

# Delivering the Legacy of the London Olympic and Paralympic Games

ロンドンオリンピック・パラリンピックが  
どのようなレガシー(遺産)を後世に残すか？

**Ralph Luck OBE FRICS**

**Real Estate Development Director, King's College London  
formerly Director of Property, Olympic Delivery Authority**

# Announcement Celebrations – 6 July 2005

結果発表・歓喜に沸く – 2005年7月6日



# On Holiday - 6 July 2005

休暇で - 2005年7月6日



- Sailing in Balearics
- Planning trip to sail the Atlantic in 2007
- Actually at anchor off Menorca at 1300hrs announcement

# Pledges given to Secure the Olympic Games

オリンピック開催を獲得するための誓約がおこなわれた

“We will deliver a compact and sustainable Olympic Park, which will transform one of London’s most neglected areas and re-connect it to the rest of London and to Europe. This will kick-start regeneration in East London, while bringing all parts of our City together to celebrate the unifying force of Olympism.”

“Staging the 2012 games in London will provide world-class facilities for Athletes a beacon of excellence for our communities and a social, environmental and economical legacy that will enhance the lives of generations.”

“The most enduring legacy of the Olympics will be the regeneration of the entire community for the direct benefit of everybody who lives there.”

# Pledges given to Secure the Olympic Games

“The Olympic Park will become a model of social inclusion, opening up opportunity for education, cultural and skills development in jobs for people across the UK and London, especially in the Lee Valley and surrounding areas.”

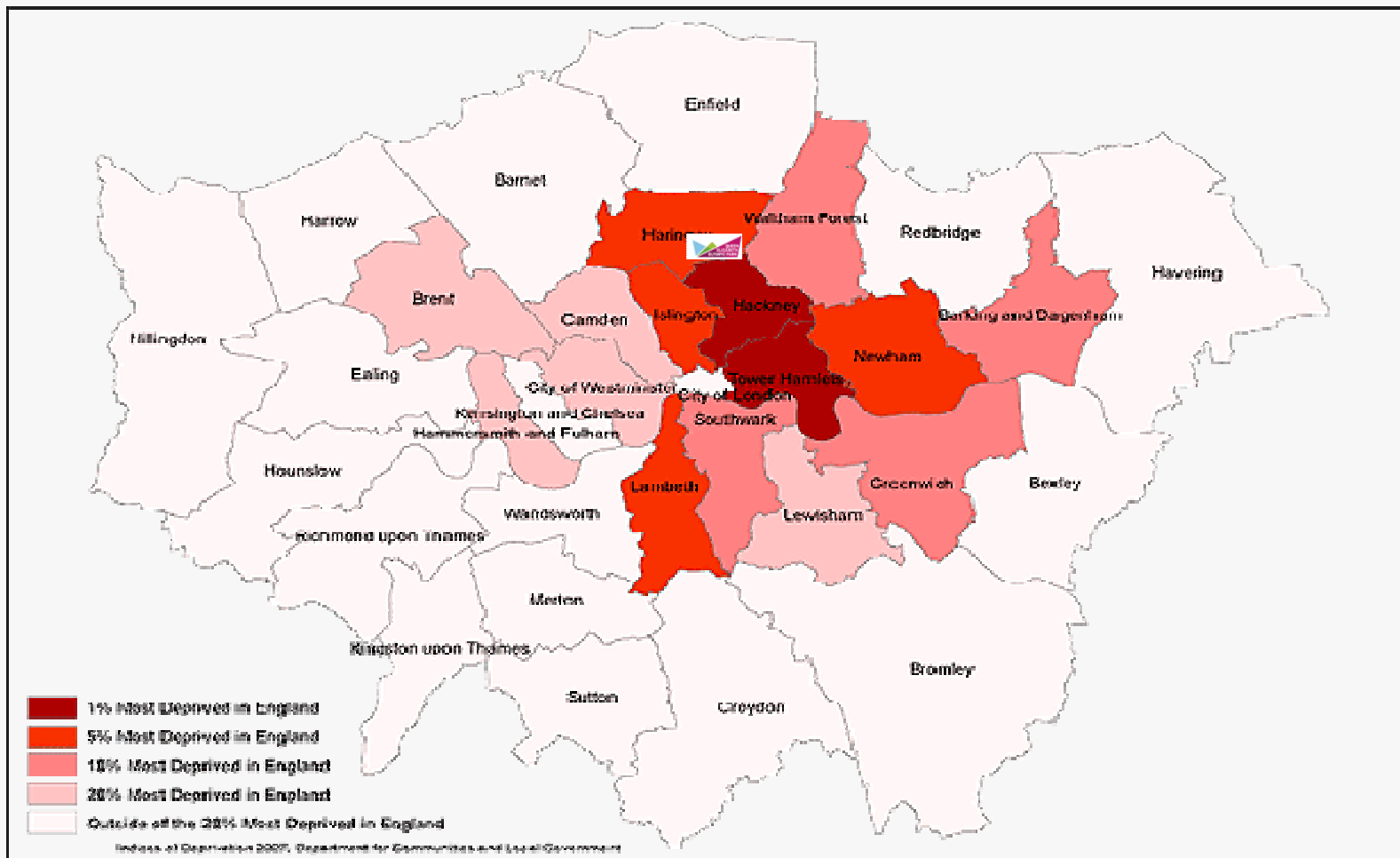
“Staging the Olympic Games in the Lee Valley area will simulate the vital economic regeneration programme in London’s poorest and most disadvantaged area .”

“The Olympic Park will provide local people with a significant improvement in health and well-being, education, skills and training, job opportunities, cultural entitlements, housing, social integration and environment.”

# The Legacy

## Why East London?

レガシー(遺産)  
なぜ東ロンドンに？



Relative deprivation levels (2007)

# Location of Olympic Park & Stratford City

オリンピック公園とストラトフォードシティの位置



# Location of Olympic Park at Stratford London

## オリンピック公園とストラトフォードシティの位置

- 4 miles from Tower Bridge and Canary Wharf
- Served by:
  - International Railway from St Pancras International to Kent and Europe
  - Regional Railways to Central London and East of England
  - Jubilee and Central Lines Underground railways to Central and West London
  - Docklands Light Railway from City of London serving East and South East London
  - London City Airport (5 miles)
  - Stansted Airport (33 miles)
  - Gatwick Airport (49 miles)
  - Heathrow Airport (25 miles)
  - Crossrail in 2018 linking West and East London to Heathrow Airport
- Access times:
  - 7 mins to St Pancras/Kings Cross
  - 20 mins to London City Airport
  - Less than 35 mins to all other major London railway stations
  - 1 hour to Heathrow
  - Less than 2 hours to Brussels
  - Less than 3 hours to Paris



# The Challenge

## 挑 戰

- ODA inherited a site that had suffered from generational neglect and piecemeal development
- The site was owned by numerous parties
- Tasked with delivering a construction programme twice the size of Terminal 5 at Heathrow Airport in half the time
- Fast forward to the present and the construction for Olympic and Paralympic Games was completed early within budget and the Legacy Retro-Fit is achieving a phased completion
- The Olympic Park is transforming and dominating the East London skyline, its economy and its legacy

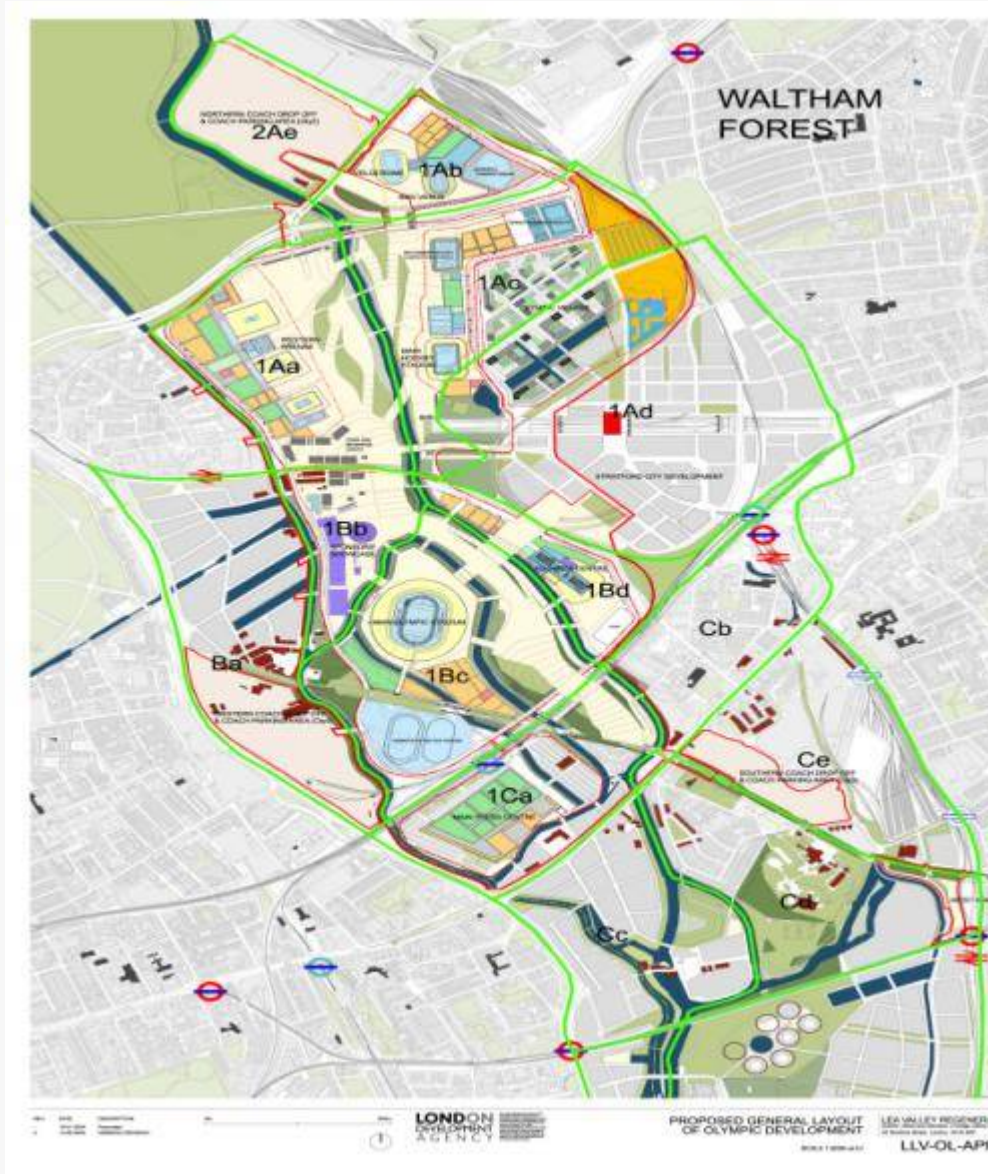
# The 2:4:1 Plan

## 2:4:1 計画

- 2 years to acquire, plan and prepare the site
  - 4 years to build the venues
  - 1 year to test and commission and for LOCOG to erect overlay
- 
- Decision to award the Games to London July 2005
  - Site acquired by July 2007 and demolition complete by December 2007
  - Primary Infrastructure installed during 2007/08
  - May/June 2008 construction commencement on main venues and village
  - July 2011 main venues complete
  - August 2011 LOCOG assume control of Park and Westfield Life Line
  - January 2012 Village handed over to LOCOG

# Bid Masterplan – November 2004

入札のマスタープラン — 2004年11月



- Integrated Olympic Park
- 9 venues
- 50% of competitors in walking distance from Village
- Two large temporary parking areas
- Olympic Village part in and part outside Stratford City site
- Velodrome to north of A12
- 3 temporary venues
- Media and Broadcast Centres to south of Stratford High Street

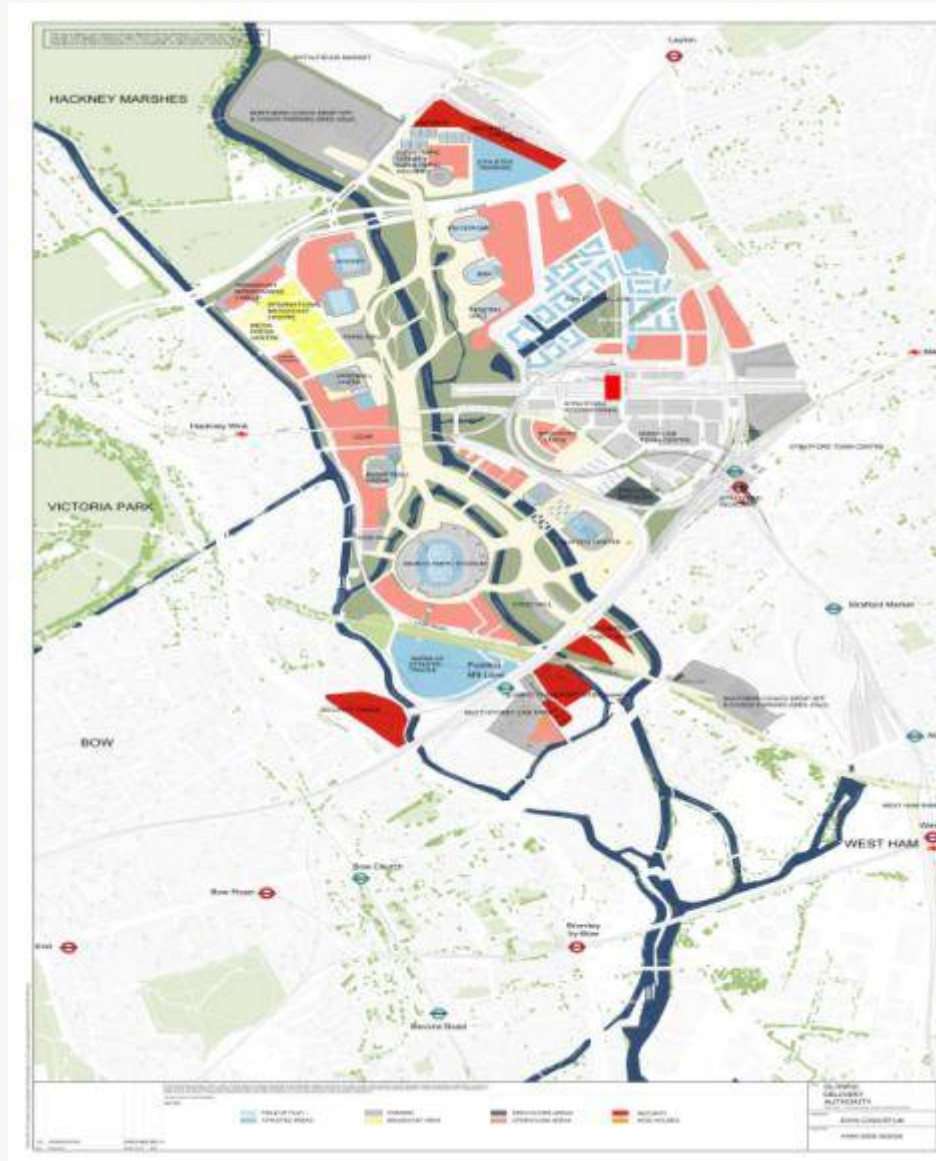
# Masterplanning Review – September 2005

マスタープランのレビュー 2005年9月

- Reduced Overall Village Size
- Village contained within Stratford City Proposal
- Designed for Legacy primarily
- Build to Level 4 of the Code for Sustainable Homes
- Adapted for Athletes, Officials and National Olympic Committees

# Olympic Masterplan - June 2006

オリンピック マスタープラン 2006年6月

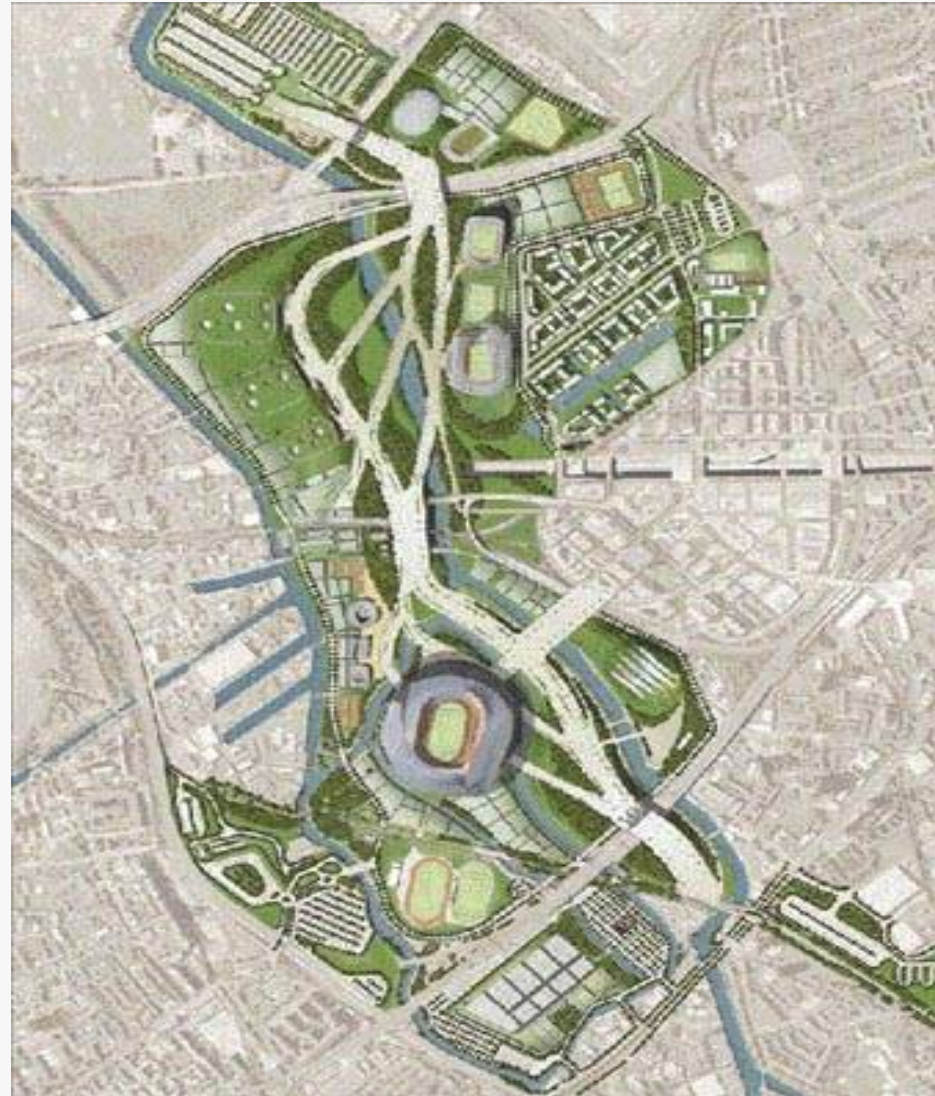


- Reduced land take
- Fewer businesses affected
- IBC/MPC relocated to north west
- Northern venues reconfigured
  - Security
  - Legacy
- Temporary parking reduced
- Village integrated into Stratford City
- Maintained overall park configuration
- Reduction in risk

# Acquisition of the Olympic Site

## オリンピック用地の取得

- 850 acres (345 hectares)
- 2756 Land interests
- 1313 Freehold interests
- 1443 Leasehold interests
- 20+ Statutory undertakers
- 4 Local authorities



# The Olympic and Legacy Compulsory Purchase Order (CPO)

## オリンピックとCPO

- 2 traveller sites
- 284 operational businesses
- Over 250 residential occupiers
- Open space/common land
- 3 religious organisations
- Crown land
- Utilities
- Allotments
- 3 bus depots
- Railway infrastructure changes
- Stratford City development site



# Timeline

## 時間のながれ

- July 2005 – IOC selects London for 2012 Games
- November 2005 – CPO made by the London Development Agency. 450 objections lodged
- May-August 2006 – Public Inquiry (83 parties attend)
- December 2006 – Secretary of State confirms CPO
- January 2007 – First Notice to Treat served
- February 2007 – High Court challenges lodged
- Spring 2007 – Series of General Vesting Declaration Orders executed
- July 2007 – Vacant possession secured



# Olympic & Stratford City Site in 2005

2005年当時のオリンピック用地とストラトフォードシティ



# Olympic Park & Stratford City July 2012

2012年7月のオリンピック公園とストラトフォードシティ



# Olympic Park and Stratford City today

現在のオリンピック公園とストラトフォードシティ



# Procurement of Construction Contracts

## 建設発注

- CLM Delivery Partner (CH2M Hill/Laing O'Rourke/MACE)
- All competitively tendered
- OJEU rules where applicable
- E-tendering through PQQ/ITT stages
- E-Evaluation Tool
- Compete For
- Use of NEC3 and JCT Contracts

# Health and Safety

## 健康管理と安全面

- Overall AFR was 0.1 – industry average is 0.6 - 0.7
- 30 periods of one million hours worked without a reportable injury
- 46,334 workers on the Olympic Park overall
- No fatalities on the construction project
- Safety, Health and Environmental Leadership Team (SHELT) fundamental
- Park Health played a vital role
- 2011 Award of Sword of Honour
- 2012 ROSPA Diamond Jubilee Award



# Sustainability

## サステナビリティ(持続可能性)

- 98% of demolition material was recycled and reused
- Cleaned 2 million tonnes of contaminated soil
- 650 bird and bat boxes installed across the Park
- 1.8m tonnes of material delivered to the Olympic Park by rail
- Combined heating and cooling for all venues in Olympic Park, Village and Westfield
- Energy Centres
- Velodrome is the first most energy efficient venue on the Park



# 5 Gold Rings from Opening Ceremony

金色の五輪 開会式にて



# Aquatics Centre

## 水上競技場

- Designed by Zaha Hadid (like a big wave or a stingray)
- Two 50m, 10 lane and 8 lane pools and a separate 25m diving pool with 1m, 3m, 5m 7.5m and 10m diving boards
- Olympic Games – diving, swimming, synchronised swimming and elements of modern pentathlon
- Paralympic Games – Swimming
- Capacity – 17,500 seats during the Games
- Legacy – 2,500 seats after the Games (with ability to increase to 3,500 for large competitions)

Pools open for use by the local community and elite athletes

- Operated by Greenwich Leisure Limited in Legacy from 1 March 2014
- Bidding for 2016 European Championship





# Olympic Stadium

## オリンピック競技場

- Sunken bowl of 25,000 lower permanent seats
- Demolishable upper tier of 55,000 seats
- Cable supported roof providing cover for 2/3 of spectators
- Olympic Games - Athletics, Opening and closing Ceremony
- Paralympic Games – Athletics, Opening and Closing Ceremony
- Capacity – 80,000 seats during the Games
- Legacy – 60,000 seats with extended roof cover
- Host for 5 games in Rugby World Cup in 2015
- 99 year concession to West Ham FC from September 2016 for football (soccer)
- 30 year concession to UK athletics in July from 2016
- IAAF World Athletics Championships and IPC World Paralympic Championships in 2017



# Velodrome

## 自転車競技場

- Spectacular double curved roof
- Olympic Games – 250m indoor track cycling plus adjacent outdoor BMX track
- Paralympic Games – Indoor track cycling plus adjacent outdoor BMX track
- Capacity – 6,000 seats during the Games and in Legacy
- Legacy – Venue forms part of a new VeloPark for community and elite use. It is combined with a reconfigured BMX Track and an external 1.7km road cycling circuit and 6km of mountain bike trails
- Owned and managed by the Lee Valley Regional Park Authority from 12 March 2014



# Basketball

## バスケットボール

- 34m High temporary venue
- Olympic Games – Basketball, Handball finals
- Paralympic Games – Wheelchair Basketball, Wheelchair Rugby
- Capacity – 12,000 seats for Basketball and 10,000 seats for Paralympic events
- Dismantled with elements reused elsewhere including Glasgow Commonwealth Games in 2014
- In Legacy the site is being redeveloped for family housing by Taylor Wimpey



# International Broadcast Centre and Media Press Centre

## 国際放送センターとメディアプレスセンター

- 91,000 sq.m in size plus 1,200 space multi-storey car and coach park and catering village
- IBC is 275m long, 104m wide and 21m tall
- London 2012 Games – Hosted more than 20,000 of the World's broadcasters, photographers and journalists in state-of-the-art facilities
- Legacy – Facilities are being converted into more than 80,000 sq.m of business space, with the potential to generate thousands of new jobs in the local area
- LLDC has granted a lease to ICity to create an Innovation City comprising computing centre, research labs, post production, graphic designers, digital education and convention centre
- Occupiers include: British Telecom Sport; Loughborough University; Hackney Community College; Infinity SDC and Tech Hub



# Eton Manor

- Site of Eton Manor Boys' Club established in early 1900s
- Olympic Games – Aquatics training
- Paralympic Games – Wheelchair Tennis, Aquatics Training
- Capacity – 12,500 seats during the Games
- Legacy – Converted into 4 indoor Tennis Courts, 2 Hockey pitches and 6 outdoor Tennis Courts
- Owned and managed by Lee Valley Regional Park Authority. Re-opening in May 2014
- Will host 2014 Wheelchair Tennis Master and 2015 Euro Hockey Championships



# The Copper Box (Handball Arena)

- Olympic Games – Handball and Fencing element of modern penthalon
- Paralympic Games – Goalball
- 7,000 seats in Games Mode and 6,000 – 7,500 in legacy – 3<sup>rd</sup> largest arena in London
- 12 Court Hall
- Legacy Use – Multi-use arena for wide range of sports e.g. Badminton, Basketball, Boxing, Handball, Netball and Volleyball together with Health and Fitness Centre
- Also suitable for Exhibitions, Concerts and Events
- Operated in Legacy by Greenwich Leisure Limited from July 2013
- London Lions Basketball team base



# The Orbit

- Designed by Anish Kapoor together with Cecil Balmond of ARUP
- 115m tall structure with 2 viewing platforms
- Spiral staircase of 455 steps, 354m long
- 2 lifts capable of carrying 21 people each to viewing area
- Suitable for corporate hospitality
- Re-opened to the public on 5 April 2014



# Queen Elizabeth Olympic Park Opening Timetable

## クイーン・エリザベス・オリンピック・パーク オープニング予定表

- October 2012 – LOCOG handed back Park to LLDC
- July 2013 – music concerts held in North Park
- 26–28 July 2013 – Anniversary games held
- 29 July 2013 - Northern Park opened
- 1 March 2014 - Aquatics Centre re-opens
- 14-15 March - Velodrome re-opens
- 23 March - Sport Relief on Queen Elizabeth Olympic Park
- 5 April 2014 – Southern Park and Plaza and Arcelor Mittal Orbit opens
- May 2014 - Lee Valley Hockey and Tennis opened
- September/October 2015 - Rugby World Cup in Olympic Stadium
- August 2016 – Stadium re-opens for permanent use
- 2014 and beyond – Residential and community facilities open – 6,800 homes over a 15-20 year period



# East Village



# Olympic Village Scope: Residential Vertical Build

オリンピック選手村：垂直方向に建設する住居

## To Games Time:

- The Olympic Village Vertical Build comprises:
  - 11 plots
  - 62 blocks of residential units (including some ground floor retail space, ranging from 3 to 14 storeys high)
  - 16,760 bed spaces for Athletes and Officials during the Games

## Retrofit Works (Post Games):

- The scope of retrofit works involves:
  - 2,818 residential apartments and town houses (including retail space) to be retrofitted
  - Removal and making good of Games temporary works e.g. partitions
  - Installation and commissioning of deferred works e.g. kitchens and final floor and paint finishes

# Olympic Village Scope: Infrastructure and Community Projects

## オリンピック選手村：インフラと地域施設

- **Multi Storey Car Park**
  - For use by Stratford International rail passengers
  - 6 storeys in height
  - 850 car parking spaces
- **Polyclinic and Community Facilities**
  - ODA will provide a basic fit out and is responsible for the community facilities
  - LOCOG will provide the FF&E to make it a working polyclinic for Games
  - PCT is responsible for the capital spend and FFE
  - Health and Wellbeing Centre in Legacy for the local community
- **Chobham Academy**
  - 1,832 school places for pupils ranging in age from 4 – 18 years old
  - 3 key buildings connected by a 4 storey hub
  - Day Care Centre
- **Public Realm & Community Playing Fields**
  - Delivery of playing fields for Academy and community use
  - Playing surfaces and associated fixtures
  - Extensive hard, soft and water landscaping covering 10 hectares
  - Flood Lighting, Landscaping, Street Furniture and Fencing

# Olympic Village Images



# Chobham Academy



- 1838 pupils from 4-18
- 52 nursery places
- 630 primary places
- 900 secondary places
- 256 sixth form places



# Sir Ludwig Guttman Health and Wellbeing Centre



# Tenures of Homes

マンションやタウンハウス群



# Tenures and types of Homes

## マンションとタウンハウスのタイプ

### **1,439 open market tenure homes which are now to be let**

- 101 four bed townhouses
- 453 three bed apartments
- 725 two bed apartments
- 155 one bed apartments
- 5 Studio apartments
- 6 development plots having capacity for 2,075 homes

### **£1,379m Affordable Homes**

#### **Section 106 Homes**

Social rent	675 homes
Intermediate rent	92 homes
Shared ownership	158 homes
Retained equity	79 homes

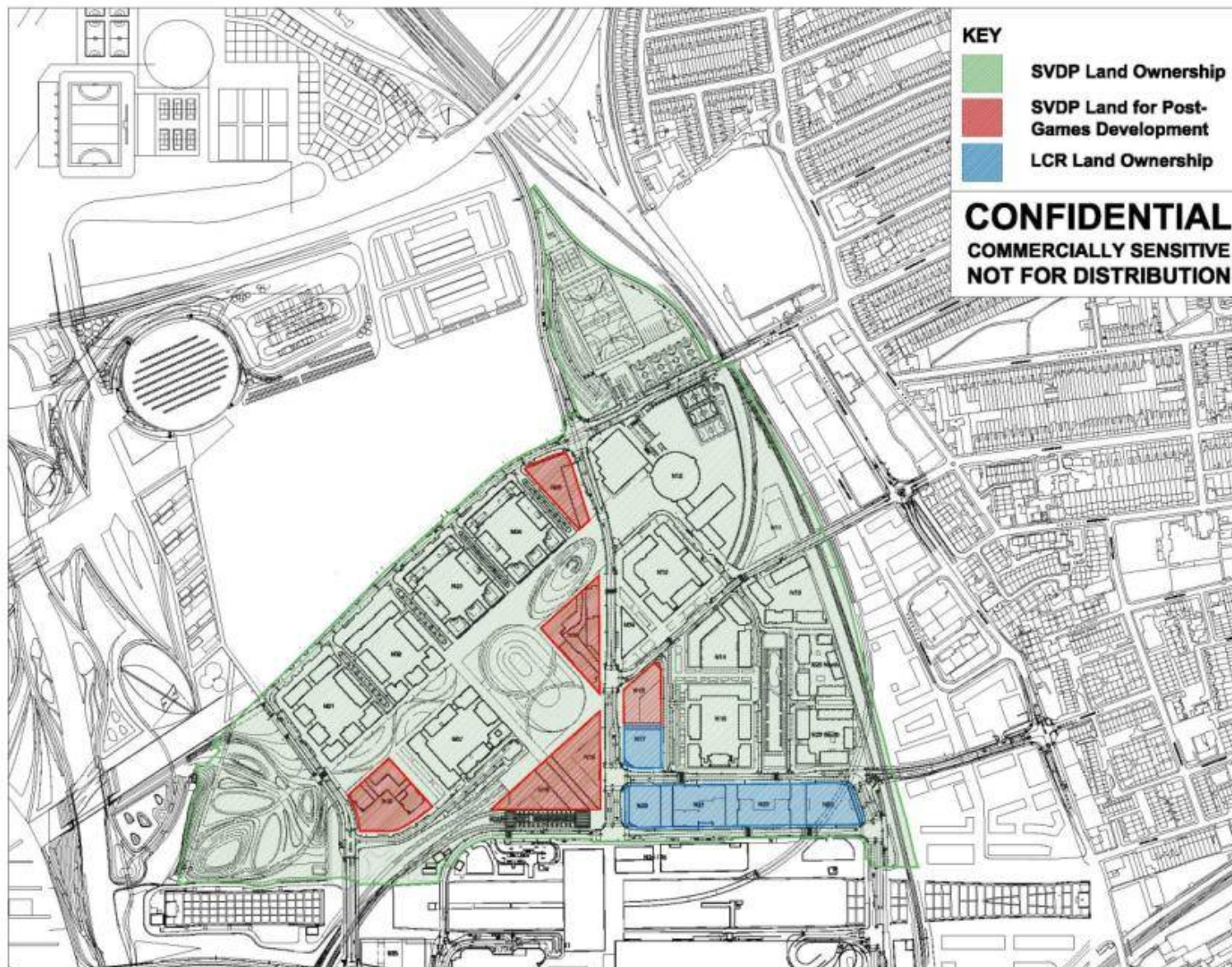
#### **Discretionary Intermediate Homes**

Intermediate rent	264 homes
Shared ownership	111 homes



# Post Games Development

## オリンピック後の開発



# Issues for Community Sustainability

## コミュニティサステナビリティにおける問題点

- Rate and balance of occupation of homes across all tenures
- Degree of occupation by economically active in Social Rent Homes
- Balance of age profile of residents and child density
- Nomination rights catchment area for Affordable Homes
- Linking Affordable Homes to jobs and vice versa
- Academy admissions policy for Primary and Secondary education
- Health & Community Services

# Sale of Olympic Village

## オリンピック選手村の販売

### **Transaction terms with Triathlon Homes for 1379 affordable homes agreed in June 2009**

- £268m paid, part funded by Government Grant
- £110m Government Grant to be received. 90% on completion for Athletes' use and handover to LOCOG achieved. 10% on final Practical Completion of retrofit
- £158m received from Barclays/European Investment Bank on fixed payment profile
- Additional Consideration Deed – share in profitability of business
- Intermediate Unit Sales Agency Agreement – profit share on sale of 264 homes
- Holding Costs Undertaking for Olympic occupation period

### **Transaction Terms with Delancey/Qatari Diar for 1439 open market homes agreed in August 2011**

- £55.75m paid in August 2011
- £501.75m payable in June 2014 after retrofit works completed
- Overage on built stock in June 2016 of £5m plus £10,000 for every £1 by which the average value exceeds £500 per sq. ft.
- Overage on development plots of 2-3% profit alongside developer's return
- Overage on business as a whole where business disposals occur
- Benefit of any refinancing gain

# Westfield Stratford City

ウエストフィールド ストラトフォールドシティ

## MASTER PLAN



# Stratford City Development

## ストラトフォードシティの開発

- Largest urban shopping centre in Europe
- Total cost including offices will be £1.75bn
- Total area of retail and leisure space is 1.9m sq. ft.
- Retail of 300 stores & 70 bars and restaurants
- Commercial offices – 1.1m sq. ft.
- Residential - 1,100 apartments excluding Olympic Village
- Three hotels providing 617 rooms
- Leisure of 17 screen cinema, casino and 14 lane bowling alley
- Car Parking (5000 spaces)
- Over 20,000 construction jobs
- Over 10,000 permanent jobs
- 2,500 previously un-employed people working on the opening day

# Stratford City on 27 July 2012

2012年7月27日のストラトフォードシティ



# Stratford City Transaction

## ストラトフォードシティの売買取引

- Westfield acquired site for retail, leisure, office and residential development
- Westfield transferred land for Olympic Village and majority of office development to ODA on behalf of Government
- ODA contributed
  - £33m to acquire property rights using Compulsory Purchase Powers
  - £234m for infrastructure required for Stratford City
- Westfield provided
  - primary access and car parking for the Olympic Games
  - Infrastructure for the Olympic Games
  - Developed the shopping centre at a time when the economy was suffering and no pre-lets guaranteed. No other developer would have done this
- ODA profit share
  - if the financial outcome of the retail and leisure development achieved a certain rental income which gave Westfield more than 15% return on its estimated cost, the ODA received a capital sum equivalent to 50% of the capital value of the rent above this return

# Olympic Park in 2032 and Beyond

2032年のオリンピック公園 そして その後の姿





# Out of London Venues

## Eton Dorney, Broxbourne and Weymouth & Portland

ロンドン会場以外では



# Broxbourne

- Olympic Games – Canoe Slalom
- Capacity – 12,000 seats during the Games
- Legacy – Competition and intermediate courses remain and the centre becomes a canoe and kayak venue for the local community and elite athletes, as well as a leisure attraction for white water rafting. It is owned and managed by Lee Valley Regional Park Authority



# Weymouth and Portland

- Enhanced Weymouth and Portland National Sailing Academy together with a Dean and Reddyhoff Commercial Marina and facilities for marine industrial and commercial accommodation
- Olympic and Paralympic Games – Sailing
- Legacy – enhanced facilities used for local community use and elite training, competition and recreation together with a commercial marina which will increase size from 350 to 600 berths



# Olympic Closing Ceremony

オリンピック閉会式

