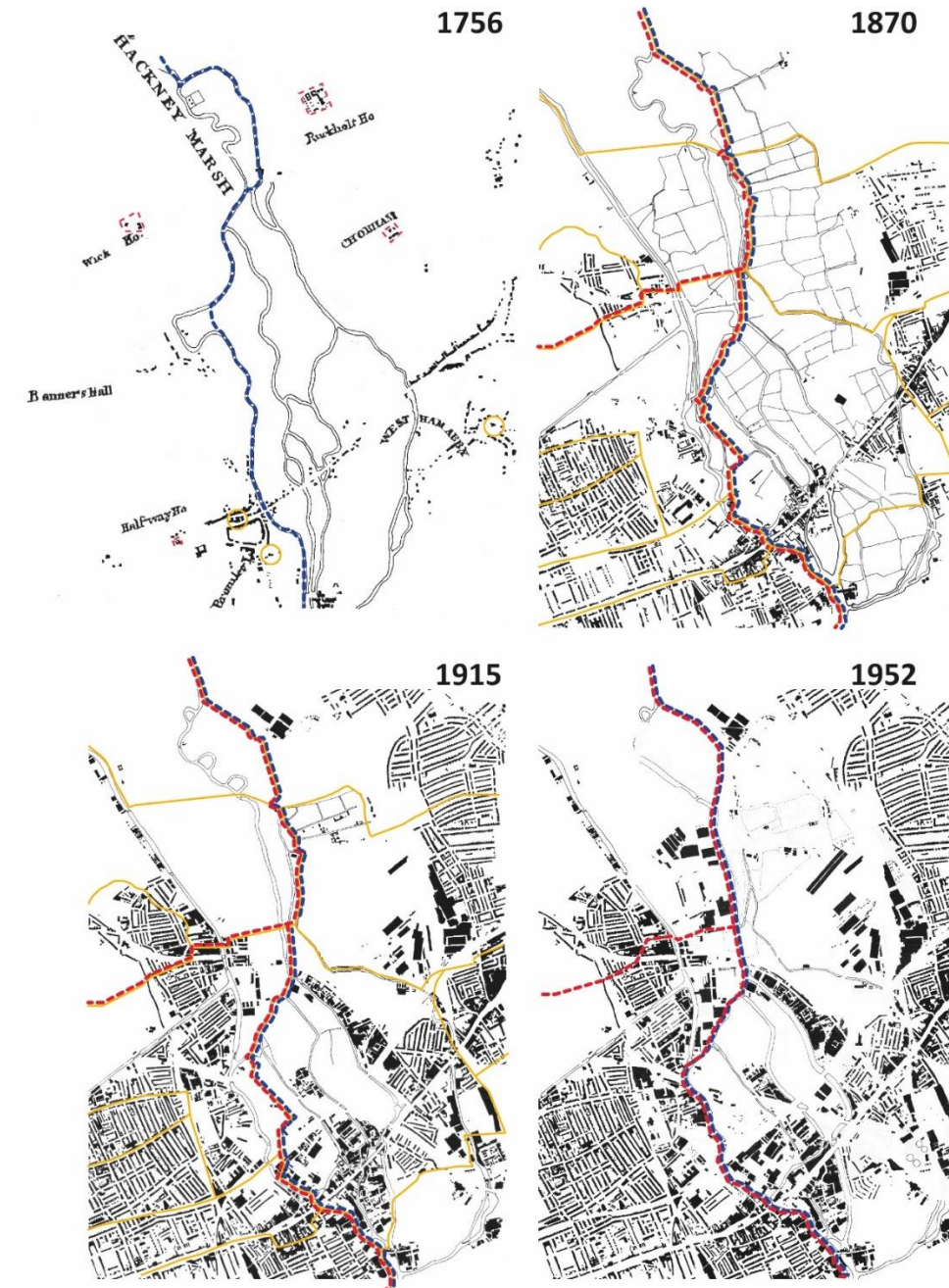
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Boundaries



A depiction of changing boundaries on the site (blue= county; red= urban districts; yellow = parish (Juliet Davis, 2009)

The site of Queen Elizabeth Olympic Park has long been associated with boundaries jurisdictional, cultural and physical. The Lea River has been used to mark the boundaries of different jurisdictions and even nations for more than a thousand years. In the late ninth century, it formed part of the Danelaw boundary, the line between Anglo-Saxon Wessex and the Danelaw, which was the part of England colonized by the Danes after 865. For centuries following the Norman Conquest of England

in 1066, the Lea was a county boundary, also marking the limits of parishes and manorial estates, their common lands often extending over the marshy valley floor. It marked the eastern edge of the jurisdiction of London's first government, the Metropolitan Board of Works, from 1855-1889, and of the County of London from 1889-1965. On the formation of Greater London in 1965 it lost its status as a city limit but remained as a boundary between Inner and Outer London boroughs.

By then of course, the physical expansion of London had moved far over the actual border of the city. Indeed, the very definition of a London border in the 1850s helped to stimulate almost immediately the development of a very different, less regulated London beyond it. The character of this 'London over the border' was portrayed by Henry Morley for Charles Dickens's publication *Household Works* in 1857. In it, he describes the 'Essex marshes' east of the river as 'quite cut off from the comforts of the Metropolitan Buildings Act' and thereby 'chosen as a place of refuge for offensive trade establishments turned out of the town - those of oil boilers, gut spinners, varnish makers, printers ink makers and the like.' Being cut off, as he puts it, from the 'comforts' afforded by building regulations also shaped the development of poor-quality housing and sanitation over the border, leading West Ham to lag behind the curve of sanitary reform. The Olympic bid - and the ensuing planning and urban design process relating the Olympic Games and legacy - can be seen through an historical lens as twenty-first century strategies that were still aimed at addressing deep-seated issues of border urbanism in terms of land use, legibility, and development quality.

But these planning and design processes also set out to confront a series of physical boundaries within the site that reinforced the sense of separation between an inner and outer London. An idea that this place was insular and restricted, at least before the Games came, was also the result of a series of major infrastructure projects built across the site of the Park, particularly over the last few centuries.

For example, the various channels of the River Lea here have been heavily modified, with different parts straightened, filled in or widened. King Alfred himself supposedly created at least one new channel to stop a Danish army from fleeing England in 896 AD. Much later, the establishment of the Hackney Cut in 1769 improved navigation on the River Lea and this still provides a sharp western boundary to the Park of today. Similarly, the much-altered major 'Bow Back Rivers' of the Lea within the Park such as the City Mill River and Waterworks River continue to 'naturally' subdivide its different neighbourhoods.

One of the most visible and persistent boundaries came with the building of the Northern and Eastern Counties Railway to Stratford in 1839 and along with later additions, led to the southern and eastern portions of today's Park cut off from surrounding districts by embankments, bridges and cuttings. Further railway construction then bisected the centre of the area including what is today the London Overground line that runs between Richmond and Stratford (originally a part of the North London Railway, built in 1854) and, more recently, the vast Stratford International Station 'box' which opened in 2009 to serve high-speed trains going to and from St Pancras and the Channel Tunnel. While these routes – not to mention the later (buried) Tube lines, the DLR and the Elizabeth Line – have meant that Stratford is a well-connected place, the railway infrastructure itself has nonetheless created a series of barriers that can still only be traversed in certain places via bridges or tunnels. In some cases there are still whole 'islands' of land left inaccessible (such as the two triangles of land isolated railway lines along Carpenters Road near the London Aquatics Centre and East Bank) though nonetheless providing a refuge for plants and animals.

Other, more recently built infrastructure subdivides the Park, though again, some of this also offers

connections further afield. After the railways the next major boundary to emerge here came with construction of the Northern Outfall Sewer in the 1860s. Although part of the solution to London's dire sanitation problem by carrying sewage away to the Thames at Beckton, the Sewer's huge embankment created a major cut through the southern edge of the Park. Nonetheless the sewer is also now home to a long-distance walking and cycle path called the Greenway (built atop the pipes in the 1990s) which offers easy connections to Victoria Park and Hackney to the west and West Ham and beyond to the east.

The northern boundary of the majority of Queen Elizabeth Olympic Park is formed by the six lanes of the A12 road. This 'edge', since the mid-1990s, has also been one designed to facilitate transport and connection, but, once again, has had the effect of cutting off the site from areas beyond. While the road remains a major landscape feature today, another major and longstanding piece of infrastructure was actually removed for the Games themselves; the two lines of electricity pylons that once snaked across the Valley.

One line of pylons (transmission towers) was built in 1953 connecting Brimsdown near Enfield and Brunswick Wharf on the Thames. These were then upgraded and supplemented by a second line in the 1970s, with both connecting Barking Power Station and Hackney substation at Millfields. These transmission lines provided essential electricity to east London's densely occupied communities and the many different industrial premises located here. Though acting as local landmarks for years, the pylons' removal across the area in 2007 was seen as a positive development by many, with the structures having sometimes been seen as a different kind of 'barrier' or boundary to redevelopment, even if one that did not physically prevent access to the district. The building of the Park saw both power lines 'undergrounded' in huge tunnels.

Both the physical and more 'conceptual' boundaries of the area just described contributed to why this place was chosen to host the main site of the 2012 Olympic and Paralympic Games. The apparently isolated and fragmented nature of the area and obvious industrial infrastructure like the pylons were taken as evidence that the district was in need of radical regeneration: the Games project, with the political and financial leverage it brought with it, were understood as being the best way to achieve this.

The construction project of the Games brought its own temporary barriers: an 11-mile long wooden construction fence sprung up in the summer of 2007 around the site. With its vivid bright-blue colour (a shade named 'All Aboard'), this became a controversial landmark in its own right, until it too was removed, and replaced by a welded-mesh high-strength steel fence topped with electric wires and hundreds of CCTV for the period of the Games itself and many months afterwards. This was removed with the transformation of the Games-time park into the 'legacy mode' Queen Elizabeth Olympic Park of today, which now allows visitors unimpeded passage from east to west and north to south across new roads, bridges and paths.

JG and JD

Further Reading

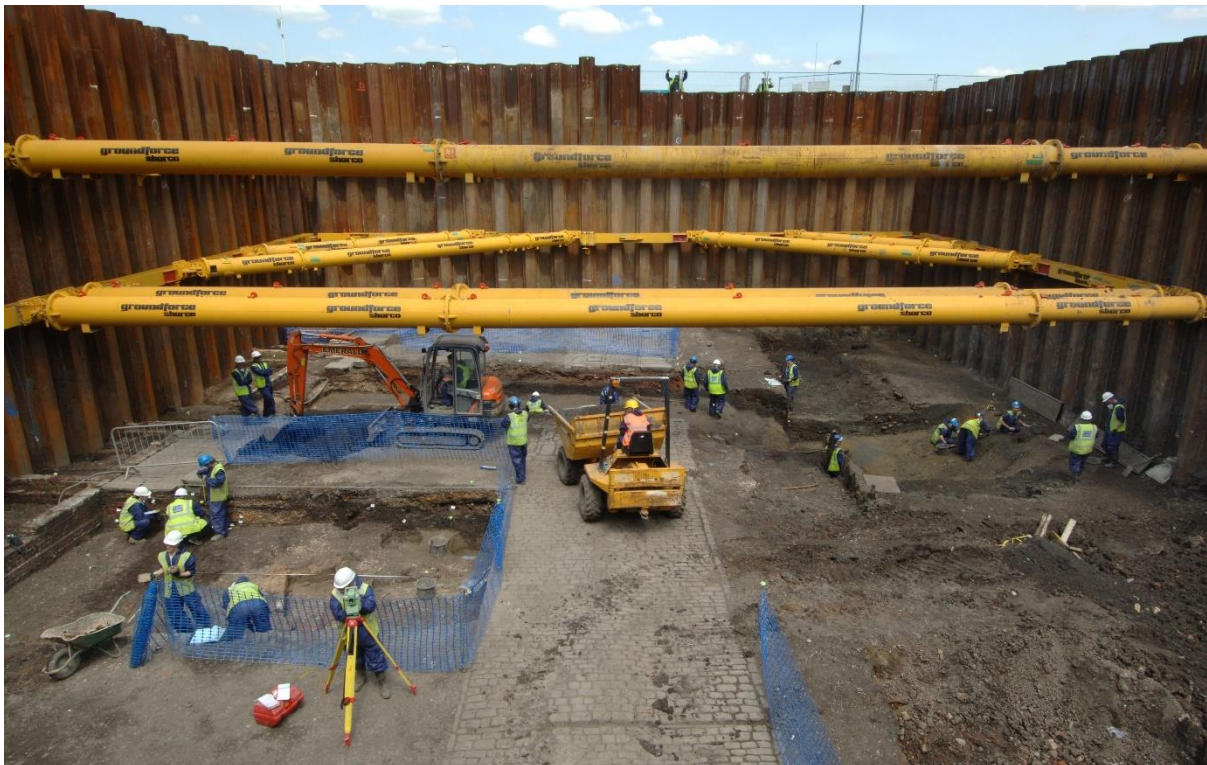
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Dwyer, Emma. (2007) [*Overhead Power Transmission Lines and Associated Structures, Lower Lea Valley: A Built Heritage Assessment*](#). Unpublished survey report, MOLA, London.

Gardner, Jonathan. (2013) [*Five Rings: Enclosing the London 2012 Olympic Games*](#). *Papers from the Institute of Archaeology*, 23 (1), 1–22.

[London Canals](#) is an extremely informative website on many of the rivers and channels in the area.

The Archaeologists



Archaeologists at work at Temple Mills on the Olympic Park construction site in 2008 (© MOLA)

Building Queen Elizabeth Olympic Park has involved thousands of different people doing all kinds of jobs. As part of the work of clearing and preparing the site for the 2012 Games themselves, a large team of archaeologists surveyed and excavated landscape to learn more about the history of Stratford and the Lower Lea Valley. These archaeological investigations were required as part of the overall planning permission for the Games and took place where there was likely to be significant historical or prehistoric remains, including on the sites of the main stadia and new roads, bridges and other infrastructure.

During the construction of the Olympic Park between 2005 and 2012, archaeology often made the news for the artefacts or sites that were discovered. Less well known, but just as equally a part of the history of the site, are the stories of the excavations and archaeologists themselves.

Almost 100 archaeologists excavated 121 small trenches as well as 8 larger 'open' area sites all over the Park, making this one of London's largest ever digs. This was complemented with extensive survey and photographic recording of old buildings and historic landscape features that would be demolished or lost for the Games' construction.

Sites for the archaeological trenches were chosen using information gleaned from historic maps and previous discoveries and targeted places that might contain the most significant archaeology (for example, the Roman Bridge discussed elsewhere in the guide). Because so much of the land had been built up from the original low-lying marsh with dumped rubble and rubbish since the nineteenth century – this ‘made ground’ was up to 10m deep in places – the trenches had to be cut by excavating machines and ‘stepped’ inwards carefully so more ancient layers buried beneath these deposits could be documented safely. These trenches often resembled inverted pyramids or ziggurats, with often only a small area exposed at the base in which to work despite the huge amount of digging required.

Working in these trenches was hard and sometimes dirty work. The ground was very wet because of the rivers and marshes, and due to the history of industrialisation and pollution, the archaeologists had to wear protective suits, rubber gloves and respirators to protect against chemicals and other hazardous materials.

Despite these challenges, the archaeologists made many important discoveries both in and above the ground and revealed new stories ranging from prehistory almost 10,000 years ago, to factories and homes in use right up until 2007 (when the main Games’ construction began). In other parts of this guide you can read more about the findings (such as the Temple Mills and the prehistoric discoveries at the London Aquatic Centre).

JG

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Remnants and traces



Crushed concrete fragments reused in the Park's new bridges. This was created from the demolition and crushing of the area's pre-existing buildings and infrastructure as part of the Games' project (Jonathan Gardner, CC BY-NC 4.0)

While much work was carried out to document archaeological remains during the Olympic and Paralympic Games' construction between 2005 and 2012, any physical traces of this history are sometimes hard to spot in Queen Elizabeth Olympic Park of today. That is not to say no traces survive however – you simply need to know where to look!

As part of its commitment to be the 'greenest-ever Games' the building of London 2012 saw the recycling and reuse of 98% of all materials produced during the site's clearance and demolition. This means that 98% of what was cleaned or knocked down is actually still here in the Park, albeit radically transformed and put to new uses. For example, the beautifully sculpted landscapes of the Park were shaped with hundreds-of-thousands of tons of cleaned soil that were decontaminated of industrial pollutants in giant soil 'washing' machines during the Games' construction. These new hills and valleys are especially obvious around the Olympic Rings and Tumbling Bay playground. Over 9,500 cubic metres of soil from the site of the Olympic Stadium (now London Stadium) was also used to infill the Pudding Mill River, the old entrance of which can be seen on the Lea towpath close the Stadium's carpark.

Material remnants of the factories, homes and roads that existed here right up until the Games' construction can also be seen more directly in the Park's many new bridges. Here crushed concrete and stone fragments from demolished structures fill gabion baskets that provide facing walls – as you walk under them, look closely and you will see this reconfigured rubble supporting the infrastructure of today's Park (see image above).

Other material traces of the past have also been reused elsewhere. If you look down at the ground you will sometimes see granite kerbs and setts (cobblestones) that have been reused as new paving and even stepping stones. The steps pictured below are next to the Tumbling Bay playground and may have come from the excavations at Temple Mills mentioned elsewhere in this guide.

Together, these subtle traces show that the past still underpins the present here in a very literal sense, and also act as a showcase for the ingenuity and creativity of the engineers, landscape architects, builders and others who made Queen Elizabeth Olympic Park a reality.



Granite kerbs reclaimed during the clearance and demolition undertaken for the Games project were later reused as stepping-stones in the east of the Park (Jonathan Gardner, CC BY-NC 4.0)

Further Reading

BioRegional (2011) [Reuse and Recycling on the London 2012 Olympic Park](#). Wallington: BioRegional.
Gardner, J. A filmed presentation partly discussing [how waste materials were reused in the Park](#).

Level Playing Fields? Sporting chances in life, labour and leisure

In this section we are going to explore the close connection' between forms of work, sport and leisure as these have developed on the ground since the Victorian period.

There is only one truly level playing field in Queen Elizabeth Olympic Park and it belongs to its resident football club, West Ham United. A great deal of money has been spent in using the latest soil management techniques to ensure that its Premier League games take place in pitch perfect conditions, whatever the weather. Meanwhile half a mile away on Hackney Marshes, where each weekend thousands of aspiring young amateur soccer players seek to emulate their professional heroes, the ground is often uneven and muddy and challenges players to improve their ball control skills. Paradoxically uneven playing fields can be great levellers as the big clubs discover when they travel to play teams from the lower divisions in the FA cup; they often find they are in for a bumpy ride as bad pitches neutralise the competitive advantage conferred by their wealth of talent and facilities.

The history of east London suggests that the same principles of 'fair play' do not necessarily apply when it comes to creating 'level playing fields' in the wider society. The ambition to engineer equal opportunities for social advancement, including through sport, so central to the London 2012 Games bid, comes up against deeply rooted structures of inequality which level down, not up, and ensure that the hoped-for convergence in life chances has proved as elusive as West Ham winning the FA Cup.

Yet there is another more hopeful side to the story. The spark lit by the matchgirls at the nearby Bryant and Mays' factory whose famous strikes for better pay and conditions in 1880s was bright enough to inspire East End feminists, like Annie Besant and Sylvia Pankhurst, to link the oppressive conditions of women's wage labour and their domestic work in the home, and to see in outdoor recreation a way to transcend both. A keen cyclist, when cycling was still largely a male and middle class preserve, Emily Pankhurst saw the bicycle not only as a cheap means of transport but a way of escaping the joint entrapments of work and home. As John Burnside explores in his *Bicycling Ladies'* poem - displayed in the Park - she discovered a new and liberating relation between bodies, machines and the material environment. The desire to build a New Jerusalem out of industrial wastelands could become a driving force for exploring what remained of a once green and pleasant land while learning about its mysterious undergrowth of stories:

*they want to ride for hours... and end up at some point of no return,
like changelings, in some faded picture book from childhood, going headlong through the dark
to some new realm, where no mere man is kin.*

In the late 1950s and 60s, now seen in retrospect as a golden age of economic stability and growth, the benefits of prosperity continued to be unequally distributed. The introduction of containerisation and new methods for handling and transporting goods threatened dock work, a core element in east London's casualised economy. A container depot became the scene for an industrial dispute which became a national event, and ended with a victory for trade unionism, though the decasualisation of dock labour may have hastened the closure of the docks in the 1970s.

Yet for many working-class people this was a time to move on from post war austerity, 'on yer bike' came to mean for many getting a motorbike rather than a push bike to work. Speedway briefly

became a mass spectator sport and crowds thronged to the Hackney Wick stadium to watch 'the Hammers' take on teams from around the country.

However, the days of the 'push bike' were far from over. The emergence of mountain biking as a new urban sport in the 1970s led to the establishment of the Eastway cycle track with trails over a wide area, and eventually to its acceptance as an Olympic sport.

Fast forward to 2020 and East Enders, young and old, have once again found release in pedal power, not just as an escape from the confinements of lockdown and a form of healthy exercise but a way of getting about that puts them more in touch with their surroundings, and offers a glimpse of a city no longer polluted by heavy motorised traffic. Along the Greenway, and through the Park, along the towpath and into the Lea valley the citizens of the pedosphere reclaim and proclaim their freedom of movement.

Sporting Chances

At the end of the Victorian period, the connection between sport and politics took another turn with the movement for rational recreation and the widely held view that participation in organised games inculcates character building values of moral and physical self-discipline and 'team spirit' amongst otherwise 'unruly' sections of working class youth. The Eton Manor Boys Club was perhaps the most successful of East London's many 'civilising missions' at least in terms of its superb facilities and associated athletic success. As celebrated in Carol Ann Duffy's poem about the club, it 'translated poverty to self-esteem/camaraderie, and optimism smiled in smiles'. The poem talks of:

*young lives respected, cherished, valued, helped
to sprint, swim, bowl, box, play, excel, belong;
believe community is self in multitude...*

This belief in the power of sport to sublimate the otherwise anarchic energies of working-class young people continues to resonate. Just a year before the 2012 Games when riots broke out in 'left behind' urban neighbourhoods in major cities across the country, including east London the then Mayor, himself an old Etonian, echoed these sentiments in a somewhat more instrumental form when he went on record as recommending these disenfranchised youth take up rugby, as 'after they have had a good work out in the scrum, they would have no energy left to go out looting'.

Nevertheless, the notion that physical skills learnt for survival on the street or competence in the workplace might be further developed and exercised in more pleasurable, profitable and unlaborious ways, whether on the dance floor or through participation in sport has held great appeal to successive generations of East End youth, especially from communities otherwise denied a 'sporting chance' of bettering their circumstances by more traditional means. The fact that east London has produced a string of Jewish, Irish, and BAME boxing champions at both amateur and professional levels is directly connected to the fact that being handy with your fists has been at certain times and places a necessary way of standing your ground against racial attacks.

More recently the development of hip hop and rave cultures into an international phenomenon owes a lot to the creative energies of otherwise unemployed youth on the streets and estates of east London. In the process the traditional boundaries between work and play, art and sport have become excitingly blurred.

At the same time, the growth in popularity of urban sports like skateboarding, BMX, parkour and free form climbing has offered some inner city youth a challenge to scale heights of skill and thrill not otherwise available in our highly regulated urban environment. Such improvised adventure

playgrounds carved out of the urban fabric can help bodies no longer hardened (and sometimes crippled) by 'grunt' manual labour to develop new, more creative and co-operative ways of 'working out'. But as the testimony of local skateboarders suggests, the attempt to reclaim the streets and other public spaces for such activities runs up against by-laws. The acceptance of skateboarding as an Olympic Sport has not only professionalised it, but taken it off the streets and into specially designed parks and indoor facilities, a change recognised by the planned staging of the World Skateboard Championships in the Copper Box Arena.

The 2011 riots emphasised the way social inequality - and street crime - has become postcoded; the creation of East 20 as a new postal district for Queen Elizabeth Olympic Park and its environs was designed not only to evoke the fictional address of the nation's favourite soap opera but to ensure that this new area did not become a focus of territorial rivalries between existing street and estate based gangs.

Effective policing was built into the Park's design brief from the outset. Whether you are strolling along the wide boulevards of South Park, enjoying the intimate scale of a traditional British garden or exploring the carefully cultivated wilderness of North Park, there is nowhere to hide, and you are never alone. These landscapes have been so constructed to ensure that there is no 'dead ground' where visitors presence cannot be monitored by the ubiquitous CCTV cameras and relayed to an observation station. In this open plan park public safety is guaranteed by 24/7 surveillance.

There is another and more positive sense in which the Park is as a level playing field. It is epitomised by the London Aquatics Centre. The provision of public baths and swimming pools in working class areas was one of the great achievements of the Victorian urban reformers. It was not just a matter of enabling people who lacked the necessary facilities at home to wash off the workaday grime, but of offering access to a medium in which bodies rendered depleted or unfit by stress might discover a new buoyancy while in a communal setting.

If you visit the London Aquatics Centre you will see people of all ages and backgrounds enjoying being together in the liquid architecture created by Zaha Hadid. Some swimmers are in the slow lane, others in the fast. Parents, toddlers and beginners have their own dedicated pool. Those with a head for heights can try to follow in the footsteps of Tom Daley and dive off the ten-metre board. The less ambitious can practice belly flops. And all at price everyone can afford. Do pause and read Jo Shapcott's poem '[Wild Swimmer](#)' (engraved in a wooden structure to the South of the Centre). Follow the advice in her opening lines:

Open this box

breathe

dive in

you are mostly water

glide

in your element

And then let her poem take you on a guided tour of east London's lost rivers. Today more than ever, we must learn to become wild swimmers in and against the tide of a history which is silting up the shared memoryscapes we need to hold on to, if we are to prevent its catastrophic ending.

Bryant & May Factory – Spark Catchers



The Bryant and May factory, rebuilt in 1910 (Fin Fahey [CC BY-SA 2.5](#))

The site of the Park contained a match factory, the Wolsey Match Works, but this was dwarfed by the famous Bryant & May, once the largest matchstick factory in Britain which was founded in 1861 nearby in Bow. Whilst the Bryant & May factory was not situated in the Park itself, the listed factory buildings are a visible and important feature on the Park skyline.

Bryant & May was established by two Quakers who manufactured tallow and candles and acquired the British rights to producing the safety match in 1855. The business was a major local employer of thousands of women, who produced 300 million matches a day by 1886. Working conditions were harsh, with long hours, fines for disobeying strict rules and working conditions that put many workers at risk of injury and phossy jaw, a disfiguring and painful disease.

The Bow factory was the scene of the famous Bryant and May matchgirls strike (1888) in at which 1,400 women and children walked out in protest following the [dismissal of a 'troublemaker'](#). They formed a well organised strike committee and the employers capitulated to their demands, which included being allowed to form a union, having a separate space to eat away from phosphorus and stopping unfair employment practices such as punitive fines and charging workers for materials. The strike was deeply influential in the labour movement, as many of the strikers had brothers, fathers and partners who were dockers and gas workers, and [correspondence revealed](#) how it motivated men in these industries to organise themselves into unions. Socialist campaigner Annie Besant became involved in the campaign and wrote an influential exposé on the subject entitled [White slavery in London](#) in which she argued for a boycott of Bryant & May products.

The strike was also the subject of a poem by Lemn Sissay, [Spark Catchers](#) which was commissioned by the Olympic Development Authority and is displayed on a wooden wall, part of an electricity transformer in north of the Park.

In a [2012 interview](#) Sissay explains: 'The Olympic site is built on land which has a history which feeds it... it is history that has led to the Olympic Games, and they in turn will become a historical monument, that people will refer to in the past, and when they do, they will see that poem, and they can refer even further back. I believe in poetry in public spaces. I believe it draws us closer to the environment, it allows us to engage with the place that we have always known, in a way that we have never known, and I think that is a wonderful, wonderful thing.'

TB

Further reading

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The Cold Store Strike



A picket sign at Chobham Farm during the strike of 1972. © [TUC Library Collections](#) at London Metropolitan University.

Part of today's East Village housing development (on the east side of Queen Elizabeth Olympic Park) was the site of a significant episode in recent British labour history. In 1972 a strike took place at Chobham Farm container depot in act of 'secondary' picketing by dock workers whose jobs were under threat from changes brought by the introduction of shipping containers to cargo shipping. Striking without the permission of the main dockworkers union, the picketers argued that if loading and unloading containers was to take place at sites like Chobham Farm (i.e. not within the docks themselves), this work should only be undertaken by dock workers themselves and not taken by non-dock labour who might work for lower wages.

Under new anti-strike laws that prohibited such secondary picketing, a container handling company on the site obtained a court order banning the dockers' picket. However, led by five shop stewards (Vic Turner, Conny Clancy, Tony Merrick, Bernie Steer and Derek Watkins), the dockers continued the picket anyway and these five were arrested on 21 July for being in contempt of court and sent to

Pentonville Prison. The incarceration of the shop stewards – who became known as the ‘Pentonville Five’ – led to outrage amongst their dock colleagues and unionised workers more broadly, and sparked off a massive wave of strike action across the UK. This saw all major UK ports shut down and miners, factory workers, market workers, and bus drivers walk out in solidarity. In response to plans for a National Strike set for 31 July 1972 – and after 30,000 trade unionists marched on Pentonville – the government relented and released the five men on 26 July. This was recognised at the time as the most significant example of organised labour in the UK since the 1926 General Strike.

JG

Further Reading

Steel, Peta. (2013) [Obituary. Vic Turner: Trade union leader and docker who was part of the imprisoned Pentonville Five](#). *The Independent*, 18 January 2013.

University of Warwick Library. (2020) [Pentonville voices](#) (includes excerpts of [interviews with strikers by Fred Lindop](#))

The Eastway

In 1964, The Civic Trust produced a report entitled: *A Lea Valley Regional Park: an essay in the use of neglected land for recreation and culture*. This was the result of a commission by ten local authorities including the Counties of London and Middlesex whose jurisdictions encompassed parts of the Lea Valley. Together they sought to develop a strategy for the promotion of recreational and other public uses of the portion of the Valley between West Ham and Ware. The report pointed to the potential to reconceive the valley as a giant linear park and its direct outcome of the report was the formation of a new management body, The Lea Valley Regional Park Authority. The government bill produced to instigate the creation of this new body received Royal assent in 1966 and so the Lea Valley Regional Park Authority (LVRPA) was born.

In forming its vision, one of the major challenges the Civic Trust recognized was to weave and stitch elements of parkland and existing open space through a highly diverse landscape. This was no salubrious place redolent of health, but a place of contradictory images as ‘London’s kitchen garden, its well, its privy and its workshop’. The Trust also sought to find expression for recreation and leisure, which had arisen as notions in the context of British working-class society as a result of the creation of non-working weekends and paid holidays following legislation in the first half of the twentieth century. Dealing with these two primary issues, the vision foresaw the creation of a series of interlinked parks, encompassing venues for different sports and entertainments.

In the vicinity of the Olympic Park, these included ‘Mill Meads’ and ‘Temple Mill Park’. The former of these was to house the architect Cedric Price’s Fun Palace, a project which also grappled with the notion of free time and life beyond home and work. The latter included a greyhound racing stadium, playing fields and an athletics track. Some of the plans in the report were implemented – the greyhound stadium was established, as were the playing fields, but the Fun Palace and athletics facilities were never built.

However, within the area set out for athletics, a cycling circuit was developed by the LVRPA in 1975, the UK’s first purpose built such facility. This may have owed to the existence from the 1950s of a small

cycle speedway centre beside the river, just south of Temple Mills Bridge. The new circuit occupied an L-shaped piece of land between the Lea River, Temple Mills Lane, a housing cooperative and a freightliner depot. To create it, a new hilly landscape was formed over a mix of an old rubbish tip, a manure works and allotment gardens. While the circuit was built for road-racing, over time, an off-road track for mountain bikes was formed across the landscape. The circuit and associated club building continued in operation until 2006 hosting countless events, cycle series and training sessions for cyclists of all ages.



Eastway Cycle Circuit, 2003 (Dennis Turner, CC BY-SA 2.0)

In 2006, as part of the Compulsory Purchase Order (CPO) for the Olympic site, the track was closed. The Eastway Users' group, an association of club members formed in opposition to the closure, was vocal in the context of the CPO, taking a case to the Mayor of London for a replacement facility. They consistently argued that, while Olympic legacy plans included the development of a far more advanced Velopark, the operators would favour elite sports over grassroots initiatives, whereas the old Eastway had created a level playing field for riders of all abilities. In addition, the interval of time between the closure of Eastway and the development of the Velopark would disadvantage young cyclists entering the sport during that period. The result was the development of a new legacy venue in Hog Hill, Redbridge which opened in 2008 – the [Redbridge Cycling Centre](#). This includes a road circuit and mountain bike tracks and is the focus for numerous race series, summer holiday courses, several cycle clubs and cycle repairs.



Redbridge Cycle Centre cyclists at its opening in 2008 (Juliet Davis)

JD

Further Reading

Civic Trust (1964) [A Lea Valley Regional Park : an essay in the use of neglected land for recreation and leisure](#). London: Civic Trust

Eton Manor Boys Club

At the far edge of Queen Elizabeth Olympic Park are pitches and sporting facilities that pre-date the Olympics by some ninety years and remind us that sport played a hugely important part of life in East London in the past, as it still does today.

The sports facilities at what is now the edge of the Park were established by the Eton Manor Boys' Club. Eton Manor was a sports and social club that emerged out of the Eton College Christian Mission in Hackney Wick. Set up in the 1880s, the Eton Mission was part of a wider social movement that saw privileged students, staff, and alumni of some of Britain's most elite schools and universities temporarily 'settle' in poorer urban districts. The expectation was that these privileged few would give not just their money but also their time to improve the life-chances of the poor.

By the early 1900s, some of those involved in the Eton Mission were unhappy at how the mission operated in the East End. For example, they didn't like the religious aspect of the work and they weren't happy that boys over the age of thirteen weren't provided for. So they formed a breakaway group that included Gerald Wellesley and Arthur Villiers. This breakaway group bought land from the Manor Dairy Farm (hence the name Eton Manor) to build and equip a club house which was similar to a youth club, but with vastly superior facilities.

In 1913, the Eton Manor clubhouse opened on Riseholme Street in Hackney Wick, near Victoria Park Station. It looked much like a mansion and included accommodation for some of the old Etonians involved in its funding and management. Members of this new boys' club now enjoyed access to a well-equipped gymnasium, a billiards room, a library, a rifle range and a hall which was the setting for plays, operas, and lively debates. One 1960s discussion reflected on the question: 'Are you living with purpose?'

Boxing was hugely popular in east London, so of course the East End boys at Eton Manor had access to the finest training equipment at the club house. Club member Harry Mallin won two Olympic gold medals for boxing. The boys also had access to showers in a period when it was unusual to have hot and cold running water in working-class homes. For a small weekly subscription fee, members could use the facilities whenever they wanted. The only other thing they needed to join was a pair of boots, but those without boots were provided with them.



Pictured is Harry and Fred Mallin. It appears to be Fred Mallin holding the trophy. He is wearing an Eton Manor vest along with boxing gloves. Picture undated. Taken from Laurie Radley's [Memories of the River Lea](#) (edited by Christopher Dodd and Clive Radley), published online on [Hear The Boat Sing](#) (2015).

The club went from strength to strength and, in the 1920s, a vast expanse of pitted marshland between Leyton and Stratford was bought to develop as a sports arena for the club. This 32-acre site (some of which had been used as a rubbish dump) became known to members as the Wilderness. Here, boys from crowded homes with little outdoor space could spend all day long playing sports. There were nine football pitches, six tennis courts, rugby pitches, cricket pitches, a bowling green, squash courts, a plunge pool and netball courts.

The club even acquired the cinder running track from Wembley Stadium that had been used for the 1948 Olympic Games. The track was re-laid and flood-lit at the Wilderness and it attracted top athletes including Richard Bannister, who ran the first four-minute mile. Eton Manor also had a boathouse at Old Ford for rowing.



The Wilderness - date unknown (reprinted in Few, J. (2013) [Eton Manor AC 1913-2013](#))



The running track, date unknown (reprinted in Few, J. (2013) [Eton Manor AC 1913-2013](#))

Much of the money used to finance the sports ground came from the deep pockets of the eccentric aristocrat Arthur Villiers. After going to Eton College, Villiers studied history at Oxford where he

scraped a fourth class degree, which poor result reflected his lack of interest in formal education. Villiers then got a job in Barings Bank. He had a knack for successful investments and used the profits he made to bankroll the Eton Manor Boys Club for more than fifty years. Inspired by the ethos of the early settlement movement, Villiers moved to the East End of London in the 1920s to devote all his spare time to supporting the club and its members. He lived in a house on the Wilderness until his death in the 1960s.

Eton Manor Boys' Club ran a strict admissions system to make sure teenagers were committed to playing an active part in club life ahead of joining up. Members were typically recruited from local working-class families. They could only join between the ages of thirteen or fourteen and they had to pass a probationary period and agree to follow a set of rules that included (in the early period) no drinking, no playing cards for money, no loafing and no breaking things.

The Old Etonians who ran the club felt strongly that playing sport gave the members confidence, taught them teamwork, and built their character. If you left the club, you could never return but if you remained loyal to Eton Manor, you had a home-from-home and friends for life at the clubhouse and the Wilderness. Once boys turned eighteen they automatically qualified to join the 'Old Boys' club. For a nominal weekly fee, they were able to continue to use the clubhouse and sportsground. Then in 1942, a sister club was set up for girls. Brookfield Manor Girls' Club shared many of the Eton Manor facilities, and the two clubs arranged social events together, including shows and dances. A few marriages between members emerged out of these events.

Every summer, Eton Manor boys had the opportunity to attend a heavily subsidised and much-anticipated summer camp, this at a time when few working-class families could afford a holiday. In the early years the club camped in the grounds of Eton College in Windsor. From the 1920s, thanks to the generosity of one early founder (Edward Cadogan), they went to the Isle of Thorns in Sussex. During camp, the boys were provided with good food and fresh air. Villiers reported that one under-nourished lad had put on almost half a stone in ten days, a remark that reminds us that the club provided pastoral care for many of its members.

If a boy was known to be hard-up, his membership fee might be waived. The Old Etonian managers exploited their wealthy contacts, too, to secure jobs and training opportunities for members who were struggling to make their way in the world. In one act of dramatic benevolence, a boy was found to be living in such poor housing that Villiers was moved to buy a better house for his family, charging a low rent. This was the first of dozens of similar purchases, along with offering loans and scholarships to club members.



Eton Manor Summer Camp (undated). ([Bishopsgate Library/Eton Manor Boys' Club Archive](#))

Arthur Villiers fought off plans by London County Council to build a housing estate on the football fields on Hackney marshes by offering them land elsewhere for the development, but he was powerless to prevent the decision to drive a motorway through Riseholme Street in the early 1960s. For a couple of years after the clubhouse was demolished, the Wilderness grounds continued to provide a base for club members. Then in 1967, Villiers closed the whole club down, without warning. He never explained his reasons for the sudden closure but it's believed the reasons were partly falling numbers and partly changes to legislation that made it easier to support educational work than sporting activity. From the 1970s, the charitable trust that had supported Eton Manor since the 1920s became a learning charity (the Villiers Park Educational Trust near Cambridge).

Some Old Boys determined to carry on their sporting activities outside the boys' club umbrella. An Eton Manor Association was set up and individual clubs such as the Eton Manor rugby, athletics and football clubs remained active across the final decades of the twentieth century. Then in the early twenty-first century new sporting life was breathed into the Wilderness when parts of it were redeveloped as part of the 2012 Olympics. For example, tennis was played at this location in the Paralympic Games.

You can find some interesting memorials relating to the club here, along with an inscribed poem commissioned in 2012 by the then Poet Laureate, Carol Anne Duffy, *Eton Manor* (2012).

TB and Michelle Johansen, Bishopsgate Library, with thanks to UEL students for additional research, Lila Tolui, Nicola Cruttenden, Maria Pringipa, Ali Haddi.

Augmented reality hotspot (video of on-site experience): [Eton Manor and sport](#)

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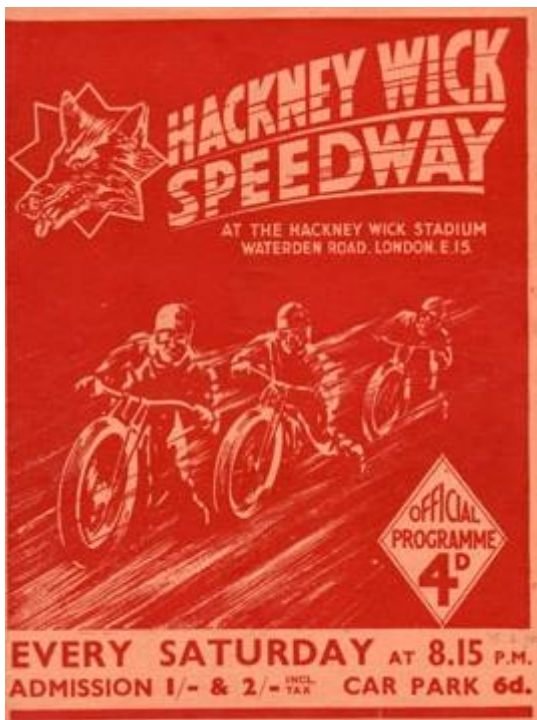
The [Eton Manor Archive](#), including minute books, the Club magazine *Chinwag* and other materials are available to view at the Bishopsgate Institute Library. Book your visit [here](#).

The Eton Manor poem installation along with many other public artworks has been mapped in [The Art in the Park: A Field Guide](#), Queen Elizabeth Olympic Park (2014).

Hackney Wick Stadium

The Hackney Wick Stadium (1932) was located on the site of what is now the 'Here East' media complex. The stadium was constructed for greyhound racing and adopted the oval track and mechanical hare which had been in use in the USA in the late 1920s. Compared to horse racing, dog tracks were easier to establish in urban locations and much more accessible to working class communities. With a capacity of 50,000, the stadium was floodlit which meant both greyhound racing and speedway could be a popular night out after work; spectators gambled on the races and got refreshments from eight licenced bars and food outlets. Off-site gambling was legalised in 1961 and for decades the televised greyhound racing was broadcast from Hackney Wick to betting shops all over the country, filling an important Saturday morning slot. The stadium also had kennels, training paddocks that could accommodate 50 dogs, and regular greyhound auctions. One spectator described the atmosphere:

It was a documentary makers dream, full of characters, old men in caps, many who had probably been to the track every Saturday morning since the year dot, and nearly all puffing away, almost as if it was a pre-requisite to attend... I used to just love the atmosphere, the smells, the sights and the sounds – Hackney was always good for the banter.¹



1936 Programme Cover, Credit: reproduced with kind permission of John Slusar, (greyhoundderby.com)

But perhaps the most visceral and exciting regular event here was the [speedway](#) which started at Hackney in 1935, a few years after the stadium opened. The smell of motorbike exhaust (methanol and oil) and the noise of the engines could be astonishing. As one observer noted:

Heavens, the noise! It is like ten million mechanical drills performing in unison. It swells and falls as the riders take the corners; it echoes about the cavernous concrete halls, drowning the feeble acclamations of the crowd; it dies slowly as the riders stop, and the end of a race seems like the end of a battle. It is titanic and terrible and monstrous; and yet in that enormous place, made by those monsters, it seems appropriate and right. And I do believe I rather liked it. (2)

The track was made with burnt, crushed rock (cinders) so the bikes could easily slide sideways around the track. Typically races involved four riders skidding around the track as the bikes did not have brakes and just one gear; they could reach speeds of 70 miles an hour on the straights.

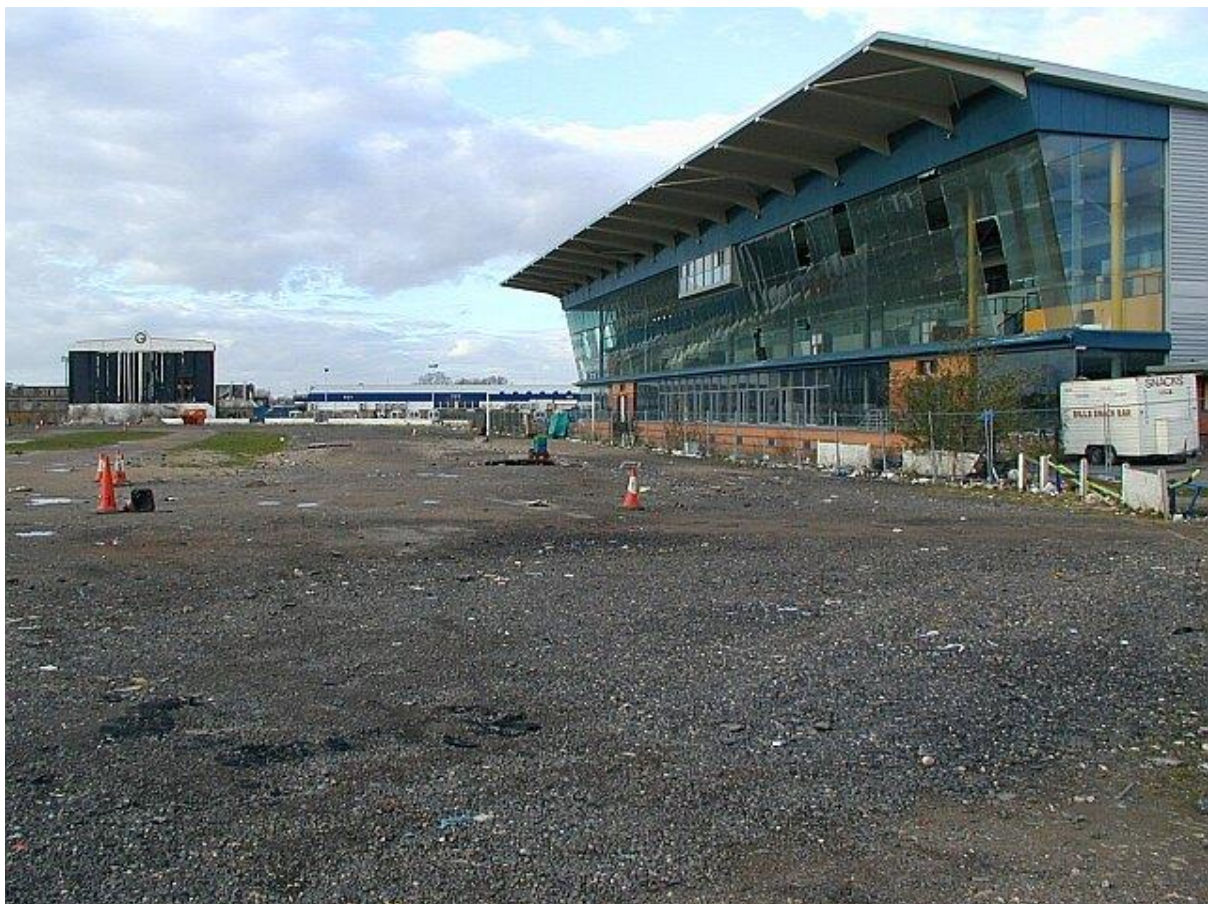


Speedway match at Hackney Wick, 1935 – Tom Farndon leading George Wilks. Tom later lost his life in a speedway crash. (With kind permission from John Skinner, defunktspeedway.co.uk)

Like football, there were speedway teams (this track was home to the Hackney Wick Wolves and the Hackney Hawks) with a national league and home and away matches. Supporters enjoyed travelling to see their teams compete. There were seven riders per team, with points awarded for first, second and third place in each race. The sport was very male-dominated but occasionally women raced too

and in the 1960s Mary Mansfield won the women's 'Queen of the Cinders' speedway competition two years in a row, beating Beryl Swain, the only woman to ever ride in the Isle of Man TT race.

The Stadium hosted plenty of other events, including a [heavy metal music festival](#) and, somewhat bizarrely, a [Highland Games were held here in 1934](#) - the Scottish Olympics. In 1994 new owners spent millions renovating the renamed London Stadium with a £12m stand, including a new restaurant and corporate hospitality boxes but despite a capacity crowd on the opening evening and hosting events including the British Speedway Grand Prix for two years running, it closed to the public just three years later in 1997. The stadium became derelict and was eventually demolished to make way for the Olympics Press and Broadcast Centre, now Here East.



Picture credit: The derelict London Stadium after closure (unknown photographer, runtrackdir.com)

TB

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The Olympic Bell



Bradley Wiggins at 2012 Summer Olympics opening ceremony (Nick Webb [CC BY 2.0](#))

The Olympic Bell was cast specially for the 2012 Games and was rung by gold medallist Bradley Wiggins at the beginning of the Opening Ceremony. It kicked off an opening show that memorably drew inspiration from the history of the Lea Valley and its transformation from a rural to an industrial landscape, and the social changes that accompanied it.

The Bell has a rich and direct link to this industrial past. It was created by the Whitechapel Bell Foundry, which in 2012 had been in existence in east London continuously since 1542, making it perhaps the most venerable and certainly the longest lived of its many factories. Over the centuries the Foundry cast some of the most famous bells in the world, including the Bow Bells and Big Ben, in London, and the Liberty Bell in Philadelphia USA.



Church Bell Foundry, Whitechapel (Alamy)

Strangely, since the Games, the bell has been given no further role to play. Because it is so loud, they say, there are no plans to ring it again. But the bell is the perfect place to reflect, now the Olympics is long gone, on how the Games and the site it has redeveloped, is part of a greater narrative of change in east London.

In the early twentieth century the idea emerged that the assorted marshes, gravel beds, sports grounds and open spaces scattered up and down the river Lea might be turned into a great park. An influential report was prepared by the Civic Trust, who created an extraordinary vision for future of the Lea Valley including a space 'the size of Hyde Park' north-west of Stratford, for sports activity of

all kinds, which eerily prefigures the Olympic Park of today. The report worked and the Lee Valley Regional Park was created by Act of Parliament in 1966.

Among its proposals were the construction of a 'Fun Palace', a giant modern structure dreamt up by Joan Littlewood and the architect Cedric Price to house community-based arts, science and culture by the river at Three Mills. The unrealised Fun Palace's [adaptable and inclusive industrial architecture](#) influenced Richard Rogers and Renzo Piano in their design of Paris's Centre Georges Pompidou. Designed more as a kit of parts than a building, its egalitarian marketing literature challenged people to interpret and use it at will:

'Choose what you want to do – or watch someone else doing it [...] Try starting a riot or beginning a painting – or just lie back and stare at the sky.'¹

The Fun Palace remains an influential and iconic proposal, even though it was never built, but a Lee Valley Regional Park Authority was established in 1966 and began to piece a more modest park together, some of which is now incorporated into Queen Elizabeth Olympic Park.

In the 1990's, as London Docklands started to take shape, it was the turn of local boroughs to become visionary, promoting the Lower Lee as a new London business and residential district, titled grandly an 'Arc of Opportunity' and '[Water City](#)' for the capital. Serious investment began in 1994 when the Government recast its plan for an international high speed rail route to Paris to take it through a new station at Stratford, accompanied by a massive shopping and commercial centre to be known as 'Stratford City', on the site of Stratford Works and Locomotive Depot. The Jubilee Line was opened in 2000, providing additional connections to underground passengers in north, central and south London, alongside the Central Line and the Docklands Light railway, much of which followed the existing network of railway lines that ran to Stratford.

Despite the ambition, investment in the years before the Olympics remained slow and some parts of the area remained amongst the poorest in the country. In 2001 the Olympic bid was seized on by the new London Mayor, Ken Livingstone, as a unique opportunity to reshape east London in a similar way to Barcelona, where the Olympics was a trigger for redevelopment of a large part of the city. He won the Government's support, and a bid was constructed emphasising the investment it would bring, and how it would utilise the energy of its young, creative and multi-ethnic population. It was this 'legacy promise' that caught the world's imagination and [won the bid for London](#).

Most commentators agreed that London 2012 proved a great success. While the budget grew far beyond first envisaged, the Games were delivered successfully on time and the opening ceremony, which included a dramatic theatrical performance in which pastoral land was ripped up to create factories and railways and then the scene was again reconfigured to highlight the success of the National Health Service and the connectivity of the internet age. While many of the allusions were national in scale, by association the image of east London presented to the world throughout this extraordinary process was a narrative of a post-industrial place of the past to an exciting and hopeful place with a future.

It is a decade later and you can see for yourself how the massive investment has transformed the area. Many argue that London's centre of gravity has truly 'moved east', particularly in terms of the creative and knowledge economy which seem likely to power a large proportion of London's twenty-first century growth. 'Austerity' cuts knocked regeneration plans off-track almost before it had begun, but the cranes are testament that the development continues, albeit at a slower pace than first envisaged, as the fringes of Queen Elizabeth Olympic Park become new sites for universities,

government offices, business headquarters, museums and tourist attractions. London is no longer turning its back to the east end of town or turning up its nose. It's moving in.

And there are inevitable losers as well as winners: the settled businesses who were forced to make way for the Olympic Park; displaced local residents unable to meet the cost of the new and improved housing. Even the Whitechapel Bell Foundry was a victim, forced to close in 2017 after almost 500 years, and now the site of a bitter battle between its new owners who wish to convert much of the site into a hotel, and those seeking to preserve its rich history intact.

So perhaps the Olympic Bell has a role after all - to keep London's legacy promise alive and kicking. It should be rung to celebrate the positive changes that have started to take place, and give us a moment to reflect on what has come before. But perhaps most importantly, it must be rung to remind London that there is still a lot more to do, not just for the economic development of east London, but for its people as well.

AG and Ralph Ward

1. 'On The Fun Palace' from *The (Temporary) Museum of Stratford*, The Architecture Foundation, 2013).

Augmented reality hotspot (video of on-site experience): the [Olympic Bell](#)

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The [University of East London Archive](#) holds the records of the British Olympic Association, including the 2012 Olympics bid submissions.

The CAA archive contains a large collection of drawings and other items [concerning the Fun Palace](#)

Water City Group (2008): [Lord Mawson's Water City Vision](#)

Omega (Olympic Games sponsor) (2012) [The IOC announces London as host city for the 2012 Olympic Games](#)

Gary's Olympic Game



Gary and Mark Carpenter (Photo: Phil Cohen)

The following narrative depicts understandings of ground, history and place from the perspective of a pair of groundbreakers from the 'Dig, Design and Demolish' phase of the Olympic site's transformation. The transcript below is from an interview recorded by Phil Cohen with Gary Carpenter, then aged 18, who describes the people he met and incidents that happened while he was working with his dad as an assistant rigger. Riggers own their own 'rig' which makes bore holes into the soil to take samples, which are then sent to a laboratory for analysis in order to provide a close mapping of the underground terrain through which the tunnelling is to take place.

Phil first met the Carpenters during a health and safety induction session at the Carpenters Road site and subsequently conducted interviews with each of them separately and one with them together. He was immediately struck by the closeness of their relationship and by the fact that this father and son team represented a very 'old fashioned' aspect of working-class culture. Gary had started working with his dad as soon as he left school, and in effect became his apprentice. They both took great pride in the job, and also from the fact that to a large extent they were their own bosses. They were taken on as a team, controlled their own work process, and moved from site to site, deciding when and where they would work. At 18 Gary was earning very good money and drove a Lamborghini to prove it.

Mark Carpenter was very knowledgeable about soils – in effect he was a geologist - and also something of an amateur archaeologist since his hobby was collecting objects he unearthed around the site. He had found Roman coins and pottery fragments, and many other things, each of which

had a story attached to them. But he was as interested in the present as the past and what was going on in and around the site, as well as what lay underground. He was a great story-teller and for his son's eighteenth birthday, made him what he called 'Gary's Olympic game' as a souvenir. It took the form of a Monopoly board which he adapted so that it represented a series of site-specific features and events. 'It's full of little private jokes,' Gary told me, 'while for Mark it was a good bit of memorabilia for us'.

One day Gary gave Phil a guided tour, telling the stories as he went. Some of the sites marked where they had worked. 'Vine Street' becomes Marshgate Lane and Euston Road gives way to Waterden Road which led onto the Olympic site. Gary joked that his dad only put them on so he knew where he was. In a geography which was changing so fast, with buildings being demolished and a whole street pattern erased, a few fixed points of reference came in handy.

Many of the stories were about their workmates and their personal idiosyncrasies. Local cafes and pubs also feature prominently. Some of the references are autobiographical, some touch on family conflicts, and others on their perceptions of the local community. Some stories are what Gary called 'rude': 'Dave's Hairy Pie Shop' would certainly put you off eating there.

In constructing his Monopoly board, Mark's topographical imagination follows a narrative, not a spatial logic. Real and imaginary sites are haphazardly mixed together, and many were place holders for private in-jokes as well as public 'craic'. Gary described the function of the game as an 'aide-memoire': 'so I can look back and remember everything that happened'.

The significance of the map is as much political as personal. In authorised cartographies places are named after the famous by those who have the power to confer that recognition, but in this narrative landscape is organised around people who might never get their names on any official map. Both Gary and Mark were insistent that the workforce who built the Olympic Park should have their contribution recognised and their story told. 'If it wasn't for us there would be no Olympics' they said.

Gary's tour

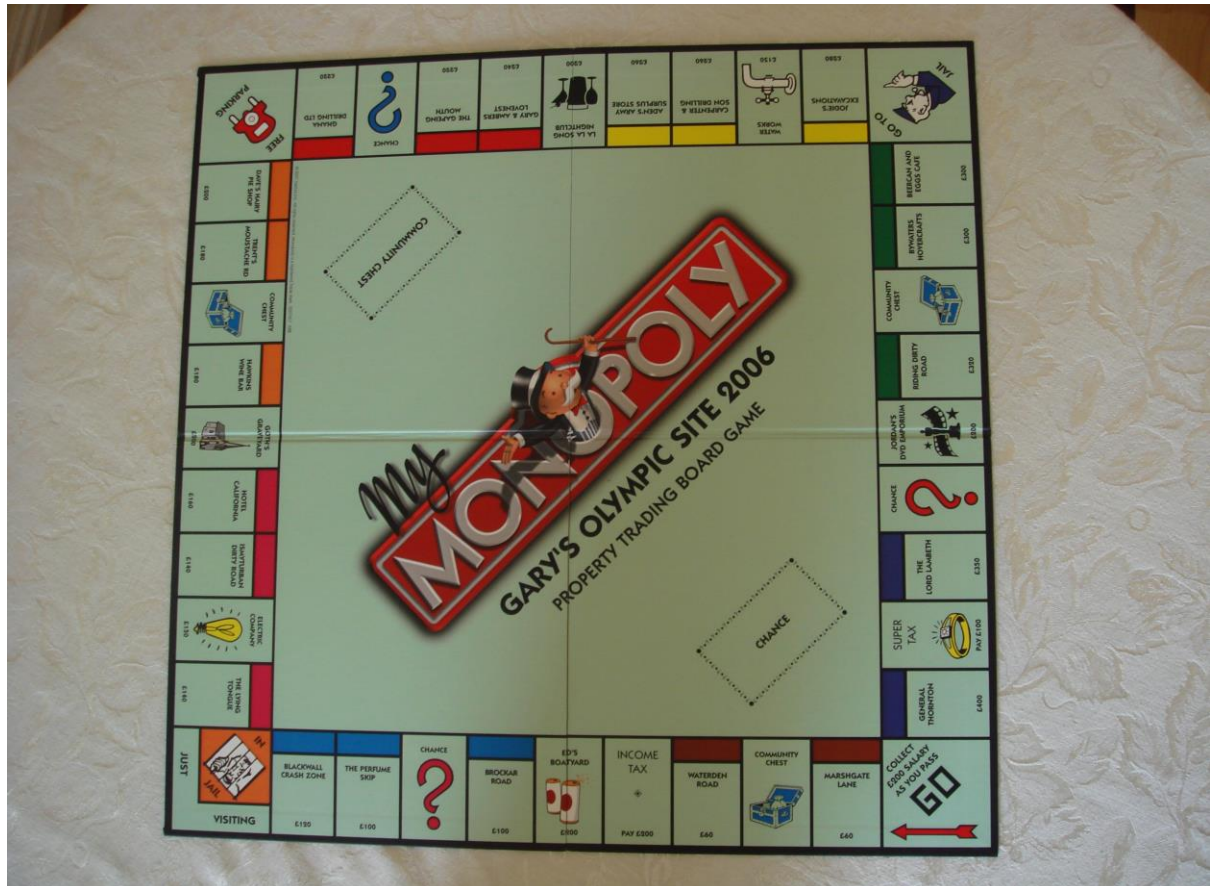
'I work with my dad, I'm his assistant, what they call a second man. We bore holes in the soil to get samples for them to send to the laboratory. I like my job. I was born to be a rigger. You have to learn it by your hands, and by watching what the rigger does. Every hole is different. You have to know what tools to use for what conditions. You can't learn it out of a manual or by looking at a diagram.

The way I am on site, I'm a name, I like to feel it's my site, I'm in control. People know me, it's all down to reputation and respect, everyone knows everyone on this site and I've made loads of friends. I'm proud to be here, to be part of the Olympics. In 2012, I'll be 23, maybe I'll have kids and I'll be able to tell them, 'look I helped build that'.

A lot of people say the East End is a shit hole, it's a dirty area. Its gun crime, its stabbings, its lawless. But I found the people were decent, friendly folk who have hard lives like us. Mind you they are not all like that. There was this scrapyard merchant down the road and he had a Rottweiler. I knew he was mistreating it. He didn't feed it properly, just left it out in the damp and cold. He was due to move out so I said to him 'I'll buy it off you and give it a good home. How much do you want for it? And he goes 'five hundred quid'. Well there was no way I could afford that, so I rung the RSPCA and told them about it and they come down and took the dog away. I said I'd like to have him, but they rang me the next day and said that he had to be put down cos he was suffering from hip dysplasia

and cataracts - he just hadn't been looked after. But I have a heart, you know what I mean, I could never mistreat an animal.'

Gary's tour of the Monopoly board: an annotated map



Marshgate Lane and Waterden Road

These are roads leading on to the Olympic site. I think they are just there because everything is changing so fast, so just to get our bearings. We done a lot of work down there.

Ed's Boatyard

Ed was the site engineer and if we had any problems we'd go to him and he'd either tell us to carry on or pull us off the job. He liked his boats, he knew a lot about them and when we got ours he used to help us a lot, telling us what to do, what stuff to get.

Brocart

This is a local road and what it was, I'd just started driving and when I'd come up to the lights, or a roundabout I used to hesitate sometimes. And my dad was with me and whenever I did this he'd go brocart, bro, bro, brocart (makes a sound like a hen clucking) so it became like a private joke between us.

The Perfumed Skip

There was this distribution centre up the road and they deal with perfumes, and cosmetics. And they was always throwing stuff out in the skip, even if just the packaging was damaged. So I used to go up there in my lunch break and have a sniff around and I got loads of good stuff out of there, which I gave to my girlfriend.

Blackwall Crash zone

I had a tasty little crash there, went into the back of a Land Rover, only at about two miles an hour, but it all counts. My dad used to bring it up.

The Lying Tongue

This is about my Uncle Pau. When I first started drilling with my dad, he worked with us. But when I started getting more comfortable with my dad, and we'd do a lot of horseplay, he didn't like it. perhaps he felt left out, I dunno. He realised that my dad had ideas for me getting into drilling and being part of the business. Then one day he rang up and said he was quitting, cos I was taking the piss out of him all the time. My dad told him I was no threat, but he said he was going back to lorry driving. But then we found out that he had gone and got himself a job with another drilling company, so he lied to us. He'd got a long tongue but he lied with it, even though my dad had taken him in when he needed help.

Hotel California

It's a strip bar in Stratford. There was a bloke called Dave who worked for the bomb disposal squad. He was always going on about this place. He loved it in there and spent most of his free time there. Quite a few of the lads used to drink in there, but I never went there myself.

Goth's Graveyard

This is about another Dave, also in the bomb squad. He's just come back from Iraq. He seemed like a normal bloke, but then he met this girl, she was Goth. So one day he turned up with a Mohican and pink hair. Then he was off for a few days and we spread a little rumour that he's been caught shagging his missus in a graveyard. Every time we saw him on the site we'd go 'been down the Graveyard recently?' But then his girlfriend left him. His money from Iraq started running out, then he lost his job. He had a lot of bad luck.

Hawkins Wine bar

This is about a bloke called Hawkins, he was very dedicated to his work. He never left the yard till about eight o'clock at night. He was very friendly but quite posh. He'd say 'I'm quite partial to a thimble full of wine'. He never actually drank very much. Anyway we liked him, so we gave him a wine bar, because we could.

Trent's Moustache Road

Trent was a bit of a ladies man, very good looking. He decided to grow this moustache. It was hilarious. He'd got big lips and a wide mouth, perhaps he was trying to hide them, but the tache was huge. It looked like a rat hanging off his mouth, and it looked ridiculous on such a young bloke.

Ghana Drilling Ltd

There was a bloke we met on the site who knew nothing about drilling, but he went and bought this rig, and he would ask us for our advice. But he was very slow, you'd explain things but somehow he just couldn't grasp it. People think drilling is easy but it isn't. He wanted to go out to Ghana and he

wanted us to come with him. But we knew he'd stand no chance out there. He came back after a couple of weeks and he'd taken all the wrong gear and didn't even get to bore one hole. He wanted us to come back with him, but it wasn't a nice part of Africa where he was living, so we just said, sorry, no.

The Gaping Mouth

There was a bloke on site called Paul Mann. He was an ex-traffic warden but decided to become an engineer. And there was this other guy Jordan, he was an Australian, and we used to do a lot of Jamaican talk like 'yeah, man' and 'howya doing bro', and all that. Then one day we was with Paul and Jordan come up and ask him what his name was and he went Paul Mann, so of course just thinks he is trying to be cool, saying 'man'. Paul used to just stand there all day with his mouth open, doing nothing. He was the laziest man on the site. He was always stuffing his mouth, and if you threw anything in his direction it was bound to go in. He was just a very annoying kind of bloke.

Gary and Amber's Love Nest

I'd just met my girlfriend and my dad liked her so he put this one on for us both. There's not really a story to it, it's just a nice thing.

Lala Song Nite club

This is about my uncle Paul again. He was always singing to himself. He likes cabaret and musicals. But he could never remember the words. So he'd just lala along. So we used to take the mick and lala back at him.

Aidan's Army Surplus Store

He was also a bomb detector and a very good mate of ours. He was ex-army, he'd been a sergeant major. He was a very military bloke, the way he walked, swinging his arms. And he talked kind of strange – he'd use these big words, which you didn't know what they meant until he explained. But he wasn't at all stuck up. He also had a moustache. I asked him once if he'd seen any fighting, but he didn't like talking about the army. He used to bring in his old army stuff, trousers, jackets, waterproofs, all nice stuff. We always used to ask him to check out bore holes for bombs because we knew he was reliable. They found lots of munitions on the Olympics site, hundreds of shells.

Carpenter and Son Drilling

It's just my dad's way of saying that I'm part of the business. It's a nice thing to hear. He'll let me know when I'm ready to have a rig of my own. He says I could be earning 50 grand a year by the time I'm 25, and as it is I'm getting 350 a week which is a lot more than my mates are getting.

Jodie's Excavations

She was an archaeologist we got friendly with. Aidan also liked her a lot. She's another person on the site I'll always remember. She used to go out with us when we were boring a new hole, in case we found anything of interest to her. We found a sheep's skeleton once. I found a lot of old bottles, and an inkwell covered in mother of pearl. And loads of bits of dolls. I got interested in the bottles. People collect them, you know. California Hotel Dave was an expert on them. He knew how they were made; he could tell you stories about them. He had quite a collection, over a thousand bottles.

Beercan n Eggs Cafe

This was a local caff run by Jamaicans where we used to have breakfast sometimes. So we'd do a bit of Jamaican and ask for 'beercan n eggs'.

Bywaters Hovercraft

They used Hovercraft to collect water samples from the marshland. They had been in the James Bond movies – the one with Piers Brosnan in it. They were army style, really cool, I'd have loved to have a go in one. Got my photo taken in the driving seat; near as I'll ever get to it, I guess.

Riding Dirty Road

This is just a song I used to play as I was driving around. My dad also liked it which is probably why he put it on.

Jordan's DVD Emporium

He was a young lad, and very laid back. He was in control of the site and he just used to sit in his hut all day and listen to music and watch DVD's on his laptop. You had to knock on his door and make sure you weren't disturbing him before you want in. Mind you he had everything under control.

Lord Lambeth

Lambeth is the name for a soil formation, you get it a lot, it's also called Woolwich and Reading. There was this bloke Dave Rosser, who really knew nothing about geology, but we taught him stuff and then he set up as a site authority on the subject. He was annoying at first. He started off being the head honcho and you didn't really know how to act around him. But he ended up as just a regular geezer. So we used to call him Lord Lambeth.

General Thornton

Aidan's second name was Thornton so we used to call him General Thornton. We got a spray can, what they used to mark the ground, and sprayed 'General Thornton was Here' everywhere. We had a lot of good times with him.

No-one thinks of these people like Aidan. But if he hadn't been there we might have had a bomb go off and there would be no more Olympics. Everyone on the site did something towards the Olympics and they should get recognised. I met so many characters on the Olympics, but now everyone has gone away. Jordan's gone back to Australia; Goth's gone back to Yorkshire. I'll never see them again, but we all remember each other. When I come back to it in the future I can think 'yeah that's what happened, that was really good'.

How this project was made

The original idea emerged from research carried out by staff at the University of East London into the impact of the 2012 Olympic and Paralympic Games on its local host communities in East London. It became clear from the many interviews carried out before, during and after the event that, whilst most welcomed the Games, many people were concerned that the complex and rich history of the area would be forgotten or ignored once the housing, workplaces and other amenities that existed here were demolished for constructing the new Park. In response we decided to put together an audio trail that would explore the rich heritage of the site from the earliest recorded times until the present. We succeeded in getting a grant from the Heritage Lottery Fund for this purpose, but unfortunately before we could begin work, the University of East London decided it to close down the History and Heritage Studies department where the project was to be based. The project grant was then transferred to The Building Exploratory, a community-based charity concerned with environmental education. Work involving their volunteers, Discover Children's Story Centre and local schools was begun in September 2018 but before it could be completed the Building Exploratory went into liquidation and so the project came to an abrupt halt. After the insolvency process The Livingmaps Network, which had been involved from the very outset, agreed with the Heritage Lottery Fund to take on the project in partnership with Hyperactive Developments, and with additional financial support from the Foundation for Future London and, for our events programme, the Raphael Samuel History Centre, brought the project to completion in its present multimedia format.

About the Organisations involved in creating this guide

[Livingmaps Network](#) was established in 2015 by a group of researchers, artist map makers and community campaigners. It has a strong commitment to participatory map making and has worked with many groups, as well as running workshops, a programme of live and online events, and an online journal. With a grant from the London Legacy Development Corporation we worked with young people, and adult residents of East Village, to produce a video and photographic exhibition exploring what the 2012 legacy meant for them and a Young Person's Map and Guide was produced with Year 7 students from Chobham Academy.

[Hyperactive Developments](#) is an immersive and educational technology company led by Dr Atif Mohammed Ghani who brings 20 years of producing filmed and immersive content in the UK, probably best known for producing the East London set *Ill Manors*. His recent award-winning virtual reality project *The Martha Street Experience* has been playing marquee festival worldwide after its premiere at the BFI London Film Festival in 2020.

[Heritage 5G Ltd](#) is an immersive development company with a focus on producing content for the heritage sector. Heritage 5G is currently delivering projects with UCL Special Collections, London Metropolitan Archives, Canadian History Museum and others. Co-founder Jay Younes is an established immersive development Producer credited with designing and running immersive labs for 19,000 young people and adults throughout the south-east.

The Living Maps Team

Toby Butler is a heritage and digital education consultant, and a public historian with a wide-ranging skill set developed in higher education, the third sector and the media industry. He has devised collaborative oral history projects in India, the USA, Wales and England. He has created oral history trails along the River Thames with the Museum of London and several London parks for local authorities. He was Reader in History and Heritage Studies at the University of London and directed major oral history projects on the Royal Docks and the [Bethnal Green disaster](#). Toby is currently a Director of [LivingMaps Network](#) and an editor of *History Workshop Journal*. He is a digital education consultant at Birkbeck, University of London and is a research fellow on the Mapping Museums project, which has created an online database and map of all the museums in the UK from 1960-present featuring his [interviews with 57 museum founders](#).

Phil Cohen is an urban ethnographer, Emeritus Professor at the University of East London, and the research director of Livingmaps Network. Since the 1980's he has carried out a series of research and educational projects working with communities in East London, documenting the impact of economic and demographic change on their livelihoods, life-styles and life stories. This work was brought together in *On the Wrong Side of the Track: East London and the Post Olympics* (2013). He co-edited a collection of legacy studies *London 2012 and the Post Olympic City* (2017). He has conducted many walking lecture tours around the Queen Elizabeth Olympic Park. Amongst his other publications are *Archive That Comrade: Left Legacies and the counter culture of remembrance* (2017) and *Waypoints: towards an ecology of political mindfulness* (Eyeglass Book 2019). See [his website](#) for further information.

Juliet Davis is interested in urban histories and the making of new urban futures, in the role of the London Olympics in transforming east London, and in theories of Urban Design. She published the book *Dispersal: Picturing urban change* with Historic England Publishing in 2017, focussing on the history of the Olympic Park. Current projects include a book for Bristol University Press entitled *Care and the City: ethics of urbanism* and a special issue of *Planning Perspectives* on *Epidemics, Planning and the City*. Juliet practiced architecture and urban design in London for ten years in London before entering academia in 2007, contributing to Eric Parry Architects' regeneration of St. Martin in the Fields amongst other projects. She completed an AHRC-funded Ph.D at the London School of Economics' Cities Programme in 2011 focussed on the early stages of planning London's Olympic legacy.

David Dorrington is a software developer and game development academic at the University of Brighton. He has worked on a range of interactive learning projects.

Jonathan Gardner is an archaeologist and heritage researcher based at Edinburgh College of Art, University of Edinburgh. He has conducted extensive research on the relationship of the London 2012 Olympic and Paralympic Games to the city's history and undertook a PhD on the Games and several other London 'mega events' between 2012 and 2017 at the UCL Institute of Archaeology. He has been involved with Groundbreakers since 2014; prior to that he worked as a professional archaeologist on construction sites including Queen Elizabeth Olympic Park in Stratford between 2007 and 2008. His first book, *A Contemporary Archaeology of London's Mega Events: from the Great Exhibition to London 2012*, is out in May 2022 with UCL Press (open access and free to download [here](#)).

Bob Gilbert's varied career has included stand-up comedian, community worker, head of a residential field studies centre and Director of Sustainability at a London local authority. He has also travelled widely in Europe, Asia, Africa and South America, including walking glaciers in Kashmir and a solo journey by mule down the Dinder River in the Sudan. A long-standing campaigner for inner city conservation and the improvement of urban open spaces, he is patron of The Garden Classroom, a charity promoting outdoor and environmental education in London. Bob's books include *The Green London Way* and *Ghost Trees*, a Guardian Book of the Year, long-listed for both the Rathbones and the Wainwright awards. He has written extensively for newspapers and magazines and his column on urban wildlife has now been running continuously in a north London paper for 25 years. His work for TV and radio has most recently included *The Sussuration of Trees* and *A Pilgrimage in Plants*, both for BBC Radio 4.

Neil Larkin is a local geography teacher with over 30 years' experience of working with young people in Newham and Waltham Forest. During his career Neil has been an advisory teacher, Deputy Head teacher and senior officer for Children and Young People's Services, Neil has also successfully led over 100 fieldtrips to the Olympic Park in his role as tutor for [East London Urban Geography](#) and devised the accompanying teaching resources for this project.

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Augmented Reality credits:

Production Company	Hyperactive Developments
Development Partner	Heritage 5G Ltd
Producer	Dr Atif Mohammed Ghani
Co-Producer	Jay Younes

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AR Archives	London Metropolitan Archives, Museum of London, Newham Community Archives, Hackney Archives, Mike Seaborne, Daily Mail Archive, London Legacy Development Corporation, Canadian Architecture Association
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