CREATING THE QUEEN ELIZABETH OLYMPIC PARK
POST-GAMES TRANSFORMATION
For years a polluted industrial site and a barrier to urban renewal, the Lower Lee Valley is now being radically and rapidly transformed. The catalyst for this transformation is the London 2012 Olympic and Paralympic Games. Since the announcement in 2005 that London would be the host city for the 2012 Games, the Olympic Delivery Authority (ODA) have been tasked with preparing the site for the biggest show on earth. It has been a remarkable endeavour to prepare the site – demolishing existing structures, decontaminating huge volumes of soil, undergrounding miles of overhead cables, building the new permanent and temporary venues, installing new infrastructure, and constructing the Games-time Park. What was once industrial, contaminated land is being turned into a stunning new urban park in one of Europe’s largest regeneration projects.

“WHAT WAS ONCE INDUSTRIAL, CONTAMINATED LAND IS BEING TURNED INTO A STUNNING NEW URBAN PARK IN EUROPE’S LARGEST REGENERATION PROJECT”
Broadcast to millions of television viewers worldwide and with up to 200,000 visitors on the busiest days, the Olympic Park will be the centre-piece of the London 2012 Games – but the story doesn’t stop there. Once the Games are over the Olympic Park will be transformed from its Games-time environment by taking away the temporary venues and temporary facilities, connecting the internal Games-time service road into the surrounding streets, and extending the Games-time Park, creating a permanent urban park for east London – one of the largest to have been created in Europe in the last 150 years. The completion of this phase of works will not only realise the future Queen Elizabeth Olympic Park but also define development plots that will be the platforms for future housing, leisure and employment in the area, under the guidance of the Olympic Park Legacy Company.

The extensive parkland, the waterways, the legacy sports venues plus new attractions such as the ArcelorMittal Orbit will create a new destination for local residents and visitors to London with the sports facilities catering for both high performance athletes as well as local communities. Two new park hubs will provide café, WCs and meeting places. The Park will be further animated in the north-east by the VeloPark, an area dedicated to cycling including the Velodrome, a new one mile road cycle circuit, an extensive outdoor mountain bike course and BMX venue. Football will return to the Hackney East Marshes to the north, whilst allotments are created at Eton Manor and just to the north of the Greenway in the south Park area. An extensive network of footpaths will traverse through 102 hectares of landscaped parklands.

“FOOTBALL WILL RETURN TO THE HACKNEY EAST MARSHES TO THE NORTH”
In the summer of 2012 the Olympic Park will play host to the world’s greatest sporting occasion, the London Organising Committee for the Olympic Games (LOCOG) are responsible for staging the Games. Millions of people will visit the Park during this period both for the Olympic and the Paralympic Games. Whilst large areas of concourse are needed to enable crowds to move between the various venues, the Athletes’ Village, the entrances to the Park, the media zones and the spectator service areas, the spine of the Park will be the permanent Parkland that is being created on the valley slopes of the various watercourses. With its gardens and spectator lawns this parkland will provide welcome break-out spaces from the concourse during the Games.

In the north Park the parkland has been designed as an ecological system with sculpted landforms providing the structure for sustainable water management and biodiversity programmes. Bio-swales will convey rainwater slowly from the concourse through a series of check dams and wetland areas before finally reaching the river system. Feature meadows, woodland planting and wet woodland, will provide a patchwork of habitats. The parkland provides the dynamic visual setting for two permanent venues, the Velodrome, the Multi-Use Arena (Handball in Games-time), as well as two temporary venues (Basketball and Hockey).

“The parkland has been designed as an ecological system with sculpted landforms providing the structure for sustainable water management and biodiversity programmes”
The south Park by contrast has a more urban feel. The London 2012 Gardens will create a dramatic first impression to the thousands of visitors who will enter the Park through the principal entrance from Westfield Stratford City. Stretching for half a mile between the Aquatics Centre and Olympic Stadium, the gardens will celebrate centuries of British passion for gardens and plants and will trace the journey of the UK’s plant collectors around the world through more than 250 species of plants, trees, meadows and herbs. The south Park will also feature the Great British Garden as well as hundreds of metres of restored river valley green-space and will provide a parkland setting for the permanent Olympic Stadium, the Aquatic Centre, the towering ArcelorMittal Orbit and the temporary Water Polo venue.

Over two thousand trees will be planted to create the Games-time Park whilst over three hundred thousand aquatic plants will contribute to the UK’s largest ever urban river and wetland planting project. The Park design will push horticultural boundaries with a pioneering approach to planting creating stunning display meadows. It will also be a highly accessible Park. The gradients of the paths will be accessible to everyone and views will be maintained of the new venues and landmarks in the surrounding area.

“THE PARK DESIGN WILL PUSH HORTICULTURAL BOUNDARIES WITH A PIONEERING APPROACH TO PLANTING CREATING STUNNING DISPLAY MEADOWS”
Whilst the eyes of the world will be on the Olympic Park during the 2012 Games, it will only become fully open to the public after the Games, once the transformation phase is nearing completion and the security fence can be taken down. Fully opened, the Park, including its venues and attractions, will be revealed as an exemplar of urban design, built to exceptionally high standards and with such a variety of uses that it becomes a local, national and international destination.

Great effort has gone into making sure the Games-time Park can be readily transformed into its permanent legacy condition, whilst retaining as much of the Games mode Park as possible. Designing the two modes in tandem has ensured that the process of transformation will be rapid and efficient, protecting the investment that has already been made in a high quality landscape and minimising the amount that has to be done post-Games.

The first component of transformation will be the clearing of the Games-time overlay. This will include the dismantling of the temporary venues (Hockey, Basketball and Water Polo), the Aquatics Centre’s temporary stands, Park-wide temporary infrastructure, back of house areas and the LOCOG Games mode overlay. Large areas of concourse will also be removed to make way for the permanent post-Games Park and streets.
The second component will be the creation of connections or ‘stitches’ to the wider area. The transformation of the Park will create cleared sites for post-Games development. These will be developed over a period of time and therefore, in order to ensure that whilst these sites are still latent there are attractive pedestrian and cyclist routes into the Park, a series of green park connections or ‘stitches’ will be created. These will be partially temporary and permanent landscapes, persisting while the adjacent development platforms remain undeveloped and will effectively take the Park out to the surrounding communities. New streetscapes will also be created, forming a permanent public realm within the Park.


The final component will be the completion of the parkland and the venues. The scale of the task should not be underestimated. The transformation parkland will be the same size as the Games-time Park. It will involve the planting of a further two thousand trees, the creation of tens of hectares of meadow, species-rich lawn and landform, a new cycle circuit and two large allotment sites. The transformation project will result in the creation of the most significant urban park in the UK for well over a century. The Park then becomes the setting for the transformed permanent venues, the works to which range from the substantial modification of the Aquatics Centre to the modest internal alterations required at the Velodrome.
Immediately after Games, the removal of Games-time overlay and the dismantling of the temporary venues will commence. The Hockey and Basketball venues in the North Park, and Waterpolo in the South Park will make way for the creation of new areas of parkland and future residential development.
The design intent for the transformation streets is to provide the Park with a high quality urban street network that complements the Park’s character and connects coherently into the existing streets. The features of the streetscape have adopted best practice contemporary urban design, promoting and favouring use by pedestrians and cyclists. The key design features are seen as adopting the Games-time roads where possible, extending the use of the modern, neutral palette of materials, finishes and components, avoiding unnecessary clutter and providing legible and safe environments.

“The features of the streetscape have adopted best practice contemporary urban design, promoting and favouring use by pedestrians and cyclists”
CREATING CONNECTIONS

‘STITCH’ CONNECTIONS

The ‘stitches’ will be safe and attractive pedestrian and cyclist connections linking the transformed Park to surrounding communities in the interim period between the post-Games transformation of the Park and the build-out of the Legacy Communities Scheme (LCS) on the development platforms. These ‘stitches’ will connect communities not only into the Park but also into cross-park routes, stitching east to west and north to south in a way that didn’t exist before the Park was created.

The stitches will be a combination of temporary and permanent landscapes, depending on the likelihood of future change. They have been designed to achieve a high impact, with areas of meadow, trees in planters and attractive surfacing taking the Park out to the surrounding communities. In the case of the temporary elements, when the adjacent development platforms are built out they will have served their purpose and will be decommissioned and replaced, where necessary, with permanent infrastructure in the form of streets and boulevards.

“These ‘stitches’ will connect communities not only into the Park but also into cross-park routes”

The principal stitches are:
- Park Street and the route to the Velodrome
- Wallis footbridge and Multi-Use Arena
- Monier footbridge
- From Carpenter’s Road into the South Park
- From Stratford City into the South Park
- From the Greenway into the South Park
- From Stratford High Street to the Aquatics Centre.
“THE VELODROME HAS BEEN DESIGNED WITH ITS LONG TERM USE IN MIND FROM THE START AND WILL ONLY REQUIRE RELATIVELY MINIMAL TRANSFORMATION”
AQUATICS CENTRE

In transformation the temporary seating stands will be removed. The permanent venue will feature 2500 seats and will cater for all levels of swimming ability and aquatic disciplines. The centre will be open to the local community and schools. At the national and international level, seating accommodation and a range of facilities will enable the venue to cater for major events including national and European events. Triathlon England and British Swimming are planning on using the venue regularly, and a range of events are being considered.

THE PRESS AND BROADCAST CENTRES

The Games-time Media Centre comprising of the main Press Centre, the multi-storey car park and the International Broadcast Centre will all be transformed after the Games, with the east gantry of the Games mode International Broadcast Centre, that supports the building’s mechanical services, being removed to permit the construction of Waterden Road.

“THE PERMANENT VENUE WILL FEATURE 2500 SEATS AND WILL CATER FOR ALL LEVELS OF SWIMMING ABILITY”
The design intent and detailed coordination for permanent bridges, underpasses, retaining structures and roads delivered for Games-time functionality have been specifically designed for long-term adoption wherever possible. The visual impact that these infrastructure elements have on the look and feel of the city has a significant role to play in the quality and coherence of the urban environment. A core design principle has been that these essentially functional features need not be elaborate or over-emphasised nor given a status that exceed their role within the Park and the broader city context. These structures are designed as a coordinated ‘family’ of elements that contribute to the Olympic Park character and identity. They are integral to the landscape, providing access and connectivity effortlessly across the waterways, roads and railways. The completed Games-time Park elements will have set a benchmark for quality, and provide an essential reference for the transformation works.

**MULTI-USE ARENA**

This venue in its Games mode will host the opening stages of the Handball Event, the Modern Pentathlon Fencing and the Paralympic Goalball, it will be known as the Copper Box at Games-time. After the 2012 Games the venue is to be further modified to create a community multi-purpose sports arena capable of hosting a number of different events.

“AFTER THE 2012 GAMES THE VENUE IS TO BE FURTHER MODIFIED TO CREATE A COMMUNITY MULTI-PURPOSE SPORTS ARENA”
THE TRANSFORMED PARK

The transformed Park will also form the backdrop to the retained venues – the Aquatics Centre, the Stadium, the Velodrome, the (reconfigured as a Multi-Use Sports Venue) and the Eton Manor sports centre – as well as some major pieces of public art, not least of which will be Anish Kapoor’s ArcelorMittal Orbit.

Following completion of all the transformation works, the Park will be accessible to the public for the first time. It will be a destination for local communities as well as for visitors from much further afield. The 102 hectare Park will offer a wide range of recreational opportunities as a place for events, culture, sport and entertainment as well as food growing and biodiversity. In its transformation state the Park will comprise: expansive areas of grass and meadow for picnicking, sunbathing, events and playing; accessible waterways for a variety of water-based activities; fifteen kilometres of walking and cycling routes; gardens; two all-weather hockey pitches; six outdoor tennis courts; two large allotment sites; a six and a half kilometre mountain bike trail comprising a family route, a moderate route and a more challenging route; a one mile speed cycle circuit; a wide variety of ecological areas; a BMX track; children’s play (both embedded and equipped); and a national cycle route.

“In its transformation state the Park will comprise: expansive areas of grass and meadow for picnicking, sunbathing, events and playing”
As well as having a great variety of uses, the Queen Elizabeth Olympic Park will also be a highly accessible park. A range of transport improvements serving the Park are already underway, including an extension to the Docklands Light Railway (DLR), increased capacity on the Jubilee Line and the upgrade of Stratford Station.

The new Waterden Road will provide bus stops alongside the north Park and Carpenter’s Road alongside the south Park. The ‘stitch’ connections will make accessing the Park an attractive experience for everyone. These connections will meet the same exemplary standards of inclusive access that have guided the design of the rest of the Park.

The parklands have been designed to ‘Secured by Design’ principles for both Games-time and long term post-Games Park. In particular, care has been given to the design of pedestrian routes and the avoidance of dead ends and obstructed views.
A SUSTAINABLE PARK

The London 2012 Games will be the most sustainable ever and the mantra of ‘lean, mean and green’ that has guided the design of the Park and its venues for the 2012 Games will continue right through into its transformation. The post-Games Park has been designed to retain as much of the Games-time Park as possible. Where retention is not possible there will be inventive re-use and recycling. The security fencing for example will be taken down and folded into cage structures to be used as planters for the several hundred trees that will line the ‘stitch’ connections.

The design of the Park minimises the use of energy and water. There will be only minimal irrigation and mostly just in the establishment phase. Native species have been selected throughout the Park, not only for their biodiversity value but also for their ability to withstand a changing climate.

Most of the lighting required by the Queen Elizabeth Olympic Park will have already been installed for Games, all of it featuring low energy luminaires and much of it fitted with photovoltaic panels to capture the sun’s energy.

Low-carbon materials have been selected throughout (for example the aggregate surfacings are held together with a vegetable rather than a conventional bitumen binder) whilst innovative sustainable drainage techniques will convey rainwater through the parkland rather than discharging it rapidly into the river system. As well as taking a responsible approach to resource management the Queen Elizabeth Olympic Park will also meet ambitious biodiversity targets. Over 45 hectares of new or improved habitat will be created, transforming a largely derelict and contaminated site into a tapestry of species-rich grassland, wet woodland, reedbeds, ponds, trees and scrub, brownfield habitat and park and garden habitats.

“NATIVE SPECIES HAVE BEEN SELECTED THROUGHOUT THE PARK, NOT ONLY FOR THEIR BIODIVERSITY VALUE BUT ALSO FOR THEIR ABILITY TO WITHSTAND A CHANGING CLIMATE”
The north Park will be environmentally bio-diverse with a rich tapestry of habitats. It will provide a setting for the Eton Manor sports facilities, the retained Velodrome and the Multi-Use Arena. With the removal of the Hockey and Basketball venues following the Games, the north Park represents the most significant area of parkland transformation. It will incorporate major lawn areas, the completion of the landform which defines the north Park’s unique character, a one-mile speed cycle circuit and a mountain bike track.

The north Park will be a place where new habitats, allotments and sports facilities (at Eton Manor), recreational and competitive cycling, the river and new footpath routes are brought together through a distinctive landscape of tree planting, meadows and sculpted landform. This will deliver a parkland that provides for the broadest range of day to day programmed uses imaginable.

The north Park comprises:
- Eton Manor
- VeloPark
- The Parkland Bowl
- The Multi-Use Arena
- The Press Centre and Broadcast Centre
THE NORTH PARK

ETON MANOR

Eton Manor is the northern most part of the Park, sitting between Ruckholt Road and the A12. In transformation its focus will be a new sports centre for high performance athletes as well as local communities around which will sit a variety of sporting and community facilities. These facilities will include a Hockey and Tennis Centre, a concourse area for the England Hockey overlay, car parking for 179 vehicles, the existing war memorials incorporated into an enhanced landscape setting, mountain bike trails, an area of meadow; and nearly a hectare of allotment space. An area in the north-east corner will be levelled for the future development of five-a-side football pitches.

“ITS FOCUS WILL BE A NEW SPORTS CENTRE FOR HIGH PERFORMANCE ATHLETES AS WELL AS LOCAL COMMUNITIES”

NORTH-WEST PARK

This is the area immediately to the east of the new Waterden Road and the Press and Broadcast Centres. In transformation this area will undergo dramatic change with the removal of the temporary Hockey venue, concourse and back of house areas creating an open parkland landscape which will lend itself to informal activities such as picnicking and leisure sports activities. It is bounded to its west by Waterden Road, a new boulevard that connects the north end of the site to the south. Trees in the parkland are arranged in formal grids and avenues. The north-west corner also forms an important ecological corridor that complements and expands upon the plant communities in the north Park.
The area to the west of the Velodrome will be converted into a VeloPark comprising a variety of mountain bike trails and a road cycle circuit. The VeloPark infrastructure will be overlaid on top of the Games-time parklands, with the objective of retaining as much of the existing parkland as possible. To accommodate the cycle track loop some of the parkland landforms, pedestrian paths and seating terraces will need to be modified. The mountain bike trails will be carved into the existing landscape, in some locations small mounds will be added to provide further variety to the mountain bike network.

The riverside paths will continue through the VeloPark and connect the parklands with the communities to the north. The Velodrome itself will sit at the heart of the VeloPark with an entrance square to its south and an adjacent car-park to the east. The BMX course created for the Games is adjusted to provide a facility for cyclists of all levels.

“THE OBJECTIVE: RETAINING AS MUCH OF THE EXISTING PARKLAND AS POSSIBLE”
During the transformation of the Park, modifications and additions will be made to the structures, landforms and plant communities within the parkland bowl – the core north Park area delivered in the Games-time mode. In particular the removal of the temporary bridges will provide opportunity to reduce the width of the bridge approaches and expand the adjacent wetland habitats and species-rich meadows. Some plant communities will be developed from the display plantings of the Games-time mode to ecologically richer communities.

To the south of the north park, the Multi-Use Arena will become an important local facility of the surrounding communities. Connected to Hackney Wick by the new pedestrian link, Wallis footbridge (H10), the venue will provide a range of opportunities for local leisure and sport. During transformation, the building is modified for long-term use internally, and the external area is prepared for long-term operations, including the provision of some parking and a rear service area.

"THE VENUE WILL PROVIDE A RANGE OF OPPORTUNITIES FOR LOCAL LEISURE AND SPORT"
“THE SOUTHERN PART OF THE PARK WILL FOCUS ON RETAINING THE FESTIVAL ATMOSPHERE OF THE GAMES”

The southern part of the Park will focus on retaining the festival atmosphere of the Games, with riverside gardens, markets, events, cafes and bars and, with its proximity to Westfield Stratford City, it will be the primary entrance for the majority of visitors to the Park.

The South Park will comprise:
- Stratford Waterfront, focused on the Waterworks River
- Carpenter’s Road area
- Aquatics Centre and
- Greenway Allotment Site
- ArcelorMittal Orbit
- The Stadium
THE STRATFORD WATERFRONT

The Stratford Waterfront comprises two principal component spaces – the retained concourse and the London 2012 Gardens. The ArcelorMittal Orbit structure will form a dramatic focus to the concourse space and to the big events and fairs that will be held there. Additional trees will be planted within this area after the Games to enhance it as a piece of permanent parkland. On the eastern edge of this area of concourse are the 2012 Gardens which will provide a formal linear garden some 800 metres in length with a series of terraces and paths working their way through a rich horticultural display. These are largely constructed for the Games and are expected to become one of the enduring features of the event. After the Games there will be some additional planting related to the dismantling of temporary bridge structures.

“AN ATTRACTIVE SETTING FOR A NEW RIVERSIDE PROMENADE”

The Games-time concourse will be removed along with the two temporary spectator stands to allow the construction of both permanent parkland and a car park for the Aquatics Centre. Two sculpted landforms will ‘settle’ the building into the Park and provide an attractive setting for a new riverside promenade and an outdoor café space. The landforms will be cloaked in meadow planting with their slopes planted with informal clumps of trees. Seating terraces will be cut into the river facing slope.
THE SOUTHPARK

CARPENTER’S ROAD

This forms the principal Games-time connection between the north and south Parks with a landbridge spanning both Carpenter’s Road and the rail lines and forming a high point within the site. After the Games a series of green ‘bowls’ and ‘lenses’ will be created.

“THE CONNECTION BETWEEN THE NORTH AND SOUTH PARKS”

THE GREENWAY ALLOTMENT SITE

Over one hectare of allotment space will be created on the site immediately to the north of the Greenway. The allotments will be provided with secure fencing, paths, sheds, water supply, composting facilities and a small communal building.
The plans for the Park after the 2012 Games are more advanced than any previous host city. We are set to deliver an exciting mix of new homes, jobs and training, along with sporting, cultural and entertainment opportunities to the local area. Already six out of eight permanent venues on the Park have their long-term future secured.

“The project will demand strong leadership, meticulous planning and attention to detail.”

The diversity and the scale of the transformation project is significant and the programme to deliver the completed design through to construction is challenging. The project will demand strong leadership, meticulous planning and attention to detail. The priority themes applied to the design and delivery of the Games-time park should continue to be inherent in all transformation project activities, reflecting best practice from the construction industry. These are:

• Design and Accessibility
• Employment and Skills
• Equality and Inclusion
• Health, Safety and Security
• Legacy
• Sustainability

Olympic Park Legacy Company Limited
5th floor 9-35 West Ham Lane Stratford London E15 4PH
+44 (0)20 3288 1798 info@legacycompany.co.uk legacycompany.co.uk
Published February 2012