

# QUEEN ELIZABETH OLYMPIC PARK



Living Learning Legacy



# SPONSORS













# CONTENTS

Forewords	4
Executive summary	7
How was the legacy formulated?	12
Delivering the legacy: what are the ingredients?	25
Continuing the legacy	58
A wider legacy?	63
Viewpoints	66
Project showcase	82
Acknowledgements	244
Notes and further reading	246

# FOREWORDS

**Peter Murray OBE**  
*Curator-in-Chief, New London Architecture*

The positive impact of the 1992 Barcelona Games on that city, contrasting with Sydney’s lack of long-term plans for their 2000 Olympic site at Homebush Bay and the tumbleweed blowing through the Athens 2004 stadia, prompted London to seek from the start a sustainable legacy that would regenerate the impoverished East End of London.

Plans were put in place that would encourage public and private investment and merge the brownfield site north of Stratford seamlessly into the A–Z map of London.

This NLA report looks at the legacy of the London 2012 Olympic and Paralympic Games. It traces how the plans have come to fruition, how they have delivered a popular and exquisitely landscaped park for the communities of the area, and how they have delivered new housing, new job opportunities as well as permanent sporting amenities for both professionals and the general public.

Before London won the bid, I used to cycle regularly through the area, passing huge mountains of discarded fridges, avoiding the burnt-out cars and broken glass strewn across the deserted streets. To transform such a desolate place into a piece of city in less than two decades is remarkable and would have been impossible without the catalyst of the Olympics.

It is a testimony to the teams involved in its design and construction. Prior to the Games, we did not have a great record in the delivery of *grands projets*: Terminal 5 at Heathrow had been delayed for 12 years

in the planning process, Wembley Stadium was four years late and the Government’s abandonment of Picketts Lock as the venue for the 2005 World Athletics Championships did not bode well for our Olympic bid.

But the naysayers were confounded. The Stratford infrastructure and buildings were brilliantly delivered, a global advertisement for UK PLC. The Velodrome, perhaps the best of the buildings with its near-perfect integration of engineering, architecture and construction, designed by Hopkins Architects was the nation’s favourite to win the prestigious Stirling Prize in 2011 but was outrageously ignored by the RIBA jury.

Today, Queen Elizabeth Olympic Park is filling not only with new housing but with offices, cultural centres, and university campuses: a rich mix of uses that makes it one of the key hubs of London outside of the Central Activities Zone, reinforcing the capital’s polycentric nature, a hallmark of its resilience and flexibility in a post-COVID future.

Mayor Ken Livingstone’s plan to use the Olympics to extract funding from the Blair government followed by Johnson’s boosterism leading up to the Games were an unlikely combination that delivered a successful event and positive change. We wait to see whether the present Mayor can widen the legacy and accelerate the regeneration of the Royal Docks, an area that has been desperately slow to follow Stratford’s example.

**Lyn Garner**  
*Chief Executive, London Legacy Development Corporation*

This book tells the story of Queen Elizabeth Olympic Park. You will learn that it is about so much more than a wonderful summer of sport. As well as those magnificent Olympic and Paralympic Games in 2012 which lifted spirits and brought so much pride, the Park is at the heart of one of the largest, most ambitious and extraordinary urban regeneration projects whose benefits are now becoming increasingly apparent.

In the following pages, you will read about the contributions from a huge range of people from diverse organisations who have helped to shape the Park from its earliest days as a post-industrial brownfield site, to its Games-time configuration as a major events space through to what is taking place today as a new and inclusive part of the city.

All of those projects, from the largescale master planning through to small community-focused initiatives, were only made possible because of bold and decisive political decisions at local, London and national levels, continued cross-party support and collaboration between the public and private sectors.

Plenty of commentators will share their views in the media about what has worked and what hasn’t. That is for you to judge, but the amazing stories and projects contained within these pages don’t lie about the scale of change not only since 2005 but also since 2012. Delivering the Games was a remarkable feat, and those Games provided the perfect backdrop and impetus for this incredible regeneration project that is still only part way through its journey.

Thousands of homes have been delivered already with thousands more to come, 33,000 in the wider area by 2036. We have two amazing business districts at IQL and Here East, between them bringing thousands of jobs to Stratford. All the permanent sporting venues are open and used alongside temporary spaces, hosting world-class events from Premier League football to ABBA; Major League Baseball to the Red Hot Chili Peppers, all helping cement east London as an international visitor destination and helping to drive London’s economic recovery. But the best is still to come.

SHIFT, the Park’s inclusive innovation district, will harness the potential of the world-class universities coming to the area and join them with the entrepreneurs, tech start-ups and other movers and shakers who will help Stratford return to its roots as a place of innovation and making, this time with cleaner, greener and smaller technologies.

East Bank starts to open its doors in September 2022 with UCL East’s One Pool Street building. From 2023 UAL’s London College of Fashion, UCL’s Marshgate building, Sadler’s Wells East, V&A East Storehouse, BBC Music and V&A East Museum will also open. The potential for local people and businesses is huge.

I hope the projects you read about in this book inspire you, not just in your careers and professions, but also to come to Stratford to enjoy the Park and savour both what has been achieved here already and what is still to come.





# EXECUTIVE SUMMARY

The Olympic and Paralympic Games in the summer of 2012 were a pivotal moment in the recent history of the capital, but their longer-term importance lies as a catalyst for the wider regeneration of east London, encapsulated in the concept of 'legacy'.

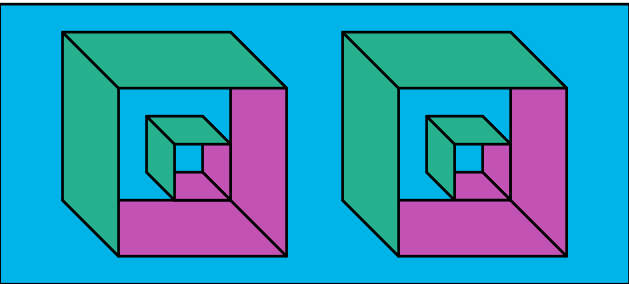
As we celebrate the tenth anniversary of the third London Games in 2022, much has already been written about the creation of Queen Elizabeth Olympic Park and the evolution, impact and assessment of the Games' legacy. Rather than providing another descriptive or historical narrative, our aim with this NLA report has been instead to draw out key underlying principles of the London Games legacy, as these relate to the physical transformation of Stratford, and how these might inform future urban regeneration.

A major part of our research process has been group interviews with more than 50 senior professionals in the built environment industry — many of whom have a long association with east London through the planning and delivery of 2012, legacy and other projects, have delivered or advised on Games projects in other host cities, and are recognised as global leaders in their respective fields.

The project showcase in this publication evidences the scale and ambition of the transformation that took place for the Games and which continues today. It provides details of masterplans, individual buildings, venues and other schemes as an important documentary record of planning, design, development and delivery.

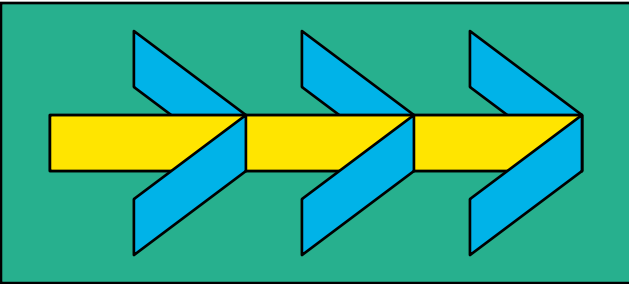
# LESSONS LEARNT

Throughout this book, we have sought to address two key questions: what can we learn from the creation and delivery of this legacy to guide the future management and development of the Park, and what is needed for the legacy to successfully continue? Several key themes, also represented in NLA's London 2035 Checklist, have emerged:



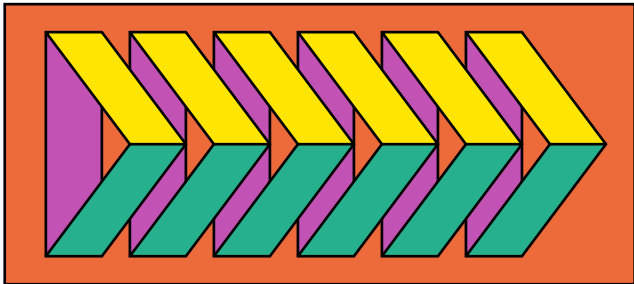
## Vision

A clear vision — that of ‘convergence’ — meant that the commitment to legacy was built in at the start, and ran as a core principle throughout the planning, design, building and continuing management and development of the Park.



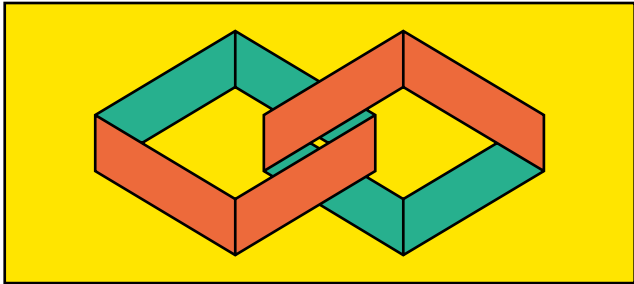
## Longtermism

Legacy is a generational rather than a decade-long project. A long-term, but responsive, approach is vital.



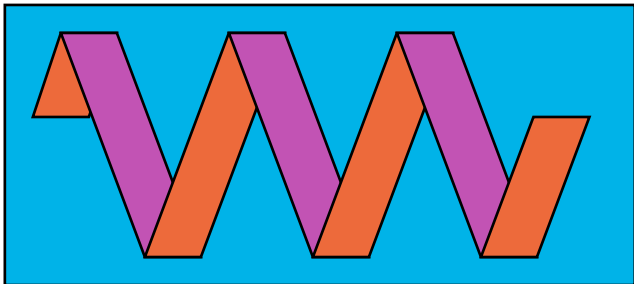
## Purpose

The fixed deadline of the Games, clarity of purpose, alongside a rare alignment of political parties and, not least, the scale of funding and resources, speeded up processes and removed obstacles that would otherwise have taken years or decades to resolve.



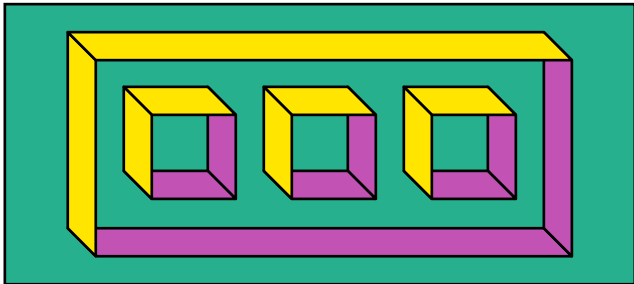
## Collaboration

Planning and delivering physical legacy generated a culture of collaboration and focused delivery, and provided confidence and ambition to deliver large-scale projects that have continued to advance the built environment industry's international profile.



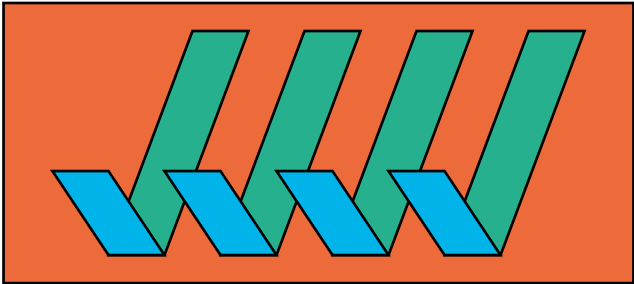
## Flexibility

Embedding legacy early on meant prioritising flexibility, supported by a commitment to innovation, and agility to respond to external forces and market demands.



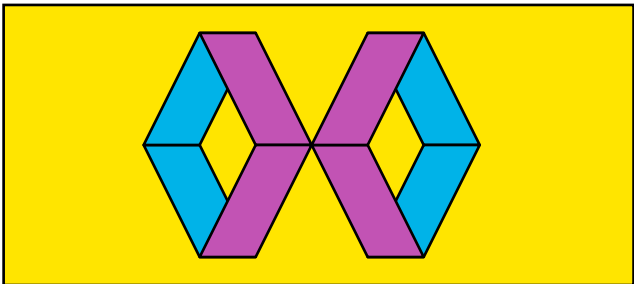
## Inclusivity

Alongside the provision of housing and social infrastructure, spaces for innovation, education and skills, and creativity are needed to enable communities to grow and thrive, and to help generate inclusive economic growth.



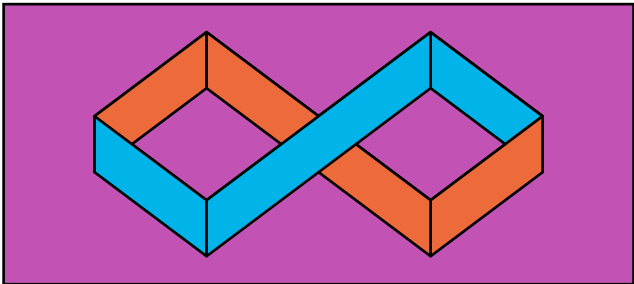
## Quality

Robust benchmarks, standards and oversight in design quality, accessibility, inclusion and environmental sustainability are essential for futureproofing and supporting the delivery of legacy aspirations.



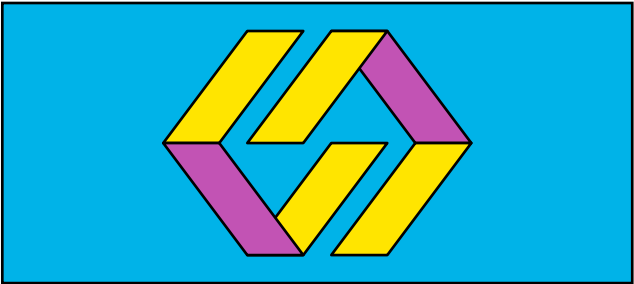
## Connectivity

Improving connections were imperative not only to facilitate the vast influx of visitors during the Games, but also to ensure that after 2012 the Park and its neighbourhoods would eventually become enmeshed physically — as well as socially, culturally and economically — with the surrounding communities, and vice versa.



## Sustainability

Sustainability was built in as a key aspiration for the Games from the beginning and has remained a fundamental priority, taking on ever-greater significance with the climate emergency and the increasing awareness of the importance of health and wellbeing.

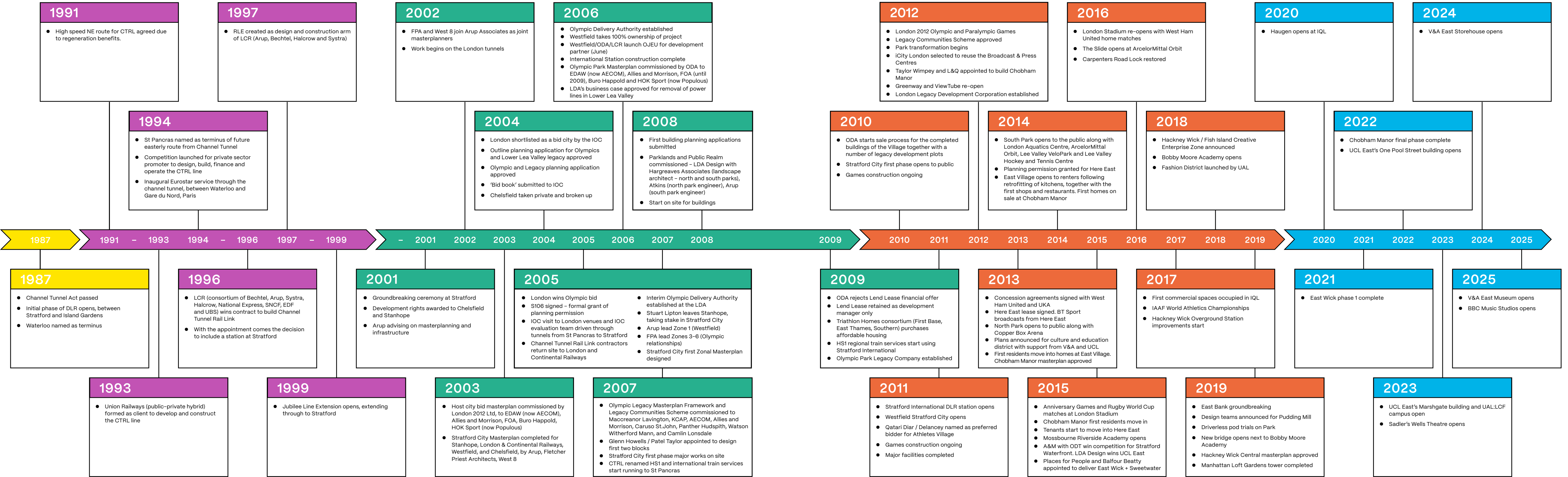


## Stewardship

Sustaining effective stewardship and proactive management and governance, by both public and private sectors, is vital for long-term success and requires patience, vision and commitment.

# TIMELINE

*With contributions from LDA Design, London Legacy Development Corporation, Fletcher Priest Architects, and Deloitte*



# HOW WAS THE LEGACY FORMULATED?

## *Regenerating East London*

'Legacy', as it is generally understood in London today, is embodied in the transformation, in little more than a decade, of a vast swathe of former industrial land in the east into one of the world's most significant modern urban parks, with new homes, jobs, schools, community facilities, and world-class sporting venues, alongside one of Europe's largest shopping centres, and a wealth of spaces for culture, leisure, education and innovation. London's hosting of the Olympic and Paralympic Games in the summer of 2012 was the supercharger for this process, but to discover the origins of its legacy we must go back to 6 July 2005, when London was awarded the Games by the International Olympic Committee (IOC).

Over the centuries, industry had been centred in east London, but with its decline in the 20th century large areas of land and the lower parts of the River Lea, forming a natural east-west boundary, fell largely into disuse. Much of the area now occupied by Queen Elizabeth Olympic Park became dominated by gasworks, overhead powerlines, waste, sewage treatment and other service infrastructure. It became a liminal space at the junction of four London boroughs — Hackney, Tower Hamlets, Newham and Waltham Forest. Dame Alison Nimmo, later Director of Design and Regeneration, Olympic Delivery Authority (ODA), recalls: 'Sometimes I have to pinch myself as to what the site was really like back at the beginning, because it was so close to big transport hubs and Canary Wharf, and yet it was a sort of forgotten place.' The surrounding areas and communities were acknowledged to be some of the poorest and most deprived in London, with an oft-quoted health research statistic from 2008 indicating that travelling east from Westminster, every two Tube stops represented more than a year of life expectancy lost.<sup>2</sup>

QUEEN ELIZABETH OLYMPIC PARK

"OLYMPIC LEGACY IS THE RESULT OF A VISION. IT ENCOMPASSES ALL THE TANGIBLE AND INTANGIBLE LONG-TERM BENEFITS INITIATED OR ACCELERATED BY THE HOSTING OF THE OLYMPIC GAMES/SPORT EVENTS FOR PEOPLE, CITIES/ TERRITORIES AND THE OLYMPIC MOVEMENT."<sup>1</sup>

International Olympic Committee





Top: Stratford International under construction, 2008 © Jason Hawkes | Bottom: London 2012 Olympic Games, Opening Ceremony © Picture Alliance | Right: Park waterways during the Games, 2012 © AECOM and David Lloyd





'In some ways', suggests Jerome Frost, now Chair, UK, Middle East, India and Africa, Arup (also former Head of Design and Regeneration at the ODA), 'although we're 10 years on, we're actually 30 years on, because the whole ambition, the whole scale of change, grew out of work that was done much earlier than the Olympic project.' The area's capacity for regeneration had been identified from the 1990s. Like so many projects before and since, it was a critical step in the development of transport infrastructure that started to unlock this potential, when the 1996 Channel Tunnel Rail Link Act allowed for the construction of the High Speed 1 rail link from St Pancras, with Stratford as a key station on the international route via Kent. Spoil from digging tunnels for the new line brought the land above the flood plain of the river Lea, making development viable. The Stratford City masterplan was developed by Stanhope, London & Continental Railways, Chelsfield, Arup, Fletcher Priest Architects and others to transform the former railway lands around what became Stratford International station into a new urban quarter centred on a new business district and major retail centre (now Westfield Stratford City), along with residential neighbourhoods of 3,000 homes, which eventually became the Athletes' Village during the Games and now comprise the core of East Village. When submitted in 2003, the masterplan comprised Europe's largest planning application since World War II.<sup>3</sup>

### *The Olympics as the catalyst*

Stratford City has now become a core element of this revitalised area of east London, but before 2012, even with a plan offering exponential change, there was

concern about the time needed to build the number of homes on such a large scale, and whether the private sector would raise enough investment to ensure sufficient return. Nigel Hugill, then Managing Director of Chelsfield and later Chair of Lendlease Europe, was quoted as saying in 2012: 'You define a place by the retail offer', but 'it was anticipated it would take 20 years to build that many new homes.'<sup>4</sup> 'The scale of what was needed', argues Jerome Frost, 'was bigger than any other major regeneration project.' The Lower Lea Valley, although part of the Lee Valley Regional Park for decades, 'was an unresolved section ... which needed a multi-billion project to really transform it and do something of such regenerative impact', agrees Shaun Dawson, Chief Executive, Lee Valley Regional Park Authority, which is responsible for a 10,000 acre, 26 mile long park which stretches from the Thames to Hertfordshire and includes parts of Olympic Park. It owns the northern third of the Olympic Park with Lee Valley VeloPark and Lee Valley Hockey and Tennis Centre, and just north of the M25 Lee Valley White Water Centre.. Many recall the frustration shared by local communities and politicians about the multitude of proposed regenerative masterplans that had never come to fruition.

Fortunately the 1990s and the turn of the millennium saw several key factors start to align. This was the period in which the Urban Task Force, headed by architect Richard Rogers, published its highly influential report *Towards an Urban Renaissance* (1999), recommending the building of new, designed, environmentally sustainable, compact urban quarters on brownfield land as a solution to building the millions of homes needed without encroaching on the Green Belt. At the same time there had been

various attempts to develop bids for the Olympic and Paralympic Games, although the UK's reputation as a potential host had been somewhat damaged by uncertainty about the design of Wembley Stadium and the decision not to construct a purpose-built athletics facility at Picketts Lock for the 2005 World Athletics Championships, with the event moved instead to Helsinki. In fact, for some time Birmingham and Manchester were the favoured UK options as the host city, featuring in unsuccessful bids for the 1992, 1996 and 2000 Games. Manchester's achievement, however, in hosting the 2002 Commonwealth Games generated renewed confidence in the country's ability to put on large sporting events.

As the capital, and a world city, London was, of course, always in the mix as a potential UK host city — but one of the most significant reasons why it had not been a primary option from an international point of view was the lack of an overarching local governing body to sign the host city contract. But, as the official report on the 2012 Games later noted, 'The election of the Mayor and the creation of the Greater London Authority in 2000 allowed for a more strategically cohesive approach in the capital.'<sup>5</sup> The Lower Lea Valley was identified as an Opportunity Area in the first iteration of the London Plan (2004), while Mayor Ken Livingstone's role is universally acknowledged as being pivotal in driving forward the ambition for London to host the Games in the east of the city, rather than in the west, as it had done twice before, in 1908 and 1948. During the 2008 mayoral election campaign, he famously admitted:

Right: the evolution of Queen Elizabeth Olympic Park in Existing, Games and Legacy modes © Allies and Morrison



"I DIDN'T BID FOR THE OLYMPICS BECAUSE I WANTED THREE WEEKS OF SPORT ... I BID FOR THE OLYMPICS BECAUSE IT'S THE ONLY WAY TO GET THE BILLIONS OF POUNDS OUT OF THE GOVERNMENT TO DEVELOP THE EAST END — TO CLEAN THE SOIL, PUT IN THE INFRASTRUCTURE AND BUILD THE HOUSING. ... IT'S EXACTLY HOW I PLOTTED IT, TO ENSNARE THE GOVERNMENT TO PUT MONEY INTO AN AREA IT HAS NEGLECTED FOR 30 YEARS." <sup>6</sup>

Ken Livingstone, Mayor of London, 2000–2008

At that time, the concept of 'legacy' had also become a cornerstone of the Olympic movement, and in 2003 an amendment committing the Games and organisers to 'promote a positive legacy' was added to the IOC Charter. The Games is a global sporting event like no other, with a platform to showcase the host city to a worldwide audience on an unparalleled scale, with the resulting benefits that can accrue not least from an uplift in inward investment and tourism. During the 2012 Games, it was estimated that 3.6 billion viewers — more than half the world's population at the time — saw at least one minute of television coverage from London.<sup>7</sup> Yet there were also increasing concerns and debates about the crippling cost of hosting such events, hence the need to ensure the host city and country were able to derive maximum long-term benefit from staging them. Furthermore, the Olympics is not just a sporting event with more than a century of history, it is centred on a movement and an ideal (Olympism), the goal of which 'is to place sport at the service of the harmonious development of humankind'.<sup>8</sup> Winning a bid for the Games would therefore offer London a rare opportunity — the third in its history — to accelerate the regeneration of east London and catalyse social, economic and environmental change for the benefit not only of current residents but also future generations.

In May 2003, the UK Government announced it would support a bid, one of the first with an explicit legacy aspiration encapsulated in the motto 'Inspire a Generation' and an agreed funding package (at the time) of just under £2.4 billion.<sup>9</sup> Five main themes underpinned London's vision for the Games, including 'benefiting the community through regeneration' and creating 'compact, iconic and well-connected venues'. Stratford 'always looked the best option in terms of space, availability and access' for the Olympic Park, the 2012 Official Report later noted, while other planned venues included world-famous locations such as Wimbledon, Wembley, Greenwich and Horse Guards Parade in Westminster.<sup>10</sup> A Games bid team put together a proposal centred on a new stadium, and the London Development Agency appointed a consortium led by EDAW (now AECOM) to develop a regeneration masterplan, with, at the same time, a legacy masterplan to show what the area would look like after the Games; legacy was therefore built into the physical transformation at the earliest possible stage. In



January 2004 planning applications were submitted to each of the 'host boroughs' in London in which the Games would be held (Hackney, Newham, Tower Hamlets and Waltham Forest; with Greenwich and Barking and Dagenham added as host boroughs), although a Joint Planning Authorities Team had been established to align and accelerate this process, with approval granted in September of that year. The logistics required at this stage were a foretaste of the remarkable level of synchronisation and coordination that would later be needed on an exponential scale. Andrew Jones, now Cities Programme Leader, AECOM — who in 2004 was Principal, EDAW (now AECOM) — recalls that: 'The chair of the meeting [of each host borough planning committee] said "we pass a motion to make a decision outside our borough". They then headed on minibuses to City Hall and there started their meetings again in separate committee rooms. And we were diving between the forums, making sure that all the conditions that they came up with, and the permissions that they actually granted, were the same, because we could have ended up with a whole series of complications.' The impressive new rail infrastructure, signalling the larger-scale transformation to come, played a crucial role of its own, when the IOC evaluation team were driven through the high-speed rail tunnels between St Pancras and Stratford to highlight not only engineering achievement but also how accessible this part of east London was. The following year, on 6 July, the momentous decision came when the IOC announced that London's bid had won, narrowly beating that of Paris (later awarded the 2024 Games) by 54 votes to 50.



Crowds in Trafalgar Square celebrate the announcement that London will host the 2012 Olympic Games, 2005 © AFP

### *Building in legacy: what made the difference?*

The detailed story of the remediation, design, construction and build of the Olympic Park (renamed Queen Elizabeth Olympic Park when it reopened to the public in 2013) and venues for the Games has been extensively recounted and analysed in many publications before and after 2012. The project showcase in this book evidences the scale and ambition of the transformation that took place for the Games (and continues today), and provides details of masterplans, individual buildings, venues and other schemes. Key underlying themes and principles that relate to the evolution of the Park before and after the Games are discussed in the next section of this essay.

What were the fundamental principles that enabled the successful delivery of the Park for the Games and set the foundations for a legacy? Three stand out: a defined goal, a clear vision and purpose, and a plan from the start. What made the Olympics unlike any other project with purpose was its fixed deadline: the opening ceremony had to start in the Olympic stadium on the evening of Friday 27 July 2012. In the famous words of NASA's Apollo moon missions, failure was not an option — there would have been long-lasting and catastrophic consequences for London and the UK's international reputation, on top of the loss of billions of pounds of funding and future investment. As Jamie Ritblat, Founder and Chairman, Delancey, notes, meeting the deadline 'was not just a national imperative, it was a global imperative. And I think you need imperatives of some description, to make things happen like that.'

A clear vision and purpose meant that the commitment to legacy ran as a core

principle throughout planning, design and building, the remit of the ODA established in 2006 to deliver the infrastructure, venues and facilities in the Park and determine planning applications related to them. (A parallel, time-limited body — the London Organising Committee of the Olympic and Paralympic Games (LOCOG) — was responsible for planning and delivering the Games and associated ceremonies.) But the legacy was not primarily about physical transformation — it was about delivering this for the people of east London. Bill Hanway, now Executive Vice President and Global Sports and Social Infrastructure Leader, AECOM (then Executive Director Operations, Europe, EDAW), explains that the proposal was: 'We would like to regenerate the East End of London, and we will find the best architects in the world to deliver beautiful venues. But if we don't get the long-term legacy right, then the capital investment that the Games bring to bear will have been wasted. This was the premise from the very beginning.' The longer-term vision and purpose of regenerating the area for the benefit of all its residents, and using the Games as an accelerant to rectify structural social and economic disadvantages, was reinforced by the creation of the Strategic Regeneration Framework (2009), led by the host boroughs, with its clear goal of 'convergence': 'The true legacy of 2012 is that within 20 years the communities who host the 2012 Games will have the same social and economic chances as their neighbours across London.'<sup>11</sup> In the same year, the Olympic Park Legacy Company (OPLC), the forerunner of the London Legacy Development Corporation (LLDC), was established to lead and take forward decisions on the legacy and transformation of the Park after the Games.<sup>12</sup>



Legacy masterplans and Games masterplans evolved alongside one another in a symbiotic relationship. Tom Jones, Senior Principal, Populous, recalls that ‘the idea that you had the legacy mode in mind when you started and then you worked back to the Olympic mode, and figured out how you’re going to transition between the two, was a key part of the wider Park masterplan’.

The fixed deadline and clarity of purpose, alongside a rare alignment of political parties and not least the scale of public funding, speeded up processes that would otherwise have taken years or decades. The Olympics provided the magic key to unlocking existing issues and removing stubborn obstacles, both in and near the Stratford site. Leonie Oliva, Partner, Gerald Eve, remembers working in 2005 on a project at West Ham where a vital step involved removing power lines and putting them underground, but progress was stuck as the cost would have been prohibitive. ‘So we were going through the motions probably for a few years’, she recalls, ‘And then virtually overnight, it was announced that we had won the bid for 2012, and within a matter of [as I recall] weeks or months, that site was bought by the LDA [London Development Agency] and powerlines were removed. That was repeated across the area on a massive scale.’ The compulsory purchase order process of acquiring the land and taking it into public ownership to build the Games was essential for success, and involved coordination and negotiation with existing land interests (of which it was reported there were initially more than 2,200) — again, with the urgency of the deadline this was completed in a little over two years, an unprecedented timescale drawing exhaustively on industry expertise across the UK.<sup>13</sup> Steve Kennard, Director

of Regeneration, Hadley, who was Director of Land and Development at the London Development Agency from 2008 to 2012, observes that ‘if the LDA land team lead by Gareth Blacker since 2004 hadn’t secured the compulsory purchase of land in a timely fashion, the Games wouldn’t have happened. And there were a bunch of people behind that who did a quite remarkable job in a very compressed period of time.’

Delivery of the Olympic Park for 2012 also resulted in a significant legacy for the built environment industry itself, generating a culture of collaboration and focused delivery that had perhaps not been seen since the major reconstruction programmes after World War II, and providing confidence and ambition to deliver such large-scale projects that have helped to further boost the UK industry’s international profile (as shown in NLA’s 2021 research London Design Capital). Mark Reynolds, Group Chairman and Chief Executive, Mace Group, explains that ‘The thing that I always go back to [is] how important it is to keep things simple and communicate clearly. And that’s sometimes the difficulty in our industry, we over-complicate things. ... a lot of the benefits of what we did, and the legacy we left, were down to keeping things simple. If you can transport that to other parts of the world, to other big programmes, you can deliver spectacular results.’ Jo Negrini, who in 2012 was Director of Strategic Regeneration, Planning and Olympic Legacy, London Borough of Newham, recalls that ‘it was really good to work in a place where there was a key focus’, while Selina Mason, Director of Masterplanning, Lendlease (formerly Deputy Head of Design, ODA, and also Director of Design Integration, London Legacy Development Corporation), suggests that:



Stratford City masterplan before the Games © Fletcher Priest and Arup

‘you can’t deliver a high-quality place without a clear vision and collaborative endeavour. It takes a lot of hands to do that, with or without the kind of centralizing force’ of a mayoral development corporation (MDC).’ The next stage of legacy also began just before the Games when the London Legacy Development Corporation (LLDC) was established as an MDC, the first of its kind, in April 2012, tasked with taking forward and delivering the physical legacy of world-class, sustainable neighbourhoods and continuing the planning, development, management and maintenance of the Park.<sup>14</sup> Just three months later the Games opened on time with a spectacular opening ceremony, to great acclaim, and with Team GB’s greatest medal haul. One Australian journalist reviewing London’s performance as host wrote laconically: ‘London, you didn’t half do a decent job. ...The Olympic Park’s setting ... proved inspired.’<sup>15</sup>





Queen Elizabeth Olympic Park Legacy masterplan © Allies and Morrison and AECOM

# DELIVERING THE LEGACY: WHAT ARE THE INGREDIENTS?

This section explores some key themes and principles that underpin the concept and the physical manifestation of 'legacy', before and after the 2012 Games. These have been identified as part of our research process and from extensive interviews with industry leaders involved in the creation, design, development and management of Queen Elizabeth Olympic Park and surrounding neighbourhoods.

## *Providing robust but flexible frameworks*

With the legacy aspiration embedded from the bid stage, the ambition to provide maximum benefit for the people of east London and to set a benchmark in the delivery of a new sustainable urban district determined the shaping of masterplans. The driving principle was not to create a 'ready-made' new neighbourhood, but to generate a compact urban framework that would evolve and adapt and, in time, integrate seamlessly into the rest of the city. The masterplanners held firm that to achieve this goal they were 'creating the structural platform for new communities, connected by additional public transport, and anchored by a brand new park. Delivering an outcome in which the Olympic and Paralympic Games fit into the long-term city plan rather than the other way around', says Bill Hanway.

Bob Allies, Partner, Allies and Morrison, reflects that a fundamental principle was the idea that masterplans are time-based, not just spatial — that 'a project like this was not about designing everything on day one, it was about setting the stage, and so the judgements we had to make were not about the final outcome: they were about how to facilitate a process'.

In 'setting the stage' some key elements have remained constant throughout all the various masterplan iterations: creating inclusive public space; enhancing and celebrating the character of the area, especially its rivers and waterways and green spaces; and inserting vital new connections including bridges, walking and cycling routes, alongside the provision of new homes, offices, schools and community centres, and the retention and reconfiguration of key Olympic sporting venues, especially the aquatics centre (now London Aquatics Centre) and velodrome (now the centrepiece of Lee Valley VeloPark) as local community assets. The first iterations, developed for the bid in 2003 and which received planning permission in 2004, centred on the delivery of up to 10,000 new homes, mainly one- and two-bed flats — a high-density approach seen as the most sustainable option in line with the urban agenda of brownfield development that was emerging at the time. A pivotal moment in the history of the site





Left page: Top: plans for East Bank and Stratford Waterfront © Allies and Morrison | Bottom: Aerial view of the Park during the Games, 2012 © LLDC

occurred in 2008, with the global financial crash, when central government had to provide a financial bailout to ensure that construction of the Athletes' Village continued.<sup>16</sup> In the same year, Boris Johnson was elected as Mayor, replacing Ken Livingstone, and — in an example of how the Mayor can actively reshape the city through direct intervention — he pushed for lower densities and different typologies, specifically more family housing. The OPLC published a new masterplan in 2010 in which the number of new homes was reduced to 8,000 and development centred on terraces, squares and gardens rather than higher-rise apartments.<sup>17</sup> In 2012 a new iteration was approved as an outline planning application by the ODA and which provides the framework for the development of the Park and neighbouring areas within the MDC remit until the 2030s. Known as the Legacy Communities Scheme (LCS), it proposed five neighbourhoods of 6,800 homes in total, in a mix of typologies (though still with a very high proportion of family-sized homes), along with 130,000 sqm of employment space, with the overall site divided into 'planning delivery zones'.<sup>18</sup> Yet, the overall scheme and shape of the area have since been transformed again with the decision to build East Bank, a major new cultural and education quarter.

As the planning authority for the Park, the LLDC has the responsibility for preparing and implementing a Local Plan, the latest version of which was published in 2021 and envisions the development of the area up to 2036. The total site area of Queen Elizabeth Olympic Park is 226.6 hectares, but the overall administrative boundary of the planning authority area is 480 hectares, hence the LLDC has the unique capacity in this role to influence and shape the development of the fringe areas of the Park for the benefit of neighbouring communities. A key part of generating a robust social and physical framework for legacy is the continuation of the overarching principles that informed the Games bid, now identified as: promoting convergence, employment and community participation; championing equalities and inclusion; ensuring high-quality design; and ensuring environmental sustainability. Each planning application for an area within the Park, for example, must state explicitly how it will deliver 'convergence' outcomes; such alignment through the planning and design processes seeks to support the coordinated vision embodied in the evolution of the



masterplans. Central to this, of course, is land ownership, empowering the LLDC to assert more control than would usually be expected from a public-sector body.

Sustaining the legacy ambitions also means investing in quality to not only ensure futureproofing but also to get the best value for the public investment — and it is generally agreed that the LLDC and its predecessor organisations have set benchmarks far above what is usually required in terms of design, accessibility, inclusion and sustainability. Such an approach is now also aligned with the ‘good growth’ agenda of the Mayor in 2022, Sadiq Khan. High-quality, sustainable and inclusive design was a fundamental aspiration from the beginning: a special ‘London 2012 design review panel’, run by the Commission for Architecture and the Built Environment (CABE) and Design for London (a mayoral-supported research body founded in 2006 that sought to devise a cohesive urban strategy for regenerating London) contributed to the design development of 26 schemes and the Olympic Park,<sup>19</sup> while international design competitions were held for key developments including the Athletes’ Village.<sup>20</sup> Neil Smith, Inclusive Design Lead, HS2, and Chair, Built Environment Access Panel, LLDC (formerly Head of Inclusive Design, BuroHappold Engineering), describes how the Games, positioned as the ‘most accessible’ ever, became a catalyst for improving standards on inclusive design: ‘historically it had been, “we’ve got to do the disability access bit later”, but it actually became a very strong part of the vision all the way through. And what we started back in 2005 changed the construction industry’s approach to access and inclusion quite significantly.’

The LLDC has continued this commitment by establishing an independent Quality Review Panel, and, uniquely to date, a Built Environment Access Panel, to assess the design quality and inclusivity of applications submitted to the Planning Decisions Committee.<sup>21</sup> An extensive suite of design-related guidelines and standards has also been produced to provide advice on the requirements for planning approval, while the organisation has also continued to hold design competitions, for example for the Timber Lodge community hub and playground. ‘So high-quality design is baked in right through the procurement of development partner processes through to the actual planning application. ... It is a very high-quality environment that wouldn’t have been delivered on a piecemeal basis without the large-scale ownership and then enforcing these design policies and principles through all stages’, suggests Leonie Oliva. Architects and developers also report how, through this robust, interrogative approach, ‘you’re challenged to really be at your best. But we managed to turn it into a really collaborative process with the [Quality Review] Panel, where we took constructive ideas, and tested them. ... it was good to have that discourse with people who were passionate about design. And I thought that was a positive thing in terms of driving quality of design forwards’, observes Richard Harvey, Partner, PRP Architects, of the process of designing Chobham Manor. Hanna Afolabi, Development Director, East Wick and Sweetwaterw, agrees: ‘When you look at the planning process that we’ve gone through, in creating mixed and balanced communities at East Wick and Sweetwater, ... you do that by having a developer that wants to do that, you have a design team that can deliver quality, you’ve got a landowner that wants to maximize design quality, but also a



Top: East Wick, one of the new legacy neighbourhoods © Chromaphotography | Bottom: PRP’s Multigen House in Chobham Manor © Richard Chivers

planning authority that wants to help and deliver quality, and also a really thorough design review process. And I think there have probably been low moments, but when you take a step back [you see] how that genuinely improved the scheme.'

Flexibility and durability of design and build for individual structures and venues were as important as the overall plan with the aim to futureproof the Park for longer-term use. A significant feature of the London bid for the Games was the commitment to use existing venues where possible, erect temporary venues where needed and build permanent venues only where a post-Games use and business plan had been identified. This corresponded not only to the ambition of reducing costs but also creating 'the most sustainable Games ever'. The two-year period of 'transformation' from 2012 to 2014 — the transition from Games to legacy mode — was also planned in carefully so that the three temporary venues (for hockey, basketball and water polo), London Aquatics Centre's temporary stands, Games infrastructure and overlay, and large areas of concourse could be removed or replaced in the first phase after the close of the Paralympic Games in September 2012. The Athletes' Village, for example, was also fitted with temporary portable walls that would facilitate an easier transition between accommodating athletes and then being converted to permanent housing, now as East Village. The Stadium (now London Stadium) later underwent a period of review and change in terms of its future use and long-term business plan post-Games, which significantly changed the physical requirements of its transformation. However, the requirement from the beginning to build in a future change of use, meant that 'even though it went through that change of brief, the core structure was still able to adapt and adjust and successfully host the events that have come since', says Tom Jones. Learning from the Games is now directly informing the development of new sporting venues and other buildings. Dan Buck, who in 2012 was Senior Activation Manager and is now a Corporate Director at Lee Valley Regional Park Authority, cites the example of the Authority's new Lee Valley Ice Centre, due to open in late 2022. Although it is 96 per cent bigger than the previous venue, it will have 143 per cent more usable space: the Olympics experience showed that for new venues, 'we don't build extra fat in them, all we do is just make the areas work harder in a more intelligent and clever way to reduce their footprint.'

### *Taking a long-term but responsive approach*

Probably the most important factor in enabling the flexibility and 'curation' of uses across the Park today is land ownership. The LLDC was set up in 2012 under the terms of the 2011 Localism Act, which permitted the formation of mayoral development corporations, as the first of its kind, to manage Queen Elizabeth Olympic Park and its venues, and with a statutory purpose to deliver regeneration within its area, alongside its role as a planning authority.<sup>22</sup> The freehold (and some leasehold) ownership of land that had already been acquired by the LDA for the Games and transferred to the OPLC was conveyed on 1 April 2012 to the LLDC, establishing a large-scale area within single ownership. This is a fundamental characteristic that it shares with the traditional, and other contemporary, 'great estates' of London, a subject examined in detail by NLA in 2013, where we demonstrated that one of the defining approaches of a great estate is a commitment to managing the estate effectively for the long term. The management and development of the Park estate have been modelled explicitly on great estate principles: 'keeping the (majority of the) current landholding together, strategically managed by a single entity which can: protect the integrity of the vision over the long term; control design and management quality through freehold ownership; plan for long term benefit rather than immediate gains; and ensure that revenue streams can be generated to cover the cost of maintenance'.<sup>23</sup> Estate revenue in this case includes rents, income from events, attractions and advertising, as well as a fixed estate charge paid by residents and commercial occupiers which supports the upkeep of the Park.<sup>24</sup>

As Jerome Frost notes, the credit crunch of 2008 could have been disastrous, but in some ways had a positive outcome in terms of obliging the public sector to take a more prominent role: 'the crash forced a lot of these schemes that were within the red line boundary to be delivered by the public sector — the public sector had to buy in and take the risk, [as] the private sector was no longer able to do it', giving the project 'some breathing space to stop and think', whereas the private sector would generally have sought to prioritise shorter- and medium-term returns on investment. Clive Pane, Partner and Head of Planning and Development,



Deloitte Real Estate, recalled that early discussions centred on the questions of: 'Not only what do we want this place to look like, but how's it going to be managed? Is this going to be a long-term piece of public-sector ownership? And if so, what are the structures needed to deliver that? How do we make sure that the public benefits from that both socially, but also commercially back to the exchequer?'. The post-Games transformation period of 2012–14 was again critical in this respect, as two years were required not only to remove temporary structures but also to establish new connections and routes to the wider area, create green infrastructure and complete the transformation of the parkland, providing a vital permanent framework before construction of new homes and other buildings could begin.

The great estates principles also apply in the fact that the Park has evolved into a more mixed-use district than was originally envisaged. Sustaining long-term social and economic value means taking a creative, strategic view to support an appropriate mix — and to be agile and tactical enough to accommodate new land uses according to market demand and external forces, including, of course, political ones. Of these, the most significant is undoubtedly the major shift to forming a new cultural and educational district at East Bank, alongside the innovation and technology campus Here East, neither of which originally featured in the Legacy Communities Scheme but together are now seen as key drivers for the continuing regeneration of east London.<sup>25</sup> Clive Pane suggests that 'you can plan to a certain extent, but you've also got to change direction when good opportunities come along. ... what LLDC has done well is to grasp those opportunities'. The LLDC as

Top: The Canal Park by Here East today © Rory Gardiner | Bottom: UCL's Marshgate building on the left and Pool Street West student accommodation on the right © Chris Hopkinson | Right: Hackney Wick Overground Station © Dome Photography



a public-sector body has also acted as an enabler at various levels, whether through the provision of infrastructure to engaging in joint ventures, or even direct delivery. Peter Maxwell, Director of Design, LLDC, explains that a regeneration agency focused entirely on place 'can see the opportunities where the public sector can deliver things directly. And where we can unlock problems and work with the landowners to get a better outcome than they will be able to achieve themselves.' In projects such as the major transformation of Hackney Wick Overground station and surrounding connections, for example, 'the public sector', he says, 'has got a key enabling role to deliver better, wider public good ... the boroughs are big, and they've got lots of other priorities, where we can try and help the place move forward'.

Sustaining effective stewardship also requires patience, vision and commitment to supporting long-term sustainable neighbourhoods on the part of developers, investors and occupiers. Gavin Poole, CEO, Here East, recalls that operating this innovation campus at its full potential has taken longer than anticipated, but that the value of collaboration and of patience in being determined to find the right mix of occupiers to support the vision has eventually paid off: '... you have to hold your nerve. There were times when I cast my mind back to when we had no future lettings on the table', but, with the support of the owners, Delancey, the decision was, rather than taking any offer, 'we should just hold firm. And that's what we've done and we've gone from 56 per cent [occupancy, in 2018], to now over 90 per cent [in 2022].' 'Patient capital' has







also underpinned the then highly innovative long-term private rental model of housing initiated at East Village, for which Delancey and Qatari Diar won the bid for ownership of the 1,400 private homes in 2011, with plots for future development of another 2,000. As Stafford Lancaster, Investment Director, Delancey, points out, to support the evolution of a genuinely thriving neighbourhood, what is needed is ‘a long-term investor mentality. I do think [one of the reasons] we were able to win the bid to acquire East Village was because we were able to demonstrate to government a genuine commitment to the legacy — we weren’t going to trade the housing out; we were going to keep it for long-term rental. This theme of being patient and long term, I think is absolutely critical.’ Rick de Blaby, Chief Executive Officer, Get Living, which manages East Village, highlights the hands-on stewardship that requires constant engagement with residents and occupiers, feasible only through long-term ownership: ‘We haven’t got separation between owner and operator. We’re invested in the long-term future of East Village which means we are always looking to improve and enhance our proposition.’

As noted above, the Games bid was clear in its commitment to legacy ownership: ‘We are only building new venues where clear legacy needs have been identified and sporting and business plans developed for post-Games use.’<sup>26</sup> The Lee Valley Regional Park Authority was identified as legacy client for three of the Games venues: Lee Valley VeloPark and Lee Valley Hockey and Tennis Centre, both in Queen Elizabeth Olympic Park, and Lee Valley White Water Centre in Waltham Cross, Hertfordshire. ‘We were there right at the beginning which is not normal for an Olympic Games build. And even though we didn’t get everything that we wanted, at least

we were able to be part of the discussions to guide and get ourselves in the best position. And that allowed us to plan ahead of time’, recalls Dan Buck, as there was also long term accountability within one organisation to get the right solution for legacy as well as Games use. The Authority was able to contribute vital land, existing schemes for new cycling and white water venues which it was already planning, decades of expertise running complex sports venues and the input of key personnel. The key venue where legacy ownership was not clearly identified pre-Games was unfortunately the most prominent one: the Stadium (now London Stadium). The ODA originally decided that this would be an 80,000-seat stadium for the Games, then deconstructed post-Games into a 25,000-seat venue for athletics, but the legacy options were later re-examined by OPLC, which opted for a 60,000-seat stadium run on a commercial basis. The bidding competition to find a legacy tenant had to be rerun owing to legal challenges and was dogged by controversy. Eventually, however, West Ham United football club moved in 2016, although there were concerns reported in 2018 that the rent paid did not cover the cost of staging matches,<sup>27</sup> and in 2021 a London Assembly Budget and Performance Committee report warned the Stadium was costing annually more than £8 million of public subsidy.<sup>28</sup> Nevertheless, the Stadium has also successfully hosted several international athletics championships, matches in the 2015 Rugby World Cup, and the first regular-season US Major League Baseball game in Europe, 2019.

Clockwise from top: The Park during the Games, 2012 © Populous | Lee Valley Hockey and Tennis Centre (previously known as Eton Manor) during the 2012 Olympic and Paralympic Games © Hufton+Crow | People enjoy the Park, with Lee Valley VeloPark in the background, 2012 © Nathaniel Moore | Crowds attend the Games, with London Stadium and ArcelorMittal Orbit in the background, 2012 © Populous | Lee Valley VeloPark by Hopkins Architects, 2012 © Tom Jenkins



## *Enabling communities to grow and thrive*

The overarching goal of Games legacy, through the concept of 'convergence', was to improve the living conditions and life chances of residents in the host boroughs so that they reached the average for London. The Strategic Regeneration Framework published in 2009 painted a stark picture of some of the disadvantages experienced by these east London communities, among them a persistently high level of violent crime with a clear gap to the London average, and overcrowding in up to 38 per cent of households against a London average of under 7 per cent.<sup>29</sup> As well as improving skills and employment opportunities, therefore, improving the housing offer and developing successful neighbourhoods were seen as fundamentally important ambitions in order to remedy health inequalities and support a better quality of life.

As noted above, the provision of housing had already been planned ahead of the Games bid as it was included in the Stratford City masterplan. Once London had won the bid, the housing scheme was modified by masterplanners Fletcher Priest to become the Athletes' Village, accommodating 17,000 athletes during the Games. Nearly 3,000 homes were constructed in a single phase in a much-compressed timescale owing to the Games deadline. In 2011 Delancey and Qatari Diar bought 1,400 apartments and land with permission to build 2,000 more for more than £500 million, with the remaining homes (49 per cent of the total) — a mix of social rent, intermediate rent and shared ownership — managed by Triathlon Homes. The first residents moved in in 2013. The private apartments were one of the very first examples of large-scale housing for private rental, managed by Get Living, paving the way for the build-to-rent sector that has now emerged across the UK. The development plots have now seen the construction of new elements of East Village: Victory Plaza, an eight-storey podium and two towers, comprising 482 new homes, designed by Lifschutz Davidson Sandilands and completed in 2019; and Portlands Place, two towers and two ten-storey pavilions of 524 new homes, designed by Hawkins\Brown and completed in 2020. Both are also build-to-rent. A key part of East Village are the shared amenity and public spaces and shops, bars and restaurants at ground level,

## The resident's view

Rebecca Rosmini and her husband moved to East Village in 2015 and they own and manage "Signorelli", two eponymous artisan bakeries, one in East Village, where they live, and the another one in International Quarter London:

'We moved here seven years ago from Camden to open the bakery. I think within three months of opening, we realized that it wasn't a sustainable life to be commuting from Camden to east London. Here we found the right mix between what I liked about London, the creativity and the stimulus, but my husband found the calm, the lack of pollution, and lack of the hustle and bustle that you got in the city centre, which he found really stunted his ability to really enjoy the type of work that he does [in the bakery].

... I have to say, from a general perspective, I definitely feel safe in this environment, and that there's space for my four-year-old son to grow. And he can go much further away from me than I would allow in other parts of London, which I think for young people is really important, that self-confidence and having independence.

... Lockdown [during the pandemic] was the pivotal point actually as people suddenly stopped and took stock of the environment around them and the proximity to Hackney Wick, London Fields, Victoria Park — suddenly realizing that was on their doorstep. ... we're getting people coming in from other parts of Hackney into East Village who would have never come in before because they probably felt it was too shiny, and not something they could relate to. But it's starting, I think, to all become one, which is really nice.'





Top: People enjoy a sunny day at East Village ©Peter Cook | Bottom: Chobham Manor, with the Multigen House at the fore, 2018 ©PRP

designed to support social interaction, and built into the scheme from the beginning. As Rick de Blaby suggests, management models need to continually innovate in line with the evolution of the neighbourhood: 'we create the stage for the people who live here to create their own community. ... you [i.e. the owner and manager] catalyze it to happen. ... And there's no magic bullet for that.' Alongside a continuous focus on customer needs, he says, a fundamental principle of building a new neighbourhood is to recognise that it is a social ecosystem that is being created, that '[we] have to exist in a very interdependent way with everything that's going on around us. We don't exist in some kind of bubble or isolation.'

The Legacy Communities Scheme lays out the plans for the creation of five new 'legacy neighbourhoods' across the Park: Chobham Manor, East Wick, Sweetwater, Pudding Mill and Stratford Waterfront. To date, more than 10,000 homes in a mix of typologies have been built within the LLDC area, with a total of 33,000 expected by 2036, the end date of the current Local Plan.<sup>30</sup> The first of the legacy neighbourhoods to be built was Chobham Manor, where an important innovation, designed to meet the critical need for more family housing, has been the multi-generational home for extended families, developed by PRP Architects. Manisha Patel, Senior Partner, PRP Architects, explains that this was conceived at a time when affordability in the aftermath of the financial crash had become a key issue in the private housing market and led to 'the idea that ... you could create affordable products in the private market where families could live together and support each other'; the typology responds to the requirement for inclusive

design that allows residents to adapt the use of their homes for changing needs over time. An inclusive, 'family-first' approach, 'what we believe to be a clear reflection of an East London neighbourhood', says Hanna Afolabi, with homes including three-bedroom houses, is also emerging at East Wick and Sweetwater, the first phase of which is now complete. Attention is also now turning to areas to the south, for example around Bromley-by-Bow, where Guinness has completed the first phase of a new mixed-tenure and mixed-use development of 965 homes at Leaside Lock. Over time, it is to be expected that the overall demographics of Park residents would reflect the diversity of age and background present in any urban population, and Hellyn Fairbrother, Regional Sales Manager, The Guinness Partnership, remarks that the influx of 'more mature buyers, that have now reassessed and redefined their lives ... and are coming back into London', attracted by the transport links and amenities, and that are single-person households, is particularly noticeable. The shape of the Park population will be given a further different dynamic by the expected influx of higher-education students with the completion of UCL East and other institutions at East Bank.

A post-occupancy evaluation project has been established to gather residents' views and assess building performance, but it is clear from anecdotal evidence that the emergence of new high-quality and inclusive neighbourhoods, with a variety of amenities within the Park setting, has helped to transform the perception of the area. Rebecca Rosmini, a business owner and resident at East Village, who moved into the area in 2015, suggests that 'we're really seeing an emergence of a community that is much more organic. And that it



just feels a lot more natural. [Earlier] it felt quite forced. Everybody wanted it to work; there was a real desire to make the legacy function’, whereas now people view it more as a part of London. Kathryn Firth, Director, Masterplanning and Urban Design, Arup, and formerly Chief of Design, LLDC, remarks that ‘it was fantastic to go through Chobham Manor and see that the road markings had started to fade — it felt like a real place’. Manisha Patel observes that the sense of ownership has emerged at Chobham Manor with the formation of residents’ groups: ‘When the community loves it, and they adopt it and have a voice, that’s what will keep it alive. It’s because somebody really cares about it and they want to make it successful.’ Another important aspect is the need to balance the requirements of residents against those of visitors from further afield, given that Stratford is identified as a metropolitan centre of London with a future potential classification of ‘international’ (alongside the West End and Knightsbridge) in the current iteration of the London Plan (2021).<sup>31</sup> ‘It feels to me like there’s been a successful balance of creating something that’s got a national and international status’, says Tom Jones, ‘but still making it somewhere where local people feel welcome.’ While the response has been largely positive to date, housing development in the Park has not been without its criticisms, including concerns especially about the proportion of affordable housing in new developments, the price range of private housing and the consequent inflation of house prices in surrounding areas, as well as some residents’ concerns about the cost of the fixed estate charge and its annual increase in line with the retail prices index.<sup>32</sup>

The provision of both public and adequate

indoor and outdoor private space and amenities close to housing — especially independent retailers — and, in East Village, service provision, meant that the neighbourhoods were more resilient during the pandemic than perhaps many other parts of London. Rick de Blaby recounts how Get Living sought to check in with residents directly during the pandemic, and that ‘we had people here who really valued the fact that they were living in a place 25 acres of public realm on their doorstep with a real sense of community, which was amplified with everyone spending more time in their homes than ever before. More than that, we had quite a lot of people defect from more inner-city locations with no balconies and no services’ Manisha Patel recalls that she learned that some residents in multi-generational homes at Chobham Manor were using the garden annexe as an isolation space for family members with COVID-19, while the provision of roof gardens, and the higher space standards stipulated by LLDC, meant that ‘if you were incorporating home working, it would be within the dwelling types that we have designed’.

In contrast to some of the shortcomings of large-scale regeneration schemes of earlier decades, which focused almost entirely on residential development, the LLDC recognises through its Local Plan that ‘new community infrastructure needs to be provided to ensure that successful neighbourhoods are created and the new communities have the facilities available ....’<sup>33</sup> Indeed, as well as the major attraction of the Park itself as an amenity, the opening up of Olympic and Paralympic sporting venues to local communities acted as a visible marker for the new neighbourhoods that started to emerge

in the mid-2010s, not least as venues were retained for elite sporting events alongside everyday use by local people. Michael O’Leary, Operations Director, Taylor Wimpey London, recalls that — unlike other regeneration areas — as all the attractions were in situ such as the Park, the Stadium, the velodrome, the swimming pool ... this created an environment that enabled us to sell the dream upfront, unlike some regeneration areas where you are selling the future benefits.’ This also applied to some of the modest interventions, such as the Tumbling Bay playground, which drew in families to use the Park before the first phases of the legacy neighbourhoods were completed. One of the most successful elements of masterplanning, argues Sowmya Parthasarathy, Director, Urban

Design and Masterplanning, Arup London (and formerly Urban Design Advisor, LLDC), ‘was to put all the social infrastructure at the edge. So the school was on the Leyton edge and ... the idea that the Copper Box would be reused as a community centre on the Hackney edge ... because you wanted it to have a wider catchment’ to neighbouring communities. New schools include Chobham Academy at Chobham Manor — the UK’s first through school, combining primary and secondary education — and Mossbourne Riverside Primary Academy, opened in 2017 and serving the new East Wick community. Both the primary and secondary schools of the Bobby Moore Academy allow for community uses, with the primary school buildings have potential for expansion as the community grows.



The Handball Arena in 2012, now known as Copper Box Arena © Make Architects



## Connecting and integrating places

While the achievements of landscape-led regeneration in creating new, sustainable neighbourhoods cannot be overstated, 'it is actually the way the project changed this part of the city, and made it work more effectively that's in a way more important than almost anything else'. Historically an important artery for industry and trade, the river Lea, prone to flooding and surrounded by marshland unsuitable for large-scale development, presented an intractable barrier to London's eastward expansion. 'More than any other inner London location', explained an LLDC and Design for London report, *Stitching the Fringe*, in 2013, 'the Lower Lea Valley already has the space and the transport connections to sustainably accommodate new developments and new communities.' However, as a predominantly 'tangled belt of canals and railways, parkland and industry', this area of 1,500 acres was widely perceived 'as a vast gulf, severing London's eastern areas from the city'.<sup>34</sup> Rail and Tube connections made Stratford and surrounding areas highly accessible and were pivotal in the choice of this area to host the Games. But improving connections both east to west and north to south along the valley was imperative not only to facilitate the vast influx of visitors during the four-week period of the Games, but also to ensure that after 2012 the Park and its neighbourhoods would eventually become enmeshed physically — as well as socially and economically — with the surrounding communities.

The principle that underpinned this integration was to 'stitch' this area back into the rest of London through a network of routes and connections across and along the valley. Physical connections inserted



Top: Fish Island Village a new canalside community, on the edge of Hackney Wick | Bottom: The 130m curved bridge connecting Stratford Town Centre with Westfield Stratford City © Knight Architects

before and after 2012 include around 30 new bridges over waterways, roads and railways; pedestrian crossings and station entrances; and walking and cycling routes, in line with the sustainability aspirations associated with the Games and commitment to more active travel and promotion of healthy living. The strategy also sought to exploit and enhance the area's distinctive geography of waterways, canals and green spaces, for walking and cycling along the 26-mile Lea Valley corridor. Creating this complex web of connections required an innovative approach that conceptually worked in reverse to what might normally be expected — to take the existing surrounding neighbourhoods and the form of the landscape as the starting points and to work inwards towards the spaces that would host the Games. As Bob Allies explains, 'We were not thinking about it as the Olympic Park, and the buildings around it. We were thinking about it in terms of how each of the surrounding communities could grow and connect themselves to the Olympic Park.' This process also involved a sometimes very complex resolution of apparent divergences between short-term Games use and long-term legacy use. Robert Aspland, Director, LDA Design, highlights how the LDA Design team questioned 'some of the assumptions that had been made about the size of the concourse areas. ... And by doing that, we were able to push the concourse areas back, make them smaller, and therefore lay the slopes of the river valleys back to make more of a park. So that was a big move. But this was all happening in real time, in that the engineers were constructing bridge abutments and laying utilities and so it was a very challenging time.' Another significant element in the process of improving connectivity beyond the Park to existing neighbourhoods, in areas such as Hackney

Wick and Leyton, were the six Olympic 'fringe masterplans' developed before the Games. Informed — like the overall Park masterplans — by intensive and detailed site-specific research, these sought to identify and bring together a multitude of interventions at different scales — green routes, bridges, lighting, street furniture, play areas and town centre improvements, among many others — to form cohesive strategies supporting the revitalization of neighbourhoods.<sup>35</sup>

A critical phase in ensuring connections could be embedded across and beyond the Park was the Transformation phase after the Games, the planning of which also began at an early stage. This involved removing the barriers and overlay of one of the world's most secure, enclosed sites in Games time, with a concourse surrounded by a ring of venues enabling movement of up to 250,000 visitors per day, into a public park and community facilities open to all. Having a large area within public-sector control was a key advantage at this transitional stage, explains Leonie Oliva, 'because it enabled a holistic approach which would have been difficult to achieve with a range of individual landowners with their own ideas and drivers'. Andrew Harland, Director, LDA Design, and joint landscape lead for the Park, explains how the planning and design of many elements of the Park landscape and public realm were informed specifically by the need to facilitate the transition seamlessly and to begin to open up new routes that would become more legible over time, after the Park reopened in 2013. For example, in planting new trees, he remarks, 'we set out to provide shade in the Games, but they were tree grids, which are aligned with the future connections, which would then link



to the bridges. So we were building all those routes, and the structure for then being able to, in transformation, put the pieces in place to make those connections.'

Although the strength of its rail and Tube connections made the area highly accessible, Hari Sothinathan, Partner, Gerald Eve (formerly Director, Deloitte UK), argues that 'it required government spending that amount of money' in strengthening the local infrastructure to make legacy use successful. The ODA invested £429m to produce a legacy of improvements to the transport system, including £281 million for projects in the capital delivered by TfL. These included DLR infrastructure upgrades, a revamp of Stratford station and modernisation of the North London Line. 'That central government support', he says, 'was the seed investment, if you like, in east London, that people, businesses and institutions have only [perhaps] for six or seven years started to capitalize on.' Continuing investment into new physical infrastructure and connections has been required to ensure that the area remains legible and accessible as it changes shape into a major culture, education and innovation district, especially with an expected influx of an extra 1.5 million visitors per year with the opening of East Bank, along with crowds for football matches and other major sporting and cultural events. Carpenters Land Bridge, for example, completed in 2020, is a major pedestrian and cycle route that links East Bank with the new business district at International Quarter London.<sup>36</sup> Strengthening connections has also meant public-private partnerships and investment into public transport, such as the new Hackney Wick station, completed in 2019, which has created new walking routes and public spaces as part of the Hackney Wick central masterplan by LLDC and London Borough of Hackney. Also important are the much smaller interventions that support wayfinding around such a large and complex area, one example being the Twelve Trees ramp (2016), marking access down to the river Lea from Twelvetreets Crescent bridge and visible over other bridges.<sup>37</sup>

Some issues with accessibility and transport connections remain; Gavin Poole points out that Here East is 'still funding privately, our own bus service ... at a cost of almost a million pounds a year'. One area that has proved challenging in terms of improving connectivity is the road network. A



Top: local young people co-design Carpenters Estate's public realm to improve connections to the Park, 2020 © LDA Design | Right: Several bridges, underpasses and other infrastructure connect the Park and surrounding neighbourhoods



network of nearly 20 km of primary and secondary roads was constructed for the Games, including a 12 km loop road around the Park, linking all the venues and the Athletes' Village (a temporary 109-mile long Olympic Route Network was also put in place on London roads during the Games to enable easier access for those involved in making the Games happen). Jules Pipe, now Deputy Mayor of London, Planning, Regeneration and Skills, and formerly Mayor of Hackney, suggests that 'with hindsight and the changing context of our expectations about transport, maybe some of the roads are too big — there's a fair bit of heavy engineering'. While the Park is well served by new walking and cycling routes — although there have been some concerns about the potential for conflicting priorities of access between pedestrians and cyclists — surrounding roads linking the Park with the wider area are still dominated by vehicles. In line with TfL's Healthy Streets agenda, a new plan was announced in 2019 to improve active travel by narrowing major routes such as Westfield Avenue and Montfichet Road to allow the introduction of segregated cycle lanes and wider pavements.<sup>38</sup>

In some areas infrastructure has also proved a barrier that has taken much longer to resolve. One such area is



the Carpenters Estate, a 28-acre estate of low-rise social housing, with a college, school and other community facilities, built in the 1960s, and which has been subject to a long and controversial sequence of plans for refurbishment and redevelopment that began before the Games bid. The neighbourhood plan submitted by the Greater Carpenters Neighbourhood Forum in 2019 notes (in its first paragraph) that the area of the estate 'is on the border of the Queen Elizabeth Park, Stratford [sic], but is physically separated from it by railway lines', and that key aspirations include 'a community which is better integrated socially and physically with the surrounding area through improved connections, social and community infrastructure and partnerships'.<sup>39</sup> In December 2021, residents of the estate approved a 'co-produced' masterplan and scheme for redevelopment involving the construction of 2,000 new homes as well as community uses and workspaces, along with plans for new public space, play space and improved street connections along key routes, for example to Stratford station.<sup>40</sup>

This virtual connectivity, in the form of communication and engagement with existing and neighbouring communities, plays a vital role alongside the creation of tangible physical connections. William Chamberlain, Partner, Counterculture, and Founding Director of Creative Wick and the Hackney Wick and Fish Island Community Development Trust emphasises that 'I think communication has always been the key'. ... Over the years, he argues, one thing that was not always done as well as it could have been 'was to explain what the Olympic legacy was and how people should actually be responsible for getting it for themselves ... for going out and the kind of

legacy that they wanted as the community. ... The Olympic Park was London's biggest industrial estate, there were 250 businesses at least, [and] over 2,000 people working there. And I think the narrative that it was a wasteland isn't accurate. ... it was a vibrant community in itself.' As the Park evolves, organisations, companies and institutions are seeking to build and sustain links with existing neighbourhoods and communities through both informal and formal learning, skills and other activities to ensure new opportunities are open to all and that information is shared more widely and effectively.

*Creating and activating high-quality, sustainable spaces*

Above all, the defining feature of this area, now acclaimed as a world-leading exemplar of landscape-led regeneration, is the open space of Queen Elizabeth Olympic Park, sometimes described as the 'eighth venue' of the 2012 Games. Transforming the landscape for the Games and legacy involved a complex and lengthy process of remediation of huge tracts of contaminated land and the removal of overhead electricity pylons — along with the construction of two long tunnels, enabling power lines to be carried underground — and creating biodiversity-led landscape designs, opening up the river Lea corridor and carving out a network of wet woodlands, water meadows, and other green and blue spaces. The process culminated in the largest new urban park for more than a century, providing space for leisure, play, exercise, socialising, arts, and culture, alongside essential environmental measures such as flood protection (as highlighted in our 2021 report, Resilient London, flooding is one of the primary climate risks for London and the



The largest new urban park in the UK for over a century, the Park includes world-class green open spaces and walkways © AECOM and David Lloyd



handling of surface water is a top priority). Today, the Park covers 226 hectares, with 6.5km of waterways, and contains more than 13,000 trees and at least 60 species of birds.<sup>41</sup> It is a major node of connection with a wider green infrastructure: the Lea River Park links Queen Elizabeth Olympic Park to the Royal Docks and the river Thames with 26 miles of continuous public parklands. Like the structures that were built within it, the Park's landscape and public realm have been carefully designed and managed within established guidelines and standards (including the Park Design Guide, Biodiversity Action Plan and Inclusive Design Standards). Neil Mattinson, Director, LDA Design, says that the standards for accessibility, sustainability and inclusivity were industry-leading. 'The expectations of quality have become LLDC standards, but the design set the standards not only for the future of this park but for every subsequent major landscape project.'



Aerial view of the Park during the 2012 Games, showing the scale of transformation © Jason Hawkes for ODA

In line with contemporary placeshaping approaches, and the holistic character of 'great estate' management strategies, the Park is not viewed only as a major environmental asset, offsetting the urban heat island effect and providing wildlife habitats; as a multi-functional 'cultural asset, it also has communal, social, aesthetic ... and historic value' and is designed for everyone to use.<sup>42</sup> By 2031 the total number of visitors to date is expected to have increased fivefold from 25 million, in 2021, to 125 million.<sup>43</sup> The importance of the Park as an open and green space — and the smaller public and private outdoor spaces within the legacy neighbourhoods — became apparent especially during the COVID-19 pandemic of 2020–21, when the most stringent restrictions stipulated that people should leave their homes only for exercise (if not for work or medical need). Michael O'Leary highlighted that a colleague who lives within the Park has noticed a more intensive daily use of outdoor green space, as working patterns have evolved post-pandemic: 'the park feels more vibrant now because you get a lot of people working from home so you tend to see more people making use of the open spaces'. Jerome Frost argues that in creating a city around the centrepiece of an open green space, which in London compares in size only to the Royal Parks, the Park matured and came into its own during the pandemic because 'there aren't that many [green spaces] that are of the scale where you really do feel like you can get away from the city ... there's the physical maturity, but there's also the psychological maturity. ... I think people will now own it much more as their Park than it might otherwise have been.' The character of the landscape is also configured for different uses, as the North Park is a naturalistic landscape. The South Park, however, closer

to Stratford and providing space for a range of cultural and other events and activities, has a more ornamental, cultivated feel; this was redesigned after the Games by James Corner + Field Operations, in partnership with Piet Oudolf.

The landscape and public realm had to be designed to provide an attractive setting for the Games as well as an infinite range of legacy uses, whether sport, exercise, leisure, culture, relaxing or socialising, for people of diverse ages and backgrounds — both local and from much further afield. Active management of the Park including an extensive programme of events at different scales and varied mix of options has been critical in using public realm as a tool to generate not only social value but also to drive investment into a place where something was always seen to be happening. As Dan Buck explains, at one level, Lee Valley White Water Centre showed sports venue usage patterns which echo across the whole park. 'Many of the people that visit our sites aren't actually doing an activity. At Lee Valley White Water Centre, some will come in to have a cup of tea, or go walking in our nearby country park, sit on the terrace, and have a couple of beers. So we've taken that philosophy very much into planning for other venues now — particularly with the new Lee Valley Ice Centre.' Alongside the existing sporting venues created for the Games and legacy use, on a much larger scale are the new entertainment attractions that aim to bring visitors from across the UK and beyond. These include the 3,000-capacity timber temporary 'ABBA Arena' next to Pudding Mill DLR station, hosting Swedish pop group ABBA's virtual 'avatar' concerts in 2022,<sup>44</sup> and the MSG Sphere, a state-of-the-art entertainment and music venue designed

by Populous with capacity for more than 20,000 people, and which was approved by the LLDC planning committee in March 2022.

Public art is now also seen as an integral part of placemaking, helping to articulate the character of a place and reinforce identity. The ODA established an Arts and Culture strategy that, among other aspects, involved commissions for 26 works, including Monica Bonvicini's free-standing mirror sculpture, RUN, next to the Copper Box Arena, as well as others incorporated within bridges, underpasses and other infrastructure, and community projects led by artists.<sup>45</sup> The ArcelorMittal Orbit, at 114.5 metres high Britain's largest piece of public art, is an observation tower designed by Sir Anish Kapoor and Cecil Balmond and now a key visitor attraction. The Emerging East programme in 2013 was again another key example of an iterative programme of interventions, including temporary structures such as benches and shelters, which sought to engage people in the Park as it began to reopen. The LLDC Arts and Culture strategy published in 2014 outlined the ambition of positioning the area as a key cultural and creative destination,<sup>46</sup> which has now been reinforced by the arrival of major institutions such as the V&A East, UAL's London College of Fashion and Sadler's Wells at East Bank. The public realm here, at Stratford Waterfront, has been designed to play a vital role in supporting much higher footfall and achieving the goal of an inclusive innovation, culture and education district. The designs of stepped terraces looking across the river and Park with spaces for different activities, notes Andrew Harland, creates an active frontage designed to make these institutions more permeable and as a unifying feature

generating opportunities for informal exchange: the institutions 'want local communities to come in and share their space ...', underpinned by a concept of 'stickiness, this idea of wanting to create a democratic place, which will draw people to spend time there, but not have to spend money there'.

### *Harnessing innovation and creativity for inclusive growth*

Economic sustainability is a prerequisite for the successful regeneration of places, as the convergence strategy identified: 'the single most important factor in reducing disadvantage is getting more residents into work and better paid work'. The Legacy Communities Scheme identified the potential for 31,000 office and retail jobs at Stratford, with many thousands more in areas such as venue management and within the planned new neighbourhoods. One of the key drivers of economic growth in the area has been the creation of Westfield Stratford City, one of Europe's largest shopping centres forming part of the wider Stratford City mixed-use urban district, which has now achieved footfall of 53 million visitors per year<sup>47</sup> and has created more than 10,000 jobs since it opened in September 2011. Over this past decade, James Atherton, Development Director, Unibail-Rodamco-Westfield, observes, Westfield Stratford City has cemented its place as a destination in its own right, not just for retail but also as a meeting place that brings people together to live, work and play. Constantly adapting and bringing in new experiences and concepts, Stratford City is a beacon for the ever-changing retail landscape and illustrates how creating a neighbourhood that is truly part of its community is key to success. Our centre

## The creative entrepreneur's view

Christopher Raeburn, leading designer and Creative Director at RÆBURN (and Collaborator at Large at Timberland), is based in Hackney and in 2021 was appointed by Get Living to design and produce a new creative hub at East Village, The Lab E20, bringing together fashion, tech and design innovators and the local community:

'I studied at the Royal College of Art and graduated back in 2006, and in 2008, I took my first shared studio space in Hackney Wick ... it was a really amazing time because I went from seeing the first bulldozers going on to the Olympic site through to being at "Super Saturday" ... quite incredible as the whole area was transformed ....

... A lot of the learning that we have in the RÆBURN lab in Hackney is all about bringing together craft, creativity and community, so we do a lot of things like workshops and tours and the space itself is completely flexible. So that's what I wanted to bring to E20, in the lab space we have there — a creative blank canvas that anyone can come into. And what's been so encouraging and inspiring [is that] so many other creatives [and people] use the space in different ways. It really has been an amazing connector, with the immediate local community but importantly for us those in the wider neighbourhoods.

We certainly found that with the activities that we did [in The Lab E20] attracted this really broad myriad of people. ... That's the whole point: a lot of what we do is about trying to foster and keep skills.'



has become a town hall as we heavily invest in the focus as community hubs — we're launching works spaces, repurposing retail space for leisure and entertainment, integrating health and wellbeing offers and even building homes — early next year we will launch 1,200 new homes at Stratford City.'

Another highly significant element of this area is the emergence of the new business district at International Quarter London (IQL), another key driver of employment at scale, to which major organisations such as the Financial Conduct Authority, Transport for London, UNICEF, HM Revenue and Customs and the British Council have moved their UK headquarters; by 2025 it is estimated that 25,000 jobs will be located here. Kristy Lansdown, Project Director, Lendlease, also suggests that, in the post-pandemic era, with a greater awareness of health and wellbeing, there is even more demand for the highest-quality and sustainable workspace, ESG priorities and amenities. In this vein, IQL has emerged as a premier destination for forward-thinking businesses, not just owing to Stratford's connectivity, but also, she says the 'Olympic Park's unparalleled offer of award-winning workplaces surrounded by acres of green space, international standard leisure facilities and world-leading arts organisations and academia. It's a unique proposition to have everything on our doorstep and be part of such a vibrant and growing part of London and something we've seen tenants increasingly prioritise for the wellbeing of their employees.'

Early debates around the provision of other employment space across the Park in legacy use centred notably on the potential reuse of the International Broadcast and Press Centre, a vast structure, 275 metres



Inside Here East, the innovation centre home to start-up and scale-up businesses, 2018 © Rory Gardiner

long, providing media facilities for 30,000 international journalists during the Games. Jules Pipe (then Mayor of Hackney) wrote in 2012 that: 'Whatever happens to the International Broadcast Centre building, we need a commitment now from the Mayor of London to delivering the amount of employment space that was promised.'<sup>48</sup> The centre's advantages as workspace lay in its size, the adaptability of its design (with a strong framework and varied floor-to-ceiling heights) but most importantly in its power capability and resilient digital connectivity, originally provided for simultaneous worldwide broadcasting during the Games. Initial plans were for a tech hub and data centre — reflecting the ambitions of the government of the time for the formation of a new east London 'Tech City' in and around Shoreditch in 2010 — but later evolved into what is now acclaimed as one of the UK's pioneering centres of innovation, Here East. In the 2000s the idea of an urban centre in which culture, education and technologies could be combined with start-up and other enterprises to stimulate new ideas, products and services was ground-breaking (the Brookings Institution's seminal paper on the idea of 'innovation districts' was published only in 2014<sup>49</sup>) — but has now become mainstream. This inclusive, collaborative approach has seen Here East become home to companies such as broadcaster BT Sport, start-up and scale-up businesses at the innovation centre Plexal, and Ford Mobility, which focuses on urban transport innovation, as well as major higher education institutions including UCL, and the London branches of Staffordshire University and Loughborough University. The reconfiguration of the structure by Hawkins\Brown sought to provide the right environment for cross-

disciplinary collaboration: 'one of the things that we brought to the table', suggests architect David Bickle, Partner and Creative Director, Hawkins\Brown, 'was the thinking that something of that scale is more like a piece of infrastructure, network, or a platform to support a dynamic ecosystem of enterprises that promotes innovative work practices and behaviours'. Also pioneering for the time was the introduction of creative industries: as Jamie Ritblat acknowledges, Delancey's financial support of Here East 'was a significant amount of risk' as the market was only emerging, and bringing in leading choreographer Wayne McGregor and his dance company 'was slightly counterintuitive in some respects. But we thought it would be an interesting piece of culture to bring to the story' to generate cross-fertilisation of ideas. Today the creative community at Here East has also expanded to include low-cost studios for local arts, design and other creative businesses in the Trampery on the Gantry, a set of 21 freestanding studios within the repurposed steel structure at the back of the former broadcast building.

The creative community in and around the Park is set to increase exponentially with the completion and opening of East Bank in 2022/23, described as the largest culture and education district since the creation in the 19th century of the South Kensington estate by the Royal Commission for the Exhibition of 1851. Spread across three sites, this co-location of major cultural and educational institutions includes a theatre, centre and academy for dance organisation Sadler's Wells; a campus integrating the six sites of UAL's London College of Fashion — incorporating public open spaces, galleries, libraries and archives; a new outpost of the Victoria and Albert



Museum, and the V&A East Storehouse, a collection and research centre at Here East; state-of-the-art BBC Music studios and performance spaces; and UCL East, a campus for multi-disciplinary research, teaching and innovation. It is anticipated that East Bank will bring in a 10,000-strong student population, create 2,500 jobs and generate £1.5 billion of economic value.

These major institutions, some of which in fact have a long history of association with east London, have already established engagement and skills training programmes with local communities and business partners, to help support this transition and to grow the social, cultural and economic ecosystem in and around the Park. There have been ongoing concerns about the number of skilled jobs and the provision of training on offer to local people, as well as the importance of maintaining the vitality of existing creative industries, particularly at Hackney Wick and Fish Island. In-depth research has shown that area contains Europe's greatest concentration of artists and other creative professionals, mainly in small, independent enterprises. In 2017 a report by the London Assembly Regeneration Committee noted that 'many of the new jobs forecast for the Growth (i.e. host) Boroughs are "skills hungry", requiring higher levels of education that may not be available to local people' and, as such any economic growth 'may be disguising the need for efforts to target those "left behind" in the years since the Games'.<sup>50</sup> Gavin Poole, CEO of Here East, also emphasises that the vision of Here East has been to support positive change within the local communities: 'our long-term ambition has been to create a place where we could enhance employment in this area by bringing in high value jobs and businesses

that would not normally come here. And we could enhance education by gathering a cluster of like-minded universities providing courses and research that could actually bring enterprise scale businesses to sit alongside start-ups. So the employment isn't about just bringing jobs. It's also about creative jobs.' Much other activity has taken place over the last decade by LLDC to ensure that investment and commitment to providing opportunities for skills development, training and education is incorporated within contractual obligations for developers and leaseholders. A new Good Growth Hub is also being launched at Hackney Bridge, a meanwhile project providing incubator space, located near Hackney Wick and the canal and intended to connect businesses with local people through skills and training opportunities.

The area covered by the Park and its neighbouring districts have a long history of industrial innovation and invention, and innovation has now become a key driver of the strategies to sustain economic vitality far into the future; the Park continues to be an 'urban testbed' for experimentation at different scales. This builds on a theme of pioneering ideas from the Games and legacy development too, both in processes and systems and in the physical built environment. The former include innovative financial models such as joint-venture limited risk structures, giving LLDC as landowner a percentage of the end sales value of development rather than the cost of land, and the introduction of build-to-rent at scale at East Village. Just a few of the latter are the world's largest cantilevered roof at London Stadium; the invention of the 'multigenerational house' at Chobham Manor; and the UK's first 'rising factory', an innovative prefabricated



Hackney Bridge gives local entrepreneurs and enterprises the opportunity to see their business thrive ©Harry Winteringham





construction solution by Mace enabling each floor of a new tower at East Village to be built in just one week. As Rick de Blaby notes, the scale of development is a crucial factor: 'it gives us the opportunity to try new things and we're certainly not finished yet. We've learnt a huge amount from operating East Village, and the opportunity to create a meaningful impact that will serve future generations is one that we relish'. Another key aspect is the fact that LLDC is a single body with regeneration as its focus. There is concern that this commitment to innovation may be diluted in the future: Davendra Dabasia, Managing Director for International Consultancy, Global (and Construction Director, Olympic Park Legacy Transformation), Mace Group, highlights a major consideration as 'the agility of the client to be able to keep that pace of change. ... I do worry that ... some of the growth in the aspirations will be stifled' after 2024.

Gavin Poole says of Here East that 'we set out originally with a very localized strategy about the buildings, the neighbourhoods, the community and the people. The breadth and sight of the vision were also to create a national and international effect.' This ambition to create impact through common purpose at a larger scale has now evolved into a new phase with the aim of creating what may be the world's first inclusive innovation district. Launching in summer 2022, under the name SHIFT, this will be a collaboration of key organisations across the Park committed to an agenda of generating and supporting research and innovation for future cities, focusing on critical themes such as climate resilience, social equity, urban mobility and health and wellbeing.<sup>51</sup>

Top: UCL's Pool Street West atrium © Forbes Massie | Bottom: Aerial view of Here East, 2012 © Jason Hawkes



# CONTINUING THE LEGACY

The transformation that has taken place since the Games represents perhaps a scale and speed of regeneration unprecedented in recent times in a single area in the UK, but the legacy project is far from complete. Indeed, the pace of development is increasing. ‘From what I see going there every day’, says Peter Maxwell, ‘it is about [every] 12 to 18 months that this place fundamentally moves on and changes.’ In 2022 the Park has reached only the halfway mark of the 20-year convergence pledge, and there ‘remains significant work to do to fulfil the commitments made in the original London 2012 bid with respect to the regeneration of east London’.<sup>52</sup> Over the coming decades the Park is set to evolve further into a key cultural and business district, with the expansion of Stratford City, the opening of East Bank and the launch and growth of the inclusive innovation district. With the anticipated completion of housing in legacy neighbourhoods and in other developments, the population of the area will increase exponentially and is projected, by some estimates, to double in size to more than 100,000 people by 2036.<sup>53</sup>

LLDC is, however, a time-limited organisation, and a significant part of its role in the physical and socio-economic transformation of the area under its remit is expected to be complete by 2025. The development of plans for much longer-term oversight and management of the Park is underway in a process that the organisation

calls ‘Transition’. Though the full details of Transition are not yet known, as agreed by the Mayor of London, the LLDC’s town planning powers will be handed back to the boroughs of Hackney, Newham, Tower Hamlets and Waltham Forest by the end of 2024.

It is generally agreed that one of the main reasons for the success of the transformation to date has been the fact that the LLDC is a non-partisan body (with representation from the boroughs at Board and Planning Committee levels): unlike a local authority which has a multitude of other statutory functions, it has been able to focus on an overarching goal and take decisions for the long-term benefit of the area in its remit. Management, maintenance, resilience and future governance are therefore at the top of the agenda for the future, with many interviewees for this project advising that the shape of future arrangements should be considered carefully but made public as soon as possible, to allow for effective coordination. Shaun Dawson emphasises that, after 2024, ‘when the planning powers for Queen Elizabeth Olympic Park are returned to the four local boroughs and a reset LLDC has been established, there needs to be a mechanism which ties the major Queen Elizabeth Olympic Park players together in some way. It’s currently based very much on relationships, goodwill, mutual respect and recognition. But that’s not necessarily an effective basis for ensuring the successful

development and activation of an evolving Queen Elizabeth Olympic Park over the next decade.’

Continuity of stewardship is essential to safeguard, and continue, the cohesion and quality that have been achieved to date. This needs an understanding that the Park is an asset that must be maintained for the public good, the benefits of residents and businesses and London as a whole, with stakeholders acting in the collective interest. The LLDC has committed in its strategies to maintaining the Park as a ‘great estate’, but many of our interviewees underline the careful balance that also must be struck between commercial use to ensure economic vitality, and affordability and diversity to ensure that local people share in wealth creation as this area evolves

as an attractive neighbourhood. Manisha Patel highlights that on visits to Chobham Manor, she and her colleagues hear from residents that ‘they love living in the Park, but it’s the charges’ that are a concern, as residents pay the fixed estate charge on top of their council tax. ‘There is a danger that it could become quite exclusive’ for certain ages and income groups, she says, noting that some homes intended for families are now in reality house shares occupied by younger professionals, and that, with an ageing UK population, there are not at present any specialist residential facilities for older people on the Park.

Coping with a booming population and intensity of everyday use is another key concern. Density and characterisation studies undertaken to support the



Aerial view of the proposed new neighbourhoods of Sweetwater and Stratford Waterfront



LLDC's Local Plan have helped to inform discussions on the densities of specific schemes being put forward for development. Stratford, as a metropolitan centre with high public transport accessibility, is identified as the main location for higher-density projects. Even with such levels of accessibility, Heike Neurohr, Partner and Studio Lead, Hawkins\Brown, highlights the need to factor in vastly increased demand on roads and other infrastructure with the boom in home direct delivery services: 'I'm not sure if that infrastructure was thought through in terms of the uplift in urban logistics and last mile delivery and having everything with you at the click of a button,' she says. The increased footfall and impact of many more people living in, working in and visiting the area means safety and security will also continue to be top priorities, along with the protection of green spaces. At the same time, Andrew Harland also emphasises that a framework for controlling new interventions and additions in the landscape will continue to be essential: 'Space will be increasingly contested. It is possible to take advantage of commercial opportunities in a way that does not compromise the qualities of the Park, but only if the bigger picture is always held in mind. This means understanding the significance of the qualities of the landscape.' With the popularity of the Park as a destination and workplace, Stratford station has become the 7th busiest station in the UK, with further demand expected in the coming years — especially with the long-awaited opening of the Elizabeth Line in 2022 — and the movement of people through and from this major east London transport hub has therefore become an important focus for LLDC, the London Borough of Newham, TfL and Park stakeholders. In 2021, 5th Studio



Stratford Station awaiting further improvements as East Bank and Westfield expand, 2020 © Jason Hawkes

was appointed to lead a multidisciplinary team to develop a vision and urban design framework to improve the interchange, as well as links to Stratford International Station (less than 500 metres away) — where international train services still do not yet stop, though this ambition has not been abandoned — and Stratford town centre.<sup>54</sup>

As the climate emergency deepens, the importance of environmental sustainability has become ever greater. The early development of the Park was ground-breaking in its sustainability aspirations, including for example, the building of what is now East Village to level 4 of the Code for Sustainable Homes, much higher than required by the building regulations of the time. Achieving net zero carbon — along with sustainable design for health and wellbeing — is now one of the main drivers in the development of new buildings in and around the Park. The Turing Building, for example, due to be completed in 2024 and one of three new major office developments at IQL, has been awarded the highest level BREEAM rating, 'Outstanding' at the design stage, and is targeting the highest level of other standards, including WELL Gold and EPC A ratings. However, technologies have moved on significantly, and there is much concern about the viability of the district heating network installed across the Park, which, in its current reliance on fossil fuels rather than renewable energy sources, is now increasingly in conflict with the UK government's ambition for decarbonising the power grid. (Dame Alison Nimmo highlighted in a group discussion for this research that among her original aspirations for the Park in her role at ODA, to deliver the promise of the greenest games ever, was a wind turbine in the north section.)

Less important for the Park as a place, but more for the wider industry and other places undergoing regeneration, is the need to ensure that the confidence, ambition, collaboration and innovation that the Games and legacy generated are retained in future projects. Davendra Dabasia suggests that the key lesson was that London 2012 and its legacy 'made a collaborative, fair mechanism of delivery achievable, [in what] previously has been quite a transactional industry ... it said we can be collaborative, share the risk and reward with our supply chain'. Also relevant, with the current UK government's levelling up agenda aiming to spread opportunity and growth more evenly and equally across the country, is the question of how the 'ecosystem of place' that has been developed in the Park can be captured and translated to other towns and cities across the UK. Recognising this area as an exemplar and promoting it for the greater good of neighbouring areas will always be vital, yet perhaps its ultimate legacy will be how it integrates over time into the urban fabric of the rest of London. As Lyn Garner, Chief Executive, LLDC, explains, as the Park evolves over the next decade and more, 'a lot of people will be just living here and ... it'll feel a lot more like a new piece of city'.

# A WIDER LEGACY?

Ultimately, legacy is about people. Although pilot studies, post-occupancy evaluation and analyses evaluating the success of legacy aspirations have taken place and are still in progress, a deeper and wider understanding of the longer-term socio-economic impacts of the Games and legacy regeneration on east London is needed. This was implicitly acknowledged by the initiation in 2021 of a 10-year, community-led longitudinal study that will cover not only the Park but also neighbouring districts. In this work, the Institute for Global Prosperity at UCL East, supported by the LLDC and other organisations, will gather data from 'citizen scientists' who will 'self-report' the long-term impact of social, economic and physical changes on households in 13 east London neighbourhoods directly affected by the regeneration of the Park and the Royal Docks.<sup>55</sup> When the Legacy Communities Scheme reaches its final realisation in the 2030s, this study will no doubt provide valuable data and insights into the assessment of legacy in east London.

It is also important to look at legacy in the wider reshaping of London. The regeneration of Stratford — although at an exponential scale — has taken place alongside that of other urban centres and districts across the capital in the 21st century, in line with the aspirations outlined in the London Plan. As a town centre with a very high level of public transport connectivity, it is a key node in London's polycentricity, as we have explored in previous NLA reports *London's Towns: Shaping the Polycentric City* (2017) and *Local London* (2021). The re-zoning of Stratford station by Transport for London as Zones 2/3 in 2016 recognises that the perception, and indeed the reality, of what constitutes 'central London' is expanding beyond the traditional boundaries of the Central Activities Zone. With the current discussion around the concept of the compact '15-minute city', and the impact of the COVID-19 pandemic on working and travel patterns, it is interesting to note that once the





Aerial view of the Park, 2022 ©LLDC

east section of the Elizabeth Line is fully open (anticipated in autumn 2022), the estimated journey time from Stratford to Bond Street will be 15 minutes.

As noted above, the aspiration towards a self-sustaining 'ecosystem of place', integrated with the wider city, may also provide useful lessons, in terms of key principles, for the current 'levelling up' agenda of the UK national government. Also significant is the need to retain and disseminate knowledge, expertise and skills in placemaking and urban regeneration on projects at this unique scale, in both public and private sectors, a fact perhaps recognised in part by Lord Kerslake's review of GLA Group housing delivery in February 2022. One of his recommendations was: 'The transition of LLDC should prioritise collaboration, cost efficiencies, and the retention of key talent.'<sup>56</sup>

At the international level, there is a well-established process of handover and knowledge transfer between Olympic and Paralympic host cities, and London continues to be profiled by the IOC as an exemplar of how the Games can provide long-term benefits to communities.<sup>57</sup> Many of the people interviewed for this research project have also been closely involved in the design, planning and development of the Games' parks and venues in previous and future host cities. How each city views legacy and seeks to optimise the opportunity of hosting the Games will be different, of course, as political, economic, social and cultural governance, drivers and urban contexts vary enormously around the globe. The transformation of Barcelona as a host city for the 1992 Games had lessons in urban regeneration that informed work in London. And as the next summer

Games host city, in 2024, Paris seeks to take London's pioneering approach to sustainability a stage further by organising 'the world's first Olympic and Paralympic Games with a positive contribution to the climate' — 95 per cent of venues will be existing or temporary,<sup>58</sup> and the opening ceremony will be held in the heart of the city, along the river Seine, rather than in a purpose-built stadium. Paris also presents an interesting comparison with London in terms of a possible alternative scenario had London not won the Games bid. Roger Hawkins cites the example of Clichy-Batignolles Eco Quarter in Paris, the site that originally competed with London to host the 2012 Games; it is of similar scale and centred on a redundant goods yard. 'After the bid was lost', he notes, 'the city of Paris decided to proceed with a major transformation of the site without restrictions imposed by needing to host the Games. ... The area feels more intimate, more diverse with different housing typologies, more responsive to sustainability and more connected to the city.' The next summer Games hosts after Paris, Los Angeles in 2028 and Brisbane in 2032, are coastal cities where sea levels are projected to rise significantly. In coming decades, therefore, if the Games continue to be held after 2032, the climate emergency will undoubtedly provide the ultimate global imperative determining the shape of any Olympic and Paralympic legacy and its manifestation in an urban setting.

# VIEWPOINTS



# GLOBAL SPORTS

*Bill Hanway, Executive Vice President, Global Sports Leader,  
Social Infrastructure Leader, AECOM*

The Olympic and Paralympic Games have always driven distinctly opposing views. As a veteran of four Games, I understand and share the concerns about the cost and disruption but, if done with clarity of purpose, hosting this event can accelerate the delivery of long-term benefits that transcend the typical timeframe and politics of government funding cycles.

London’s successful bid for the 2012 Games was conceived in the spirit of Barcelona 1992 and focused on the regeneration of the historically challenged East End of London. To achieve the desired transformation, the consultant team started the process with environmental, social, and economic analysis to define appropriate targets of success. Once established, the work was undertaken simultaneously at multiple levels — the Games, the post-Olympics transition, and the long-term legacy. This allowed us to ensure that the infrastructure of the main Olympic Park master plan was designed with future housing, schools, enhanced transportation links, and commercial development in mind — later analysis estimated that 80 pence of every pound spent on the Park had a legacy use. Importantly, the team saw the 100ha park (now Queen Elizabeth Olympic Park) as the centrepiece of the plan and key to stitching together the new community with the existing while establishing collective ownership.

As early as 2016, it was possible to measure the success of the planning efforts through the real estate values in the neighbourhoods near the Games — analysis showed that

these hubs outperformed surrounding areas by an average of 29 per cent. Additional development around Queen Elizabeth Olympic Park continues to fulfil the goal to create a fully rounded community with a new cultural hub at East Bank (formerly the temporary Water Polo Venue location), a creative and entrepreneurial destination in Here East (previously the International Broadcast Centre), and academic anchors of Loughborough University London, University College London, and Staffordshire University London.

Rio 2016 had the London 2012 methodology and focus on legacy in mind from the start, but in terms of personality, Mayor Eduardo Paes proclaimed, “We are not London or Beijing. These will be a distinctly Rio Games.” The goal was to reflect the beauty and hospitality of Rio while embracing its structured chaos. The bid emphasized that two of the four zones were in fast-growing areas of the city that needed the infrastructure and housing that the Games could help accelerate. The evaluators praised the “excellent legacy plan,” with its emphasis on social integration.

Economic context is important when reviewing Rio 2016. In 2009 Brazil was in ascendance and was pushing towards 7th in the world GDP ranking. The following years saw a complete reversal of fortune with the country mired in political scandal and economic implosion further burdened by the hosting of the 2014 World Cup and Rio 2016. The challenges continue and it



Top: LA28, Coliseum Athletics © AECOM | Bottom: Rio 2016 Olympic Park, Ground Level by AECOM © Robb Williamson and AECOM





will be years, perhaps decades, before we know whether the legacies described in the bid come to pass. There are some successes including a new subway line, 100 miles of rapid-bus lanes, and a 17-mile light-rail system.

These experiences along with the financial success of the 1984 Games have influenced the development of LA28. The plan for Los Angeles 2028 Olympics and Paralympic Games — entirely privately financed — takes many of the lessons of the recent past as far as possible. For instance, the city will not be building any new venues, all events will take place in existing or temporary sites. The addition of SoFi Stadium and the new Intuit Dome have increased the percentage of existing venues to over 75 per cent. In addition, the city will not build a new Olympic Village, instead, athletes will stay in the dormitories at UCLA. The Paris 2024 plan takes a similar approach, relying heavily on existing or temporary venues and officials are promising that every venue will have a post-Games purpose.

Without question, hosting the Olympic and Paralympic Games is expensive, disruptive and carries risks. The Games are delivered on a 7-year cycle that does not always match global economic patterns. The success of London 2012 was supported by low construction costs driven by the 2008 financial crisis and the subsequent economic recovery that tied into the legacy delivery. Despite the same methodology, the reverse happened for Rio in 2016. For Tokyo 2020, the pandemic resulted in a huge revenue deficit driven by the lack of visitors. Despite these challenges, success can be achieved through building consensus around a clear social, physical, economic, and environmental vision that goes beyond simply staging a global sports celebration and looks not about what the city could do for the Olympics, but what the Olympics could do for the city.



# INNOVATIVE PARTNERSHIPS

*Clive Pane, Partner, Deloitte*

One of the greatest challenges for the London Legacy Development Corporation (LLDC) and its advisors was ensuring that Queen Elizabeth Olympic Park was not only a place where people wanted to live, work and play, but that returns and regeneration outcomes were also optimised. This was particularly the case given the billions already incurred to host the Games and high-profile commitments around a significant local legacy. From a technical perspective, we took the view that achieving LLDC’s goals would require a new approach to the creation and sharing of development value between the public and private sector.

Deloitte has been one of LLDC’s key development and business planning advisors since 2006. Amongst many other roles, Deloitte has advised LLDC on the commerciality of the masterplan, the LCS s106 viability discussions and its early business planning work. It has also advised on the majority of transactions on the park including Chobham Manor, East Wick and Sweetwater, Here East, UCL and a number of the Stadia Assets. Deloitte continues to advise LLDC across a range of areas and instructions including Pudding Mill Lane.

The ambition to achieve world class placemaking, meaningful social, economic, and environmental outcomes as well as a deliverable and viable project, had a huge impact on design development and the

development strategy. The project was underpinned by a business plan created alongside, and with, an understanding of the master-planning and town planning process. Key decisions were supported by detailed analysis and appraisal of impacts, financial and non-financial. The design and the commercial teams were fully integrated.

The Legacy Communities Scheme planning consent and associated design parameters provided a blueprint for the future neighbourhoods. A suite of LLDC policies detailed its regeneration aspirations, including design quality and inclusive design, socio-economic benefits and sustainable development. A key implementation challenge was then to ensure a relatively high degree of control over the quality delivered by developers on the park, whilst simultaneously ensuring enhanced participation in the value created. To do this, we worked alongside LLDC to devise and implement a series of specific contractual structures appropriate to the particular phase objectives, use mix and market conditions.

For the first neighbourhood, Chobham Manor, a risk sharing development agreement (DA) was used. This transaction, in early 2012, took place in a very different context to the Park we know today. The Park was inaccessible to the public as London put in place final preparations to host the 2012 Olympic and Paralympic Games

and market perceptions of Stratford as a development hotspot were mixed. Whilst LLDC was confident in the investment made in the Park and the location, the private sector would never have fully priced in the potential upside at that moment. The DA structure adopted therefore encouraged the market to participate as it avoided a large upfront capital sum and reduced funding costs. In parallel, it allowed LLDC to take its return based on the pricing of achieved unit sales, after perceptions and pricing had been transformed. The second phase, Eastwick and Sweetwater, presented a different opportunity for LLDC to accelerate delivery through diversification of housing supply. Here, land ownership has been converted into part ownership of the completed PRS scheme, providing a source of long-term revenue. With the

third phase, East Bank, LLDC has taken on the development management role itself, providing it with full control over this landmark project that will be an economic catalyst for East London.

The way in which LLDC has brought design, quality control, achievement of regeneration outcomes and value capture together at Queen Elizabeth Olympic Park in a consistent and yet continuously evolving way, represents the best example of a ‘pre-planned’ approach to regeneration in Western Europe. Deloitte has worked closely with LLDC on every step of this process, helping it to design and implement it via the delivery of multiple developer selections. The approach adopted on the Park has been exported across the UK public sector, transforming methods of optimising value capture.



© LLDC



# A TRUE PIECE OF LONDON

*Jason Prior, Masterplanner of the 2012 Olympic Park and Queen Elizabeth Olympic Park, Founding Partner, Prior and Partners*

It's hard to imagine today, but twenty years ago, the site of the Queen Elizabeth Olympic Park and its surrounding development was a forlorn place. Dotted with low-grade manufacturing, recycling sites, bus and tube parking and Europe's largest fridge mountain, it was also threaded with huge sewer pipes and a filthy river. Overall, it didn't look promising. It had long been the service area for London, but also home to several communities. And to top it all, a little further down the line, the global financial crash of 2008 had to be overcome. Nevertheless, the scheme had many champions and thanks to the collaborative efforts of the local boroughs, London Mayor Ken Livingstone, dozens of creative and construction teams, leadership teams at the Greater London Authority, the London Development Agency and Olympic Delivery Authority and more besides, the vision was realised on budget and on time for the 2012 Games.

From the start, the masterplan for today's wider park was conceived in parallel with the Olympic Park and the 2012 Olympics, with the games seen as an event and a catalyst on route to enabling this new district for London. And while it looks very different to many other parks in the capital, the concept is the same — public green space surrounded by housing, workplaces and cultural and educational institutions. The

new Olympic quarter is a continuation of the capital's evolution and carries the baton into the future.

### *Lessons learnt*

In making the first major park and new quarter for London in generations, it was important to look back and learn lessons from the past. The elements of good city making haven't changed in a very long time, and the same rules applied here. Success in such a venture requires strong ideas and guiding principles, an ambitious vision facilitated by organisational commitment alongside political commitment, and good process aligned with good funding. Infrastructure is the first priority followed by investment in generous community, social and cultural assets.

### *Ripple effect*

Ten years on from the Games, we are seeing how this new quarter is not only evolving into a popular district, but also making profound changes to the adjacent neighbourhoods. The ripple effect is radiating out through the hinterlands and reaching along the length of the Lea Valley from Tottenham to Leamouth. The impacts demonstrate how big a catalyst needs to be to engender positive change and move the dial socially, culturally and environmentally. It takes courage and commitment to make radical change, put

in infrastructure, invest in place and people, and ride the vagaries of the economic cycles. To create big change, you need a big move.

### *Greenest Games*

Sustainability was a critical component in the making of the Park: part of the design and construction remit was to push the envelope of sustainability. With numerous state-of-the-art innovations in areas from water management, ecological restoration and material specification to the fact that spectators arrived only by public transport, the park anticipated many areas of good practice we see today. Ten years down the line, there is still plenty that's good, however it's no longer a leader in sustainability ideas. This serves to show how fast climate change is happening and how urgently we all need to adapt to meet the new needs.

The wider Olympic project can demonstrate how major cities evolve and change, and in London, it has shown that we're good at it. When a project is set up right, and it is as inclusive as possible, it can achieve success.



Top: © AECOM and David Lloyd | Bottom: the 'fridge mountain'





# THE REGENERATION GAMES

*Mathias Kuhlmann, Senior Funding Expert*

In 2015 Hamburg applied as host of the Olympic and Paralympic Summer Games 2024. On this occasion I conducted a comparative study on the bid of my hometown and the 2012 London Games. The key idea of it was learning from success and failure of previous Olympic Games as major urban development projects and deduction of success factors for future Games. An enthusiastic supporter of the bid and based on comprehensive online research, interviews and on-site visits in Hamburg and London (plus Paris, Barcelona and Munich in the following years) I developed, circulated and communicated recommendations during the controversial public debate in Hamburg.

In a referendum from November 2015 a scarce majority of 51.6 per cent of voters said "no" to the Olympics in Hamburg and thus stopped the bid. In the deprived neighbourhoods close to the planned OlympiaCity in the port up to 80 per cent of the residents voted against the Games. At the beginning of the debate the Hamburg government had declared a "yes" of the population as condition for the further planning and bid process. But most politicians, planners and supporters underestimated the enormous social and economic dimension of the Games. The German government reinforced the doubts of many residents as it didn't promise bindingly to finance the majority of the

estimated costs of €11.2 billion (including investment in local transport infrastructure).

The Olympic plans of Hamburg as major urban development project in the centre of the city and harbour have largely failed due to the lack of integration of both the interests of the port industry and the neighbouring districts. The strategy of the Hamburg Parliament, the Senate, the bid company and a private "Fire and Flame Initiative" relied too much on the emotional conviction of the people of the Olympics brand. Due to the difficult circumstances such as the FIFA and the doping scandal, the refugee crisis and terrorist threat as well as the unsecured financing of the Federal Government's part, the bid had come into difficult waters. Instead of too much marketing-oriented stakeholder management, it would have required intensive involvement of both local residents and other important players, such as welfare and environmental organisations, in order to gain the trust of the population. Nevertheless, the enthusiasm of the people for the largest sports festival in the world as a symbol of global understanding among nations is an indispensable condition for hosting the Olympic Games and their sustainable legacy for urban development.

The lessons learned from this experience are:

- Olympic Games as catalyst of urban development must leave behind beacons of integrated urban development, comprising a wide range of urban issues, interests and stakeholders.
- Key issues of Olympics as "Regeneration Games" are: high-quality public transport; affordable housing; good jobs; comprehensive civil participation; economic, social and environmental sustainability.
- The staging of the twice two weeks mega event should be financed by the local and worldwide audience. The majority of investment for infrastructural legacy should be financed by national governments.



Grasbrook, Hamburg



# INCLUSIVE INNOVATION

*Neil Smith MRTPI, NRAC Consultant, Chair, LLDC BEAP, Mayor’s Design Advocate*

The formation and success of London Legacy Development Corporation’s (LLDC) Built Environment Access Panel (BEAP) should be understood in the context of the planning frameworks which shaped the development of the Park, from the London 2012 Olympics and Paralympics bid documents to the handover of the Park to the LLDC. This encouraged and further developed strategic inclusive innovation, helping people experience the world around them in a fair and equal way by creating safe and accessible environments for all members of the community.

At a strategic level, two of the four LLDC priority themes are ‘Promoting convergence and community participation’ and ‘Championing equalities and inclusion’ support an approach to strategic inclusive innovation. This was to support a key commitment to ensure that the future communities and neighbours of Queen Elizabeth Olympic Park live in a vibrant new area. One with the best principles of accessibility and inclusion embedded within it.

It should also be understood, that as a public body LLDC is required, under the Public Sector Equality duty, to promote equality and be transparent about how this is delivered.

Beyond organisational strategic commitments encouraging inclusion as a baseline what has set this project apart is the creation of Inclusive Design Standards used as ‘good practice’ benchmarks,



Top: Inclusive Design Standards, 2019 © LLDC | Bottom: Annual General Meeting of the Built Environment Access Panel, 2021 © LLDC

engagement with the BEAP and the involvement of the LLDC’s development partners in continuous dialogue. This has delivered inclusive innovation.

BEAP has a voice and influence that is a continuation of the framework put in place by the Olympic Delivery Authority. BEAP influenced the proposals for transformation, the overall masterplan for over 5000 homes with new schools, employment and public space (the Legacy Community Scheme) and the subsequent developments within, and surrounding, the Park, as well as day to day operations and schemes such as the Park’s successful Mobility Scheme.

The formation of a panel, such as BEAP, and consultation aren’t innovative. Such panels were once embedded in London’s planning processes. The formation of project specific access/inclusion groups have sadly waned because of a both lack of funding and political will.

A critical success factor that supports strategic inclusive innovation is that BEAP has board level champions and is embedded in the LLDC’s strategic thinking. BEAP has developed a clear, strong and respected voice; the LLDC’s ‘Inclusive Design Strategy’ and ‘Equality and Inclusion Policy’ highlight the importance of continued engagement with BEAP, going beyond notional ‘consultation’.

The terms of reference for BEAP set out that it will have range of technical expertise and first-hand experience in inclusion and access, with at least half of its members being disabled people. The membership has developed over time to include local residents of the Park, members of the LLDC Legacy Youth Voice, specialists in Equality,

Diversity and Inclusion and also inclusive events and play.

BEAP is exceptional; its work is recognised and valued by the LLDC as being vital in delivering its priority themes. BEAP has broad ranging engagement and influences with many of LLDC’s functions; including development, design, planning, regeneration and park operations and venues.

BEAP continues to challenge what we understand to be inclusive, addressing the needs of BAME Londoners and the intersectionality of faith, disability and social circumstance to avoid the narrow lens of ‘accessibility.’ The panel bring diverse voices in design debate and the built environment.

At a corporate level, the panel provide insight, feedback, and direction to current and future policy development; at design team level they bring expertise and critical analysis to proposals and the delivered end-projects. By actively addressing diversity and inclusion in design, and recognising it is more than just a tick box exercise delivering ‘compliant’ design, the opportunity to develop and deliver truly inclusive innovation manifestly increases.

As this phase of the LLDC’s existence comes to an end, it is vital that lessons learnt from BEAP’s work feeds into the GLA’s future thinking to deliver a London for all Londoners.



# PROJECT MAP

- 1

East Village
- 2

UCL East
- 3

Bridgewater Triangle
- 4

Sugar House Island
- 5

East Wick + Sweetwater
- 6

International Quarter London (IQL)
- 7

Carpenters Estate
- 8

Pudding Mill Lane
- 9

Olympic Energy Centres
- 10

Pudding Mill Lane Pumping Station
- 11

Pudding Mill Lane Dlr Station
- 12

Queen Elizabeth Olympic Park Mutli-Storey Car Park
- 13

Hackney Wick Station
- 14

Three Mills Lock
- 15

Twelvetimes
- 16

The Triangle Bridge
- 17

Westfield Avenue
- 18

Lee Valley White Water Centre
- 19

Lee Valley VeloPark
- 20

London 2012 Olympic Stadium
- 21

Copper Box Arena
- 22

Hackney Marshes Centre
- 23

London Aquatics Centre
- 24

Lee Valley Hockey & Tennis Centre London
- 25

The Slide at ArcelorMittal Orbit
- 26

Eastway
- 27

South Park
- 28

Tumbling Bay & Timber Lodge
- 29

Canal Park
- 30

Trowbridge Gardens
- 31

Fish Island Village
- 32

Stone Studios
- 33

Wickfirst
- 34

Wallis Studios
- 35

Sir Ludwig Guttman Health & Wellbeing Centre
- 36

Chobham Academy
- 37

The Line
- 38

Bobby Moore Academy Primary School
- 39

Bobby Moore Academy Secondary School
- 40

Here East
- 41

East Bank
- 42

Marshgate, UCL East
- 43

UCL East, One Pool Street
- 44

UAL's London College of Fashion
- 45

Sadler's Wells East
- 46

BBC East Bank
- 47

V&A East Museum
- 48

V&A East Storehouse
- 49

Stratford Waterfront
- 50

Unite Stratford One
- 51

Stratosphere
- 52

Westfield Stratford City
- 53

Supermarket And Gym At East Village
- 54

The Podium
- 55

The Stratford / Manhattan Loft Gardens
- 56

The Gantry
- 57

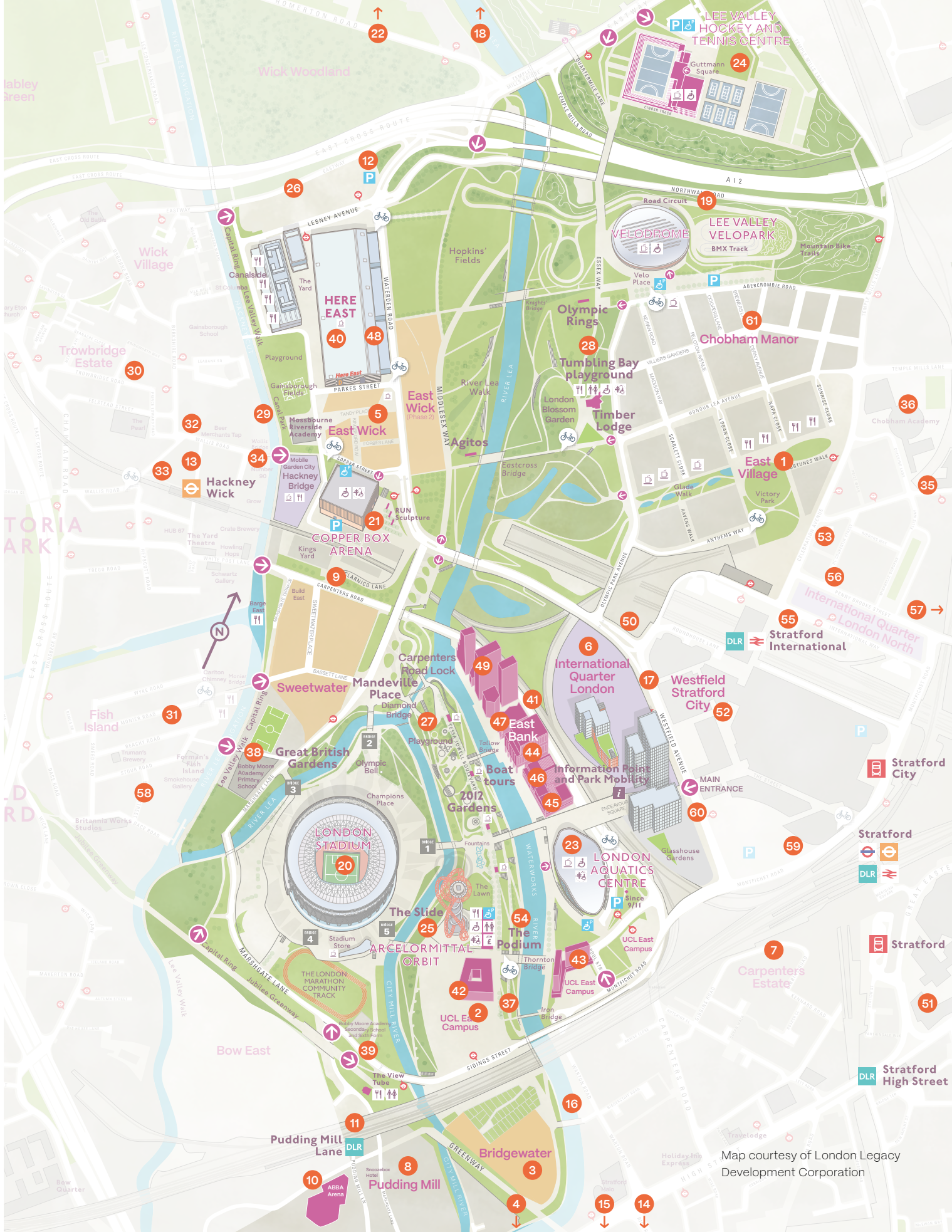
New Garden Quarter
- 58

Bream Street
- 59

Westfield Stratford City Residential Quarter
- 60

Park Place
- 61

Chobham Manor





# PROJECT SHOWCASE

## MASTERPLANS

The projects in this section have been contributed by the main companies involved in the planning, design and delivery of each scheme. Some projects have multiple entries presenting complimentary narratives for each project

MASTERPLANS	85
TRANSPORT AND INFRASTRUCTURE	119
LEISURE AND SPORT	139
LANDSCAPE DESIGN AND PUBLIC REALM	155
RETAIL, HOTELS AND HOSPITALITY	173
TEMPORARY PROJECTS	181
MIXED-USE	191
CULTURE, INNOVATION, HEALTHCARE AND EDUCATION	201
HOUSING	224



# STRATFORD CITY MASTERPLAN

The development of the former rail land into East London’s mixed-use Stratford City played a key role in the city’s successful bid for the 2012 Olympic and Paralympic Games. Arup designed the masterplan in conjunction with Fletcher Priest, West 8 and 20 other architectural practices. Arup brought together a diverse range of disciplines from infrastructure design, transport planning and project management, working in collaboration with developers and masterplanners to maximise the development potential and shape the landform while maintaining the outline planning approvals. Technical approvals for Arup’s work were obtained from Network Rail, High Speed 1 (CTRL), DLR, Transport for London, EA, ODA & London Borough of Newham.

Ten years on, it is delivering exactly the kind of anchor and legacy intended for communities. The masterplan has proved to be a highly resilient development framework over the decade. It has delivered a novel, high-quality and sustainable piece of city development within a dramatically changing urban context, becoming one of the most engaging places in London. Behind that transformation and legacy lies a careful balance of quality design, operation efficiency and development flexibility in the face of challenging economic conditions.

As part of the planning process, Arup’s environmental and masterplanning teams developed a set of site-wide sustainability strategies. These provided detailed guidance on issues such as energy, sustainable building design, waste, water, microclimate, air quality and ecology. This guidance was passed onto developers in the form of statutory regulations. Arup identified robust environmental mitigation strategies that still gave enough flexibility to allow for change and evolution over the 15–20 years of development. As part of their guidance, Arup created a panel that continues to review the development’s sustainability. It is gratifying to see that Arup’s early measurements show carbon savings that exceed their initial goals.

Status:  
**Built**

Completion:  
**2003**

Client:  
**Stanhope, London & Continental  
Railways, Westfield, and Chelsfield**

Masterplan:  
**Arup, Fletcher Priest, West 8**

Transport Consultant:  
**Arup**

*“The project team faced a tricky site. With Stratford City acting as a gateway to the Olympic Park, they had to find inventive ways to transform the development’s infrastructure for the Games and accommodate thousands of spectators at the time. Designing the infrastructure for Stratford City was a unique project. With bare minimum on the site, our designers started from scratch. This mixed-used development has since translated the infrastructure opportunity into city making and has continued to evolve, delivering positive social outcomes for many people”*

Malcolm Smith,  
Masterplanning and Urban  
Design Leader, Arup





# LONDON 2012 OLYMPIC AND PARALYMPIC GAMES MASTERPLAN

AECOM’s leading role in masterplanning, town planning and delivery began in 2003, two years before the announcement that London would host the Games and continues to date.

The extensive scope included multidisciplinary masterplanning for the Olympic Park and wider Lower Lea Valley regeneration, policy development, securing planning permissions and compulsory land purchase by public sector agencies, and establishing strategies to secure high quality venues, infrastructure, green infrastructure and community assets.

The approach integrated multiple social, environmental, transport, planning and design issues into a clear strategy. Infrastructure investment was integrated to secure economic benefits, including connecting HS1 to the heart of the Olympic project; focusing London’s rail projects on Stratford, and creating the context for future transit-oriented communities; transforming aged energy and sewerage utilities and services; burying power lines in two 6km tunnels; and incorporating social infrastructure from the creative reuse of Olympic facilities. These big moves were made possible by the strategic and long term view taken to the development.

AECOM established early delivery governance principles and secured planning consents for the rapid build-out. This reduced risk and gave certainty to the International Olympic Committee that London could deliver.

The regeneration case was underpinned with the 2006 Lower Lea Valley Opportunity Area Planning Framework which created a forward-looking policy context for all four host boroughs and the GLA, focused on maximising the potential of legacy development. Permissions for the legacy communities were secured in 2011 — so the site transformation began as the Games closed. These permissions established the flexibility for design to respond over the lifetime of the legacy build-out.

The robust approach to the strategic planning has enabled the integrity of the original masterplan to be delivered and provided a context for unexpected elements to ‘slot in’ to the Park, including Here East and East Bank which will redefine the Park for generations to come.

Status:  
**Built**

Completion:  
**2012**

Client:  
**London Development Agency and Olympic Delivery Authority**

Masterplan:  
**EDAW (now AECOM), Allies and Morrison, Populous, Foreign Office Architects**

Landscape Architect:  
**EDAW (now AECOM)**

Engineer:  
**Buro Happold, Symonds**

Planning Consultant:  
**EDAW (now AECOM)**

Project Manager:  
**CLM**



*“Central to unlocking the site’s potential was a flexible and responsive masterplanning approach. Games and legacy masterplans were drawn up in parallel with the former seen as a landmark event taking place during the making of the new 110 hectare park and its surrounding communities. The Games were the catalyst for wider urban regeneration — around 75p of every £1 spent on Olympic investment helped deliver legacy benefit.”*

Bill Hanway, Global Sports Sector Lead, AECOM



# LONDON 2012 OLYMPIC AND PARALYMPIC GAMES MASTERPLAN

The numbers involved in staging an Olympic Games are staggering: 26 Olympic sports and 21 Paralympic sports across 29 venues in 27 days, thousands of athletes, spectators, volunteers and media, not to mention a global television audience in excess of three billion viewers. To do it successfully involves creating a masterplan that works logistically and shows the host city off to its best advantage.

The masterplan for the London 2012 Olympic Games was designed by a team including the global architectural design firm Populous, showcasing a sustainable approach to temporary architecture never before seen in the staging of the Games. The comprehensive scheme brought together proposals for London’s renowned stadium, arenas and sports grounds to host events, supplemented with a range of new temporary venues transforming some of London’s most iconic landmarks, as well as permanent venues focused around a new urban park in Stratford.

An underdeveloped former light-industrial district, Stratford had been targeted as a key metropolitan regeneration site before the London 2012 Bid, and the development of new transport infrastructure, together with the extension of the town’s retail centre, was progressing at pace. The Olympic Park masterplan integrated with these components to deliver an expansive public park housing the Populous-designed London Olympic Stadium, and a host of other new Games venues that would later be transformed into community sports facilities. It also provided more green space and potential sites for future leisure, business, residential, social, and cultural quarters.

With its eight permanent venues and three temporary venues, the developed design for the Olympic Park formed the largest planning application in British history. Today, the masterplan continues to evolve as part of the biggest urban park development in Europe in the last 150 years. It has created a new landmark destination for London, serving as the catalyst for widespread regeneration.

Status:  
**Built**

Completion:  
**2012**

Client:  
**London Development Agency and Olympic Delivery Authority**

Masterplan:  
**EDAW (now AECOM), Allies and Morrison, Populous, Foreign Office Architects**

Landscape Architect:  
**EDAW (now AECOM)**

Engineer:  
**Buro Happold, Symonds**

Planning Consultant:  
**EDAW (now AECOM)**

Project Manager:  
**CLM**

*“London 2012 has raised the bar on sustainability, not just for future Olympic and Paralympic Games but for industry, and for the organizers of major events the world over.”*

Shaun Mccarthy, Chair, Commission for a Sustainable London 2012





# LONDON 2012 OLYMPIC AND PARALYMPIC GAMES MASTERPLAN

The 2012 Games were promoted as the ‘greenest ever’ and the sustainability aspirations for the legacy development were similarly ambitious.

The masterplan prepared by an AECOM-led consortium, took a pioneering approach to creating a sustainable new community anticipating the impacts of climate change.

With new parklands at the heart of the project, the landscape was established as a network of connected and ecologically rich green spaces including wildflower meadows and extensive tree planting. Drought-tolerant plants reduce water demand with varied habitats adding biodiversity.

Architectural design was modelled to anticipate heavy rainfall events and hotter summers, with materials and inbuilt natural shading specified to reduce the heat island effect. Now commonplace, Queen Elizabeth Olympic Park was an early adopter of photovoltaic and low-water use appliances, alongside a comprehensive sustainable drainage systems (SuDS) to capture and filter water to use in irrigation lowering demands of scarce resources.

The innovative Park-wide energy network ensured energy efficiency from the outset. 10 years later, decarbonisation of the grid has accelerated, and AECOM is working with Equans in a quest towards net zero energy.

One of the greatest successes has been the early promotion of sustainable ‘active travel’ with extensive walking routes through the park, connecting communities east and west to extensive public transport options. The network of cycling facilities — for all users — ensures Queen Elizabeth Olympic Park is at the heart of the Lee Valley and East London.

The dynamic development of Queen Elizabeth Olympic Park continues at pace, as a sustainable and resilient quarter of the capital, building on the forward-looking and flexible original masterplanning principles. These will serve it well in the next stages of its life as it evolves to meet new environmental and social needs and expectations.

Status: **Under construction**

Completion: **2012–2030**

Masterplan: **AECOM and Allies and Morrison**

M&E / Sustainability Engineer: **AECOM**

Client: **Olympic Delivery Authority and London Legacy Development Corporation**

Planning Consultant: **AECOM**

EIA Lead Consultant: **AECOM**

Other: **Thames Water, Equans**

Civils and Structure Engineers: **Buro Happold, Arup, Atkins**

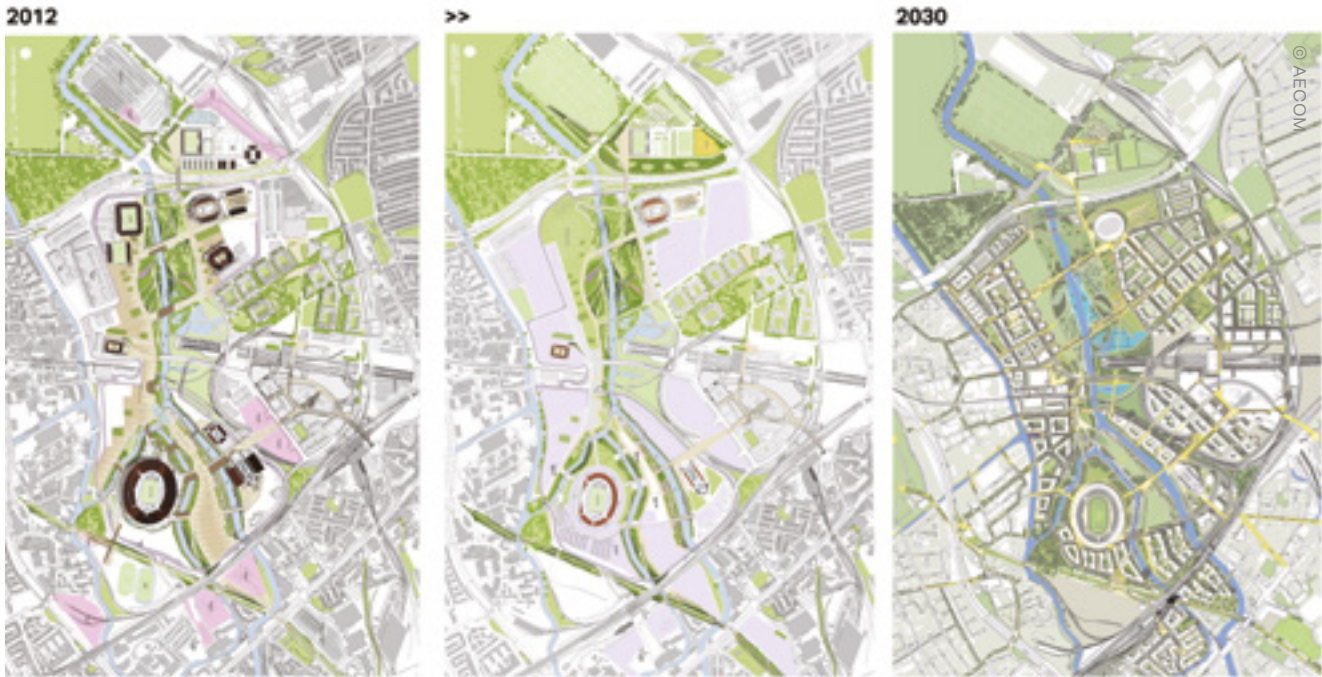
Park Landscape: **LDA Design with Hargreaves**

South Park Pleasure Gardens: **Field Operations**

Additional Urban Legacy: **Maccleanor Lavington, Witherford Watson Mann, Beyond Green, JMP Health Consulting**

Legacy Civils and Highways: **Arup and Buro Happold**

Project Manager: **CLM**



*“At the outset the masterplan recognised that climate change would have unavoidable consequences for the way we live and must inform the design of this new London neighbourhood; forward-thinking approach for a scheme initiated two decades ago. It ensured environmental mitigation measures were embedded into the design requirements so the Queen Elizabeth Olympic Park had resilience and flexibility to adapt over time.”*

Bill Hanway, Global Sports Sector Lead, AECOM





# OLYMPIC LEGACY MASTERPLAN

Hosting the 2012 Olympics has been part of a longer journey to address longstanding divides in London’s physical, environmental and social fabric. The Olympic and Legacy Masterplans have transformed a post-industrial backwater into a valuable ecological asset, the largest park created in London in 150 years. New east-west connections and a pragmatic approach to venue design is allowing for new neighbourhoods with thousands of homes to take root. And along the East Bank, the park will soon host the most significant collection of cultural and educational buildings to be built in Britain since the Victorian era.

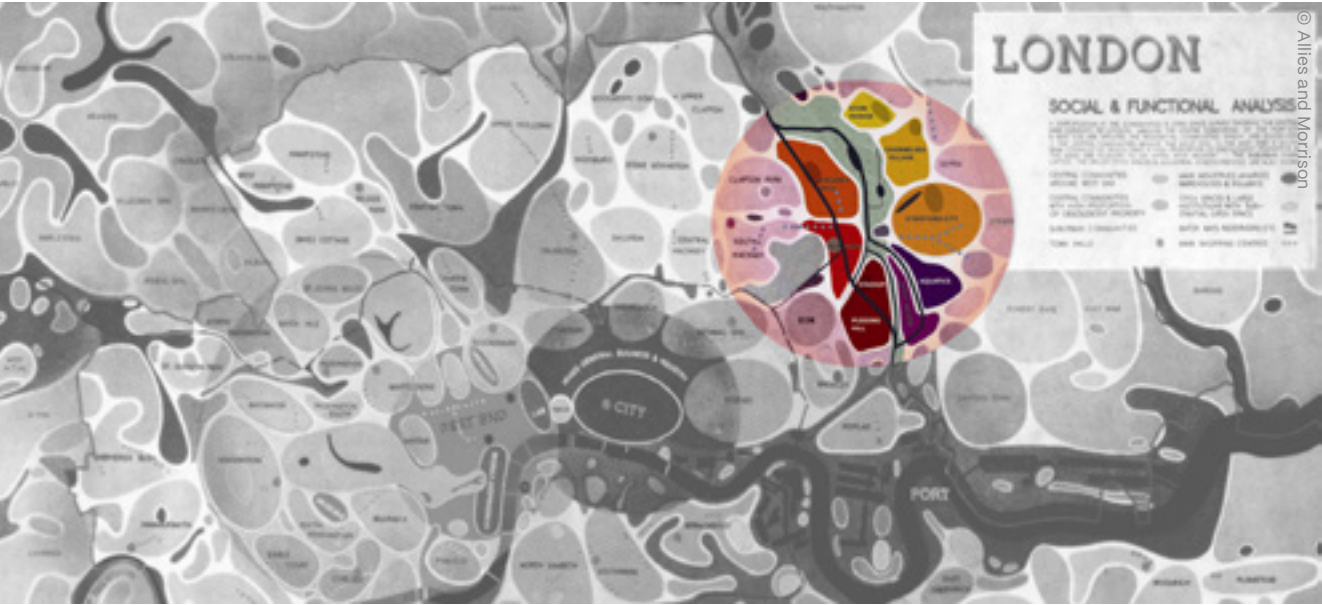
Allies and Morrison’s work began in 2003 as one of a team of four consultants who developed a masterplan for a new Olympic Park for London’s successful bid to host the 2012 Games. The site was an elongated section of the Lower Lea Valley, where the River Lea flowing south into the Thames, has formed a divide separating the body of the city from its eastern extension. The masterplan strengthened links with the neighbouring railway connections of Stratford Station, which has since become Britain’s busiest railway station.

In a wider strategic context, the project was an opportunity to bridge long-standing inequalities between west and east London, and to redress this imbalance, the Games acting as a catalyst for a much larger project of urban change. Parkland and landscape have healed a damaged ecosystem with the River Lea’s water quality greatly improved. A more complex and comprehensive network of connections have been implemented across the valley including a series of new bridges.

A series of ‘fringe’ masterplans were prepared to explore how neighbouring areas could be improved and further integrated into the park and vice versa. New predominantly residential, neighbourhoods now surround the park, each of these designed to look out as well as in, forming explicit connection with their adjacent parts of the city. By 2031, there will be tens of thousands of people living in these neighbourhoods; Chobham Manor, East Wick, Sweetwater, Stratford Waterfront and Pudding Mill.

London’s experience has proved to be a model for other cities seeking to host the Olympic Games in responsible and sustainable ways, providing an opportunity to take a far more radical and comprehensive approach to an area’s transformation, setting in motion the creation of a new piece of city.

- Status: **Under construction**
- Completion: **2015–2030**
- Client: **Olympic Delivery Authority and London Legacy Development Corporation**
- Masterplan: **AECOM, Allies and Morrison**
- Civils and Structure Engineers: **Buro Happold, Arup, Atkins**
- M&E / Sustainability Engineer: **AECOM**
- Planning Consultant: **AECOM**
- EIA Lead Consultant: **AECOM**
- Park Landscape: **LDA Design with Hargreaves**
- South Park Pleasure Gardens: **Field Operations**
- Additional Urban Legacy: **Maccleanor Lavington, Witherford Watson Mann, Beyond Green, JMP Health Consulting**
- Legacy Civils and Highways: **Arup and Buro Happold**
- Project Manager: **CLM and Mace**





# STRATFORD CITY RESIDENTIAL MASTERPLAN

Allford Hall Monaghan Morris have completed the residential masterplanning consultancy project for Stratford City Athletes Village for Lendlease and their partners First Base and East Thames Group. As residential masterplanners, their brief was to pursue the collaborative design development of the urban masterplan and to undertake a series of studies that explored the scheme's urban and architectural potential.

Status:  
**Delivered**

Client: **Lendlease in partnership with First Base and East Thames Group** | Architect: **Allford Hall Monaghan Morris** | Fire Consultant: **Arup** | Landscape Architect: **West 8** | M&E / Sustainability Engineer: **Arup** | Masterplan Urban Designers: **Fletcher Priest Architects** | Planning Consultant: **RPS Planning** | Access Consultant: **David Bonnet Associates** | Urban Designers: **Space Syntax**



# EAST VILLAGE

Designed from the late 1990s, the original Stratford City masterplan was the largest planning application ever submitted in London. It was conceived and planning submitted prior to the 2012 bid and intended to grow with market demand over 20–30 years. Fletcher Priest were joint masterplanners alongside Arup and West 8 with LCR, Stanhope and Chelsfield as clients.

A key principle from the outset was of long-term city making, creating connections with the existing town centre and into the Lea Valley, seeding regeneration in every direction. Transforming inaccessible brownfield land, the plan created new open spaces, connections and social infrastructure within mixed-use neighbourhoods including significant retail, employment and new homes.

When London started bidding, the role evolved into coordination and joint working, each project aligned but not obstructing the other. This ensured success for the original plan should the Olympic bid fail, as widely expected.

Winning the games rapidly accelerated the scale and pace of change and the nature of the clients. Fletcher Priest led the masterplanning of the residential districts throughout, working with ODA, Lendlease and numerous public bodies to shape the Village. It was designed to briefly host 17,000 athletes and convert into 2,800 homes, forming the basis of a new community.

Fletcher Priest were joined by Vogt landscape architects and over a dozen architectural practices, shaping and coordinating the rapid evolution of the site, integrating with the wider Olympic Park, setting the framework for ongoing change.

Status:  
**Built**

Completion:  
**2012**

Client:  
**Lendlease, Olympic Delivery Authority, Triathlon**

Masterplan:  
**Fletcher Priest Architects, West 8, Arup**

Landscape Architect:  
**Vogt**

Project Manager:  
**CLM**

*“It is a matter of huge pride for us as a practice that the strategic ambitions we helped bring to life, from our first involvement more than 20 years ago, have proven so robust and successful. Over more than a decade we were trusted to act as a consistent guiding hand, maintaining a clear eye on ‘legacy’ before that term was widely used. The process of change is ongoing; we remain excited and optimistic as the mixture of uses deepens even further and the area takes its rightful place as one of London’s key urban centres”*

Jonathan Kendall, Partner, Fletcher Priest Architects





QUEEN ELIZABETH OLYMPIC PARK



96



## EAST VILLAGE MASTERPLAN

Athletes' Village, now known as East Village, is a new community in a new city quarter within Queen Elizabeth Olympic Park. Having designed two courtyard buildings with 500 apartments for the 2012 Games, Lifschutz Davidson Sandilands worked with QDD to convert the athletes' accommodation into high-quality homes and provide a masterplan for the five unbuilt plots. The scheme for 1,850 PRS apartments was based on the consented parameters plan reworked to form a crescent of six towers enclosing Victory Park.

Status:  
**Under construction**

Completion:  
**2023**

Client: **Qatari Diar Delancey** | Masterplan: **Lifschutz Davidson Sandilands** | Engineer: **Arup** | Planning Consultant: **Quod** | Quantity Surveyor: **AECOM** | Project Manager: **CLM**

PROJECT SHOWCASE – MASTERPLANS

97



# QUEEN ELIZABETH OLYMPIC PARK LAND ACQUISITION

In 2005, Deloitte Real Estate’s Compulsory Purchase team began advising the Olympic & Paralympic Games Bid Team about the strategy for assembling land in the Lower Lea Valley to deliver the Olympic Park masterplan and create a new piece of city that delivers a highly successful legacy. Since then, Deloitte have implemented the strategy to acquire land interests across the area.

Deloitte’s strategy had to reflect the exceptionally high profile that was given to acquiring land to host the Olympics and the immovable end date of the programme. The client, the London Development Agency (LDA), had to deliver the land as quickly as possible and to progress negotiations to secure successful business relocations. The pace and approach to land acquisition generated widespread media and political coverage, adding to the pressure on the team to deliver.

Deloitte provided procedural and compensation advice on an initial compulsory purchase order (CPO) to divert 6 km of overhead power lines between Hackney and West Ham, and subsequently on the main compulsory purchase order to enable construction of the Queen Elizabeth Olympic Park to commence in 2007.

Deloitte negotiated early acquisitions and compensation claims with over 100 separate property interests and the relocation of over 75 industrial and commercial occupiers. Where it was not possible to settle by agreement, they represented the London Development Agency (and its successor, the Greater London Authority) in Lands Tribunal hearings. Deloitte dealt with a very diverse range of businesses, including bus garages, newspaper printworks, travellers’ sites, a church and heavy industrial users.

Deloitte are extremely proud of their role in ensuring that construction of the park was completed in time for the Opening Ceremony in July 2012 and the amazing scenes that followed. Deloitte are delighted to have been part of the area’s transformation in achieving the highly successful Games and legacy.

Status:  
**Built**

Completion:  
**2012**

Masterplan:  
**AECOM**

Client:  
**London Development Agency and Greater London Authority**

Development and Lead CPO Consultant:  
**Deloitte Real Estate**

Planning Consultant:  
**AECOM and Deloitte Real Estate**

Other:  
**Deloitte Real Estate**



*“Deloitte Real Estate has the unique ability to offer high quality development consultancy advice alongside ‘big four’ strength in corporate and financial analysis. This is important when an advisor is working with you to make sure that taxpayer’s money is invested wisely.”*

*Gareth Blacker, Director of Development – Olympics, London Development Agency/ Olympic Delivery Authority (2005 – 2009)*





# QUEEN ELIZABETH OLYMPIC PARK, PLACEMAKING AND VALUE CAPTURE

In 2009, Deloitte Real Estate Development Consultancy team was appointed as the commercial real estate advisor to the newly created Olympic Park Legacy Company (OPLC) and from 2012 its successor body, the London Legacy Development Corporation (LLDC). Deloitte’s roles included establishing a commercial strategy for the Queen Elizabeth Olympic Park estate that would ensure that the quality of design and placemaking on the park would set the highest possible benchmarks to create a new estate within London.

Deloitte Real Estate also sought to capture the value created by the public sector investment required to deliver a place of such quality. To achieve this, Deloitte has worked closely with Olympic Park Legacy Company and London Legacy Development Corporation to create a financial model covering the development proposed on the estate. This was used to establish guidance that set key development principles such as the overall scale of development, design standards, mix of uses, location of post-games transformation infrastructure and programme phasing.

Deloitte, working closely with Olympic Park Legacy Company and London Legacy Development Corporation, also provided the market-based insight required to inform the nature of development (for example land uses, size and nature of residential and commercial accommodation) across the estate. They also established a development control strategy for the park. This used a combination of town planning, design codes and appropriate transaction structures to ensure that selected development partners deliver buildings to standards set by London Legacy Development Corporation and its predecessors.

Lastly, Deloitte designed the transaction structures required to ensure quality of delivery on the various development platforms while also optimising long term value capture for the taxpayer. Using these structures, Deloitte acted as London Legacy Development Corporation’s agent and secured development partners for Chobham Manor and East Wick & Sweetwater. This process illustrates a unique example of where a public sector entity has been able to successfully integrate quality placemaking with a ground-breaking value capture strategy that has delivered the standard of places and infrastructure investment seen on the Queen Elizabeth Olympic Park today.

Status:  
**Built**

Completion:  
**2021**

Client:  
**Olympic Park Development Company and London Legacy Development Corporation**

Masterplan:  
**AECOM, Allies and Morrison, EDAW, Populous, Foreign Office Architects**

Planning Consultant:  
**Deloitte Real Estate**



*“Thanks to Deloitte for your help on Legacy. You were essential and invaluable to our efforts. I could always rely on you with total trust and confidence that you would deliver to the highest professional standards and most importantly, would always give us your total commitment to meet our needs at a moment’s notice (however unreasonable!).”*

*Andrew Altman, CEO, London Legacy Development Corporation (2009 – 2012).*



# CHOBHAM MANOR

Chobham Manor is the first of five new neighbourhoods built within Queen Elizabeth Olympic Park in Stratford, East London as part of the Legacy Communities Scheme. Situated between the Lee Valley VeloPark and East Village, it provides 880 dwellings in a mixed-use masterplan, including a nursery, community centre and a number of commercial units.

The architectural and public realm design of the four phases of the development were designed collaboratively by an award-winning team AHMM, Haworth Tompkins, Karakusevic Carson Architects, Make, muf architecture/ art, Nord and PRP for Chobham Manor LLP (Taylor Wimpey and London & Quadrant Housing Trust) and the London Legacy Development Corporation.

Five principal housing typologies enable diversity and choice across the masterplan with these comprising townhouses, mews, maisonettes, mansion blocks and multi-generational homes; which are in turn supported by three neighbourhood greens that knit the masterplan together. The three greens and the public realm are rich in planting, and a network of tree-lined streets form a hierarchy of spaces which link to the surrounding urban fabric. Three quarters of the estate is aimed at families and over one third of the total is affordable housing.

The cohesive and sustainable masterplan connects into its emerging and historic context and the wider Olympic legacy area to support the social, economic and environmental regeneration of the Stratford area. The project was awarded the coveted NLA Mayor's Prize in 2019.

Status:  
**Under construction**

Completion:  
**2022**

Clients:  
**Chobham Manor LLP (Taylor Wimpey and London & Quadrant Housing Trust), London Legacy Development Corporation**

Architects:  
**PRP Architects, AHMM, Haworth Tompkins, Karakusevic Carson Architects, Make, muf architecture/ art, Nord**

Landscape Architect:  
**muf architecture/ art, PR Architects**





# CHOBHAM MANOR MASTERPLAN

This residential neighbourhood on the east border of the Queen Elizabeth Olympic Park measures over 1,000,000 sq ft and includes more than 800 homes across maisonettes, mews and apartment buildings. The development has been designed primarily for families, with 75 per cent of homes containing three bedrooms. Cafés, restaurants, shops and a nursery, all linked by public green spaces, also contribute to the sense of community while connecting the site to the surrounding park.

Status:  
**Built**

Completion:  
**2021**

Client: **Chobham Manor LLP** | Engineer: **WSP Group** | Architect: **Make** | Landscape Architect: **J & L Gibbons** | Engineer: **Mott MacDonald** | Planning Consultant: **Quod** | Consultant: **Urbik**



# CHOBHAM MANOR DESIGN GUIDE

A new design guide for this community of family homes nestled between the VeloPark and the East Village, where wide tree-lined avenues intersect with intimate streets and mews, offering an unexpected environment of quiet terraced homes and neighbourhood squares. Chobham Manor is the first of five new neighbourhoods being built at Queen Elizabeth Olympic Park in Stratford, east London.

Status:  
**Proposed**

Client: **London Legacy Development Corporation** | Architect: **Maccleanor Lavington**



# UCL EAST MASTERPLAN

University College London (UCL) is building on its pioneering history with a new campus, part of East Bank. It is the single biggest expansion in the university’s 200-year history.

The masterplan by LDA Design, for UCL and joint client London Legacy Development Corporation, is designed to make the campus genuinely accessible and useful to local people, in time central even to their lives. It draws on the power of the landscape to foster an open and collaborative academic environment and a culture of exchange between departments, staff and students, as well as neighbouring communities.

The plan includes the novel concept of the ‘Fluid Zone’, a ground and first floor expanse stretched across the whole campus, capturing both external and internal spaces and embodying UCL’s multi-educational model which supports cross-disciplinary working and life-long learning. UCL East will be a place where people can mix easily, enabling new things to happen as knowledge moves out from behind closed doors and into an inviting, well-designed public realm. Lower floors will be curated to ignite curiosity by showcasing research. The scheme was informed by intensive public consultation and tested against higher education benchmarks to maximise development potential.

Strong connectivity with the area and the wider Park setting is key. The masterplan anticipates how people will use the site and distils a clear and simple idea about connecting people and place through landscape, with enticing ways and views through and across the campus, and along sunny riverbanks. There is generous provision of flexible and diverse open spaces for events, demonstrations and workshops.

This expansion will help to maintain UCL’s position as one of the world’s top 10 research-intensive universities. UCL East will add 40 per cent to UCL’s central London site in Bloomsbury – around 180,000 square metres of new floor space.

- Status: **Under construction**
- Completion: **2022**
- Client: **UCL and London Legacy Development Corporation**
- Masterplanner: **LDA Design**
- Landscape Architect: **LDA Design**
- Architect: **Nicholas Hare**
- Engineer: **BuroHappold**
- Engineer: **Arcadis**
- Transport Consultant: **Momentum Transport Planning**
- Other: **Soundings**
- Cost consultant: **AECOM**
- Planning Consultant: **AECOM**
- EIA Consultant: **AECOM**
- Project Manager: **CLM**



*“The masterplan for UCL East is intended to transform the traditional relationship between city and university. Its ambition is to be inclusive and welcoming to everyone and to harness the power of the public realm to encourage collaboration and exchange. We think by creating this new kind of place, where buildings feel as inviting and accessible as external spaces and where people can mix, then great things can happen for the University and for the local community.”*

Bernie Foulkes, Director and Masterplan Lead for UCL East, LDA Design





# BRIDGEWATER TRIANGLE

Bridgewater Triangle is a verdant island site at the southern tip of the Queen Elizabeth Olympic Park. The masterplan creates a new riverside community of 575 homes. Mikhail Riches are leading a multi-disciplinary team with a particular focus on community engagement. The masterplan seeks to create a comprehensive public realm and landscape approach. It prioritises families and children's play, with connections to the adjacent Queen Elizabeth Olympic Park. The brief also specifies an emphasis on sustainability, striving for zero carbon.

Status:  
**Proposed**

Completion:  
**2025**

Client:  
**LLDC**

Architects: **mikhail riches, William Matthews Associates, RCKa architects** | Planning Consultant: **AECOM** | EIA Consultant: **AECOM**



# SUGAR HOUSE ISLAND

Sugar House Island is a new mixed-use, canal-side neighbourhood which prioritises pedestrian led public realm, engendering a strong sense of community. Morris+Company designed two schemes within the masterplan. MU5, comprises two mixed-use buildings delivering 42 homes, cafes and shops, overlooking a new public space and the renowned Three Mills. R3 consists of 155 homes and draws from the site's post-industrial character. Designs are user centric, utilising a 'day in the life' approach, designing homes that fit lifestyles.

Status:  
**Under construction**

Completion:  
**2025**

Client: **Vastint UK** | Architect: **Morris+Company** | Masterplan: **ARC-ML** | Engineer: **Mott Macdonald** | Structural Engineer: **Engineers HRW** | Landscape Architect: **Planit-IE** | Planning Consultant: **GL Hearn** | Executive Architect: **Bryden Wood** | Buildings Regulations Consultant: **Assent** | Transport Consultant: **Peter Brett Associates LLP** | Fire Consultant: **FDS Consult** | Townscape and visual impact assessment: **LDA Design** | Heritage Consultant: **Montagu Evans**



# EAST WICK + SWEETWATER

East Wick + Sweetwater (EW+S) are two development districts forming one new neighbourhood on Queen Elizabeth Olympic Park, providing two new neighbourhoods as part of the Legacy Communities Scheme masterplan, just over 1,850 homes, alongside mixed-use facilities adjacent to Here East, Copper Box Arena and London Stadium. The collaborative approach, led by co-masterplanners Sheppard Robson and Studio Egret West, with Astudio, Piercy&Company and Shedkm, creates an authentic London neighbourhood that meets the needs of 21st century urban living. A rich tapestry of typologies creates a cohesive and sustainable community that provides 'lifetime homes', appealing to all Londoners, from young sharers, to established families or 'empty nesters', allowing flexibility and adaption for future needs of the evolving community.

The masterplan amends the Legacy Communities Scheme, led by an ambition to strengthen the neighbourhoods' identity and sense of place, drawing upon their history and context. The scheme integrates into its surroundings, mending the gap in urban fabric between Hackney Wick, Fish Island, River Lea Navigation and the Park. The scheme provides new vistas to the Velodrome and explores the opportunity to forge stronger links between Canal Park and Queen Elizabeth Olympic Park, encouraging people to venture into the development. The landscape plays a pivotal role as an intergenerational and playable space, blending the neighbourhoods with the Park.

East Wick + Sweetwater will be delivered over seven phases, beginning with East Wick, where Phase one is already complete. The architecture champions consistently high-quality standardised design, creating a family of styles that builds a genuine sense of community. The masterplan includes various community facilities, including a medical centre, small scale workplaces, shops and nurseries.

East Wick + Sweetwater is intrinsically sustainable, offering exemplar energy efficiency and low carbon emissions, reduced water use, materials with high recycled content, climate change resilience, high quality and biodiverse public realm and reduced impact on the environment during construction.

- Status:  
**Under construction**
- Completion:  
**2027**
- Client:  
**East Wick + Sweetwater  
(Places for People and Balfour Beatty) with London Legacy Development Corporation**
- Masterplan:  
**Sheppard Robson, studio egret west**
- Architect:  
**astudio, Piercy & Co, shedkm**
- Landscape Architect:  
**fabrik, luc**
- Access Consultant:  
**access=design**
- Civil Engineer:  
**Atkins, Buro Happold**
- MEP Engineer:  
**Atkins, AECOM**
- Structural Engineer:  
**AECOM**
- M&E / Sustainability Engineer:  
**etude, klh**
- Fire Consultant:  
**Ofr**
- Principal Designer:  
**Stace**
- Quantity Surveyor:  
**Rlb**
- Planning Consultant:  
**Quod**
- Acoustic Consultant:  
**Hann Tucker**
- Project Manager:  
**Rlb**



*"East Wick + Sweetwater is quickly becoming a vibrant, sustainable new area in its own right. With hundreds of quality new homes in a range of tenures, a growing community of residents in our first phase as well as a mix of new shops and commercial spaces, it's really starting to take shape."*

Yuved Bheenick, Development Director at East Wick

*"East Wick + Sweetwater provides much needed new homes, schools, shops and public realm bringing together Hackney Wick and Queen Elizabeth Olympic Park and it is great to see the new residents who have moved into East Wick and enjoying the local area."*

Rosanna Lawes, Executive Director of Development at the London Legacy Development Corporation



# INTERNATIONAL QUARTER LONDON (IQL)

International Quarter London (IQL) has led London’s move east as a flourishing, 24/7 neighbourhood at the heart of Stratford. Lendlease is halfway through delivery of its masterplan and, once complete in 2032, the nine-hectare site will include 2.6m sq ft of quality office and commercial space, c.650 new homes and 8,000 sqm of retail space.

Sustainability, wellbeing and innovation were imbedded in IQL’s design from day one and have underpinned Lendlease’s ambitions to create a healthy and connected environment for residents, workers and visitors to enjoy.

IQL is already a premier location for forward-thinking businesses, based on an unparalleled offer of award-winning workplaces with acres of green space, international-standard leisure facilities and acclaimed arts institutions on their doorstep. World-leading organisations have already chosen IQL as their home — including Transport for London (TfL), UNICEF, and the Financial Conduct Authority (FCA) — with more exciting openings expected in the next few years.

As a partner in the new SHIFT innovation district, IQL and the surrounding area will continue to be established as a hub for innovation and creativity throughout the next decade, during which time cultural giants like UCL and the BBC will arrive on the neighbouring East Bank. A continuation of the collaboration that has made the Olympic legacy a success, SHIFT will turbocharge innovation across the Park by bringing cross-sector organisations together to connect, collaborate and find solutions to local and global issues.

Construction has begun on the Turing Building at IQL. With 350,000 sq ft of commercial space set over 22 floors, it’s been designed to maximise sustainability, health and wellbeing; and to accommodate flexible working patterns for the post-pandemic consumer, including 300 cycle spaces and 885 sqm of terrace space to support outdoor working and socialising.

- Status:  
**In development**
- Completion:  
**2032**
- Client:  
**Lendlease**
- Landscape Architects:  
**Gustafson Porter + Bowman**
- Architects of S5, S6 and S9 buildings:  
**Rogers Stirk Harbour + Partners**
- Pavilion Architect:  
**ACME**
- Architects of S4 building:  
**Arney Fender Katsalidis**
- Outdoor workspace Architects:  
**YOU&ME/Cooke Fawcett Architects**
- Bird boxes/Swift hotel Architect:  
**51 Architecture**
- Labyrinth Artwork:  
**Troika**
- Engineer:  
**Buro Happold**
- Lighting:  
**GIA Equation**
- Ecologist:  
**Gary Grant**
- Main Contractor:  
**Maylim**
- Landscape Contractor:  
**Willerby**
- Civil+Struotural Engineering:  
**AECOM**
- MEP Engineering:  
**AECOM**
- Energy+Sustainability:  
**AECOM**



*“Stratford is a place inspired by an Olympic dream with a passion for excellence and achievement since the 2012 Games. Since then, the area has been transformed and IQL has emerged as a neighbourhood of forward thinkers, innovators and creators. It’s a place where the biggest names from academia, fashion, technology and science can sit shoulder to shoulder and drive change.*

*From standing on a piece of empty tarmac after the Olympic Games — considering the scale and ambition of what lay ahead — to looking around and seeing people enjoying and thriving in this place, I am immensely proud of what we have achieved. And there’s still so much more to come.”*

Kristy Lansdown, Project Director, Lendlease Development Europe





# CARPENTERS ESTATE MASTERPLAN

The Carpenters Estate project is a £1 billion resident-led plan to restore the Carpenters Estate into a vibrant neighbourhood in the heart of Stratford. After years of false promises and uncertainty, 73 per cent of residents voted yes in an independent ballot to deliver the next phase of the Olympic legacy. The project is one of London’s largest and most ambitious estate regeneration plans. The Masterplan delivers over 2000 high-quality and sustainable homes (with 50 per cent being genuinely affordable).

Status: **Proposed**

Completion: **2033**

Client: **Populo Living and London Borough of Newham** | Architects: **Proctor and Matthews, Metropolitan Workshop** | Landscape Architect: **LDA Design**



# HACKNEY WICK CENTRAL MASTERPLAN

Hackney Wick Central is a masterplan and design code that is an exemplar of public sector-led renewal reshaping the future of one of London’s key creative neighbourhoods. The project provides a framework for the creation of c.1,500 homes with arts and business space and improved public areas that will support a range of civic and social uses. The masterplan was developed via a thorough analysis and understanding of the area’s social, cultural and physical assets that have informed its evolution.

Status: **Under construction**

Client: **London Legacy Development Corporation** | Architects: **Karakusevic Carson & Witherford Watson Mann Architects**





# PUDDING MILL LANE

Pudding Mill Lane is one of the last significant pieces of the Olympic housing legacy. Pudding Mill Lane will be a thriving, new mixed- use local centre around an overground rail station, delivering c.950 new homes, a new local high street including 36,000 sqm of workspace and other community, leisure and retail uses. The masterplan creates a coherent urban grain and scale where none exists — and which, alongside new streets, spaces and typologies, creates a recognisable part of the city.

Status:  
Submitted for planning

Client: London Legacy Development Corporation |  
Architects: Gort Scott with 5th Studio and JCLA |  
Planning Consultant: AECOM | EIA Consultant: AECOM



# TRANSPORT AND INFRASTRUCTURE



# OLYMPIC ENERGY CENTRES

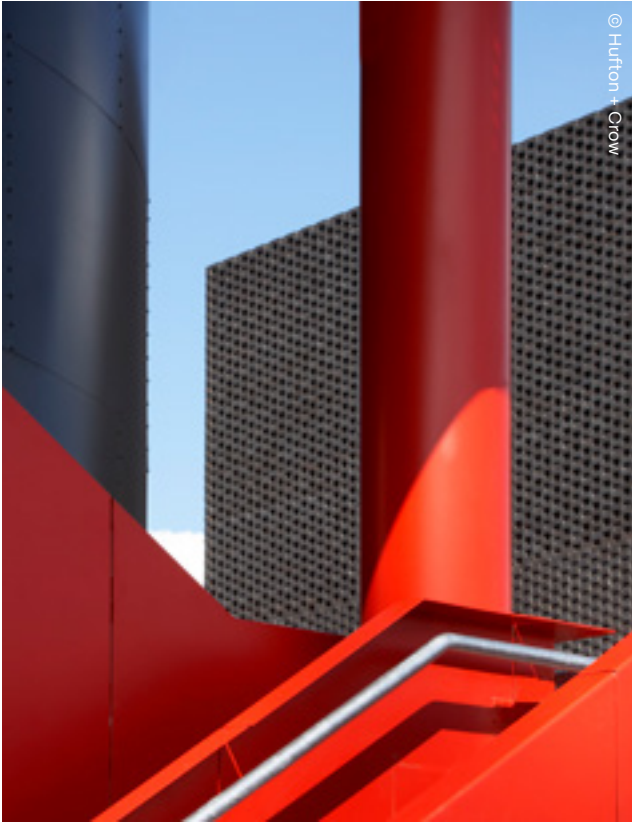
John McAslan + Partners designed two technically advanced, environmentally innovative Energy Centres for the 2012 London Olympic Games site to supply power for all the Olympic stadia and associated facilities. In Olympic Legacy mode the Centres continue to supply electricity to local communities, and the structures are landmarks at the eastern and western boundaries of a huge tranche of East London that is being regenerated. The Energy Centres add to the area's architectural character, with a deliberately tough and industrial design inspired by London's great historic power stations.

Address:  
Carpenters Rd, London

Status:  
Built

Completion:  
2012

Client: Olympic Delivery Authority | Architect: John McAslan + Partners | Structural Engineer: AKT II | MEP Engineer: Parsons Brinckerhoff | Multi-disciplinary Engineer: Buro Happold | Project Manager: Solent | Contractor: Careys | Project Manager: CLM



QUEEN ELIZABETH OLYMPIC PARK



# PUDDING MILL LANE PUMPING STATION

This pumping station in Queen Elizabeth Olympic Park connects the extensive new sewer network to the existing sewers of the Northern Outfall. The shape of the building has been generated from the circular form of the underground well and reflects the functional aspects of the engineering. The projects, which lists on Pudding Mill Lane, also features a relief pattern based on the Victorian engineering drawings of Josph Bazalgette, which has been cast onto the building's pigmented concrete walls. The drawings celebrate the engineering achievements of the sewer networks, both old and new, and contribute to the civi pride it's hoped will be engendered by this key infrastructure building.

Address:  
Pudding Mill Lane, E15

Status:  
Built

Completion:  
2010

Client: Olympic Delivery Authority | Architect: Lyall Bills & Young Architects | Structural engineer: Hyder Consulting | Quantity surveyor: Barhale | Services engineer: Hyder Consulting | Planning supervisor: Olympic Delivery Authority | Main contractor: Barhale | Building Contractor: Hutton Construction | Project manager: CLM | Design management: Arup | Technical consultant: Thames Water | Landscape design: Coe Design



PROJECT SHOWCASE – TRANSPORT AND INFRASTRUCTURE



# PUDDING MILL LANE DLR STATION

The new DLR station at Pudding Mill Lane was key to executing the Olympic Legacy Masterplan, and an enabler for the Elizabeth Line’s eastern portal. Weston Williamson + Partners design delivered a simple, elegant building that is a new benchmark for future DLR station design. It forms the focal point of the area and has acted as a catalyst for regeneration.

The DLR station is required to fulfil many functions as its locality changes and grows. Acting as a catalyst for urban growth, the station plays a central role in the wider development of the public realm and is both an entrance and exit point for the Queen Elizabeth Olympic Park and its facilities. It was critical that the station and urban realm were designed together as an integrated and flexible proposal.

Weston Williamson + Partners designed-in flexibility to Pudding Mill Lane station, presenting an elegant structure that worked for the Olympics and continues to support the Park’s uses now and in the future. It was the first DLR station designed with such in-built passive provision. Precast brick panels that form the exterior of the station undercroft can be peeled back and replaced with an active street frontage and 1,000 sqm of retail space. Space for additional escalators and lifts is already provided in the station, hidden from public view but ready when demand requires without costly alterations.

Address:  
**Pudding Mill Lane, London E15 2PJ**

Status:  
**Built**

Completion:  
**2014**

Client:  
**Crossrail Limited**

Architect:  
**Weston Williamson+Partners**

Contractor:  
**Morgan Sindall**

Project Manager: **CLM**



*"Weston Williamson + Partners has produced a simple, elegant and well-coordinated design that Crossrail is proud to have delivered at Pudding Mill Lane. We believe the Station provides a strong and integrated addition to the regeneration legacy of the Olympic Park and provides DLR users with a high quality passenger environment and the Operator with a station he can manage and maintain efficiently and effectively."*

Julian Robinson, Head of Architecture, Crossrail





# PUDDING MILL LANE DLR STATION

The new DLR station at Pudding Mill Lane was key to executing the Olympic Legacy Masterplan. Weston Williamson + Partners design delivered a simple, elegant building that was a key entrance to the park during the Olympics and continues to support the park's uses and localised growth and regeneration. It is the first DLR station with in-build passive provision, removable exterior panels and space for additional escalators and lifts are already provided, hidden from public view ready for when demand requires.

Address:  
Pudding Mill Lane, London E15 2PJ

Status:  
Built

Completion:  
2014

Client: Crossrail Limited | Architect: Weston Williamson+Partners | Contractor: Morgan Sindall | Project Manager: CLM





# LONDON 2012 TRAVEL DEMAND MANAGEMENT

IBI Group worked with the organisers of the resoundingly successful London 2012 Summer Olympic Games delivering the complex and high-profile traveller information services from strategy through design, and into implementation and operation as part of the critical Travel Demand Management programme. IBI Group's work has been internationally credited for the success of delivering an efficient, effective, and robust transportation solution for this landmark event—an area identified as one of the key risks in advance of the games.

Address:  
Black Bull Court, 18 Hatton Wall, London EC1N 8JH

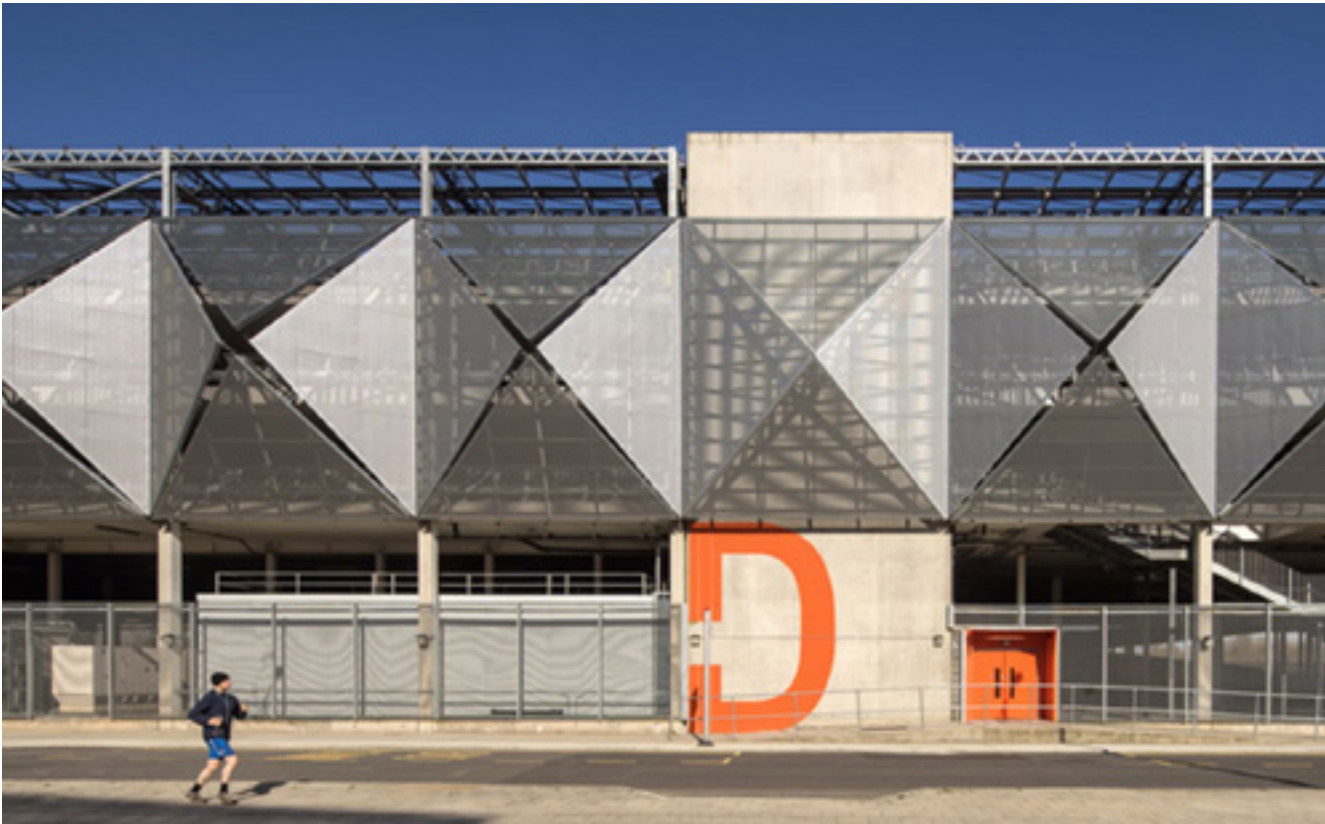
Status:  
Built

Completion:  
2013

Client: Olympic Delivery Authority and Transport for London |  
Transport Consultant: IBI Group



© Ben Broomfield



© Ben Broomfield

## QUEEN ELIZABETH OLYMPIC PARK MUTLI-STOREY CAR PARK

The cladding modules were created with a strong pyramidal geometry which project in plan and section to varying degrees along the structure's facade. The triangular panels were perforated to allow for natural lighting and ventilation of the car park area whilst providing a variety of depth, colour and form. The integrated architecture and structural engineering approach enabled the successful delivery of this complex design.

Address:  
Waterden Rd, London

Status:  
Built

Completion:  
2018

Client: London Legacy Development Corporation | Architect: Haptic | Engineer: BE Design | Contractor: Buckingham Group | Project Manager: Mace





# HACKNEY WICK STATION

Hackney Wick Station is a multiple award winning project. The station’s sense of place incorporates bespoke elements drawing inspiration from the station’s contextual setting of the River Lee. The local community, primarily local creatives, really understand this place and its relationship to this part of London. The detailed story and the design language was very deliberate; the shuttering, the willows grown out of the soil, the reference to chemical induces provide several points of reference that speak to different audiences. Several layers of meaning are embedded in the design, and chemists, musicians, artists, creatives can all find references that they can relate to.

The materiality is raw and gritty. The design ethos is about extending the character of Lea valley; sheet piling references the banks of the River Lea and the surfaces are being silty and gnarly with exposed aggregate concrete surfaces reflecting the tow path. The Underpass turns the water on its side and creates a flickering watery light quality with the use of glass. The concrete frieze references the chemical industries, once central to the area and remembers the industrial past to prevent it from being swept away. As a client we embraced the need for the station to be tough, chunky, raw and not too precious.

The close collaboration of the design team, architect, engineer and artist, together with an engaged supportive client team was central to the integrity and success of the design. The risks of delivering a station and public realm with materials and design proposals that had never been done before required faith and backing from the sponsor.

Address:  
**White Post Ln, London E9**

Status:  
**Built**

Completion:  
**2018**

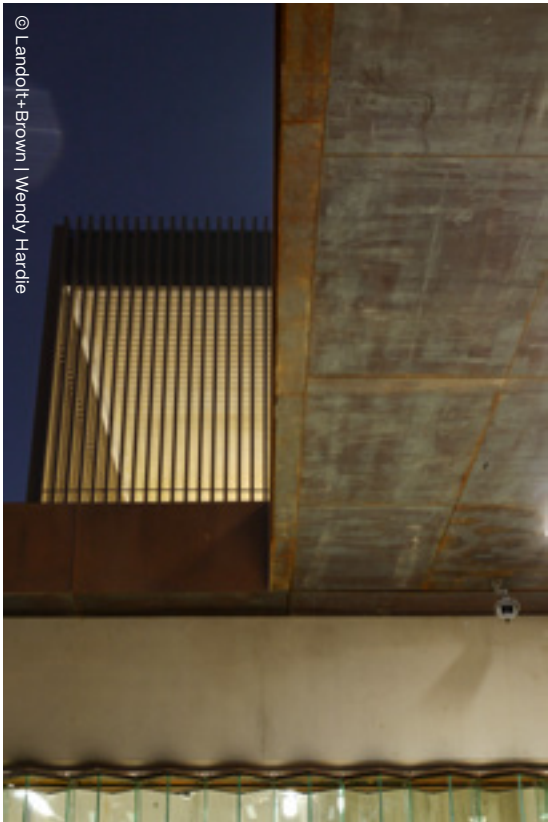
Client:  
**Network Rail, London Legacy Development Corporation**

Architect:  
**Landolt + Brown**

Artist:  
**Wendy Hardie**

Engineer:  
**Mott MacDonald**

M&E / Sustainability Engineer:  
**Mott MacDonald**



*"We are great believers in the civic importance of railway stations. At Hackney Wick we became deeply conscious of the scale urban change in the wake of the Olympics and set out to establish a creative narrative with its roots running deep into the area's industrial past, so much of which stems from the silty banks of the Lee River and so little of which still exists."*

*Adam Brown RIBA FRSA, Co-Founder, Mayor's Design Advocate, Landolt + Brown*



# QUEEN ELIZABETH OLYMPIC PARK BRIDGES

The legacy of the 2012 Olympics was designed to be embedded in the city and to ensure that as much of the financial investment in the Games as possible would go towards creating enduring benefits for the whole of east London. As part of this, a network of new infrastructure was built into the landscape, to integrate a new parkland into the fabric of the city. Much of it is in use today, as it contributes to the post-Games legacy.

The size of the park and the diverging needs created a significant challenge. It required an infrastructure solution that satisfied both the temporary needs — to allow the millions of visitors during the Games to access and cross the park, and the permanent — for those connections to work for generations to come as part of the Legacy Masterplan.

Allies and Morrison designed thirteen permanent bridges which formed a family with common geometries, details and components, and a further fifteen temporary bridges, designed as overlay elements, were removed after the Games to reveal a pre-formed river valley of landscaped terraces. Maximum investment was made in the permanent structures while temporary installations were designed in an economic and sustainable way that would allow ease of removal and re-use wherever possible.

The permanent bridges are embedded within the landscape, and designed simply to extend the concourse across the water. This strategy allowed other bridges, particularly those at the park’s perimeter, to adopt bespoke forms responding to their contexts, and thus constitute an essential component of the public realm. Among the most significant is the northern access bridge, connecting the North Park over the Eastway to Eton Manor; its bold red-orange colour highlights the sculptural quality of its elements and allows it to stand out as a marker as a northern entrance to the park.

- Address:  
Carpenters Rd, London
- Status:  
Built
- Completion:  
2012
- Client:  
Olympic Delivery Authority, London  
Legacy Development Corporation
- Architect:  
Allies and Morrison
- Structure:  
Atkins
- Planning Consultant:  
Savills
- Services:  
Atkins
- Quantity Surveyor:  
RLB
- Project Manager:  
CLM and Mace





# QUEEN ELIZABETH OLYMPIC PARK BRIDGES

As part of the legacy of the 2012 Olympics, a network of new infrastructure was built into the landscape to integrate a new parkland into the fabric of the city. Allies and Morrison designed thirteen permanent bridges which formed a family with common geometries, details and components. A further fifteen temporary bridges, designed as overlay elements, were removed after the Games to reveal a pre-formed river valley of landscaped terraces. The permanent structures are embedded within the landscape, adopting bespoke forms in response to their contexts and contributing an essential component of the public realm.

Address:  
**Carpenters Rd, London**

Status:  
**Built**

Completion:  
**2012**

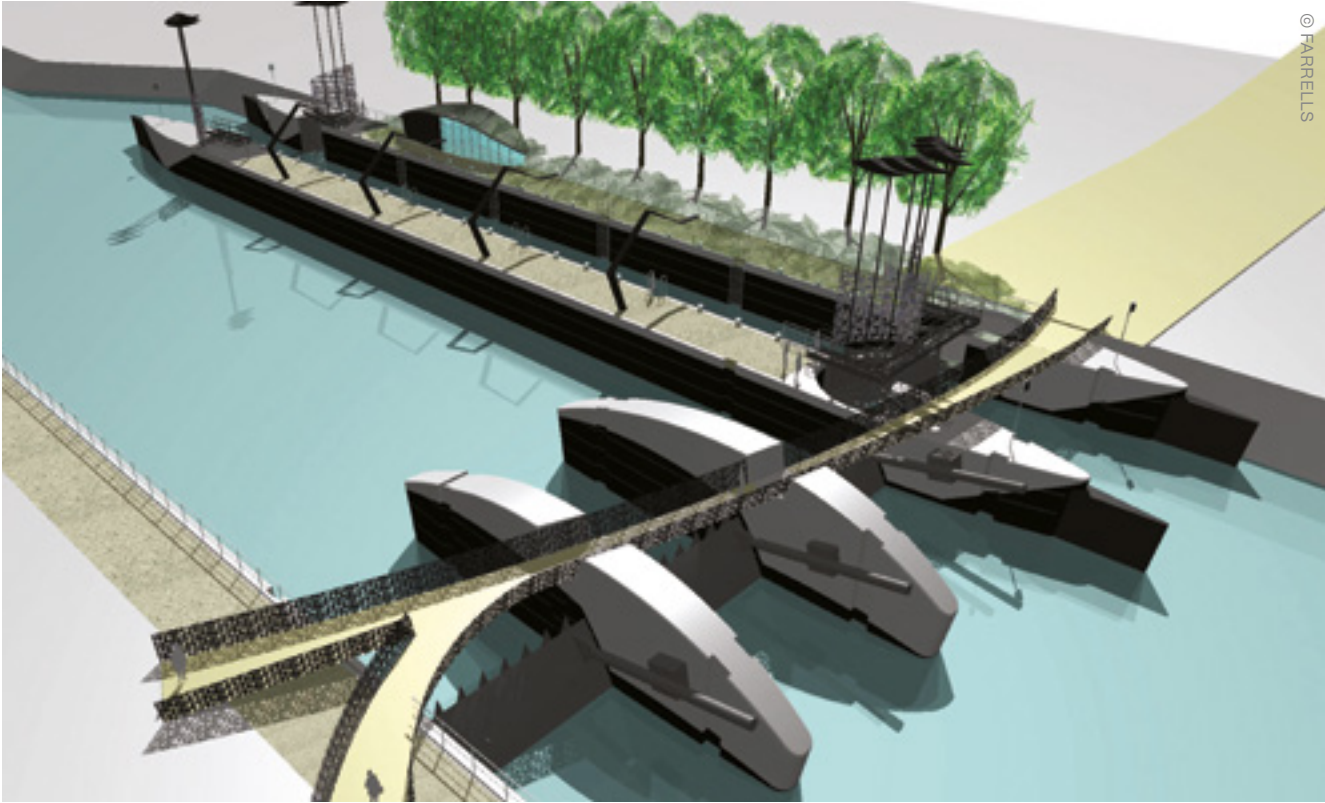
Client: **LLDC** | Architect: **Allies and Morrison** | Structure: **Atkins** |  
Planning Consultant: **Savills** | Services: **Atkins** | Quantity Surveyor: **RLB**  
| Project Manager: **Mace**



© Allies and Morrison



© Allies and Morrison



© FARRELLS

## THREE MILLS LOCK

In 2007 Farrells were commissioned by British Waterways to design a new lock and associated landscape for the new Three Mills Lock at Prescott Channel, Bromley-by-Bow. This is the first new lock to be built in London for 20 years. For more than 50 years, the Bow Back Rivers in east London lay derelict, under-used and almost forgotten. The completion of the new Three Mills Lock has revived this fascinating network of waterways and made it part of the 2012 Olympic Park.

Address:  
**Prescott Channel, London E3 3DU**

Status:  
**Built**

Completion:  
**2009**

Client: **British Waterways** | Architect: **Farrells** |  
Contractor: **volker stevin**



© FARRELLS



# BRIDGE CLADDING

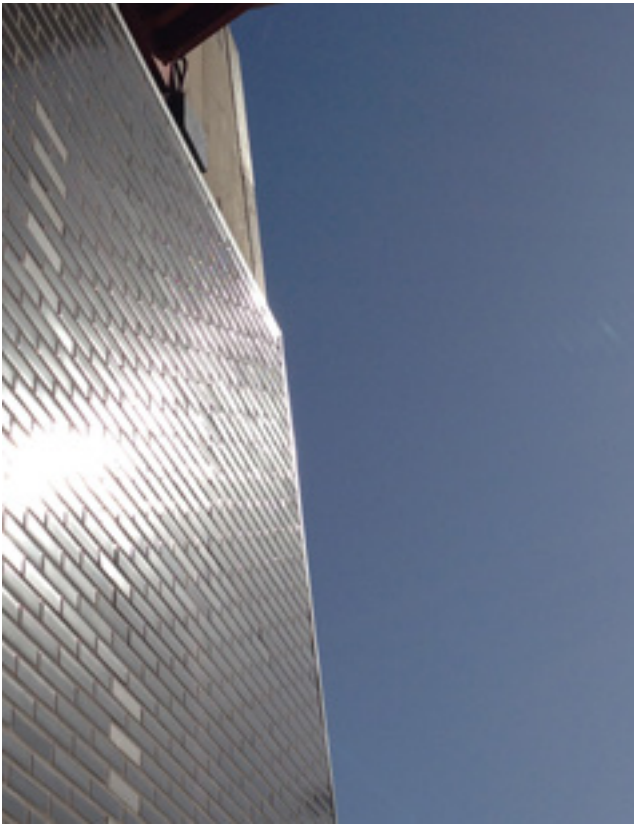
The new facade of polished brickwork was anchored to the base structure of the bridge and seamlessly combines this new materiality with the existing infrastructure. A collaborative approach enabled the seamless delivery of the scheme, creating a more attractive environment for users of the park. The works enhance the feel of the area and create a level of quality to give bring overall sense of place befitting of the areas historic use.

Address:  
**Carpenters Rd, London**

Status:  
**Built**

Completion:  
**2016**

Client: **London Legacy Development Corporation** | Contractor:  
**Buckingham Group** | Engineer: **BE Design** | Project Manager: **CLM and Mace**



# TWELVETREES

The Leaway structures of this scheme were conceived as part of a family of new connective park infrastructure that make reference to the industrial and utilitarian aesthetic of the existing bridges, pylons and river-works that populate the Lea Valley, characterised by clean rendered structures. This project employed a material language that delivers refinement and robustness whilst the metal architectural mesh set within galvanised steel frames and exposed aggregate concrete portray a clear built form whilst connecting to the local context.

Address:  
**Twelvetreecres, London E3**

Status:  
**Built**

Completion:  
**2017**

Client: **London Legacy Development Corporation** | Architects:  
**5th Studio** | Contractor: **Buckingham Group** | Engineer: **BE Design** | Project Manager: **CLM**



# HACKNEY WICK BRIDGES

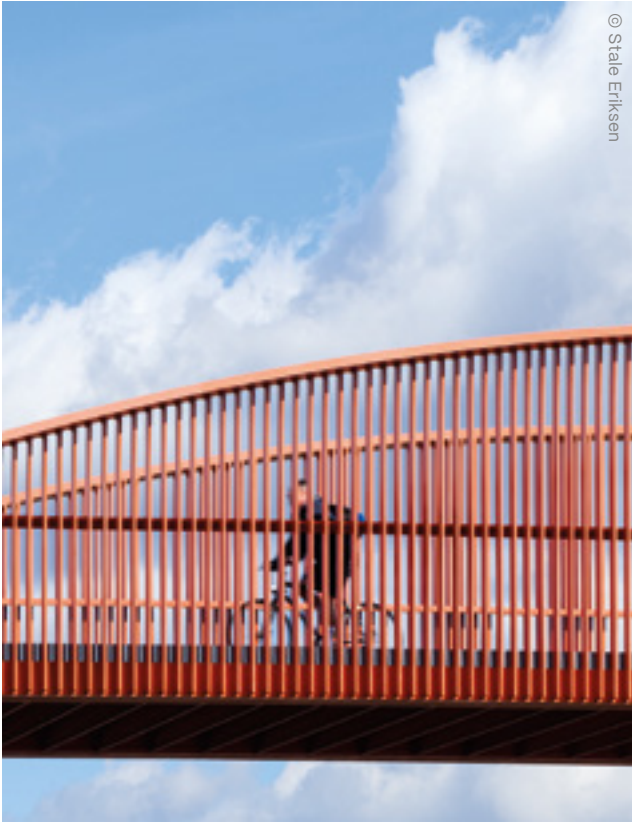
The pedestrian and road bridges link the west side of Queen Elizabeth Olympic Park with Hackney Wick. The footbridge is formed of weathered steel, with the low-maintenance material a nod to nearby industrial buildings and key pieces of infrastructure in Queen Elizabeth Olympic Park. The footbridge is formed of two plate girders, with each of the beams' vertical webs featuring 2,500 perforations, derived from structure's stress distribution diagram. Our nearby road bridge clearly relates to the pedestrian crossing.

Address:  
10 Stour Rd, Fish Island, London E3 2NT

Status:  
Built

Completion:  
2020

Client: London Legacy Development Corporation | Architect: Sheppard Robson | Engineer: Buro Happold | Landscape Architect: fabrik



© Stale Eriksen



© Allies and Morrison



© Filippo Bologna



© Filippo Bologna

## THE TRIANGLE BRIDGE

William Matthews Associates have designed a 41.5 metre-long bridge for a new single-span steel bridge over the Waterworks River in east London. The new structure is a key part of the vision for a new neighbourhood of 600 homes on the Bridgewater Triangle site. With two triangular steel trusses and four high-strength steel hangers, a skewed alignment in plan creates a visually dynamic scheme. The robust structure has been designed to appear lightweight, with a sense of permeability and openness.

Address:  
Bridgewater Rd, London E15

Status:  
Approved

Completion:  
2024

Client: LLDC | Structural Engineer: Expedition Engineering | Developer: London Legacy Development Corporation | Masterplan: Mikhail Riches | Planning Consultant: AECOM | Landscape Architect: BBUK Studio | Quantity Surveyor: Gardiner & Theobald LLP | Ecology Consultant: The Ecology Consultancy | Transport Consultant: Momentum Transport Planning | M&E / Sustainability Engineer: Greengauge



# WESTFIELD AVENUE

Westfield Avenue is an over-sized, four-lane 'loop road' linking to Stratford and serving Westfield and new development. Proposals by LDA Design will transform the experience for pedestrians and cyclists, reducing traffic to two lanes, and introducing green infrastructure to tackle a significant flood risk issue and to turn this major highway into somewhere that feels more like a piece of Queen Elizabeth Olympic Park.

Address:  
1 Westfield Ave, London E20 1HZ, UK

Status:  
Proposed

Completion:  
2022

Client: London Legacy Development Corporation | Landscape Architect: LDA Design | Civils Engineer: Arcadis | Highways Engineer: Norman Rourke Pryme | Wind Modelling: AECOM | Lighting Designer: Michael Grubb Studios | People Movement Consultant: Movement Strategies | Arboriculture: Connick Tree Services | Planting Design: Nigel Dunnett | Project Manager: CLM



# LEISURE AND SPORT



# LEE VALLEY WHITE WATER CENTRE

Before the London 2012 bid was finalised Lee Valley Regional Park Authority was a ready-made 'legacy partner' with existing plans for a VeloPark and White Water Centre and a clear vision for the three proposed venues, which would become Lee Valley White Water Centre, Lee Valley VeloPark and Lee Valley Hockey and Tennis Centre.

In order to get it absolutely right the Authority learnt from previous host cities, journeying to Barcelona, Sydney, Athens, and Beijing.

The Authority went on to influence and oversee every stage of the design and construction of the three venues to ensure that they were built with legacy in mind and would become valuable community assets. Legacy was the lens through which every decision was considered, from the minutiae of lighting and sound systems to making a case for a second, more gentle course at Lee Valley White Water Centre to broaden participation in paddlesports.

At the Authority's insistence the venues had a "build once" philosophy for both Games time and legacy, this saved enormously costly, disruptive and in some cases prohibitive modifications post Games.

Nowhere was this more apparent than in the design of Lee Valley White Water Centre. Following a visit to Sydney's successful white water centre, which regretted not building a second, gentler course to expand their market, the Authority decided, in conjunction with British Canoeing and a group of funding partners, to pay for the creation of a second white water course to complement the rapids of the Olympic Standard Competition Course. This became the Legacy Loop, a 160m course which could act as a training ground for canoeists and kayakers while they developed the skills and experience to tackle the more demanding 300m Olympic Standard Competition Course. For the Authority this second course was key to future proofing the venue, broadening participation and developing new talent in paddlesports.

Lee Valley Regional Park Authority's Chief Executive Shaun Dawson has been personally involved in the Games from the early discussions, the Singapore Bid team, throughout the Games and now in legacy.

Address:  
**Station Road, Waltham Cross, Hertfordshire EN9 1AB**

Status:  
**Built**

Completion:  
**2010**

Client:  
**Olympic Delivery Authority / Lee Valley Regional Park Authority**

Architect:  
**FaulknerBrowns Architects**

Contractor:  
**Galliford Try Construction**

Structural Engineer:  
**Cundall**

Planning Supervisor:  
**Indigo Planning**

Course Designer:  
**Whitewater Parks International**

Landscape Architect:  
**Michael Van Valkenburgh Associates**

Quantity Surveyor:  
**Northcroft**

Project Manager:  
**CLM and Mace**



*"I contributed to early feasibility discussions on bringing the Games to London and was part of the bid team in Singapore. Myself and colleagues have influenced the planning and design of a sustainable sporting legacy for London 2012 and I've led the Authority in the delivery of three of the most successful Olympic legacy venues in the world. 10 years since London 2012 and the Legacy Loop has played a crucial role in producing a new generation of champions and broadening our market."*

Shaun Dawson, Chief Executive, Lee Valley Regional Park Authority





# LEE VALLEY VELOPARK

Supreme design and value are integrated in the Velodrome, which is so clearly the physical representation of the function within. It is highly sustainable, engineered to optimum efficiency and represents great value for money, being delivered on budget and ahead of programme.

The brief for the project required a venue for indoor track cycling events at the London 2012 Olympic Games that would deliver a permanent structure and identity to become a lasting legacy for the area and the Olympic Park after the Games were completed. We designed the building for Legacy Mode — it is now the centrepiece of Lee Valley VeloPark — and then adapted it for Games Mode.

At the heart of the Velodrome is the 250 metre long FSC–certified Siberian pine track. The track’s oval shape and banked corners had a major influence on the shape of the building. In order to achieve continuous spectator support the seating in the lower tier has been wrapped around the entire track.

The Olympic Delivery Authority set sustainability and material targets. Through careful consideration and integration of the architecture, structure and building services the design has met or exceeded these requirements. Our design strategy focussed on minimising demand for energy and water and integrating this into the fabric of the building.

The overriding strategy was to design the building for Legacy Mode and then adapt it for Games Mode. The 6,000–seat venue was built to last but also had to add character to this new East London quarter — the ‘Pringle’ has since become an icon.

Address:  
**Lee Valley VeloPark, Abercrombie Road, Queen Elizabeth Olympic Park, London E20 3AB**

Status:  
**Built**

Completion:  
**2010**

Client:  
**ODA/ LOCOG**

Architect:  
**Hopkins Architects Limited**

Engineer:  
**Expedition Engineering**

Contractor:  
**ISG**

Landscape Architect:  
**LDA Design with Hargreaves**

Project Manager:  
**CLM and Mace**



*“Like the design of the bicycle, we wanted the architecture of the Velodrome to allow the expression of how all the individual parts functioned. Bringing it altogether into an integrated whole was the challenge, and it called for a variety of design tools to co-ordinate across disciplines and eventually communicate the design to the subcontractors.*

*So while the budget, brief, programme and site might all be set out precisely at the outset, and contrary to what the procurement process demands, you cannot prescribe how to go about designing a complex building such as the 2012 Velodrome. Instead the process is iterative, unpredictable and non-linear.”*

Mike Taylor, Principal, Hopkins Architects



# LEE VALLEY VELOPARK

Teaming up with Hopkins, BDSP and Grant Associates, Expedition Engineering designed the Velodrome around its Legacy use: the 2012 Games was seen only as the housewarming. We wanted a great party but far more important was its contribution to the surrounding area, London and British cycling, both in terms of support to the sport and trailblazing sustainable stadium design. Lee Valley VeloPark was the first venue to be completed in the Olympic Park, handed over on time and on budget.

Address:  
**Lee Valley VeloPark, Abercrombie Road, Queen Elizabeth Olympic Park, London E20 3AB**

Status:  
**Built**

Completion:  
**2010**

Client: **ODA/ LOCOG** | Architect: **Hopkins Architects Limited** | Engineer: **Expedition Engineering** | Contractor: **ISG** | Landscape Architect: **LDA Design with Hargreaves** | Project Manager: **CLM and Mace**





# LONDON STADIUM

The London 2012 Olympic Stadium set a new benchmark in lightweight, flexible stadium design, challenging traditional concepts of venue permeance and laying the foundations upon which the legacy of the Games has been built.

By ‘embracing the temporary’, the stadium achieved the balance between the immediate needs of a large Games stadium against the long-term requirements of a smaller-scale venue. The result was an award-winning, compact, efficient design to host the biggest show on earth.

The stadium structure is simple and elegant, minimising the physical weight, fabrication time and embodied energy of each component. As a result, the building contains under a quarter of the steel used in the main stadium for the 2008 Beijing Olympics. Additionally, the design uses surplus large-diameter pipes from North Sea gas pipeline projects. The stadium’s base tier, which accommodates 25,000 spectators, is constructed from low-carbon-dioxide concrete — containing 40 per cent less embodied carbon than conventional concrete.

The design makes full use of the site’s island situation, providing a complete circuit of spectator podium concourse around the stadium, connected by bridges to the main park. This podium concourse promoted the carnival nature of the event, with a perimeter array of spectator facilities distributed along the natural boundary of the water’s edge. During the three hours of an athletics event, spectators were free to move from their seats out onto the podium to visit these colourful clusters of concession pods, with views across the waterways to activities in the adjacent park and venues.

Populous undertook the post-Games transformation of the stadium, which included reducing the capacity of the venue from 80,000 to 66,000, as well as incorporating a new roof to cover every seat and vast improvements to the hospitality offer within and immediately surrounding the ground.

Address:  
**Olympic Park Ave, London**

Status:  
**Built**

Completion:  
**2011**

Client:  
**ODA/ LOCOG**

Architect:  
**Populous**

Interior Designer:  
**Populous**

Wayfinding:  
**Populous**

Project Manager:  
**CLM and Mace**

*“The Populous-designed London 2012 Stadium was a huge asset in the creation of the Opening Ceremonies for the Games. The creative and production teams were immediately struck by the intimacy and beguiling simplicity of the architecture which enabled the audiences to feel close to the action, the emotion of the performers to be vividly felt and the explosive live atmosphere to translate powerfully to a global audience of billions.”*

Bill Morris, London 2012  
Director of Ceremonies,  
Education and Live Sites





# COPPER BOX ARENA

One of eight permanent venues in the Queen Elizabeth Olympic Park, the award-winning Copper Box Arena is a 7,500 seat indoor arena, making it London's third largest. It hosted three major Olympic and Paralympic events during the 2012 Games, and now operates as a community leisure and training facility, accommodating a range of sports as well as concerts, conferences and exhibitions. Nicknamed 'the box that rocks', the arena has helped revitalise the Stratford area.

Address:  
The Copper Box (Stop M), London E20 3AW

Status:  
Built

Completion:  
2011

Client: ODA/LOCOG | Engineer: Arup | Architect: Make Architects with PTW | Planning Consultant: DP9 Ltd | Project Manager: CLM and Mace



© Make Architects



© Benjamin Norton



© Make Architects



© Hufon + Crow

# HACKNEY MARSHES CENTRE

A welcoming community hub, set within the woodland margins of the world's largest collection of amateur football pitches, the Centre provides much-needed facilities for the London Borough of Hackney. Formerly home to historical ironworks, before the rubble from London's blitz was laid over their landscape to create the vast open space we see today, the building embeds itself into the rituals of community football, while responding to its unique historical context via its architectural expression and inventive use of materials.

Address:  
Hackney Marshes Centre, Homerton Rd, London E9 5PF

Status:  
Built

Completion:  
2011

Client: London Borough of Hackney | Architect: Stanton Williams | Engineer: Webb Yates Engineers



# LONDON AQUATICS CENTRE

The centre's two 50-metre pools and diving pool hosted the aquatics events of the London 2012 Olympics; temporary stands giving a spectator capacity of 17,000. After the 2012 Games, these stands were removed to significantly decrease the building's volume and the centre was converted for use by its local community. Ground granulated blast-furnace slag (GGBS), a waste by-product of the steel industry, substituted 70 per cent of the cement used to build the centre, with 80 per cent of aggregates from recycled sources.

Address:  
Queen Elizabeth Olympic Park, London, E20 2ZQ

Status:  
Built

Completion:  
2011

Client: ODA/ LOCOG | Architect: Zaha Hadid Architects with S&P | Structural Engineer: Ove Arup & Partners | Contractor: Balfour Beatty | Project Manager: CLM and Mace





# LEE VALLEY HOCKEY & TENNIS CENTRE LONDON

Continuing a century old tradition of the site in providing sporting facilities to the local community, the project began as a London 2012 Olympic and Paralympic venue hosting aquatics training during the Olympics and then Wheelchair Tennis for the Paralympics. It was the only purpose built Paralympics venue for London 2012. The design took as a starting point an intended legacy as a world class and community accessible hockey and tennis facility, to minimise the transformation necessary between phases and be a true exemplar of flexibility.

Address:  
Leadmill Lane, Eton Manor, Queen Elizabeth Olympic Park,  
London E20 3AD

Status:  
**Built**

Completion:  
**2014**

Clients: **ODA/ LOCOG, Lee Valley Regional Park Authority** |  
Architect: **Stanton Williams** | Engineer: **Arup** | Landscape Architect:  
**LDA Design** | Project Manager: **CLM and Mace**



## THE SLIDE AT ARCELORMITTAL ORBIT

The architectural and engineering detailing and co-ordination of the slide installation, successfully integrated this exciting new attraction into the complex structure of one of the Park’s most prominent landmarks. The approach to design allowed for the successful and effective delivery of the scheme. Quality checks of the fabrication process were carried out in Germany before the on-site installation process of this intricate design.

Address:  
**Thornton St, London SW9**

Status:  
**Built**

Completion:  
**2016**

Client: **London Legacy Development Corporation** | Engineer:  
**BE Design** | Contractor: **Buckingham Group** | Project Manager:  
**Mace** | ArcelorMittal Orbit Design: **Sir Anish Kapoor and Cecil Balmond**



# LANDSCAPE DESIGN AND PUBLIC REALM



## EASTWAY

Eastway is a multi-use sports facility in Hackney Wick co-designed by muf architecture/art, Hackney Council and the young people who use it. The facility was built on an underused Council-owned site in Hackney Wick as a response to a lack of sporting amenities for young people in the area and delivering on the area priorities identified by engagement with over 400 young people aged 12–20 by Hackney Quest. Eastway is managed by Young Hackney, the Council's service for younger people.

Address:  
**80 Eastway, London E9 5JH**

Status:  
**Built**

Completion:  
**2022**

Client: **London Borough of Hackney** | Architect: **muf architecture/art** |  
Specialist consultant: **Ridge and Partners**



# OLYMPIC PARKLANDS AND PUBLIC REALM

Before the London 2012 Olympic Games, the Lower Lea Valley was described as ‘the largest remaining regeneration opportunity in inner London’. This forgotten, post-industrial landscape had poor housing, and was carved up by underused and polluted waterways, towering pylons, major roads, rail lines, and Europe’s largest fridge mountain. It was one of the UK’s most deprived areas with soaring unemployment and low skill levels.

The legacy of the Games was to rebalance London with green space as catalyst for wider regeneration. LDA Design’s vision for both the Games and Post-Games Transformation synthesised centuries of landscape design. The designers identified the River Lea as the true asset and pushed against early proposals with over-generous concourses to make space to pull back the river’s banks, creating a coherent riverine parkland from day one.

The Channelsea river, a designated main water course, was also filled in. By culverting beneath a sculpted landscape, a vast wetland bowl was created in the north park taking 5,000 homes out of flood risk and delivering huge biodiversity gains. In total, more than 45 hectares of new wildlife habitat was established, about half for the Games. As well as wetlands, there is a mosaic of ponds and swales, species-rich grasslands, the UK’s largest new wildflower meadow, and brownfield habitats, supporting kingfisher, water vole, bats, reptiles, swifts and sand martins.

Together, this makes for a wonderful public park, with a rich and varied ecological and social terrain that anchored the sports venues for the Games and established the framework for new mixed neighbourhoods, communities, and local economies — a new piece of city, and one of Europe’s most successful recent parklands. The complexity of this endeavour may not seem immediately apparent to visitors. Landscape has the beguiling effect of naturalising, as if the Park has always been there, grown from nature.

Address: **R.C, 1 International Way, London E20 1GS**  
Status: **Built**  
Completion: **2012–2016**  
Client: **Olympic Delivery Authority and London Legacy Development Corporation**  
Landscape Masterplanner/Architect: **LDA Design with Hargreaves**  
Lighting Consultants: **Sutton Vane Associates**  
Ecology Consultant: **James Hitchmough / University of Sheffield**  
Garden Designer: **Sarah Price**  
Irrigation: **Waterwise**  
Planning Consultant: **AECOM**  
Ecologist: **BSG**  
Horticultural specialist: **University of Sheffield**  
Soil Scientist: **Tim O’Hare**  
Project Manager: **CLM and Mace**

*“Queen Elizabeth Olympic Park has been an immensely rewarding project to be involved with. A landmark of 21st century park design, it combines a people-focussed approach whilst breaking new ground for standards of environmental design. This was particularly apparent during the constraints of the pandemic, which was very gratifying.”*

Andrew Harland, Director and Olympic Parklands co-lead, LDA Design





# OLYMPIC PARK ENTRANCE MARKERS

Expedition Engineering worked with British Artists Heather Ackroyd and Dan Harvey to mark the ten entrances into the Olympics by creating 6m diameter bronze or stainless steel ring sculptures that hung around their marker trees in an act of 'levitation'. One tree was enveloped by what was known as the spirit ring, whose predicted shadow was cast in bronze into the ground beneath. At a critical moment in the Games the shadow and the ring aligned to become one.

Status: **Built**  
Completion: **2012**  
Client: **LLDC** | Engineer: **Expedition Engineering** | Graphic Designer: **Pentagram Design** | Other: **Heather Ackroyd, Dan Harvey** | Project Manager: **CLM**



# NORTH PARK LANDSCAPE ENGINEERING

Atkins' management of the Olympic Park transformation showed it was possible to turn 246 hectares of derelict, contaminated and flood-prone industrial wasteland into a pleasant, safe, biodiverse and resilient landscape with multi-benefit outcomes for nature and communities.

Address: **Building Centre, 26 Store St, London WC1E 7BT**  
Status: **Built**  
Completion: **2012**  
Client: **LLDC** | Landscape Architecture: **Atkins Ltd** | Architecture: **Atkins Ltd** | Project Management: **Atkins Ltd**



# SOUTH PARK LANDSCAPE ENGINEERING

In the South of the Olympic Park, Arup’s landscape architects and engineers led the transformation of a 2.5 sqkm derelict brownfield site into a breath-taking setting for the London 2012 Games. Working with the client’s lead designers (LDA Hargreaves), planners and contractors, we were responsible for the detailed design and coordination of the landscape and public realm.

This complex project required a high degree of planning and project management. The site was geographically challenging, requiring significant ground-level changes. Our design work covered the complex boundaries between the landscape and the Games venues, bridges and other utilities. We experimented with different ground levels and topography to deliver a welcoming and accessible park.

Arup’s sustainability specialists collaborated with the landscape team to identify opportunities to embed sustainability in the design, specification, and construction. In doing so, the project pioneered major sustainability gains. The installation of a soil-washing plant, for example, made it possible to wash 30,000 tonnes of site material for reuse in the works. In total, 90 per cent of demolition material was reused in the landscape and public realm. The design accounted for 2,700 tonnes of waste material – with recycled aggregate used in walls and concrete mixed using 40 per cent pulverised fuel ash (PVA) from power stations. The timber used was FSC approved, and clay pipes were chosen due to lower embodied energy.

Our work was recognised with design and sustainability awards including the 2012 CEEQUAL ‘Excellent Whole Project Award (95.8 per cent)’ and Landscape Institute’s ‘President’s Award’ for the ‘Best Landscape Architecture’ scheme of the year. Today, the legacy has turned it into one of the largest new urban parks in Europe for over 150 years. Arup’s involvement with the park and LLDC is ongoing. It contributes to local biodiversity action plans and a world-leading testbed for innovative solutions like sustainable public mobility systems.

Address:  
**Stratford Pl, London**

Status:  
**Built**

Completion:  
**2012**

Client:  
**LLDC**

Landscape Architect:  
**LDA design with Hargreaves**

Landscape Engineer:  
**Arup**

M&E / Sustainability Engineer:  
**Arup**

Project Manager:  
**CLM**



© Thomas Graham | Arup

*“The south of the London Olympic Park is a complex area of venues and infrastructure. We were able to translate the design intent into engineering specifications that fulfilled the architect’s vision. As well as concourses leading to the venues and paved areas for people to gather, this part of the Park includes the widely praised 2012 Gardens. Our in-depth knowledge, and ‘one team’ approach provided a complete service, taking the park from design intent through planning, construction and specification stages to successful implementation of this large transformative project for East London and communities across the UK.”*

Penny Hall, Design Manager of the Parklands and Public Realm (South Park) for the London 2012 Olympic and Paralympic Games





# STREET INTERRUPTED

Street Interrupted is an early activation project in Hackney Wick, delivered as part of the Olympic Fringe. A tree was planted in the middle of the road to create a new public space. This space is framed by a new wall which integrates a small herb garden for the nearby Hackney Pearl restaurant to use, tended with the help of local schoolchildren. It includes locally produced furniture and terrazzo made from demolition rubble, from a local aggregate company.

Address:  
Prince Edward Road, Hackney Wick

Status:  
Completed

Completion:  
2012

Client: London Legacy Development Corporation, LB Hackney, LB Tower Hamlets | Architects: muf architecture/art | Landscape architect: +L Gibbons



# TUMBLING BAY & TIMBER LODGE

The brief was to create a community hub with cafe and a destination playground embedded in the naturalistic landscape setting of the North Park. Landscape and timber building were designed as a continuation of the park. Character areas tell plant life-cycle stories and inspire areas of bespoke play; from pioneer woodlands to the climax pine forest play. Sand and waterplay nestles between mounds and captures the history of the River Lea, from its naturalistic origins to an industrialised river.

Address:  
Queen Elizabeth Olympic Park, 1a Honour Lea Ave, London E20 1DY

Status:  
Built

Completion:  
2013

Client: London Legacy Development Corporation | Architect and Play Designer: Erect Architecture | Landscape Architect: LUC | Contractor: Bam Nuttall | Landscape Contractor: Frost | Specialist Play Contractor: Adventure Playground Engineers | Structural Engineer: Tall Engineers | Services Engineer: Max Fordham | Photography: David Grandorge | Project Manager: Mace



# CANAL PARK

This 1km-long park, which changes in character along the way, forms the seam between Tower Hamlets, Hackney Wick and Queen Elizabeth Olympic Park.

Designed for its role in the London Olympics development programme, the space functions between the development constraints relating to a pair of 42 inch Thames Water trunk mains that traverse its full length.

The park changes in character along its length, responding to the prevailing future uses, geography and functionality in each section. The scale of the park involved negotiations with interested parties where we led the discussions with a large number of these stakeholders, incorporating their needs into the final design.

Post games, next to the waterway independent maker-retailers, cafés, bars and restaurants make the Canalside a great location to meet, eat and relax. These shops and restaurants line the Lee Navigation canal, providing a lively backdrop to a range of desirable amenities and a positive community environment.

Address:  
**Queen Elizabeth Olympic Park, 1  
Waterden Rd, London E15 2HG**

Status:  
**Built**

Completion:  
**2017**

Client:  
**London Legacy Development  
Corporation**

Engineer:  
**Civic Engineers**

Architects:  
**muf, East Architects**

Landscape Architect:  
**J&L Gibbons**

Landscape Delivery:  
**LDA Design**





# HERE EAST PUBLIC REALM

The landscape challenge for Here East was to bring together the monumental, repurposed Games architecture and create a place that felt comfortable and human scale. LDA Design devised a series of external 'rooms' to create that important sense of intimacy. A successful working landscape will respect what has gone before and the design reflects the site's post-industrial heritage and Hackney Wick's entrepreneurial spirit, with yard spaces for artists and makers, generous areas for pop-ups, bold planting and concrete-slab benches.

Address:  
1 E Bay Ln, London E15 2GW

Status:  
Built

Completion:  
2016

Clients: Here East, Delancey | Landscape Architect: LDA Design | Architect: Hawkins\Brown Ltd | Cost Consultant: Gardiner & Theobald LLP | Engineer: Buro Happold



# STRATFORD CULTURAL PLACEMAKING

A project initiated by Stratford Original BID and supported by LB Newham as part of the council's commitment to public realm improvements. Thomas.Matthews was asked to help make the town centre more welcoming. The design strategy, and the range of interventions that followed, looked to engage locals with the area beyond Westfield. Creative wayfinding, 50m of hand-painted murals, a comms campaign and colourful crossings all help locals and visitors effectively navigate and enjoy this bustling London hub.

Address:  
High St, London

Status:  
Built

Completion:  
2018

Client: Stratford Original BID and London Borough of Newham | Graphic Designer: Thomas.Matthews | Other: Corin Kennington, LTD LTD



# CARPENTERS ESTATE PUBLIC REALM

Positive change is afoot for Carpenters Estate in East London as Populo Living, owned by Newham Council, seek transformation. In 2020, LDA Design was asked to rethink the estate’s external spaces to secure its future and improve connections to Queen Elizabeth Olympic Park. We have developed a lively, meaningful process of participation, co-designing solutions with residents, stakeholders, young makers and teenage designers, and sharing insight as to how we can create sociable, greener, safer and more usable spaces for all.

Address:  
8 Carpenters Rd, London E20 1JR

Status:  
Proposed

Completion:  
2023

Client: **Populo Living** | Landscape Architect: **LDA Design** | Architects: **Proctor and Matthews Architects, Metropolitan Workshop** | Engagement: **Make:Good** | M&E / Sustainability Engineer: **Mott Macdonald** | Ecology Consultant: **XC02 Energy** | Transport Consultant/Engineer: **Campbell Reith**



# PARK PLACE PUBLIC REALM AT IQL

LDA Design is creating a playful ‘super nature’ setting for two residential towers by Alison Brooks Architects at IQL. Situated on the edge of Queen Elizabeth Olympic Park, this is a richly planted, fantastical design, with welcoming public gardens for all to enjoy. It is a landscape which celebrates the joy of community and is designed to delight and to make people smile. It features a family of distinctive social spaces that links the Park and neighbouring streets.

Address:  
5 Westfield Ave, London E20 1HZ

Status:  
Proposed

Completion:  
2024

Client: **Lendlease and London and Continental Railways** | Architect: **Alison Brooks Architects** | Landscape Architect: **LDA Design**



# STRATFORD WATERFRONT PUBLIC REALM

Stratford Waterfront is a distinctive new destination, which frames the River Lea and defines the edge of Queen Elizabeth Olympic Park. The landscape establishes a cultural common ground, one designed to reach different audiences and offer up fresh educational and career opportunities in what was once one of London's most deprived areas. For the institutions putting down new roots here, including the BBC, V&A, Sadler's Wells and UAL's London College of Fashion, there is the excitement of new partnerships.

Much rests on the public realm's ability to make local people feel this place is for them. So, shared spaces work hard to not only unify the different architecture, but to provide opportunity for chance exchange and informal events, as well as supporting cross-cultural curated activities.

Taking its cue from the river, a series of terraces gradually rise to provide gentle, inviting routes up from the Park, with an open ground floor acting as an extension of the public realm. Spaces are designed to vary, so as to welcome the widest possible range of users with a series of south-facing terraces changing in direction and varying in width, surface and enclosure to create an ideal spot for everyone. The terraces have a playful feel to appeal to families. More intimate spaces are defined by strong, colourful and biodiverse planting. Materials used in the Park are carried through to Stratford Waterfront, including chunky timber seating.

The topography is steep enough to suggest a mountainside, and designs were inspired by the drawings of 19th century naturalist and explorer, Alexander von Humboldt. Vegetation changes in colour and texture with height to alter the sensory character of the spaces. To create a beautiful and thriving landscape here, one which includes trees, is highly complex and required close work with irrigation specialists, amongst others.

Address:  
**8 Carpenters Rd, London E20 1JR**

Status:  
**Under construction**

Completion:  
**2025**

Client: **London Legacy Development Corporation**

Landscape Architect: **LDA Design**

Architect: **Allies and Morrison**

Engineer: **Buro Happold**

Cost Consultant:  
**Gardiner & Theobald LLP**

Project Manager and Construction Manager: **MACE**

Planning Consultant: **AECOM**

EIA Consultant: **AECOM**

*"The public realm will be integral to the success of East Bank on a very challenging site, which brings an additional, different, and complementary experience to this edge of the Park. It is also critical 'Common Ground' that offers an open invitation to the community and facilitates the opportunity for the cultural institutions to reach out to them. I cannot wait to sit on the terraces!"*

Andrew Harland, Director and Stratford Waterfront Public Realm project director, LDA Design









# WESTFIELD STRATFORD CITY

Located at the gateway to Queen Elizabeth Olympic Park, with spectacular views, Westfield Stratford City demonstrates Westfield’s purpose, ‘Reinvent Being Together’ as it has firmly established itself in heart of London’s fastest growing community. London’s most popular shopping destination by footfall, which has seen almost half a billion visitors since opening in 2011, this mixed use development and regeneration project includes the addition of homes, hotels, and offices to create attractive new city districts, including 1,200 new homes due to launch in Spring 2023.

Status:  
**Built**

Completion:  
**2011**

Client: **Network Rail, London Legacy Development Corporation, Transport for London (TfL)** | Developer: **Unibail-Rodamco-Westfield** | Architect: **Leonard Design Architects**



# SUPERMARKET AND GYM AT EAST VILLAGE

A temporary/relocatable building with a Sainsbury’s supermarket, restaurant and gym providing amenities lacking from the Athletes Village — easing its transition into a vibrant residential neighbourhood now renamed East Village. While its intention was short-term, the community amenities provided remain at the heart of East Village, with both Sainsbury’s Local and the Better Gym remaining in the ‘temporary’ structure rather than being relocated, as had originally been intended, to the base of the residential plot (N8) across the road.

Address:  
**50 Celebration Ave, East Village, London E20 1DB**

Status:  
**Built**

Completion:  
**2014**

Architect: **Lifschutz Davidson Sandilands** | Client: **Qatari Diar Delancey** | Contractor: **Long Cross** | Engineer: **Arup** | Planning Consultant: **Quod**





# THE PODIUM

The Podium is an elegant pavilion in London’s Olympic Park housing a box office, event space, bar, restaurant and roof terrace with panoramic views. The exterior features an interactive pixel wall, designed by London-based design collective Tomato, that animates the building. Embodied carbon was reduced with an insulated roof covered in greenery and solar panels, and a rainwater collection system — all of which earned the building a BREEAM rating of ‘Excellent’.

Address:  
5 Thornton St, London E20 2AD

Status:  
Built

Completion:  
2014

Client: London Legacy Development Corporation | Engineer: Arup | Architect: Make | Consultant: Deloitte | Project Manager: Mace



# THE STRATFORD MANHATTAN LOFT GARDENS

Manhattan Loft Gardens is a vibrant east London community spanning a collection of 248 individually-designed rental loft apartments, three rooftop gardens, two restaurants, three bars and a design hotel, The Stratford. The tower’s distinctive stacking produces an array of accommodations, including single studios, split-level lofts and a stunning three-bedroom penthouse.

Status:  
Built

Completion:  
2020

Client: Manhattan Loft Corporation | Architects and Structural Engineers: SOM | MEP Engineers (design, engineer of record or peer review): Hoare Lea | Project Manager: Core5 | Main Contractor: Bouygues UK | Residential Interior Design: Studio KO and SOM | Hotel Interior Design: Space Copenhagen and SOM | Lighting: Paul Nulty | Landscape Design: Martha Schwartz and Randle Siddeley | Façade Engineers: Kyotec | Acoustics: Sandy Brown | Wind: BMT | Cost: DBK



# THE PAVILION AT IQL

The Pavilion, a new timber-framed building with outstanding energy credentials, is now open at the gateway to Queen Elizabeth Olympic Park. The multi-storey piazza welcomes visitors to Endeavour Square and celebrates timber from its undulating façade to its beautiful soffit ceiling. Small rooftop gardens enhance the area’s biodiversity and provide a home for pollinators, bird and bat species.

This inclusive and inviting place to eat, drink and socialise is home to Haugen, D&D London’s latest iconic restaurant and bar concept; as well as the Queen Elizabeth Olympic Park’s Visitor Centre. The building’s rooftop is publicly accessible, and its stepped seating forms a pleasant amphitheatre where the community can dwell.

Impressively, the building is made almost entirely from sustainably-sourced timber, which resulted in a 56 per cent reduction in embodied carbon when compared to an efficient concrete alternative. In some cases, substituting a tonne of steel or concrete with a tonne of timber can save one and a half tonnes of carbon emissions.

The building has secured an ‘Outstanding’ score of 92 per cent on the industry renowned benchmark, BREEAM. This puts the Pavilion in the top one per cent of new sustainable commercial buildings in the UK. The building was designed to be highly energy efficient; and can be powered, lit, and heated in a low carbon way thanks to the use of efficient building fabrics, smart lighting and solar panels on the roof.

The Pavilion is only one example of IQL placing sustainability at the heart of its 24/7 neighbourhood. The surrounding award-winning workplaces boast exceptional sustainability credentials and an in-situ Victorian style glasshouse — The Hothouse — that provides a controlled habitat for cultivating plants that would not ordinarily grow within the UK’s climate and showcases our rapidly changing climate.

Address:  
**Endeavour Square, International Development Quarter (IQL), Stratford, London, E20 1JN**

Status:  
**Built**

Completion:  
**2021**

Client:  
**Lendlease**

Architects:  
**ACME Architects**



© Hurfon + Crow

*“Completion of the Pavilion was a landmark moment for Stratford and recognises Lendlease’s efforts in putting placemaking at the top of our agenda, whilst setting the highest standards of environmental performance in our buildings. It’s a building that is destined to have a long-lasting impact, not just on the surrounding environment, but also on the enjoyment and wellbeing of those who visit. With its location overlooking acres of green space at Queen Elizabeth Olympic Park, stand-out architecture and public rooftop terrace with iconic views over London, café, fountains and seating area; this is a place where we hope local people and Londoners will gather to eat, drink and play.”*

Kristy Lansdown, Project Director, International Quarter London, Lendlease



© Hurfon + Crow



# THE GANTRY LONDON

With 291 guest rooms, an artisan food market, rooftop terraces, restaurants and bars, and event spaces, East London’s The Gantry is a multifaceted urban resort and hotel with integrated eating, drinking, socialising and entertaining spaces all under the same roof. Formed by slim vertical fins reminiscent of railway lines, the vertical form of the hotel is counterbalanced by curved horizontal elements.

Address:  
**40 Celebration Ave, East Village, London E20 1DB**

Status:  
**Built**

Completion: 2021

Client: **Curio Collection by Hilton** | Architect: **ICA Architects** |  
Consultant Team: **Arup, Ian Black Consulting, RLF, GL Hearn**



# TEMPORARY PROJECTS



# ATHLETES DINING TENT

The overlay concept was predicated on deploying standard modular components, with maximum reuse and minimum waste of building materials, to create vibrant humane places. The huge footprint of the Main Dining tent was covered by a trussed structure installed in one operation and ventilated by fabric ducts. Within it 5,000 athletes and 1,000 staff were fed at a single sitting from kitchens serving 16 different cuisines.

Address:  
Velopark (Stop W), London E20 1DS

Status:  
Built

Completion:  
2012

Client: **LOCOG** | Architect: **Lifschutz Davidson Sandilands** |  
Contractor: **De Boer** | Engineer: **Atkins Ltd** | Project Manager: **CLM**



# FRONTSIDE GARDENS SKATEBOARD AND BMX PARK

A 'meanwhile' project occupying a publicly owned site from 2012 to 2016. This outdoor park was built by the local community with some help and supervision, using leftover materials from the 2012 Olympics construction. The project held training sessions for girls and under-10s as well as training local young people to help manage the park.

Address:  
Hackney Wick

Status:  
Completed and demounted

Completion:  
2012

Client: **London Legacy Development Corporation** |  
Skatepark Engineer: **Andrew Willis**



# LONDON OLYMPICS BASKETBALL ARENA

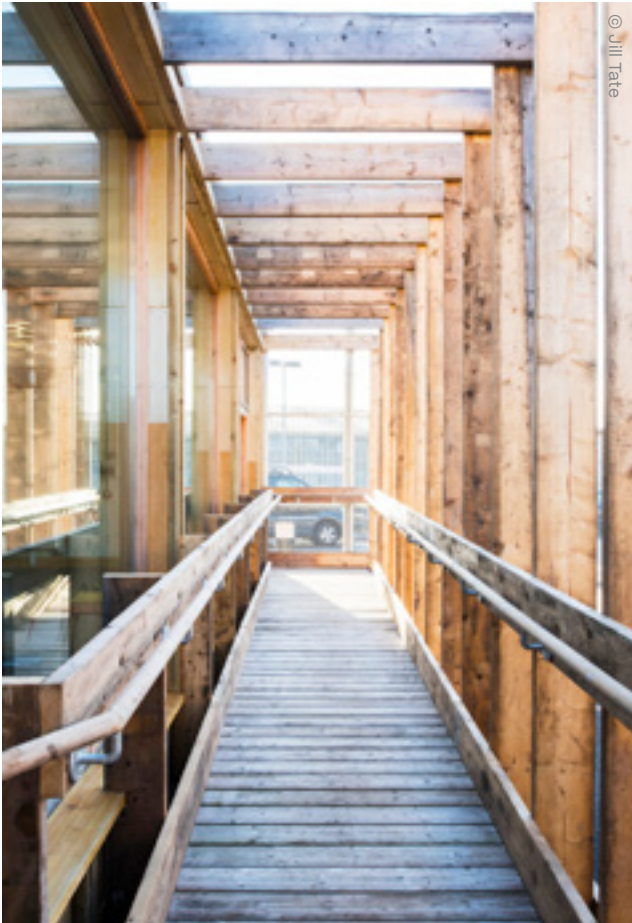
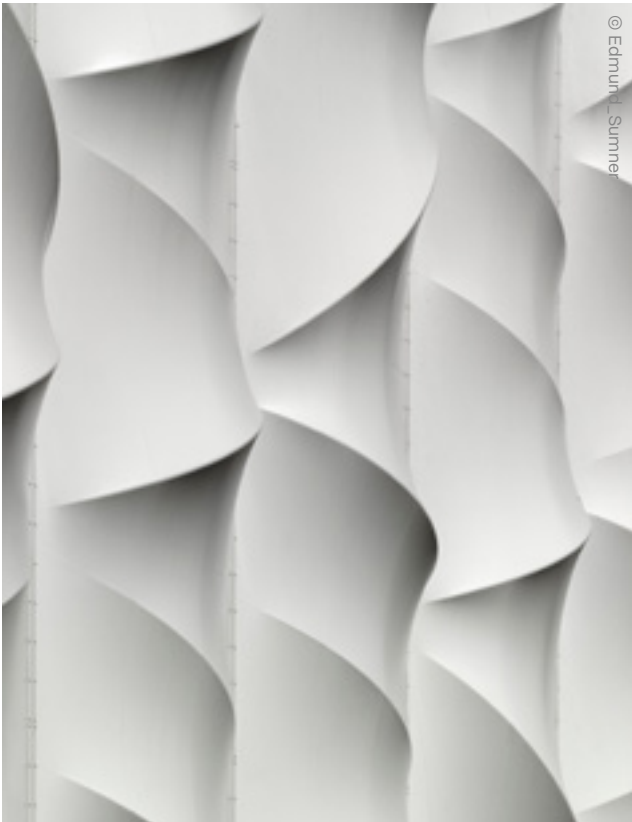
The challenge was to create a temporary building that would not only be simple to erect and sustainable in terms of its legacy once the Games were over, but also provided a world-class sporting venue. The SKM/WilkinsonEyre/KSS design team was appointed to create the arena and devised a solution in which two-thirds of the materials and elements within the building could be reused or recycled after the Games. After exploring a series of strategies for creating a structure with reusable and recyclable elements, the team opted for a lightweight steel frame and fabric cladding, allowing this enclosure to be constructed in just six weeks.

Address:  
London Olympics Basketball Arena

Status: Built

Completion: 2011

Client: ODA/ LOCOG, Olympic Delivery Authority |  
Architects: Sinclair Knight Merz with Wilkinson Eyre and KSS |  
Engineer: Arup | Project Manager: CLM and Mace



## HUB 67 PROJECT

Hub 67 is a community centre in Hackney Wick, constructed with recycled material from the London 2012 Olympic and Paralympic Games. The building was designed to have a life of between three and five years use and embraces a temporary and recycled aesthetic adding to the local architectural palette with a high-quality design. The facade and a central chandelier were designed and built with the local community, creating ownership at the heart of the project.

Address:  
Rothbury Road, Hackney Wick

Status:  
Built

Completion:  
2012

Client: London Legacy Development Corporation |  
Architects: LYN Atelier | Photograph: ill Tate



# LONDON 2012 WATER POLO ARENA

A world first — commended for having “real soul and personality”, awarded Sustainable Sports Building of the Year. The 5,000 seat Water Polo Arena was 70 per cent pre-cycled and 90 per cent returned to stock. Its placemaking legacy released a prominent site at the gateway to the Olympic Park for intense future development, setting a benchmark for future Olympic and Paralympic Games. The economic design included many innovations in planning, form and material, including 50m long air-inflated recyclable pvc roof cushions.

Address:  
Olympic Park Ave, London

Status:  
Built

Completion:  
2012

Client: ODA/ LOCOG | Architect: David Morley Architects |  
Structural Engineer: Buro Happold | Services Engineer: Max Fordham | Planning Consultant: Turley | Project Manager: CLM and Mace



# YARDHOUSE

Yardhouse is a prototype for high quality new-build affordable workspace on an interim-use site. The building system is an economic, modular system designed to be de-mounted and re-assembled elsewhere. Arranged as a simple three storey, three aisled structure occupying a square footprint of 12m x 12m with a total internal floor area of 250 sqm. The side aisles serve as private studio spaces — broken down by the structural frame into sixteen equally sized 12 sqm studio plots.

Status:  
Completed and demounted

Completion:  
2012

Client: Assemble Project / London Legacy Development Corporation | Architects: Assemble Project



# CLIPPER HOUSE, TRINITY BUOY WHARF

LOCOG commissioned Container City to design and build this nine storey, 1,477 sqm space, with ground floor food outlets and 10x TV broadcasting studios above. It was installed in 12 days. We dismantled it immediately after the Games ended. In 2014 we erected a smaller 1,200 sqm version at TBW in five days. It has four floors, providing 12 workspaces which vary from 22 sqm creative spaces to the HQ of Thames Clippers with 500 sqm of bespoke office space.

Address:  
64 Orchard Pl, London E14 0JW

Status:  
Built

Completion:  
2014

Client: Urban Space Management | Architect: Container City | Engineer: Furness Partnership



# HACKNEY BRIDGE

Hackney Bridge, located within the Olympic Park, is a meanwhile creative hub and public destination, comprised of five buildings arranged around a central courtyard, and is inspired by the industrial and creative heritage of the area. The site will eventually be developed as part of the Olympic Legacy Plan for housing, but the interim period of 12 years will allow the site to support start-ups and offer opportunities for a diverse mix of local people on the Olympic Park and surrounding neighbourhoods through its mix of workspace, public facilities, events spaces, markets, restaurants, and bars.

Status:  
Built

Completion:  
2020

Client: Make Shift | Architect: Turner Works | Contractor: Glencar Construction | Structural Engineer: Structure Workshop | Civil Engineer: Genever & Partners | MEP Consultant: PSH Consulting | Quantity Surveyor: Christopher Smith Associates | Fire Consultant: Asture Fire | Approved Inspector: Stroma BC | Planning Consultant: Quod | Acoustic Consultant: Hann Tucker Associates | Landscaping: Studio Hatcham | External Furniture: Studio Jutta Goessl







# OLYMPIC DELIVERY AUTHORITY STAKEHOLDER ENGAGEMENT

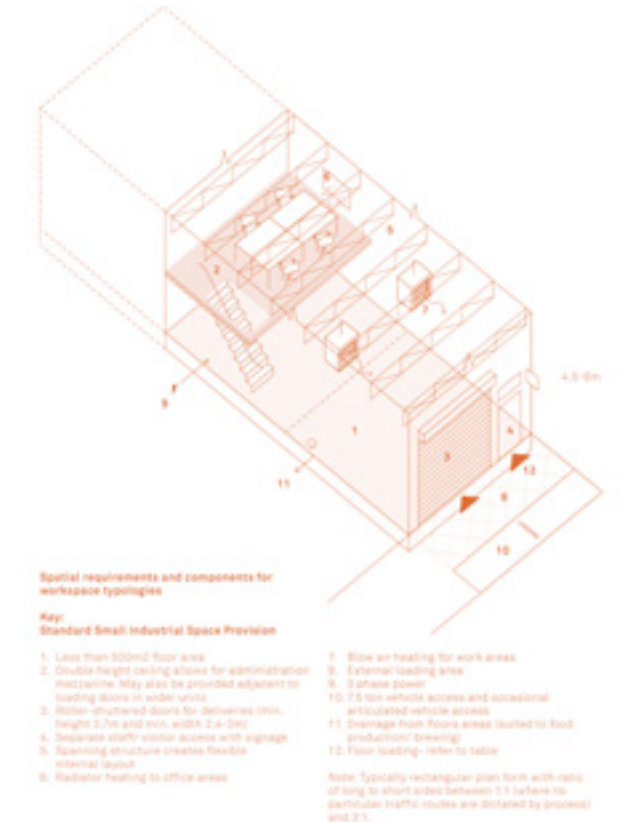
Working with partners Beyond Green, Thomas. Matthews designed a public roadshow which travelled by bicycle to reinforce the Games' sustainability focus. Information displays paired with interactive components allowed the public to feed in ideas and opinions on plans for a post-Games legacy for the local area. An interactive game 'Postcards from the Future' invited people to explore their aspirations for themselves and the Olympic Park site. Data was captured, collated and fed back to the design team to inform their work.

Address:  
Abercrombie Rd, London E15

Status:  
Built

Completion:  
2008

Client: LLDC | Graphic Designer: Thomas.Matthews | Other: Thomas.Matthews, Beyond Green | Project Manager: CLM



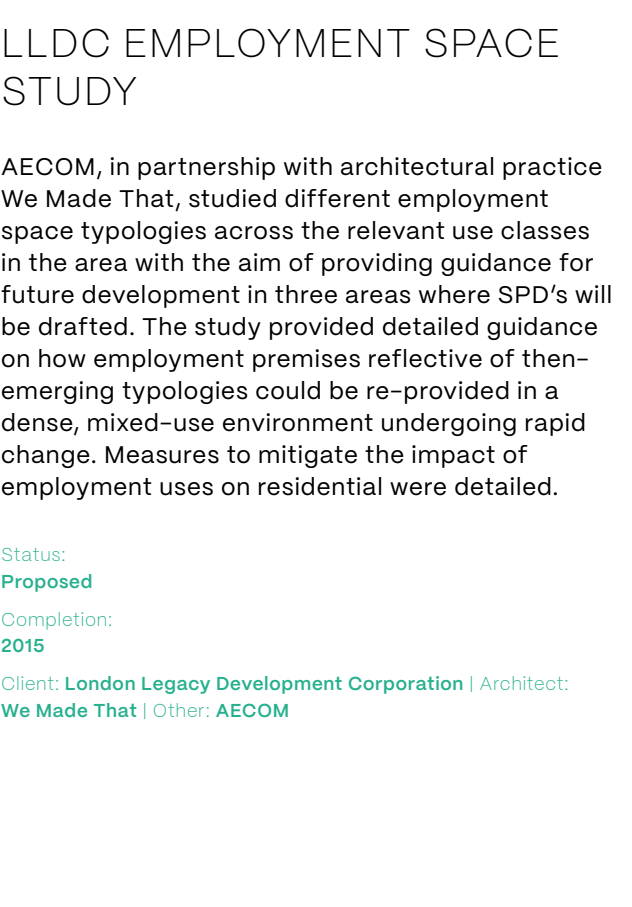
# LLDC EMPLOYMENT SPACE STUDY

AECOM, in partnership with architectural practice We Made That, studied different employment space typologies across the relevant use classes in the area with the aim of providing guidance for future development in three areas where SPD's will be drafted. The study provided detailed guidance on how employment premises reflective of then-emerging typologies could be re-provided in a dense, mixed-use environment undergoing rapid change. Measures to mitigate the impact of employment uses on residential were detailed.

Status:  
Proposed

Completion:  
2015

Client: London Legacy Development Corporation | Architect: We Made That | Other: AECOM





# INDUSTRIAL TRANSFORMATION

Aukett Swanke were invited to design and transform the inner volumes of this two storey industrial building with the intention of flexible uses including workplace, R&D, manufacture, education and leisure options within the confines of perimeter workplace and gantry uses by others. From dark airless caves Aukett Swanke drew air and daylight from above, adding interim CLT floors to double the floor area. This created an enticing variety of public and private settings that can accommodate the industrious to the delicate.

Address:  
22 Olympic Park Ave, Chobham Manor, London E20 1FA

Status:  
Proposed

Completion:  
2018

Architect: Aukett Swanke | Project Manager: Savills



## TROWBRIDGE GARDENS

Trowbridge Gardens is a previously underutilised asset transformed by the Council into a creative hub in Hackney Wick. Run by Arbeit Studios it is home to 26 studios dedicated to creative professionals, a local cafe, a fitness studio and exercise garden, a gallery and events space and two community gardens. The project was created to help local businesses remain in the area and received funding from the Mayor of London's Good Growth Fund.

Address:  
1 Trowbridge Rd, Hackney Wick, London E9 5LD, UK

Status:  
Built

Completion:  
2018

Client: LB Hackney | Workspace Operator: Arbeit Project Ltd |  
Planning Consultant: Brown Urbanism | Public Realm Improvements:  
Muf Architecture/Art



# FISH ISLAND VILLAGE

Located within one of the 2012 Olympic Fringe areas opposite Queen Elizabeth Olympic Park, Fish Island Village is a major live-work neighbourhood on a 2.85 hectare site, combining 588 mixed tenure dwellings (25 per cent of which are affordable) with 5,522 sqm commercial space. It is a joint venture development between Peabody, one of London's oldest and largest housing associations, and Hill, an award-winning top 20 UK housebuilder, with workspace managed by social enterprise The Trampery.

A major brownfield regeneration project to the west of Hackney Wick, in a part of the city undergoing neighbourhood-wide densification, the development has transformed an inaccessible site of disused single-storey distribution warehouses with a collection of mid-rise buildings interspersed with new public spaces fronting the canal.

Designed to reflect Hackney Wick's industrial heritage while heralding the area's urban transformation, the predominantly brick development aims to achieve the robustness and permanence of the area's historical warehouses, while creating a legible public realm composed of public squares, yards and tree-lined streets.

Masterplanned by Haworth Tompkins the development comprises: Lanterna (by Lyndon Goode Architects), a stand-alone building facing on to a new public square comprising 16 dwellings and a ground floor restaurant; Monier Road (by Pitman Tozer Architects), three blocks comprising 71 homes and seven workspace studios; and Neptune Wharf (by Haworth Tompkins), a family of 13 buildings opening up onto a sequence of courtyards.

Nine blocks of workspace facilities are being delivered by The Trampery as a campus for sustainable fashion businesses, with a tenth block dedicated to small creative businesses already established in Hackney Wick. The Trampery's Fish Island Village campus is a key project within Hackney Wick's Creative Enterprise Zone, and an anchor element of Fashion District: a consortium of institutions, facilities and investors supporting the fashion industry in east London.

Address:  
**Wyke Rd, Fish Island, London E3**

Status:  
**Built**

Completion:  
**2022**

Client:  
**Peabody**

Architect:  
**Haworth Tompkins**

Architect:  
**Pitman Tozer Architects Ltd**

Architect:  
**Lyndon Goode**



*"Fish Island Village is a unique collaboration between Peabody, Hill and social enterprise, The Trampery. The development consists of 588 mixed-tenure homes in a strategically important location on Fish Island, immediately adjacent to the Queen Elizabeth Park and the Hertford Union Canal.*

*Joint venture partners Peabody and Hill sought out a unique opportunity to create a new kind of residential scheme, mixing in creative and business opportunities with built-in studios and commercial facilities, and giving the development a far greater chance of economic and social resilience."*

Alice Spanton, Senior Development Manager, Peabody



# STONE STUDIOS

In London, the pressure to provide new homes is displacing employment floorspace, pushing up commercial rents. Stone Studios resolves this dilemma through the creative integration of homes and working studios, including subsidised affordable workspace. 50,000 sq ft of studios for the creative industries have been integrated with 120 loft apartments in a set of five adjoining buildings within a network of yards and lanes. The development delivers a new public route connecting Hackney Wick station with the Queen Elizabeth Olympic Park.

Address:  
80–84 Wallis Rd, London E9 5NB

Status:  
Built

Completion:  
2022

Clients: Telford Homes, Groveworld | Architect:  
Pollard Thomas Edwards



QUEEN ELIZABETH OLYMPIC PARK



PROJECT SHOWCASE – MIXED-USE

# WICKFIRST

Wickfirst is a development of three sites close to the newly refurbished Hackney Wick Overground Station, next to Queen Elizabeth Olympic Park. It will deliver circa 4,000 sqm high-quality public realm around the station as well as 190 new homes with 50 per cent affordable housing, and over 4,100 sqm of workspace and active ground floor use, including flexible retail and community facilities.

Address:  
57 Wallis Rd, London E9 5LH

Status:  
Proposed

Completion:  
2024

Client: London Legacy Development Corporation | Developer: NHG  
| Architects: Hawkins\Brown Ltd, Delvendahl Martin Architects  
| Landscape Architect: Studio Weave | Project Manager: AECOM  
| Lighting Designer: Lighting Design House | Energy Consultant:  
Energist | Daylight Consultant: SLR Consulting | Structural Engineer:  
Pell Frischmann | Planning Consultant: CMA Planning



# WALLIS STUDIOS

Wallis North transforms low-grade warehouses into a complex of creative workspace, shops and homes. Located next to a key crossing point into Queen Elizabeth Olympic Park, it forms a complete urban block within the Hackney Wick Central Masterplan. Double-height commercial space sits below 49 mixed-tenure flats, arranged around a landscaped courtyard and topped by a roof garden. These deck access homes are all dual-aspect. Brickwork piers, arches and spandrels create a handsome mixed-use 'palazzo' recalling the area's industrial past.

Address:  
115 Wallis Rd, London E9 5LN

Status:  
Planning granted

Completion:  
2026

Client: East London Regeneration | Architect: Pollard Thomas Edwards | Landscape Architect: Farrer Huxley Associates | Planning Consultant: Lichfields



CULTURE, INNOVATION,  
HEALTHCARE AND  
EDUCATION



# SIR LUDWIG GUTTMANN HEALTH & WELLBEING CENTRE

The Sir Ludwig Guttman Health and Wellbeing Centre, in the Queen Elizabeth Olympic Park, was designed to serve both as the Athletes’ Polyclinic for the London 2012 Olympics and afterwards, as a pioneering integrated Primary Health Care Centre for its wider locality. It provides 3,800 sqm state-of-the-art NHS primary care facilities with an additional 1,500 sqm of facilities for community use.

The building was designed as a true test of flexibility and adaptability in healthcare; to meet the LOCOG brief for Olympics’ use in 2012, then six weeks later to serve the needs of the Paralympics, and finally, but most importantly, to meet the needs of an innovative GP-led Primary Care Centre, to serve the local population for years to come.

The design responds to its nine and ten storey residential neighbours with a strong sculptural form and simple materials, achieving a landmark quality befitting of its post-Olympic place in the community.

The main facade is set back creating a generous, welcoming arcade of shop fronts rendered in gold, silver and bronze to reflect the Olympic medals, and includes a café, pharmacy and drop-in youth centre, each with its own identity. The highly glazed entrance welcomes visitors into the bright, airy interior. Externally, white ceramic clinker brick with a complementary mortar colour and precast concrete accessories achieves the intended monolithic surface, giving a sense of solidity and permanence.

The building’s heating and hot water is provided via a large-scale district heating system. This provides short term carbon reductions and enables a more straightforward move to fully de-carbonised heat in the future. An in-situ concrete frame with high recycled content provides thermal mass, resistance to vibrations from passing trains, and built-in flexibility for long term change.

Despite its small size, this civic building delivers maximum impact through its sculptural form and materiality.

- Address:  
40 Liberty Bridge Rd, East Village,  
London E20 1AS
- Status:  
Built
- Completion:  
2011 for the Games and 2013 for the  
Legacy
- Client:  
Olympic Delivery Authority
- Architect:  
Penoyre & Prasad
- Structural Engineer:  
WSP
- M&E / Sustainability Engineer:  
Wallace Whittle
- Planning Consultant:  
RPS Consulting Services Ltd
- Project Manager / Cost Consultant:  
Gardiner & Theobald LLP
- Contractor:  
Willmott Dixon Construction Ltd
- Developer:  
Lendlease
- Landscape Architect:  
Applied Landscape Design
- Acoustic Consultant:  
Hann Tucker Associates
- Lighting Consultant:  
Elektra Lighting Design
- Fire Engineer:  
JGA Fire Engineering
- Artwork and Signage:  
Art in Site
- Photographer:  
Richard Brine
- Photographer:  
Anthony Coleman
- Project Manager:  
CLM



© Anthony Coleman

“As relative late comers to the Athletes Village we had the advantage of being able to see, and respond to, the more developed designs of the other buildings around us rather than the sketchy canvas of a masterplan. From the outset we were very aware of how small our building was in relation to its neighbours, and we knew that an appropriate civic presence would only be achieved through strong architectural expression.

The unique promontory nature of our plot, bounded on either side by massive railway cuttings, is suggestive of a plinth — whatever you build there is seen in splendid isolation as an object from all sides. I think it was this that provoked our first sculptural responses, Ricky Burdett jokingly referred to one of our initial sketch models as ‘Alvaro Siza’s first building in London’ during a Design Review Panel presentation! We took this as a complement.”

Mark Rowe, Principal, Penoyre & Prasad



© Richard Brine



# CHOBHAM ACADEMY

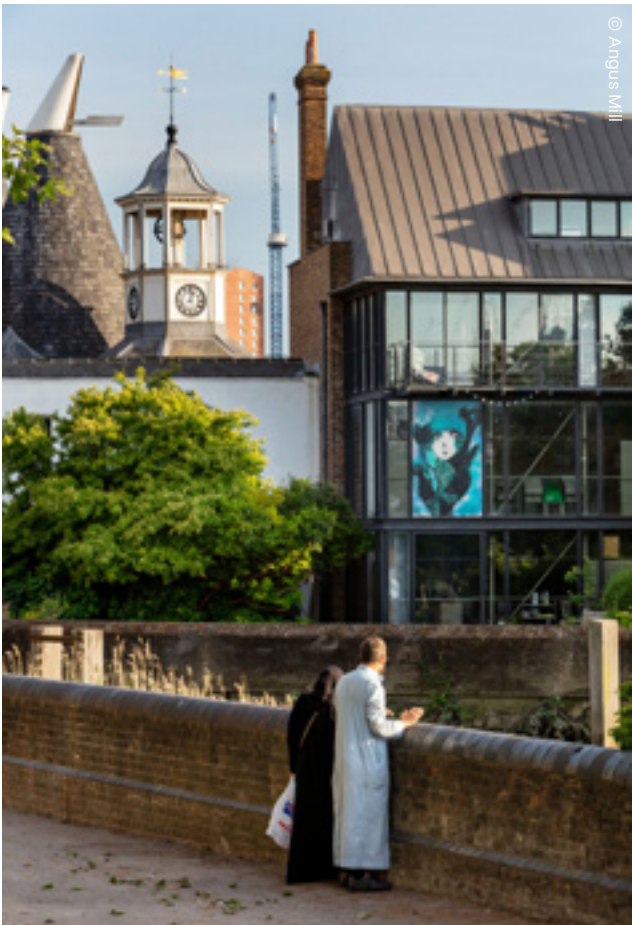
Opening in September 2013, with a specialism in literature and the performing arts, Chobham Academy serves the established local communities of Leyton and Stratford and the emerging community of the post-Games Park. Designed as part of a strong new urban grain whose pattern is reflective of existing London streets, a powerful drum form centres three connected buildings, which include a main building, primary school with nursery accommodation and a specialist arts building that also serves the community.

Address:  
40 Cheering Ln, East Village, London E20 1BD

Status:  
Built

Completion:  
2013

Client: **Lendlease** | Acoustic Consultant: **Hawksmoor Engineering** | Approved Inspector: **JLAB** | Architect: **Allford Hall Monaghan Morris** | Contractor: **BAM** | Cost Consultant: **Gardiner & Theobald LLP** | Engineer: **Arup** | Fire Consultant: **JGA Fire** | Graphic Designer: **Hat Trix** | Landscape Architect: **Kinnear Landscape Architects** | M&E / Sustainability Engineer: **Buro Happold (pre-contract) and Hoare Lea (post-contract)** | Planning Consultant: **RPS / Quod Planning** | Project Manager: **Lendlease** | Quantity Surveyor: **Gardiner & Theobald LLP**



# THE LINE

London's first dedicated public art walk, following the waterways and line of the Greenwich Meridian between Queen Elizabeth Olympic Park and The O2. The Line's outdoor exhibition programme offers a journey through a dynamic urban landscape where everyone can explore art, nature and heritage for free. Co-founded by Megan Piper and the late regeneration expert Clive Dutton OBE (1953-2015), The Line's mission is to connect communities and inspire individuals, to support health and wellbeing and provide engaging, cross-curricular educational opportunities.

Address:  
3 Thornton St, London E20 2AD

Status:  
Built

Completion:  
2015

Other: **The Line Art Walk**



# BOBBY MOORE ACADEMY PRIMARY SCHOOL

In the heart of Queen Elizabeth Olympic Park, the Bobby Moore Academy Primary School is part of an all-through academy which includes a separate secondary school, a Multi-Use Games Area and sports pavilion. The Academy provides much-needed education and community resources to support the growing neighbourhood.

The 2FE primary school for 420 children sits along the Lee Navigation Canal, beside the London Stadium. Its long, thin form results from the complexities of the site; the canal on one side and two Thameswater pipes running through the centre.

The 2,250 sqm building is divided into three parts. Key Stage one and Key Stage two teaching spaces sit at either end, opening onto their respective outdoor play areas. Shared central facilities include the main hall, dining, library and specialist teaching spaces. These are available to the community after hours without impacting on the security of the rest of the school.

The building is clad with brick slips with a two-tone palette, sharing an architectural language with the secondary school and sports pavilion. Teaching spaces are naturally ventilated using hybrid thermal mixing units while large windows and double height spaces maximise daylight and provide views to the canal and the stadium. The school is designed to accommodate future expansion upwards to cater for an additional class per year group.

The 107 sqm Sports Pavilion and MUGA is a fun, lively addition to the Park, for use by both schools, and the wider public after hours. It incorporates changing rooms, toilets and stores and a canopy to provide shelter for spectators. A gap between the two parts of the building provides space for players before and after their games. The window from this space focuses directly on the Olympic Stadium, reinforcing the connection to sporting excellence and the art of the possible.

Address:  
**23 Marshgate Ln, London E20 2AA**

Status:  
**Built**

Completion:  
**2017**

Client:  
**David Ross Education Trust**

Architect:  
**Penoyre & Prasad**

Contractor:  
**Balfour Beatty**

Structural Engineer:  
**Terrell Ltd**

Landscape Architect:  
**fabrik**

Planning Consultant:  
**Savills**

Construction:  
**MACE**

Acoustic Consultant:  
**HRS Services**

Fire Strategy and Approved  
Inspectors:  
**Tenos Ltd**

Transport Consultant:  
**Momentum Transport Planning**

BREEAM Assessor:  
**Method Consulting**

M&E / Sustainability Engineer:  
**MZA Consulting Engineer**



*“The Bobby Moore Academy Primary School is located on a unique site, sandwiched between the water and the park. The site presented many challenges, not least the two mains water pipes running through the centre of the site with 15m no-build zones either side. This suggested a long thin building along the water’s edge, resulting a series of internal spaces with ever-changing light qualities and varied views from the water to the trees to the stadium. Using a steel structure, precast concrete planks and prefabricated cladding enabled the team to complete the construction within 12 months, providing a distinctive learning environment for the growing young community.”*

Rafael Marks, Principal,  
Penoyre & Prasad





# BOBBY MOORE ACADEMY SECONDARY SCHOOL

In the heart of Queen Elizabeth Olympic Park, the Bobby Moore Academy Secondary School is part of an all-through academy which includes a separate primary school, a Multi-Use Games Area and sports pavilion. The Academy provides education and community resources to support the growing neighbourhood.

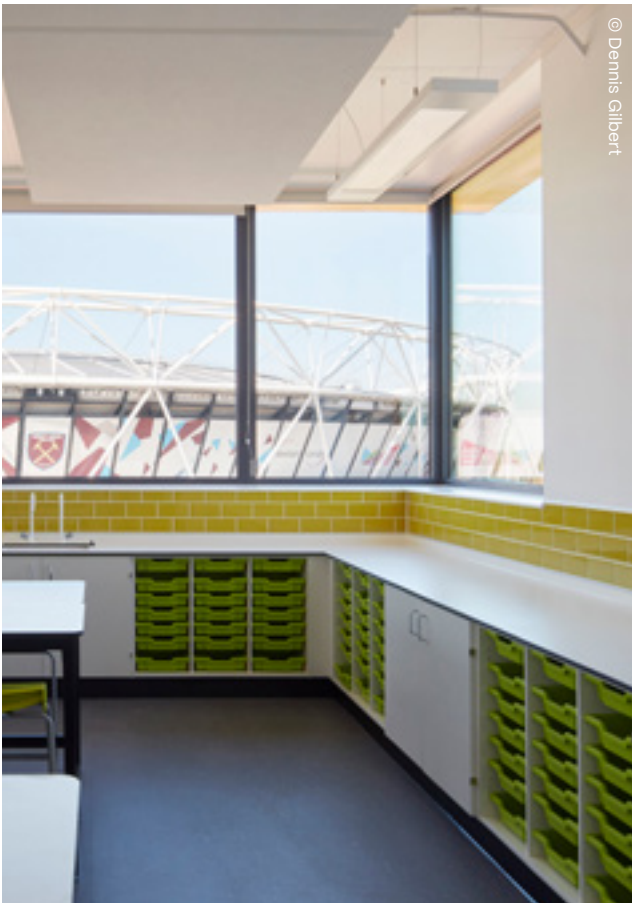
The 6FE school for 1,140 pupils sits on one of the smallest secondary school sites in London — a 3,500 sqm triangular site wedged between the London Stadium, City Mill River and the Park’s Loop Road — and comprises 9,240 sqm of diverse learning and social spaces across six storeys.

Organised by faculty, teaching spaces sit either side of a circulation spine, with voids to create vertical connections and bring light into the building. Bold graphics and colour provide identity to each faculty and floor. Classrooms are naturally ventilated using mixed-mode ventilation units which also attenuate noise from nearby City Airport. Expansive areas of glazing maximise daylight and views. The exposed concrete soffit provides thermal mass and future flexibility. The building has achieved BREEAM Excellent.

With specialisms in science and sports, the school capitalises on the world-class facilities provided by the Park. Designed through extensive consultation with the David Ross Education Trust and the London Legacy Development Corporation, the school is extensively used by the public during evenings, weekends and holidays. The community-accessible facilities are located at ground and first floor with an extra-large lift to accommodate parasports teams.

The school’s articulated form presents a bold civic presence to the Park, creating a new public realm overlooking the river. Materially, it has a kinship with the Primary School and Pavilion; the crisply detailed palette of two-tone brick slips in a woven pattern of glazed and matt finishes, deep window reveals punctuated with bright yellow accents, and the carefully articulated massing creates a distinctive identity for the Academy.

- Address:  
**1 Sidlings St, London, E20 2AF**
- Status:  
**Built**
- Completion:  
**2018**
- Client:  
**David Ross Education Trust**
- Architect:  
**Penoyre & Prasad**
- Contractor:  
**Balfour Beatty**
- Structural Engineer:  
**Terrell Ltd**
- Landscape Architect:  
**fabrik**
- Planning Consultant:  
**Savills**
- Construction:  
**MACE**
- Acoustic Consultant:  
**HRS Services**
- Fire Strategy and Approved Inspectors:  
**Tenos Ltd**
- Transport Consultant:  
**Momentum Transport Planning**
- BREEAM Assessor:  
**Method Consulting**
- M&E / Sustainability Engineer:  
**MZA Consulting Engineer**



*“The new school is a beacon of learning in the rapidly developing Queen Elizabeth Olympic Park. It provides first-class educational spaces while capitalising on the world-class sports facilities around it.*

*The big challenge for the design was accommodating the large programme of spaces on such a tiny triangular site while maximising external play space for the students. Set in the pantheon of great Olympic architecture, it also had to punch above its architectural weight.*

*Given the site’s exposure on all sides, the building is conceived as an object. Its distinctive form and architectural expression serve to create a strong identity for the school while rooting it in context and creating a civic realm where none existed before.”*

*Rafael Marks, Principal,  
Penoyre & Prasad*



# HERE EAST

Here East is a catalyst for growth and London’s fastest growing innovation campus. Located at the heart of Queen Elizabeth Olympic Park in London, it is a launchpad for innovation. Once the Press and Broadcast Centre for the Olympic Games, designed by Allies and Morrison, the 1.2 million sq ft campus is now home to over 4,500 academics and innovators, and is designed to foster collaboration, allowing tenants to collaborate, scale and grow at pace.

Today, 4,500-plus people call Here East home — from software developers to contemporary dancers, baristas to electronics engineers, architecture students to data scientists — all exploring new ways of thinking, better ways of doing, and exciting, collaborative opportunities to change lives.

The Here East masterplan was influenced by the tight-knit, light industrial factories and yards of neighbouring Hackney Wick, where the highest concentration of artists and makers in Europe reside. Plexal is the innovation hub in The Old Press Centre, with a mix of over 200 start-ups, scale-ups companies and dedicated innovation programmes. Outside, the landscaped Canalside features a life support system of locally-owned cafes and bars.

The vast steel structure behind the broadcast centre has been joyfully repurposed as The Trampery on the Gantry, a quirky ensemble of 21 affordable Wiki-House studios, designed by Hawkins\Brown, enabling local creatives to thrive. At the heart of the deep plan are state of the art broadcast studios for BT Sport and the data centre. Alongside UCL, the building is also the London home of Staffordshire University and Loughborough University.

Address:  
**14 E Bay Ln, London E9 5NY**

Status:  
**Built**

Completion:  
**2018**

Client:  
**Here East and Delancey**

Architect:  
**Hawkins\Brown**

Cost Consultant:  
**Gardiner & Theobald LLP**

Structural Engineer:  
**Buro Happold**

Environmental Engineer:  
**Cundall**

Landscape Architect:  
**LDA Design**

Project Manager:  
**Mace**

*“Here East is living proof that the Olympic legacy can be a positive force for change. The vision set out at the start of the development through sector analysis, brand development, innovative design and collaboration are ever present and enable Here East to continue its journey at the forefront of technology innovation and positive change.”*

Gavin Poole, CEO,  
Here East





# EAST BANK

This new district at Queen Elizabeth Olympic Park will enable some of the world’s leading cultural and educational institutions to reach out into the London boroughs that hosted the Olympic Games. The UK’s largest cultural project in generations, it brings together new cultural and educational venues and 600 new homes, retail and community spaces.

As part of the wider ambition to leave a lasting and positive benefit to the communities that hosted the 2012 Games, East Bank was conceived in the following years. The masterplan, devised by a team led by Allies and Morrison, brings together: V&A East with its distinctive angular form, Sadler’s Wells East with its recognisable saw-tooth roofline, both designed by O’Donnell + Tuomey. The BBC Music Studios with its weathered steel volume and a new home for the UAL’s London College of Fashion, a 21st century workshop with a dramatic central atrium, both designed by Allies and Morrison.

Each building is unique but all are designed to be approachable connected through a sequence of clear public spaces. A key principle of the masterplan is of a ‘common ground’ which flows continuously from the park up and into the public buildings, inviting easy colonisation by people, nature and culture.

- Address:  
Carpenters Rd, London
- Status:  
Under construction
- Completion:  
2023
- Client:  
LLDC
- Co-architects:  
Allies and Morrison,  
O’Donnell+Tuomey
- Landscape:  
LDA Design
- Project Manager and Cost Consultant:  
Gardiner & Theobald
- Structure and Civiis:  
Buro Happold
- Planning Consultant:  
AECOM
- EIA Consultant:  
AECOM
- Project Manager and Construction  
Manager:  
Mace



© Allies and Morrison



© Peter Molloy

*“Now onsite, the project is a true legacy of the Games and the success of the masterplan and development strategy that followed. The key design challenge has been needing to achieve an ambitious quantum of area on a compact site, resulting in vertically configured and terraced cultural and education buildings. In itself, this has been a huge technical challenge, more so while meeting London Legacy Development Corporation and their partners’ aspirations to create an inclusive, welcoming and cohesive place. It has been exciting for us, and all our team, to design and deliver.”*

Alex Wraight, Partner, Allies and Morrison



# EAST BANK

East Bank (formerly Olympicopolis) was an idea conceived by the then Mayor of London, Boris Johnson.

The aspiration was to create an environment akin to that of The Great Exhibition in 1851 that resulted in Exhibition Road in South Kensington, bringing together several museums and academic institutions in a semi-pedestrianised space creating a focal point for arts, education and culture for London.

The vision for Stratford and its post-Olympic Games legacy was to open the area up beyond sports and making the area more accessible to people with a much wider range of interests. At the heart of its concept was regeneration – enabling opportunity at grass roots level through education.

The challenge for the project was multi-dimensional; the location was arguably one of the most valuable residential locations on the Park and the site was key to the viability of the overall area. Stratford beyond Westfield had not yet been fully recognised as a mixed-use area and, despite its incredible transport connections, required further promotion. The number of partners and stakeholders to co-ordinate the project was of an incredible scale.

After several years of hard work by the London Legacy Development Corporation and its stakeholders, partners (BBC, Sadler’s Wells, UAL, UCL and the V&A) and advisors, the idea is becoming a reality. We are now seeing the creation of one of the most exciting opportunities for East London since the Olympic Games themselves.

Address:  
**Carpenters Road, Stratford, London, E20 2AQ**

Status:  
**Under construction**

Completion:  
**2022 onwards**

Client:  
**LLDC**

Co-architects:  
**Allies and Morrison, O'Donnell+Toumey**

Landscape:  
**LDA Design**

Project Manager and Cost Consultant:  
**Gardiner & Theobald**

Structure and Civils:  
**Buro Happold**

Planning Consultant:  
**AECOM**

EIA Consultant:  
**AECOM**

Sustainability consultant:  
**AECOM**

Transport planning:  
**AECOM**

Project Manager and Construction Manager:  
**Mace**



*“This project has been the highlight of my career to date. Its very rare that you get to be involved in a project which will be transformational for East London and I look forward to seeing it open next year. This project will be the new benchmark for regeneration and levelling-up.*

*For me, it is the cherry on the cake of this regeneration story – founded through the Olympics with a sporting angle, the introduction of arts and culture now truly makes the Olympic Park a place for everyone. Having been involved from its inception and being part of the initial discussions about what this scheme could achieve, to now see it come out of the ground is incredibly special.”*

Hari Sothinathan, Partner, Gerald Eve LLP





# MARSHGATE, UCL EAST

As part of the education and cultural legacy of London 2012, UCL East is the largest single expansion of University College London (UCL) since it was founded in Bloomsbury nearly 200 years ago. At the centre of this vision is Marshgate: a 35,000 sqm state-of-art academic building, designed to support collaboration — both within the university and with the wider public — and favour the interconnectedness and inter-disciplinary learning, thinking and research needed to tackle the major issues facing the world today.

The lower levels of Marshgate are characterised as a network of publicly accessible spaces, drawing the public into the heart of the building, and engaging them with the university’s activities. Activities which also extend externally into a new animated public realm accessible to the wider community.

Inside, to accommodate the university’s ambitious programme and allow new disciplines and modes of working to emerge, the design focuses on highly flexible, collaborative social areas, which promote interaction between teaching and research, staff and students, academics and members of the public. The different floors are clustered into a series of ‘neighbourhoods’, each with its own double-height collaboration space.

Adopting a series of passive design strategies, Marshgate is designed to maximise natural daylight/ventilation as well as visual connections with its surroundings. Its sculptural form, solid massing and materiality work at the scale of the site’s urban infrastructure. They complement the existing iconic structures, whilst also talking to the area’s industrial past as well as to the solidity and longevity of UCL’s existing Bloomsbury campus and academic vision.

Currently on site, due to be delivered in 2023, this visionary project was enabled through close collaboration between Government, the London Legacy Development and UCL, and it is part of the university’s wider masterplan for academic buildings and student accommodation, which will be completed in subsequent phases.

- Address:  
**Sidings St, London E15 2LE**
- Status:  
**Under construction**
- Completion:  
**2022**
- Client:  
**University College London (UCL)**
- Architect:  
**Stanton Williams**
- Sustainability, MEP, BIM, Lighting, Acoustics , Fire, Infrastructure, Logistics, Transport, Security:  
**Arup**
- Structural design:  
**AKT2**
- Contractor:  
**MACE**
- Landscape Architect:  
**Vogt Landscape**
- Design Manager:  
**Plan A**
- PD Advisor:  
**Bureau Veritas**
- Project Manager:  
**WSP / Turner and Townsend**
- Accessibility:  
**All Clear Designs Limited and Arup**
- Access and Maintenance:  
**REEF Associates Ltd**
- Cost Consultant:  
**AECOM**
- Catering:  
**Tricon**
- Planning Consultant:  
**AECOM**
- EIA consultant:  
**AECOM**
- Project Manager and Construction Manager:  
**Mace**



*“This project presented a unique opportunity to create a distinctive place: a new kind of university quarter that captures the excitement and vitality that draws people to live, work and study in contemporary London. Drawing on the energy of its East London setting, the Lee Valley’s legacy of industriousness and creativity, and the exceptional cultural and landscape setting of the Queen Elizabeth Olympic Park, this will be a place for curiosity, learning and collaboration engaged with the culture of the surrounding city.”*

Gavin Henderson, Principal Director, Stanton Williams



# UCL EAST, ONE POOL STREET

The first phase of University College London’s UCL East campus is a transformative science-based project that erodes divisions between research, education and enterprise, and barriers between academics and the public. Around a memorable top-lit atrium that will operate virtually 24/7, is a three-storey, 5,400 sqm academic space that is easily adaptable. Above the terrace rise two slender towers containing 500 student rooms with large glass-sided ‘observation car’ communal spaces at the ends of the towers with stunning three-way views.

Address:  
**2 Montfichet Rd, London E15 1AZ, UK**

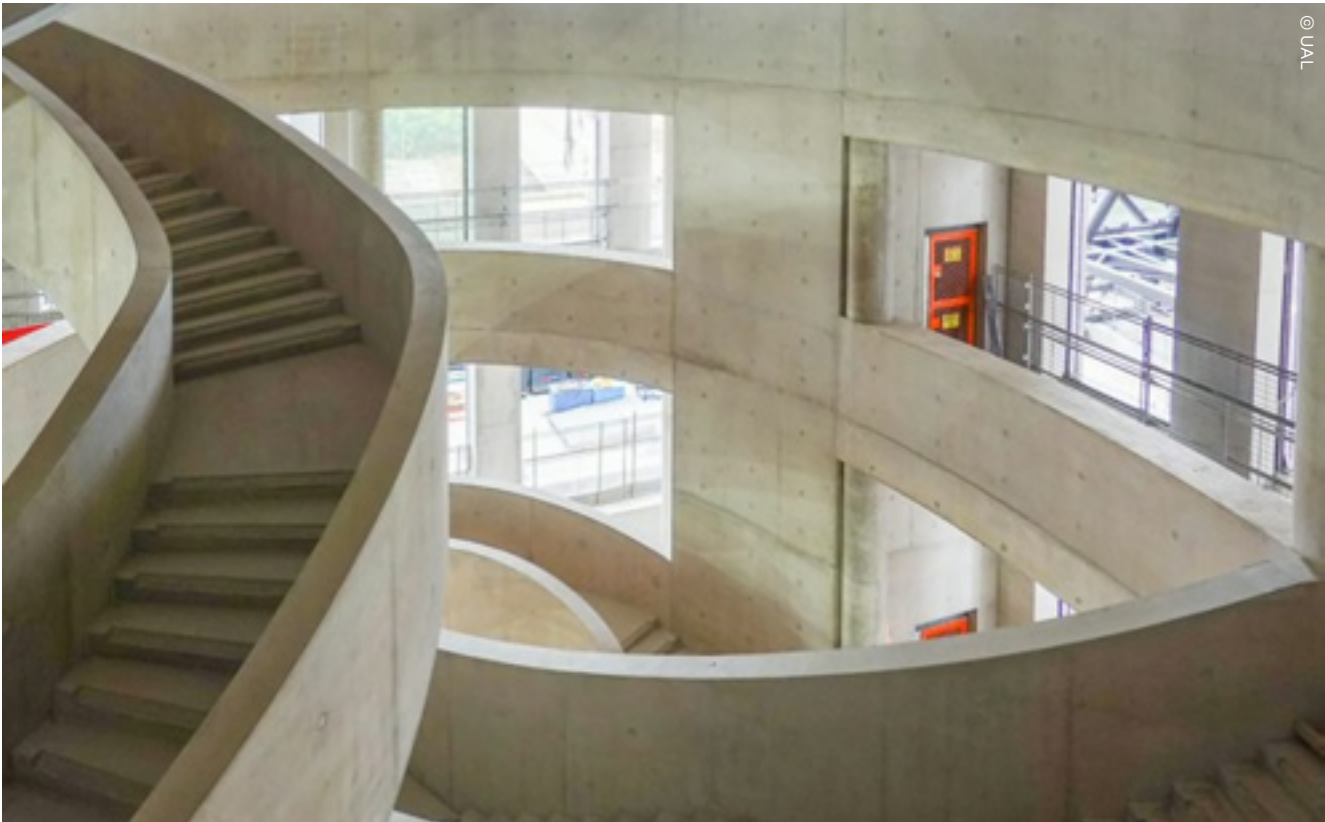
Status:  
**Under construction**

Completion:  
**2022**

Client: **University College London** | Architect: **Lifschutz Davidson Sandilands** | Structural Engineer: **AKT II** | M&E / Sustainability Engineer: **Hilson Moran** | Cost Consultant: **AECOM** | Contractor: **Vinci** | Landscape Architect: **Bradley Hole Schoenaich** | Acoustic Consultant: **Cole Jarman** | Lighting Designer: **EQ2**



© Chris Hopkinson



© UAL



© Morley von Sternberg

# UAL’S LONDON COLLEGE OF FASHION

UAL’s London College of Fashion will integrate its six sites onto one state-of-the-art campus, accommodating 6,500 students with their world-leading research community, business incubation and social enterprise centre, alongside public open spaces, galleries, libraries and archives. The campus will be a 21st century workshop, its design is inspired by the 19th century mill buildings common to many industrial cities. It will be day-lit and naturally ventilated, with factory-like steel-framed windows, internal atria for flexible learning, and lots of green spaces.

Address:  
**Stratford Waterfront**

Status:  
**Under construction**

Completion:  
**2023**

Client: **UAL’s London College of Fashion** | Architects: **Allies and Morrison** | Planning Consultant: **AECOM** | EIA consultant: **AECOM** | Project Manager and Construction Manager: **Mace**



© Allies and Morrison



# SADLER’S WELLS EAST

Sadler’s Wells East will be a space for dance makers presenting mid-scale work. The auditorium is flexible with 550-fold-away seats allowing for flat floor space to suit a range of formats. Six studios provide working spaces with excellent temperature control and natural light, most with access to terrace space. The L-shaped ‘living room’ foyer will wrap around the building opening onto Stratford Walk and the public realm where there will be outside performance space, bars, cafes and a stage for community groups.

Address:  
**Stratford Waterfront**

Status:  
**Under construction**

Completion:  
**2023**

Client: **Sadler’s Wells** | Architects: **O’Donnell + Tuomey** | Planning Consultant: **AECOM** | EIA Consultant: **AECOM** | Project Manager and Construction Manager: **Mace**



# BBC EAST BANK

BBC East Bank will be a state-of-the-art facility enabling creative and musical teams to work more flexibly, collaboratively and efficiently to provide innovative, world class music making for audiences everywhere. The new home for the BBC Symphony Orchestra and BBC Choir will also house live and recorded music sessions for Radio 1, 6 Music, Radio 2 and Radio 3. The BBC Concert Orchestra, the BBC Proms team and BBC Radio 3 New Generation Artists will also use the new studios.

Address:  
**Stratford Waterfront**

Status:  
**Under construction**

Completion:  
**2025**

Client: **BBC** | Architects: **Allies and Morrison** | Structural Engineering: **AECOM** | MEP Engineering: **AECOM** | Planning Consultant: **AECOM** | EIA Consultant: **AECOM** | Project Manager and Construction Manager: **Mace**



# V&A EAST MUSEUM

V&A East Museum, one of the world’s most significant new museum projects, will celebrate global creativity and making in its 7,000 sqm of space spread over five storeys. The museum will feature a main exhibition hall for major shows; two collection galleries exploring global making and new acquisitions, commissions and live activations as well as celebrating east London’s creative and manufacturing heritage; and an installation and events space on the top floor hosting interdisciplinary collaborations, new commissions and events.

Address:  
**Stratford Waterfront**

Status:  
**Under construction**

Completion:  
**2025**

Client: **V&A** | Architects: **O'Donnell + Tuomey** | Planning Consultant: **AECOM** | EIA Consultant: **AECOM** | Project Manager and Construction Manager: **Mace**



# V&A EAST STOREHOUSE

Designed by New York architects Diller, Scofidio + Renfro with support from UK based architects Austin-Smith:Lord, V&A East Storehouse is a 16,000m2 purpose-built home for over 250,000 objects, 350,000 library books and 1,000 archives. Offering an entirely new museum experience, V&A East Storehouse will take visitors on a journey across time, through self-guided tours and changing displays. The Storehouse’s programme will explore why objects are collected, how they are cared for, conserved and displayed and will reveal the latest research emerging from the collections.

Address:  
**Here East**

Status:  
**Under construction**

Completion:  
**2024**

Client: **V&A** | Architects: **Diller, Scofidio + Renfro and Austin-Smith:Lord**









# THE MULTIGEN HOUSE

The Multi Gen House at Chobham Manor was born out of a specific need for a house typology where families over three or four generations can live together. The core design ethos was to realise an adaptable and inclusive home with the ability to support family diversity over time. The aspiration was to deliver a place of nurture to allow for the ever-evolving nature of family life; thus, providing the stability for the success of the whole family; in particular its children.

The house is embedded as a key component of the masterplan that includes vital support networks such as the provision of local shops, nursery, café/pub and generous/useable green open space.

The plot holds a three-bedroom family dwelling with a separate self-contained annexe as a one-bedroom house. The homes are connected by a shared courtyard which links the living spaces which form the hubs for family gathering and activity. The two buildings have separate front doors with accessed directly off the street for activation.

The house is organised to promote social interaction and support family wellbeing. Other living spaces, located above ground, are places of retreat and relaxation with views of the green. Bedrooms for young children are right next door to the parent’s room, with a bedroom for older siblings on the floor below for privacy. It can be easily adapted to increase vertical circulation when required.

The annexe facilitates the need of the overall occupancy to flex as the number of family members ebbs and flows. It is multi-functional in that it caters for grandparents, young couples, a recently qualified graduate or student, a person returning from hospital or a family member with a disability, all of whom want to live independently but wish to remain close to the family.

Address:  
**Honour Lea Ave, London**

Status:  
**Built**

Completion:  
**2008**

Client:  
**LLDC and Chobham Manor LLP**

Architect:  
**PRP Architects**

Structural Engineer:  
**Stephen Wilson Partnership**



*“We designed the multigenerational home as a response to the changing family structure and the rising costs of housing and nursery care, cutbacks on pensions, and a growing awareness that a lot of childcare support came from elderly parents. We had a unique opportunity at Chobham Manor to create a house that can easily adapt to the changing circumstances of life whilst also providing a potential source of income in later-life. With the multigenerational home, generations clubbing together benefit from more affordable housing, families can afford live-in care, young adults can save for their future and older generations will benefit from having people around whom might help them with the things which are now more difficult to do.”*

Manisha Patel, Senior Partner at PRP



# ATHLETES' VILLAGE – PLOT N14

Plot N14 contains four apartment buildings, three by Lifschutz Davidson Sandilands and the fourth by Haworth Tompkins. The apartments enclose a sunny triangular courtyard with landscape that flows down to a quiet residential street on its southern perimeter. The two architects developed a consistent approach defining the base, middle and top of their buildings but thereafter responded to somewhat different aspects. Those by Lifschutz Davidson Sandilands, have suspended balconies sheltered by louvres facing due south and duplexes onto the streets.

Address:  
**16 Liberty Bridge Rd, East Village, London E20 1AP**

Status:  
**Built**

Completion:  
**2011**

Client: **Olympic Delivery Authority** | Architects: **Lifschutz Davidson Sandilands, Haworth Tompkins** | Structural Engineer: **URS (now AECOM)** | Services Engineer: **LLP** | Transport Consultant: **WSP** | Planning Consultant: **RPS Consulting Services Ltd** | Contractor: **Lendlease**



# ATHLETES' VILLAGE – PLOT N02

Plot N02 contains 317 apartments and townhouses set around a raised courtyard covering bike/car parking. The scheme is inspired by the London typology of terraces of white stucco (in this case white precast panels) presenting a formal face to the street, contrasting with a relaxed atmosphere to the rear where elevations in stock brick (in this case terracotta panels) overlook informal private and communal gardens. The balconies provide generous amenity space and are grouped in clusters that animate the facades.

Address:  
**18 Honour Lea Ave, London E20 1HH**

Status:  
**Built**

Completion:  
**2012**

Client: **Olympic Delivery Authority** | Architect: **Lifschutz Davidson Sandilands** | Structural Engineer: **URS (now AECOM)** | Services Engineer: **Wallace Whittle** | Contractor: **Ardmore** | Transport Consultant: **WSP** | Planning Consultant: **RPS Consulting Services Ltd**



# EAST VILLAGE – PLOT N10

Block N10, East Village designed by Eric Parry Architects housed around 1,700 athletes during the London Olympic and Paralympic Games. Following the Masterplan’s urban block form and established typologies, six ten-storey ‘mansion blocks’ enclose a generous raised landscaped podium garden. The podium covers the car parking without the need for basement excavation. The section has 31 triplex townhouses at the base facing the streets. These homes have their living rooms and gardens onto the central shared landscape. There is a mix of tenure across the buildings.

All the buildings have a consistent facade design, utilising high quality pre-cast concrete cladding. The precast concrete was carefully detailed with differentiated colour and surface treatments. The base has a darker concrete to the building and townhouse entrances. A strong sculptural string course runs around and forms the base to the projecting balconies. The elevations are articulated to the interiors with many rooms having two windows. The spaces between the buildings provide more sheltered private terraces. The tops of the buildings are celebrated with gullwing roofs to the upper apartments and extensive green roofs as part of the urban greening strategy.

After ten years the block provides 281 homes close to the facilities of the East Village’s school and health centre. Whilst it was once isolated, for security during the games, the East Village is becoming more connected to the neighbouring areas, but still feels refreshing different as a model of European scaled blocks with a generosity of public space and a central park.

Eric Parry prepared the designs for the solid balustrades of the distinctive prefabricated balconies. His artwork was digitally transferred and printed in the stable vitreous enamel, so the colours are as bright today as they were when first enjoyed by the athletes back in 2012.

Address:  
**11 Cheering Ln, East Village, London E20 1BB**

Status:  
**Built**

Completion:  
**2017**

Client:  
**Lendlease**

Architect:  
**Eric Parry Architects**

Structural Engineer:  
**AKT II**

Contractor:  
**Lendlease**

Services Engineer:  
**Hilson Moran**

Engineer:  
**Arup**





# EAST VILLAGE PLOTS N03 + N04

Designed by Patel Taylor / BVN with Panter Hudspith / CF Moller, N03+N04 are two courtyard plots providing a total of 587 homes and commercial space in 12 buildings over raised landscaped gardens. The scale of blocks and facade articulation responds to Parkside, Main street, Side street and Courtyard settings. Gaps between buildings are bridged by sheltered terraces. Each building's identity is expressed within a harmonious townscape character, with a palette of natural-toned precast concrete cladding and bronze-coloured metalwork.

Address:  
25 Napa Cl, London E20 1ED

Status:  
Built

Completion:  
Athletes Village 2011, East Village 2014

Client: Lendlease | Architects: Patel Taylor, BVN | Structural Engineer: Robert Bird Group | Engineer: Arup



# EAST VILLAGE PLOTS H03, N04, N07, N15

The London 2012 Olympic Athletes' Village accommodated over 17,000 athletes during the Games. It has now been converted into a residential community of over 3,000 homes. Robert Bird Group were responsible for all four of the Lendlease plots (of about 1,350 homes) — N03, N04, N07 and N15.

Address:  
Westfield Ave, London E20

Status:  
Built

Completion:  
2020

Client: Lendlease | Structural Engineer: Robert Bird Group | Architects: Patel Taylor, Glenn Howells Architects, panter



# EAST VILLAGE – PORTLANDS PLACE

The latest addition to the former Olympic Athletes’ Village, now East Village, is Portlands Place: 524 new build-to-rent homes, varying from studios to 4-bedroom homes, that epitomise the latest design thinking. Shared amenity and commercial spaces encourage social interaction between residents and provide a chance for renters to live, work and play within the same building.

Portlands Place aspires to be a socially unified building, encouraging interaction between residents and promoting extended tenancies. Two towers standing at 26 and 31 storeys, along with two ten-storey pavilions, merge into a single entity connected by a tenth floor skybridge offering ample amenities for residents. This includes a communal dining space, screening room, wellness studio, meeting and informal working spaces. The internal amenity areas open up to two generous roof gardens with spectacular views over the Queen Elizabeth Park and East Village. The amenity layer forms the beating heart of the building — every apartment is connected to it via a single internal lift journey.

At ground floor, a ‘superlobby’ provides concierge, informal working and an automated e-commerce delivery / collection facility. The apartments, comprising a range of sizes, will be available in three brand tiers to suit different tastes and budgets.

The whole development was designed with contractors Mace to be entirely prefabricated offsite, with walls and floors lifted into place, up to 30 storeys in the air, as a single pre-finished element. All services and bathrooms are similarly factory finished to be quickly converted onsite saving months on the programme. The High-Rise Solution (now Mace Tech) system enables a floor to be erected in its finished, watertight state each week with no scaffolding.

- Address:  
**1 E Park Walk, East Village, London E20 1JL**
- Status:  
**Built**
- Completion:  
**2022**
- Client:  
**Get Living London**
- Funding Client:  
**Qatari Diar, Delancey**
- Architect:  
**Hawkins\Brown Ltd**
- Contractor:  
**MACE**
- Project Manager:  
**Cast Real Estate & Construction Consultancy**
- Structural Engineer:  
**Walsh**
- Services Engineer:  
**Hurley Palmer Flatt**
- Landscape Architect:  
**Townshend**
- Cost Consultant:  
**Arcadis**
- Acoustic Consultant:  
**RBA**
- Facade Consultant:  
**Inhabit**
- CDM Principal Designer:  
**Orsa Projects**
- Planning Consultant:  
**Quod**



*“The launch of the Hawkins\Brown-designed Portlands Place shows how East Village continues to grow and evolve a decade on from the Olympics. The new residents will join a diverse, energetic and thriving community in a neighbourhood that represents one of the Games’ greatest success stories.”*

Ailish Christian West, Executive Director, Portfolio Management, Development & ESG, Get Living





# EAST VILLAGE – VICTORY PLAZA

Victory Plaza is the first completed phase of our masterplan for East Village. This triangular urban block has two sides on Victory Park and a third on Celebration Avenue. It consists of two towers of 26 and 30 storeys with very flexible floorplates above a 10-storey podium. There are 482 apartments above a ground floor of shops and restaurants that animate the main street and park. The towers were almost entirely made of prefabricated components installed off innovative rising ‘jump-factories’.

Address:  
74 Celebration Ave, East Village, London E20 1BD

Status:  
Built

Completion:  
2019

Client: **Qatari Diar Delancey** | Architect: **Lifschutz Davidson Sandilands** | Other: **Adamsons Associates** | Client: **Get Living** | Engineer: **Arup** | Contractor: **MACE**



© Paul Riddle



© BDP Architects



© Paul Riddle



© BDP Architects

## UNITE STRATFORD ONE

The site is at the end of Stratford City’s new boulevard and the building forms a highly visible gateway to the Park. The building is shaped in response to the immediate surroundings creating a home for students in a new city settlement. The tower is set around an internal courtyard, orientated to capture the best sun path and provide a tranquil retreat from the urban environment. Accommodation is enhanced with common rooms, rooftop terraces, storage for bicycles, a launderette, retail units at street level and a coach station.

Status:  
Complete

Completion:  
2014

Client: **Unite** | Architect: **BDP Architects**



# STRATOSPHERE

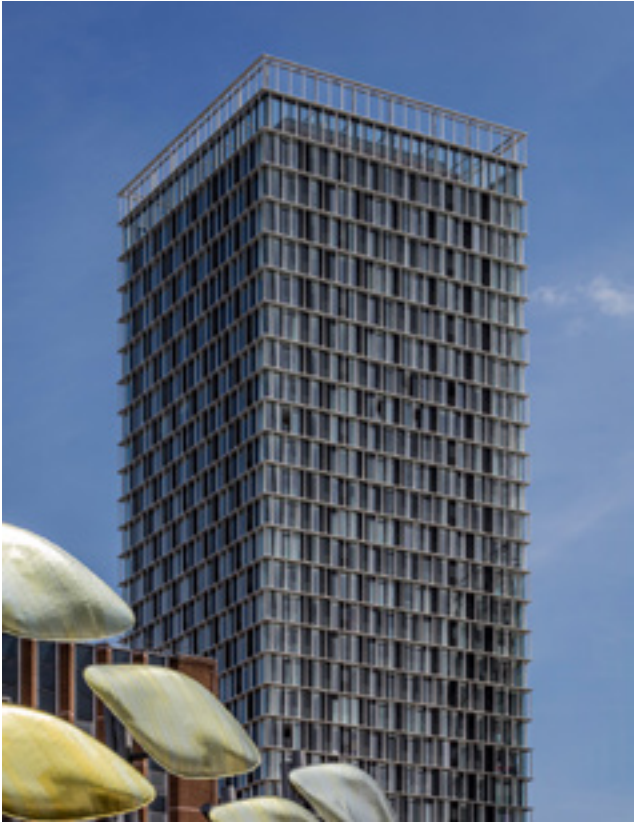
Stockwool completed the detailed design and construction phase of an Allies and Morrison designed scheme, providing 342 new homes and a rooftop garden. The scheme consists of two buildings of 36 and 11 storeys which are linked at ground floor level by a podium structure with communal amenity space above. The development provides ground floor retail space, office space and residents' leisure facilities including a gym. The building envelope comprises off-site manufactured repetitive facade elements, improving the speed and safety of construction.

Address:  
55 Great Eastern Rd, London E15 1DL

Status:  
Built

Completion:  
2018

Client: Telford Homes | Design Architect: Allies and Morrison |  
Delivery Architect: Stockwool



# NEW GARDEN QUARTER

New Garden Quarter creates a mixed-use community on brownfield land with 471 mixed-tenure apartments arranged around a major new London square. Nearly half of the new homes are large family apartments. The scheme has excellent transport links, on-site energy generation, high-performance fabric, a SUDS strategy incorporating rain gardens, doorstep play, a neighbourhood nursery and extensive new green infrastructure. The design team worked within significant infrastructure constraints to create a new destination for families.

Address:  
203 Forrester Way, London E15 1GL

Status:  
Built

Completion:  
2019

Client: Telford Homes and Notting Hill Genesis | Architect:  
Pollard Thomas Edwards | Landscape Architect: Churchman  
Thornhill Finch



# BREAM STREET

Bream Street delivers regeneration in the Fish Island area through a mixed residential-led and commercial development. The scheme consists of the demolition of an existing post-war commercial building, site clearance including decontamination, the development of seven new buildings, shared residential amenity spaces, new public route, and canal side public realm. The Stour Road Building, Garden Building, Canal Building, Lock Building and Bream Street Building are predominately residential, whilst the Employment Building and the Gatehouse are exclusively commercial.

Address:  
**Bream St, Fish Island, London E3**

Status:  
**Built**

Completion:  
**2021**

Client: **London & Quadrant Housing Trust** | Acoustic Consultant: **Cass Allen Associates** | Approved Inspector: **NHBC** | Architect: **Allford Hall Monaghan Morris** | Contractor: **Quadrant Construction** | Cost Consultant: **London & Quadrant Housing Association** | Developer: **London & Quadrant Housing Trust** | Ecology Consultant: **The Ecology Consultancy** | Fire Engineer: **Astute Fire Engineering Consultants** | Heritage Consultant: **The Townscape Consultancy** | Landscape Architect: **East Architects** | Light Consultant: **DW Windsor** | M&E / Sustainability Engineer: **MLM Multidisciplinary Consulting** | Masterplan: **Allford Hall Monaghan Morris** | Planning Consultant: **Quod** | Project Manager: **London & Quadrant Housing Trust** | Services Engineer: **FHP** | Structural Engineer: **Curtins** | Transport Consultant: **Curtins**



QUEEN ELIZABETH OLYMPIC PARK



PROJECT SHOWCASE – HOUSING

# CHOBHAM MANOR – PHASE 4

Chobham Manor phase four, situated on the edge of the Olympic Park masterplan and to the north of the East Village neighbourhood, provides 161 residential units arranged around a landscaped courtyard. The three buildings range from four to eight-storeys but share a common architectural language. The buildings facing the park are characterised by a strongly expressed brick clad structural grid, while the mansion block to the rear of the site has a strong horizontal emphasis with textured brick detailing.

Address:  
**Queen Elizabeth Olympic Park, 10 Olympic Park Ave, Chobham Manor, London E20 1FT**

Status:  
**Under construction**

Completion:  
**2022**

Client: **Taylor Wimpey East London** | Architect: **Allford Hall Monaghan Morris** | Contractor: **Taylor Wimpey East London** | Developer: **Joint venture between Taylor Wimpey East London and L&Q** | Landscape Architect: **LUC** | Planning Consultant: **Quod**



# WESTFIELD STRATFORD CITY RESIDENTIAL QUARTER

Westfield’s residential development in the heart of Stratford City demonstrates a commitment to creating and strengthening communities. In Stratford, Westfield delivered Europe’s most visited shopping centre, made significant investments into infrastructure, built new offices and hotels and now launching a residential development. From Spring 2023, residents will be a true part of the London 2012 legacy with Queen Elizabeth Olympic Park, East Bank and Westfield Stratford City on their doorstep.

Address:  
**Montfichet Rd, London E20, UK**

Status:  
**Under construction**

Completion:  
**2023**

Client: **Unibail-Rodamco-Westfield** | Architect: **PRP Architects**



# PARK PLACE

A new pair of towers at the northern threshold to the International Quarter London from Queen Elizabeth Olympic Park. Next to London’s emerging East Bank, Park Place signals a new residential neighbourhood in what is currently a workspace-led development. The two 35 and 14 storey towers will together provide 350 homes above a colonnaded ground floor of commercial and community uses.

Address:  
**5 Westfield Ave, London E20 1HZ**

Status:  
**Proposed**

Completion:  
**2026**

Client: **Lendlease** | Architect: **Alison Brooks Architects** | Landscape Architect: **LDA Design** | Structural Engineer: **AECOM** | Civil Engineer: **AECOM** | Quantity Surveyor: **Lendlease**





# PUDDING MILL LANE

Pudding Mill Lane is one of the last significant pieces of the Olympic housing legacy. Pudding Mill Lane will be a thriving, new mixed- use local centre around an overground rail station, delivering c.950 new homes, a new local high street including 36,000 sqm of workspace and other community, leisure and retail uses. The masterplan creates a coherent urban grain and scale where none exists — and which, alongside new streets, spaces and typologies, creates a recognisable part of the city.

Address:  
**Pudding Mill Ln, London E15**

Status:  
**Proposed**

Completion:  
**2031**

Client: **London Legacy Development Corporation** | Architect: **Gort Scott, 5th Studio** | Landscape Architect: **JCLA**





# ACKNOWLEDGEMENTS

NLA would like to thank our partners whose support made this project and publication possible: AECOM, Allies and Morrison, Arup, Balfour Beatty, Delancey, Deloitte, Gerald Eve, Get Living, Guinness Partnership, Hadley, Hawkins\Brown, Here East, LDA Design, Lee Valley Regional Park Authority, Lendlease, LLDC, Mace, Places for People, Plexal, Populous, Prior + Partners, PRP Architects, Taylor Wimpey, and Westfield.

Our special thanks go to the following people for sharing their time, expertise and insights, their own research, and their background information on and stories of Queen Elizabeth Olympic Park and the 2012 Games, through interviews and group discussions:

Curator-in-Chief: **Peter Murray OBE**

Researcher: **Sarah Yates**

Editor: **Federico Ortiz**

Editorial Assistant: **Morgan Lewis**

Graphic Designer: **Ruby Bergin**

Marketing and Communications: **Sophie Goff**

**Hanna Afolabi**, Development Director, Balfour Beatty Investments

**Sarah Akigbogun**, Member, Quality Review Panel, London Legacy Development Corporation

**Pam Alexander OBE**, Board Member and Chair of the Planning Committee, London Legacy Development Corporation

**Bob Allies**, Partner, Allies and Morrison

**Robert Aspland**, Director, LDA Design

**James Atherton**, Development Director, Unibail-Rodamco-Westfield

**Yuved Bheenick**, MRICS, Development Director, Placemaking and Regeneration, Places for People

**David Bickle**, Partner and Creative Director, Hawkins\Brown

**Peter Bishop**, Professor in Urban Design, UCL

**Paul Brickell**, Executive Director of Regeneration and Community Partnerships, London Legacy Development Corporation

**Stephen Bromberg**, Head of Communications, Lee Valley Regional Park Authority

**Dan Buck**, Corporate Director, Lee Valley Regional Park Authority

**Steve Burgin**, Retail Asset Management Director, Delancey

**Francesca Colloca**, Head of Innovation – SHIFT, London Legacy Development Corporation

**Sarah Custance**, Masterplan Project Manager, Regeneration and Growth, Economic Growth, London Borough of Waltham Forest

**Davendra Dabasia**, Managing Director for International Consultancy, Global, Mace Group

**Shaun Dawson**, Chief Executive, Lee Valley Regional Park Authority

**Rick de Blaby**, Chief Executive Officer, Get Living

**Hellyn Fairbrother**, Regional Sales Manager, The Guinness Partnership

**Kathryn Firth**, Partner, FPdesign – Former Chief of Design (2011–2015), London Legacy Development Corporation

**Simon Fraser**, Partner, Allies and Morrison

**Jerome Frost OBE**, Chair, UK, Middle East, India and Africa, Arup

**Lyn Garner**, CEO, London Legacy Development Corporation

**Nick Gaskell**, Partner, Studio Lead, Hawkins\Brown

**Alexander Gillington**, Partner, Gerald Eve

**James Graven**, Partner, Deloitte

**Ollr Guy Nicholson**, Deputy Mayor and Cabinet Member for Housing Supply, Planning, Culture and Inclusive Economy, London Borough of Hackney

**Kate Hall**, Director, Arup

**Bill Hanway**, Executive Vice President and Global Sports and Social Infrastructure Leader, AECOM

**Andrew Harland**, Senior Partner, LDA Design

**Richard Harvey**, Partner, PRP Architects

**Roger Hawkins**, Founding Partner, Hawkins\Brown

**Anthony Hollingsworth**, Director of Planning Policy and Decisions, London Legacy Development Corporation

**Kay Hughes**, Design Director, HS2

**Philip Johnson**, Senior Principal Architect, London, Populous

**Andrew Jones**, Cities Programme Leader, AECOM

**Tom Jones**, Senior Principal, Populous

**Andrew Jones**, Cities Programme Leader, AECOM

**Jonathan Kendall**, Urban Design Partner, Fletcher Priest Architects

**Steve Kennard**, Director of Regeneration, Hadley Property Group

**Brendan Kilpatrick**, Senior Partner, PRP Architects

**Stafford Lancaster**, Investment Director, Delancey

**Kristy Lansdown**, Project Director, Lendlease

**Zoe Madams**, PMO Services Director, PMO, Global, Mace

**Selina Mason**, Director of Masterplanning, Lendlease

**Peter Maxwell**, Director of Design, London Legacy Development Corporation

**Jane McEwen**, Technical Director – Environment, AECOM

**Rachel Meunier**, Senior Development Manager, Swan Housing Association

**Jason Millett**, Chief Executive Officer, Consultancy, Mace Group

**Jo Negrini**, Cities Consultant, Arup

**Heike Neurohr**, Partner, Studio Lead, Hawkins\Brown

**Damme Alison Nimmo**, Former Director of Design and Regeneration, Olympic Delivery Authority

**Chris Nulty**, Senior Development Manager, Get Living

**Michael O’Leary**, Operations Director, Taylor Wimpey London

**Leonie Oliva**, Partner, Gerald Eve

**Clive Pane**, Partner, Head of Planning and Development, Deloitte Real Estate

**Sowmya Parthasarathy**, Director, Urban Design and Masterplanning, Arup London

**William Chamberlain**, Partner, Counterculture, and Founding Director of Creative Wick and the Hackney Wick and Fish Island Community Development Trust

**Manisha Patel**, Senior Partner, PRP Architects

**Sir Peter Hendy**, Chair, London Legacy Development Corporation / Network Rail

**Jules Pipe**, Deputy Mayor for Planning, Regeneration and Skills, Greater London Authority

**Gavin Poole**, CEO, Here East

**Christopher Raeburn**, Creative Director, RÆBURN

**Nicholas Reynolds**, Senior Principal, Populous

**Mark Reynolds**, Group Chairman and Chief Executive, Mace Group

**Jamie Ritblat**, Founder and Chairman, Delancey

**Linda Roberts**, Director of Graduate Futures, Business & Innovation, University of the Arts London

**Mark Robinson**, Head of External Affairs, London Legacy Development Corporation

**Rebecca Rosmini**, Founder, Signorelli

**Andrew Roughan**, Managing Director, Plexal

**Chris Schulte**, Associate Director, Allies and Morrison

**Matthew Sharpe**, Senior Director, Quod

**Neil Smith**, Inclusive Design Lead, HS2

**Malcolm Smith**, Director, Australasian Cities Leader, Arup

**Carla Smyth**, Head of Design, London Legacy Development Corporation

**Alistair Smyth**, Director of External Affairs and Social Investment, The Guinness Partnership

**Hari Sothinathan**, Partner, Gerald Eve

**Soaad Stott**, Associate Principal Architect, London, Populous

**Benjamin Walker**, Studio Director, LDA Design

**Sam Wilkinson**, Head of Public Art, UCL Culture



# ENDNOTES

1 International Olympic Committee (IOC), Legacy Strategic Approach: Moving Forward (5 December 2017), p.2.

2 Andy Dangerfield, ‘Tube map used to plot Londoners’ life expectancy’, BBC News website (20 July 2012): <https://www.bbc.co.uk/news/uk-england-london-18917932>

3 ‘Stratford City: Laying the foundations for a major new metropolitan centre in East London’, Stanhope PLC website: <https://www.stanhopeplc.com/project/stratford-city>

4 Denise Chevin, New urban living for London: the making of East Village (published by The Smith Institute, London, 2012), p. 8.

5 The London Organising Committee of the Olympic Games and Paralympic Games, London 2012 Olympic Games Official Report – Volume 1 (2013), p. 17.

6 ‘Ken Livingstone admits he only bid for 2012 Olympics to “ensnare” taxpayer billions to develop East End’, Evening Standard (24 April 2008).

7 London 2012 Olympic Games: Global Broadcast Report (December 2012), p. 4.

8 ‘What is Olympism?’, Olympic Games (IOC) website: <https://olympics.com/ioc/faq/olympism-and-the-olympic-movement/what-is-olympism>

9 Ashley Davies (and others), ‘Government backs London Olympic bid’, The Guardian (15 May 2003): <https://www.theguardian.com/uk/2003/may/15/london.olympicgames>

10 London 2012 Olympic Games Official Report – Volume 1 (2013), p.19.

11 Strategic Regeneration Framework: An Olympic legacy for the host boroughs (2009), p. 2.

12 For a perspective on this process 6 years on from the Games, see Juliet Davis, ‘Futurescapes of urban regeneration: ten years of design for the unfolding urban legacy of London’s Olympic Games, 2008–2018’, Planning Perspectives, vol. 34, issue 5 (2019), pp. 877–901: <https://www.tandfonline.com/doi/full/10.1080/02665433.2018.1541757>

13 UK Parliament, Select Committee on Culture, Media and Sport, Sixth Report (30 April 2008): <https://publications.parliament.uk/pa/cm200708/cmselect/cmcumeds/104/10406.htm>

14 ‘Who We Are’, London Legacy Development Corporation website: <https://www.queenelizabetholympicpark.co.uk/our-story/who-we-are>

15 ‘London 2012: How the world saw the Olympic Games’, BBC News website (13 August 2012): <https://www.bbc.co.uk/news/uk-politics-19238284>

16 For reporting on this, see, for example, Patrick Wintour, ‘We would not have bid for games during recession, says Jowell’, The Guardian (13 November 2008): <https://www.theguardian.com/uk/2008/nov/13/olympics2012-recession>

17 See Penny Bernstock, Olympic Housing: A Critical Review of London 2012’s Legacy (Routledge, 2014).

18 Mark Wilding, ‘Three ways in which the Olympic legacy vision has changed over the past 15 years’, Planning Resource (21 July 2017): <https://www.planningresource.co.uk/article/1440044/three-ways-olympic-legacy-vision-changed-past-15-years>

19 UK Parliament, ‘Commission for Architecture and the Built Environment (Dissolution) Order 2012 Volume 734: debated on Monday 16 January 2012’, Hansard.

20 For some background information on the competition, see, for example, ‘Athletes Village for the London 2012 Olympic and Paralympic Games’, [http://akichiatlas.com/en/archives/athletes\\_village\\_london.php](http://akichiatlas.com/en/archives/athletes_village_london.php)

21 See ‘Quality Review Panel’, London Legacy Development Corporation website: [www.queenelizabetholympicpark.co.uk/planning-authority/making-an-application/quality-review-panel](http://www.queenelizabetholympicpark.co.uk/planning-authority/making-an-application/quality-review-panel)

22 For the statutory instrument establishing the LLDC, see ‘The London Legacy Development Corporation (Establishment) Order 2012’: <https://www.legislation.gov.uk/ukSI/2012/310/contents/made>

23 London Legacy Development Corporation, Queen Elizabeth Olympic Park: Strategy to 2025, p. 7, footnote 4.

24 ‘Statement on the Queen Elizabeth Olympic Park Fixed Estate Charge’, London Legacy Development Corporation website: <https://www.queenelizabetholympicpark.co.uk/the-park/homes-and-living/fixed-estate-charge>

25 ‘Boris Johnson: The Olympic park will be the Albertopolis of the east’, Evening Standard (5 December 2013): <https://www.standard.co.uk/comment/comment/boris-johnson-the-olympic-park-will-be-the-albertopolis-of-the-east-8982871.html>

26 London 2012 Olympic Games Official Report – Volume 1 (2013), p. 25.

27 ‘West Ham: London Stadium rent “does not even cover cost of matches”, owners say’, BBC News website (6 September 2018): <https://www.bbc.co.uk/sport/football/45439883>

28 <https://www.london.gov.uk/press-releases/assembly/london-stadium-costing-londoners-more-than-8m>

29 Strategic Regeneration Framework: An Olympic legacy for the host boroughs (2009), p. 11.

30 ‘Homes and Living’, London Legacy Development Corporation website: <https://www.queenelizabetholympicpark.co.uk/the-park/homes-and-living>

31 See Mayor of London, The London Plan: The Spatial Development Strategy for Greater London (March 2021), p.476: [https://www.london.gov.uk/sites/default/files/the\\_london\\_plan\\_2021.pdf](https://www.london.gov.uk/sites/default/files/the_london_plan_2021.pdf)

32 Rupert Jones, ‘Homeowners near London Olympic park hit out at ‘unfair’ estate charge’, The Guardian (28 April 2021): <https://www.theguardian.com/society/2021/apr/28/homeowners-london-olympic-park-criticise-unfair-estate-charge-chobham-manor>

33 London Legacy Development Corporation, Local Plan 2020 to 2036, p.55.

34 London Legacy Development Corporation and Design for London, Stitching the Fringe: Working around the Olympic Park (2013), pp. 15, 19.

35 See, for example, Peter Bishop, Design for London, Bartlett Design Research Folios (2016): [issuu.com/bartlettarchucl/docs/bishop\\_01\\_dfl\\_s05\\_update/39](http://issuu.com/bartlettarchucl/docs/bishop_01_dfl_s05_update/39)

36 ‘Bridge to the future on Queen Elizabeth Olympic Park’, London Legacy Development Corporation website press release (13 January 2020): [www.queenelizabetholympicpark.co.uk/media/press-releases/bridge-to-the-future-on-queen-elizabeth-olympic-park](http://www.queenelizabetholympicpark.co.uk/media/press-releases/bridge-to-the-future-on-queen-elizabeth-olympic-park)

37 ‘Twelvetreets Ramp tops out’, 5th Studio website (3 October 2016): <https://www.5thstudio.co.uk/journal/twelvetrees-ramp-tops-out/>

38 Ross Lydall, ‘Olympic Park to be given £25m “green transport” makeover for pedestrians and cyclists’, Evening Standard (11 April 2019): <https://www.standard.co.uk/news/london/olympic-park-to-be-given-ps25m-green-transport-makeover-for-pedestrians-and-cyclists-a4115111.html>

39 Greater Carpenters Neighbourhood Plan, 2019–2028 (Submission version May 2019), available at: <https://www.queenelizabetholympicpark.co.uk/-/media/lldc/planning/neighbourhood-planning/greater-carpenters-neighbourhood-plan/neighbourhood-plan-submission-version-gcnf.ashx?la=en>

40 Laura Edgar, ‘Newham estate regeneration scheme approved’, The Planner (20 December 2021): <https://www.theplanner.co.uk/news/newham-estate-regeneration-scheme-approved>

41 London Legacy Development Corporation, Queen Elizabeth Olympic Park: Valuing Landscape (February 2021), p. 9.

42 ‘The Park and Open Spaces’, London Legacy Development Corporation website: <https://www.queenelizabetholympicpark.co.uk/our-story/how-we-work/design-excellence/the-park-and-open-spaces>

43 Valuing Landscape (2021), p.9.

44 Richard Waite, ‘London practice behind new Olympic Park arena for ABBA’s virtual comeback tour’, Architects’

Journal (3 September 2021): <https://www.architectsjournal.co.uk/news/london-practice-behind-new-olympic-park-arena-for-abbas-virtual-comeback-tour>

45 See ‘Art in the Park. Sculpture in the Olympic Park for London 2012’, Art & Architecture Journal (27 April 2012): <https://aajpress.wordpress.com/2012/04/27/art-in-the-park-sculpture-in-the-olympic-park-for-london-2012/>

46 London Legacy Development Corporation, ‘Eyes, and minds, and dreams, and tongues’: Arts & culture strategy (2014).

47 Information kindly provided by James Atherton, Development Director, Unibail–Rodamco–Westfield

48 ‘Hackney needs promised employment space’, Financial Times (24 June 2012): <https://www.ft.com/content/b185c6ee-bbc9-11e1-9436-00144feabdc0>. For Pipe’s reflections on this issue in 2016, see: <https://news.hackney.gov.uk/mayor-of-hackney-discusses-olympic-legacy-in-final-speech/>

49 See Bruce Katz and Julie Wagner, ‘The Rise of Innovation Districts: A New Geography of Innovation in America’: <https://www.brookings.edu/essay/rise-of-innovation-districts/>

50 London Assembly Regeneration Committee, Relighting the torch: securing the Olympic legacy (November 2017), p. 12.

51 See <https://www.queenelizabetholympicpark.co.uk/-/media/shift-progress-update-dec-2021.ashx>; <https://www.ucl.ac.uk/ucl-east/news/2022/jan/ucl-helps-spearhead-new-shift-innovation-district-london>

52 Queen Elizabeth Olympic Park: Strategy to 2025, p. 6.

53 London Legacy Development Corporation, Spatial Portrait Background Paper (October 2018), p. 6 (2018 estimate).

54 <https://www.5thstudio.co.uk/journal/5th-studio-appointed-to-lead-urban-design-framework-for-stratford-station/>

55 ‘IGP launches pioneering longitudinal study of impacts of regeneration of east London’, UCL website (26 August 2021): <https://www.ucl.ac.uk/bartlett/igp/news/2021/aug/igp-pioneers-uks-first-longitudinal-study-household-prosperity-based-community-led>

56 Lord Kerslake, Review of GLA Group housing delivery (March 2022), p. 70 (Recommendation 14): [https://www.london.gov.uk/sites/default/files/kerslake\\_review\\_of\\_gla\\_group\\_housing\\_delivery.pdf](https://www.london.gov.uk/sites/default/files/kerslake_review_of_gla_group_housing_delivery.pdf)

57 ‘London 2012: a legacy that keeps giving’, Olympic Games (IOC) website (13 April 2021): <https://olympics.com/ioc/news/london-2012-a-legacy-that-keeps-giving>

58 ‘Paris 2024 commits to staging climate-positive Olympic and Paralympic Games’, Olympic Games (IOC) website (23 March 2021): <https://olympics.com/ioc/news/paris-2024-commits-to-staging-climate-positive-olympic-and-paralympic-games>



# FURTHER READING

The Olympic World Library of the Olympic Studies Centre is a searchable, comprehensive online archive of documents and policies relating to London 2012: [library.olympics.com](http://library.olympics.com)

Key documents and publications relating to Queen Elizabeth Olympic Park are available at: [queenelizabetholympicpark.co.uk/our-story/how-we-work/documents](http://queenelizabetholympicpark.co.uk/our-story/how-we-work/documents)

For guidance and policies see: [queenelizabetholympicpark.co.uk/our-story/how-we-work/design-excellence/policy-publications-and-awards](http://queenelizabetholympicpark.co.uk/our-story/how-we-work/design-excellence/policy-publications-and-awards)

The following list is a very brief selection of key documents intended as a starting point for those wishing to explore the topic further.

*Penny Bernstock, Olympic Housing: A Critical Review of London 2012’s Legacy (2014)*

*Richard Brown, Creative Factories: Hackney Wick and Fish Island (2013)*

*Denise Chevin, New urban living for London: the making of East Village (published by The Smith Institute, London, 2012)*

*Create London, Finding the Leaway: A Curatorial Approach for the River Lea*

*Create London, Odd Guides to the Leaway* (three printed and audio guides giving young people’s perspectives on the Lower Lea Valley): [createlondon.org/event/the-odd-guides](http://createlondon.org/event/the-odd-guides)

Department for Culture, Media and Sport, Before, during and after: making the most of the London 2012 Games (2008): [library.olympics.com/Default/doc/SYRACUSE/209683/before-during-and-after-making-the-most-of-the-london-2012-games-department-for-culture-media-and-sp?\\_lg=en-GB](http://library.olympics.com/Default/doc/SYRACUSE/209683/before-during-and-after-making-the-most-of-the-london-2012-games-department-for-culture-media-and-sp?_lg=en-GB)

*Tom Dyckhoff and Claire Barrett, The Architecture of London 2012: Vision, Design, Legacy (2012)*

*Hattie Hartman, London 2012 Sustainable Design: Delivering an Olympic legacy (2012)*

International Olympic Committee (IOC), Legacy Strategic Approach: Moving Forward (2017): [stillmed.olympics.com/media/Document%20Library/OlympicOrg/Documents/Olympic-Legacy/IOC\\_Legacy\\_Strategy\\_Full\\_version.pdf](http://stillmed.olympics.com/media/Document%20Library/OlympicOrg/Documents/Olympic-Legacy/IOC_Legacy_Strategy_Full_version.pdf)

Andreas Lang, Mara Weiss and Carlotta Novella, Civic Spaces, Social Ecosystems (Published by public works for London Legacy Development Corporation, 2016): [ualresearchonline.arts.ac.uk/id/eprint/11440/](http://ualresearchonline.arts.ac.uk/id/eprint/11440/)

London Assembly Regeneration Committee, Relighting the torch: securing the Olympic legacy (2017): [london.gov.uk/sites/default/files/convergence\\_short\\_report\\_final.pdf](http://london.gov.uk/sites/default/files/convergence_short_report_final.pdf)

*London Legacy Development Corporation, Characterisation Study (April 2019)*

London Legacy Development Corporation, Design Quality Policy: [queenelizabetholympicpark.co.uk/-/media/design-quality-policy\\_web.ashx?la=en](http://queenelizabetholympicpark.co.uk/-/media/design-quality-policy_web.ashx?la=en)

*London Legacy Development Corporation, ‘Eyes, and minds, and dreams, and tongues’: Arts & culture strategy (2014)*

London Legacy Development Corporation, Inclusive Design Standards (May 2019): [queenelizabetholympicpark.co.uk/-/media/inclusive-design-standards-low-res-final.ashx?la=en](http://queenelizabetholympicpark.co.uk/-/media/inclusive-design-standards-low-res-final.ashx?la=en)

London Legacy Development Corporation, Lea River Park: Primer (2016): [newham.gov.uk/downloads/file/862/lrp-primer-nov-2016](http://newham.gov.uk/downloads/file/862/lrp-primer-nov-2016)

London Legacy Development Corporation, Local Plan 2020 to 2036 (January 2021): [queenelizabetholympicpark.co.uk/planning-authority/planning-policy/local-plan-2020-2036](http://queenelizabetholympicpark.co.uk/planning-authority/planning-policy/local-plan-2020-2036)

London Legacy Development Corporation, Park Design Guide (2018): [queenelizabetholympicpark.co.uk/-/media/lldc\\_park-design-guide\\_web.ashx?la=en](http://queenelizabetholympicpark.co.uk/-/media/lldc_park-design-guide_web.ashx?la=en)

London Legacy Development Corporation (commissioned from LDA Design), Queen Elizabeth Olympic Park: Valuing Landscape (2021): [queenelizabetholympicpark.co.uk/-/media/qeop\\_valuing-landscape\\_final](http://queenelizabetholympicpark.co.uk/-/media/qeop_valuing-landscape_final)

London Legacy Development Corporation, Spatial Portrait Background Paper (2018): [queenelizabetholympicpark.co.uk/-/media/lldc/local-plan/examination-2019/technical-background-papers/tbp7-spatial-portrait-background-paper.ashx?la=en](http://queenelizabetholympicpark.co.uk/-/media/lldc/local-plan/examination-2019/technical-background-papers/tbp7-spatial-portrait-background-paper.ashx?la=en)

London Legacy Development Corporation and Design for London, Stitching the Fringe: Working around the Olympic Park (2013): [queenelizabetholympicpark.co.uk/~media/qeop/files/public/publications/s136682673stitchingthefringeapr2013.pdf](http://queenelizabetholympicpark.co.uk/~media/qeop/files/public/publications/s136682673stitchingthefringeapr2013.pdf)

London Legacy Development Corporation, A Walk Around Queen Elizabeth Olympic Park: [queenelizabetholympicpark.co.uk/-/media/qeop/files/public/a-walk-around-queen-elizabeth-olympic-park.ashx?la=en](http://queenelizabetholympicpark.co.uk/-/media/qeop/files/public/a-walk-around-queen-elizabeth-olympic-park.ashx?la=en)

London Legacy Development Corporation, Your Sustainability Guide to Queen Elizabeth Olympic Park 2030 (2012): [queenelizabetholympicpark.co.uk/-/media/qeop/files/public/misc-documents/lldc\\_your\\_sustainability\\_guide\\_to\\_the\\_queen\\_elizabeth\\_olympic\\_park2030.ashx?la=en](http://queenelizabetholympicpark.co.uk/-/media/qeop/files/public/misc-documents/lldc_your_sustainability_guide_to_the_queen_elizabeth_olympic_park2030.ashx?la=en)

The London Organising Committee of the Olympic Games and Paralympic Games, London 2012 Olympic Games Official Report – Volume 1 (2013): [stillmed.olympic.org/Documents/Reports/Official%20Past%20Games%20Reports/Summer/2012/ENG/2012-RO-S-London\\_V1\\_I\\_eng.pdf](http://stillmed.olympic.org/Documents/Reports/Official%20Past%20Games%20Reports/Summer/2012/ENG/2012-RO-S-London_V1_I_eng.pdf)

New London Architecture, The Changing Face of London (2020): [nla.london/insights/the-changing-face-of-london](http://nla.london/insights/the-changing-face-of-london)

Olympic Delivery Authority, Lifetime Corporate Plan Summary (2007): [library.olympics.com/default/digitalCollection/DigitalCollectionInlineDownloadHandler.ashx?parentDocumentId=67273&documentId=158235&\\_cb=20210507201652](http://library.olympics.com/default/digitalCollection/DigitalCollectionInlineDownloadHandler.ashx?parentDocumentId=67273&documentId=158235&_cb=20210507201652)

Olympic Park Legacy Company, Creating the Queen Elizabeth Olympic Park: Post-Games Transformation (2012):[queenelizabetholympicpark.co.uk/-/media/qeop/files/public/publications/80251749transformati\\_onbrochurejan2012.ashx?la=en](http://queenelizabetholympicpark.co.uk/-/media/qeop/files/public/publications/80251749transformati_onbrochurejan2012.ashx?la=en)

Jason Prior, ‘Lower Lea Valley Olympic and Legacy Masterplans’, chapter 19 in Urban Design Futures, ed. Malcolm Moor and Jon Rowland (2006); open access content available to download at: [taylorfrancis.com/chapters/oa-edit/10.4324/9780203601723-34/lower-lea-valley-olympic-legacy-masterplans-jason-prior?context=ubx&refId=85aeec16-af94-4581-a1f3-d18da95f767a](http://taylorfrancis.com/chapters/oa-edit/10.4324/9780203601723-34/lower-lea-valley-olympic-legacy-masterplans-jason-prior?context=ubx&refId=85aeec16-af94-4581-a1f3-d18da95f767a)

Strategic Regeneration Framework: An Olympic legacy for the host boroughs (2009)



# NEW LONDON ARCHITECTURE



# SPONSORS

NLA is an independent, purpose-led membership organisation for everyone with an interest in London’s built environment.

NLA’s programme and its family of brands and projects engages the broadest possible audience across government, business and the public and abroad to educate, challenge, connect and create positive change.

From public realm to workspaces to London’s homes and more, NLA’s broad range of projects, research and events connects London’s network of professionals and enthusiasts, uniting the industry to shape a better city.

New London Architecture  
(NLA)

nla.london  
info@nla.london  
+44 (0)207 636 4044  
@nlalondon  
@nlalondon

Principal Partners:









The Olympic and Paralympic Games in 2012 were a pivotal moment in the recent history of London, but their long-term importance lies as a catalyst for the wider regeneration of the East End. Marking the 10th anniversary of the Games, this extensive and beautifully-illustrated book encapsulates the concept of legacy by charting the transformation of Queen Elizabeth Olympic Park over the last 10 years, and presents what's to come for the future.

