



Real Estate

Absorption Rate Report

OPDC Internal Report

CONFIDENTIAL

DRAFT

24 June 2016





Real Estate

Old Oak and Park Royal Development Corporation
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25 June 2016

Dear Davena,

Old Oak – Absorption Rate Report – INTERNAL AND CONFIDENTIAL

Introduction

I am pleased to enclose our draft Absorption Rate Report. Our scope of work is included at Appendix A.

This report reviews seven case studies of major regeneration projects across London to help provide OPDC with a view on possible market conditions and residential and office absorption rates at Old Oak Common. More specifically, OPDC has appointed Deloitte to help address the following key points:

- Maximum number of residential units delivered to the market per annum.
- Maximum office floor space delivered to the market per annum.
- Influence of market conditions and other external factors on housing absorption.
- Highlight of concerns about the trajectory and how schemes might compete with each other within the OOC as well as schemes across London.
- Advice on how many submarket and developers could be assumed to be selling residential units and letting office space at any one time across the masterplan.
- Indicative housing mix based on different typologies that will impact on the absorption rate per annum.

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Real Estate

Important notices

We enclose our report ("the report") which has been prepared for the sole purpose of assisting and advising OPDC in accordance with our Call-off Contract dated 4th April 2016 and Contract Addendum dated 08th June 2016 (together the "Contract").

This draft report is confidential to the Addressees (as defined in the Contract), is subject to the restrictions on use specified in the Contract and is expected to be superseded by our final report. This draft contains a number of outstanding matters, identified by square brackets ("[]") and italics, that require clarification or confirmation by Management. We reserve the right to add, delete and/or amend the report as we consider appropriate. No party may place any reliance whatsoever upon, and we accept no responsibility or liability to any party in respect of this draft report.

The data within this report has been obtained from third party sources and therefore should be reviewed as indicative, where Deloitte has no liability for the creditability of information and OPDC should not rely on the contents of the data.

This document includes certain analysis based on market performance where the estimates and projections reflect various assumptions concerning business, economic and competitive uncertainties, many of which are beyond the control of Deloitte and OPDC. Accordingly, there can be no assurance to the trajectory and absorption rates mentioned in this report and the actual results may vary from those projected, and those variations may be material. Whilst we have commented on such statements and market projections and their implications, we accept no responsibility for their accuracy or completeness.

Yours sincerely,

Clive Pane
Deloitte LLP

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Executive Summary

Executive Summary

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1) Introduction

Introduction

25,500 new homes and 65,000 jobs

The anticipated delivery of 25,500 homes and 65,000 jobs projects at Old Oak Common (OOC) poses a number of questions over the appropriate release of units and commercial floor space to the market and how Old Oak will change and establish its market to help drive value alongside achieving high absorption rates. The ability to release units at full market value within a reasonable and sustainable period of time is key to help meet housing targets and most importantly to help pay down the high cost of delivering up-front infrastructure.

OPDC Development Trajectory

Following the completion of OPDC's Development Trajectory, that maps out the delivery of Residential units and Commercial floor space over time, OPDC required market justification and evidence to help shape the trajectory and inform the delivery of residential units and commercial floor space.

Scope of Work

Within this context, OPDC appointed Deloitte Real Estate to prepare an Absorption Rate Report, under their Call-off Contract date 4th April 2016, to address the following areas:

- Optimum office and residential absorption rates per annum to enable OPDC to re-run their housing trajectory based on market justification and market conditions. (Section 5 and 6)
- OPDC to determine an internal view on optimum absorption rates, particularly when speaking to private sector land owners about their proposed phasing plans. Layering what is known in terms of third party delivery of land and projections against OOC's controlled land. (Section 5 and 6)
- Competing schemes throughout London to understand supply over the next 10 years and the robustness of OOC absorption rates. (Section 4)
- Assumptions around the four identified markets and whether there are actually additional, smaller sub markets, i.e. Scrubs Lane and Willesden Junction. If there are additional submarkets how does this affect the total cumulative absorption rate and how much competition is generated within these sub markets? (Section 5)

Introduction continued

Our Approach

- How different housing typologies could make up the overall housing supply on a yearly basis (i.e. PRS, private sale and affordable) and how the different combinations could shape or influence the number of homes that could be delivered. (Section 5)

Our Approach

This report sets out analysis of data that has been captured from transactional market evidence and forecasting where Deloitte has obtained market information and data from the following sources:

- Speaking to developers and sales agents
- Molior (Residential Research Database)
- CoStar (Commercial Research Database)
- News articles and press releases
- Planning applications
- Deloitte's Real Estate Research Team (drawing upon the current and historic Crane Surveys)

Absorption rates are a factor of both supply and demand. The approach therefore triangulates historic information on housing completions both in terms of construction and sales, projected delivery levels as well as looking at market factors that have influenced delivery and absorption. Where possible we have provided analysis on case studies and the broader market in informing our opinion on the potential take-up rates at OOC.

It should be noted that there are a number of challenges associated to the analysis:

- OOC is unique in terms of its scale. While the case studies focus on the largest regeneration projects in London, the OOC area has many more submarkets which can potentially be delivered in tandem.
- In the cases where regeneration projects were led by a single organisation, it is difficult to separate out market conditions and demand side absorption from the factors and drivers impacting that specific organisation.

2) Case Study Introduction

London Regeneration Case Studies

Total of 77,800 Homes and 29.8m sq ft Commercial

The following seven case studies have been selected as broadly comparable regeneration projects across London to the proposed scheme at Old Oak . These schemes are viewed as comparable as they are all large scale regeneration developments within London with a mix of uses. These case studies are at different stages of maturity, from Docklands, an established market, to Earls Court which is in its early phases of delivery.

For each case study we have assessed the historic and future development pipeline of residential and/or commercial accommodation and supported this analysis with commentary.

As an extra case study we have also reviewed the Docklands to specifically examine the delivery of commercial space since the early 1990s. We have not reviewed the residential delivery in this case study.

Collectively, the case studies have either delivered, or are expected to deliver, 77,800 homes and 29.8m sq ft of office accommodation over the next 20 years. Consequently the case studies provide some of the key schemes that Old Oak might be competing against over the 20 year delivery of the project.

| | |
|----------------------------|---|
| Nine Elms | 20,000 Homes 6.5m sq ft Commercial 2007-30 Dev Programme |
| Stratford | 20,000 Homes 0.9m sq ft Commercial 2011-31 Dev Programme |
| Greenwich Peninsula | 12,500 Homes 1.5m sq ft Commercial 2015-35 Dev Programme |
| Earls Court | 11,800 Homes 2.2m sq ft Commercial 2015-30 Dev Programme |
| Wembley | 11,500 Homes 1.2m sq ft Commercial 2004-29 Dev Programme |
| Kings Cross | 2,000 Homes 3.4m sq ft Commercial 2004-20 Dev Programme |
| Canary Wharf | 14.1m sq ft Commercial 1993-TBC Dev Programme |

Case Study Summary – Use Mix

OOO's resi equates to 40% of total resi units within the case studies

Summary of case study data

The scheme summary table, shows that there is a varying range of units, commercial floor space and hotel space in planning and development pipeline across the seven case study areas. The sales and delivery trajectory of each scheme is broken down in **Appendix B**.

The figures quoted below illustrate an all encompassing figure, representing the composition of developments in each of the case study areas that are in planning, are under construction or have already been completed.

| | Scheme Summary (Selected Developments*) | | | | | |
|---------------------|---|-----------|--------------------------------|--------------------------------|--------------|------------------------------|
| | Residential Units | PRS Units | Office Floor Space (000 sq ft) | Retail Floor Space (000 sq ft) | Hotel (beds) | Student Accommodation (beds) |
| Old Oak | 25,500 | TBC | 643 | 61** | TBC | TBC |
| Nine Elms | 19,576 | TBC | 2,601 | 1,690 | 1011 | 950 |
| Kings Cross | 1,452 | TBC | 3,000 | 1,428 | 500 | 600 |
| Stratford | 21,552 | TBC | 1,306 | 1,070 | 853 | 0 |
| Greenwich Peninsula | 5,979 | TBC | 1,400 | 250 | 905 | 0 |
| Wembley | 5,132 | TBC | 1,090 | 200 | 475 | 500 |
| Earls Court | 9,670 | 2,421 | 1,298 | 317 | 250 | 0 |
| Docklands | NA | NA | 12,600 | 1,500 | 1227 | 0 |

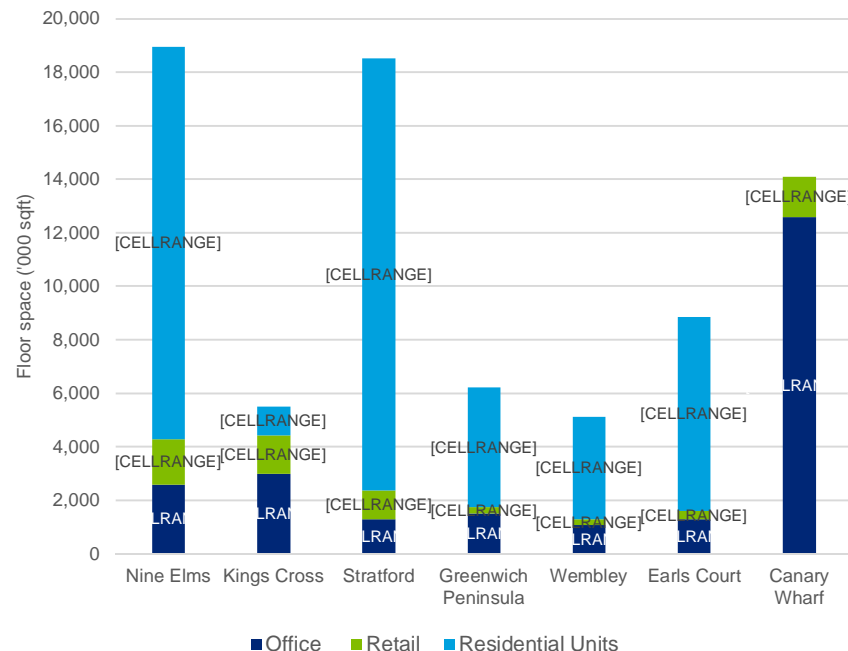
*See list of selected developments for each case study in Appendix B.

** Includes leisure floor space

Case study data summary graph

The graph below illustrates the core uses of residential, retail and office accommodation from the summary table.

It breaks down commercial space for each of the seven case study areas into office and retail, enabling comparison between the schemes. Laid on top of this is the residential unit figure for each scheme, which can be seen to vary dramatically when compared relatively to the commercial floor space composition.



Case Study Summary – Residential Mix

Affordable Housing ranges from 16.8% to 34.6%

Residential unit composition

The table below breaks down the number of residential units presented on the previous page into the private and affordable split for each case study. Docklands has been excluded as we are not recording residential development within this case study.

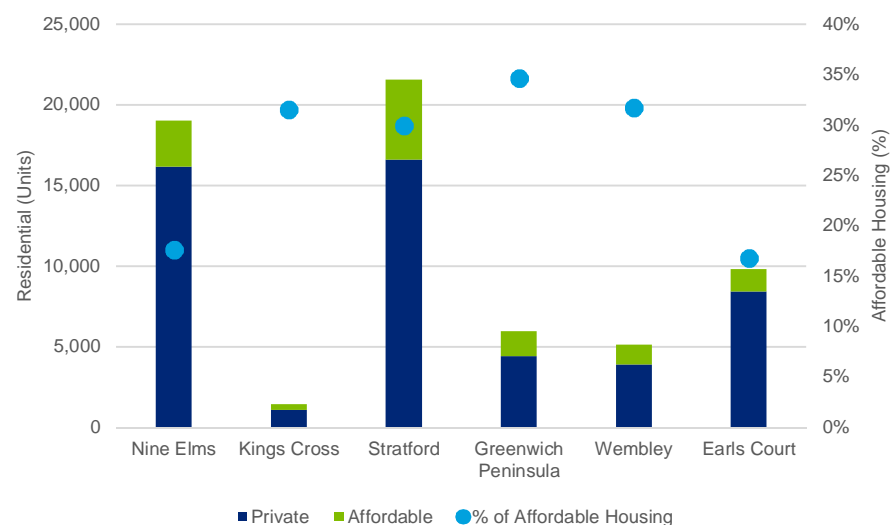
This enables us to present the percentage of affordable housing for each case study (according to the selected developments in each scheme). Interestingly Nine Elms and Earls Court are delivering just

17.6% and 16.8% affordable housing respectively. This low percentage of affordable housing is predominantly due to the viability argument and the considerable amount of infrastructure and transport required to release the sites for comprehensive redevelopment.

The residential composition is illustrated in the graph below, showing the breakdown and proportionate split of affordable and private units for each case study.

It is important to note here the range of affordable housing provision across the schemes - at a maximum differing by 17.8% between Greenwich Peninsular and Earls Court.

| | Private Units | Affordable Units | % of Affordable Housing |
|---------------------|---------------|------------------|-------------------------|
| Nine Elms | 16,186 | 2,849 | 17.6% |
| Kings Cross | 1,105 | 348 | 31.5% |
| Stratford | 16,604 | 4,968 | 29.9% |
| Greenwich Peninsula | 4,443 | 1,536 | 34.6% |
| Wembley | 3,898 | 1,234 | 31.7% |
| Earls Court | 8,424 | 1,412 | 16.8% |



3) What Impacts Market Delivery?

What Impacts the Supply (Construction) v Demand (Consumer) on the Housing and Office Market

Market, Employment and Growth Prospects is Key

| | Supply | Demand |
|---------|---|--|
| Housing | Impact of housing supply (construction) <ul style="list-style-type: none"> • Availability of finance to fund construction costs • House pricing, market cycle and projected future growth • Planning pipeline and supply of land • Government / mayoral term (Affordable Housing Negotiations) – changes to planning policy • Cost of labour, and supply and cost of construction material | Impact of housing demand (consumer market appetite) <ul style="list-style-type: none"> • Sales values and market appetite • Economic condition and employment prospects • Availability of mortgages • Interest rates • Stamp duty • Savings and deposit availability |
| | Impact of office supply (construction) <ul style="list-style-type: none"> • Availability of finance to fund construction costs • Office demand, market cycle and projected future growth – resulting in market competition and appetite to agree pre-lets • Planning policy and competition for land from higher value uses • Transport infrastructure • Cost of labour, and supply and cost of construction material | Impact of office demand (market appetite) <ul style="list-style-type: none"> • Financial stability and appetite to enter pre-let agreements. • Emerging sectors and demand from different occupiers, i.e. Financial, TMT, Service Offices etc. • Cost of rent v location across London • Incentives and lease terms • Transport infrastructure |

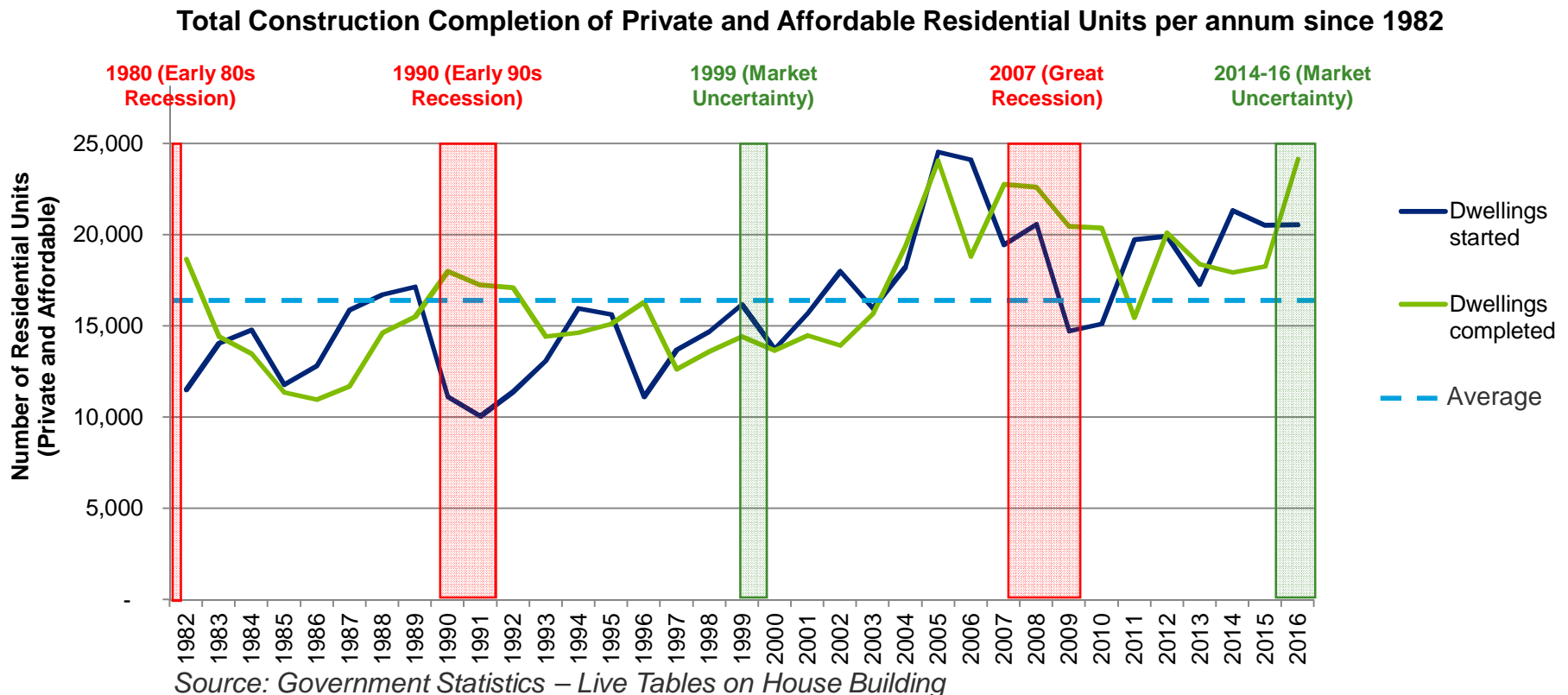
4) Residential Absorption Rate and Market Analysis

Historic Macro Residential Construction Completions (Greater London)

Average of 16,700 units per annum built since 1982

The graph below provides a macro view of the Greater London residential market since 1982. The two lines show the construction start and completion of units per annum and illustrate how residential construction reacts to financial

recessions and market uncertainty. The graph also illustrates how the construction completion (lag) is circa 1.5 – 2 ahead of construction start; this is particularly prominent between 2005-2012.

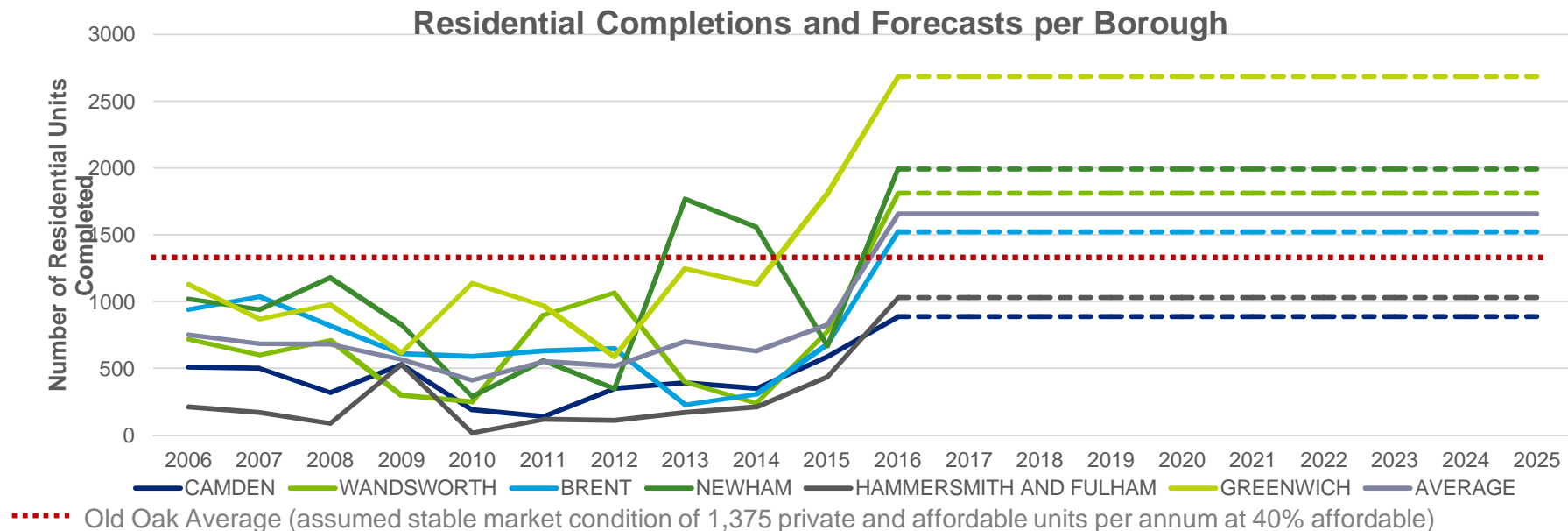


Residential Completions per Borough and Targeted Borough Housing Delivery (Case Study Boroughs)

On average the below Boroughs have delivered just 37% of the current forecast targets

The scale of delivery at OOC can be compared to that of a London borough and the following graph highlights the completions and forecast delivery for some key and comparable boroughs. The total residential completions per Borough (applicable to the case studies) show that since 2006 the boroughs have on average completed 635 residential units, albeit this varies considerably between the boroughs, with Greenwich delivering an average of 1,049

units per annum compared to Camden delivering just 387 units per annum. What is clear from the graph is that the number of completions are significantly lower than the forecasts adopted by each borough. Please note that the graph below is not comparable to the graph on the following page, as it shows construction completions and not sales exchanges.



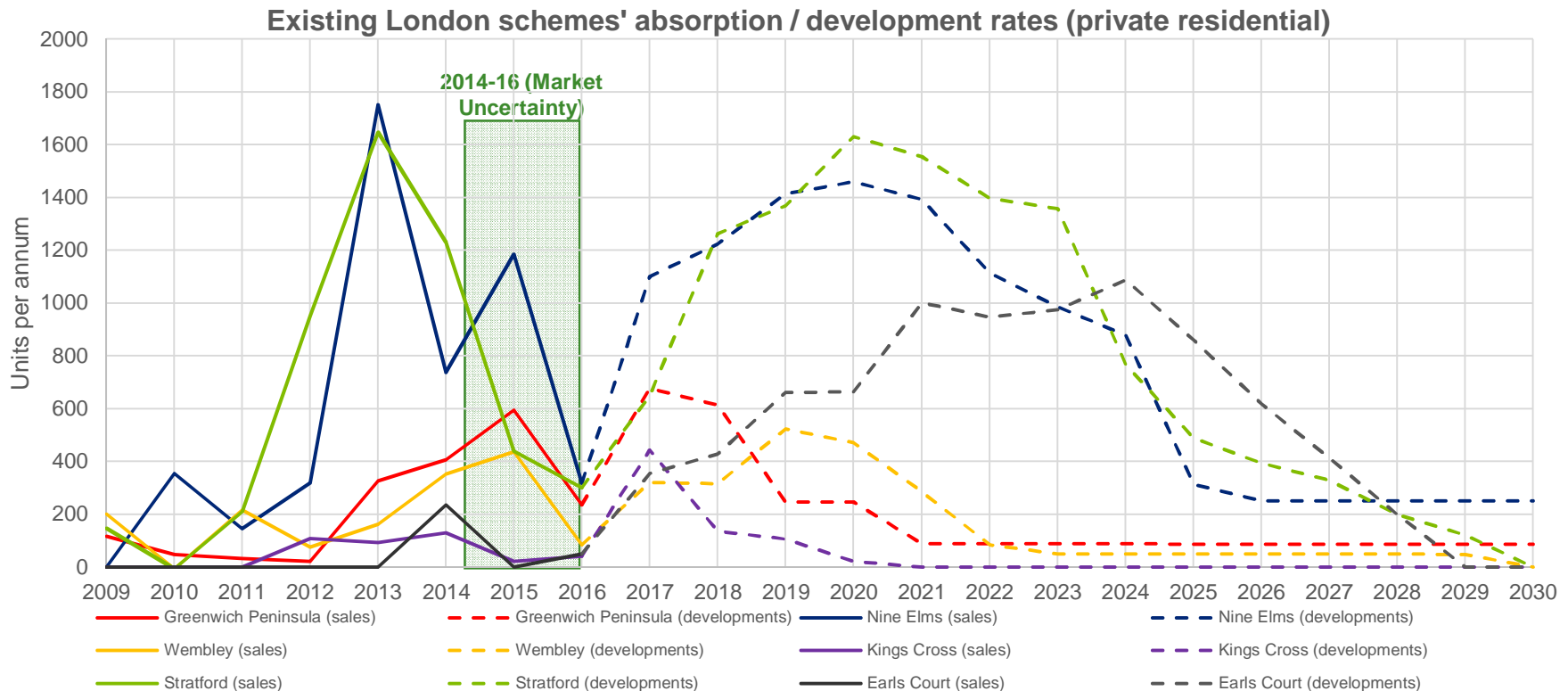
Source: Comparison of London Plan Annual Average Housing Provision/Supply Monitoring Targets
http://www.londonforum.org.uk/reports/Comparison_of_Borough_Housing_Targets.pdf

Private Residential Historic & Forecast Sales (Case Studies)

Peak of 1,751 private units at Nine Elms

The graph below shows the absorption of private residential units onto the market for the six residential case studies. The graph shows the units that have been sold (solid line) compared to the anticipate pipeline of development and delivery of units into the market (dashed line).

The graph clearly depicts the two major areas for residential development to include Nine Elms and Stratford, where there are two very distinct peaks to reflect the first phase of the Power Station and Embassy Gardens for Nine Elms and the release of units on the Athletes Village for Stratford.



Private Residential – Peak, Average and Low

| | Peak Absorption Rate | Average Absorption Rate | Lowest Absorption Rate |
|----------------------|--|--|---|
| Nine Elms | | | |
| Residential Units | Exchanged = 1,751 Pipeline = 1,460 | Exchanged = 687 Dev Trajectory = 796 | Exchanged = 318 Dev Trajectory = 252 |
| Number of Developers | Exchanged = 13 Pipeline = 14 | | Exchanged = 2 Pipeline = 1 |
| Commentary | The first major releases of units to the market took place during 2013, where Embassy Gardens sold 541 units, Riverlight sold 256 and within just a few weeks Battersea Power Station sold 860 units; during this period there was considerable demand from overseas investors, stamp duty was lower and there was good availability of mortgages and lending. During 2014 six smaller schemes came onto the market selling a total of 737 units. In 2015 the second wave of sales came to market with Battersea Power Station's Phase 2 and 3 selling 440 units, Embassy Gardens selling 110 and One Nine Elms launched and sold 272 units, including smaller schemes 2015 sold a total of 1,185 units. 2015 was considerably lower and 2016 has been struggling with just 318 sold to date this year, this is principally because of lack of foreign buyers, stamp duty on second homes (came into effect from April 2016) and uncertainty within the economy about BREXIT and the new mayoral administration. | | |
| Kings Cross | | | |
| Residential Units | Exchanged = 131 Dev Trajectory = 443 | Exchanged = 79 Dev Trajectory = 177 | Exchanged = 22 Dev Trajectory = 23 |
| Number of Developers | Exchanged = 3 Pipeline = 7 | | Exchanged = 1 Pipeline = 1 |
| Commentary | Arthouse, The Plimsoll Building and the Tapestry Building make up the first phase of development at the Kings Cross site, comprising of 527 units (388 private, 141 affordable). Construction of this phase commenced in 2012 with sales commencing prior to this date in 2011 (off plan). Within this phase there are 25 units left on the market. Further phases followed with multiple developments north of the canal commencing construction in 2015 and early 2016. For those developments that have been released onto the market there was a high private residential take-up rate up until 2014, however in recent months there has been a slow down of units being sold, potentially due to the market uncertainty related to Brexit and the mayoral elections. | | |

Private Residential – Peak, Average and Low

| | Peak Absorption Rate | Average Absorption Rate | Lowest Absorption Rate |
|----------------------------|---|---|----------------------------------|
| Stratford | | | |
| Residential Units | Exchanged = 1,231 Pipeline = 1,630 | Exchanged = 615 Pipeline = 886 | Exchanged = 35 Pipeline = 122 |
| Number of Developers | Exchanged = 9 Pipeline = 15 | | Exchanged = 2 Pipeline = 1 |
| Commentary | The Athletes Village was the first major release of residential units to the market at Stratford and took place after the Olympics in 2013 where 1,440 units were sold onto the market. An average of 835 residential units per annum exchanged on the market for the following two years. This includes Cobham Manor on the Olympic Park and numerous schemes around Stratford and the majority of these schemes are still under construction. 300 units have exchanged on the market to date for 2016, this predominantly due to the release of East Village where 240 units have exchanged. It is forecast that 2017 will see the further sale of c. 300 already completed units. It is also forecast that the development rate will increase from 2018 peaking at 1630 units pa in 2020, primarily due to the Marshgate Wharf scheme entering its construction phase. | | |
| Greenwich Peninsula | | | |
| Residential Units | Exchanged = 595 Pipeline = 678 | Exchanged = 222 Pipeline = 190 | Exchanged = 22 Pipeline = 87 |
| Number of Developers | Exchanged = 9 Pipeline = 6 | | Exchanged = 1 Pipeline = 1 |
| Commentary | Greenwich Peninsula has slowly seen a growing number of units being delivered onto the market increasing from 22 in 2012 to 595 in 2015. This increase in transaction numbers has been driven from the constantly increasing place making and establishment of Greenwich Peninsula as a residential neighbourhood. The majority of developments to date have been predominately small sale averaging 108 units for the schemes completed and averaging 429 units for the schemes under construction. Having numerous developers on-board at the same time as Knight Dragon, delivering smaller schemes with different unit mixes and price points, has assisted the absorption rate in this relatively new residential location. | | |

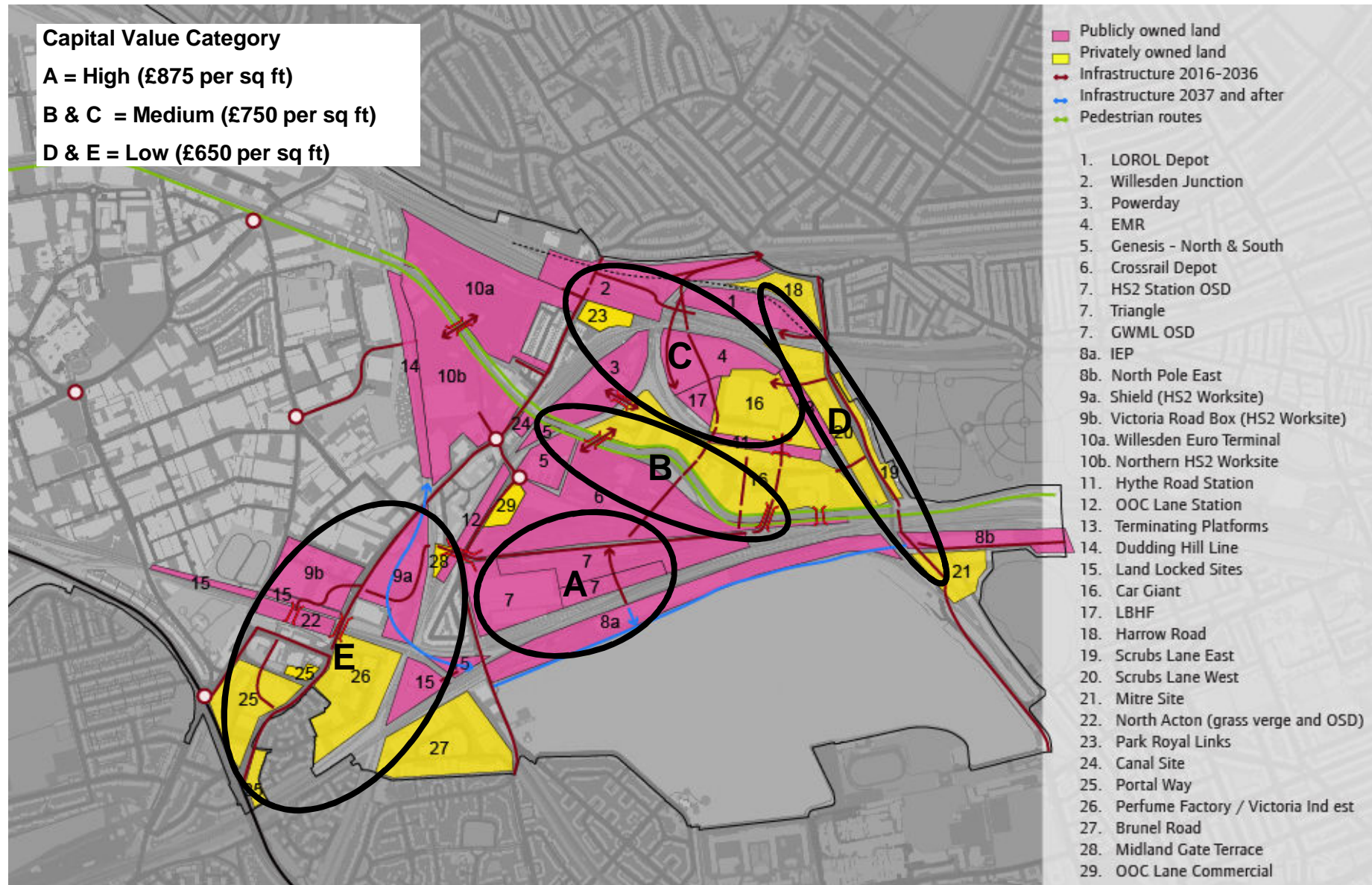
Private Residential – Peak, Average and Low

| | Peak Absorption Rate | Average Absorption Rate | Lowest Absorption Rate |
|----------------------|--|---|---------------------------------|
| Wembley | | | |
| Residential Units | Exchanged = 438 Pipeline = 524 | Exchanged = 190 Pipeline = 180 | Exchanged = 0 Pipeline = 49 |
| Number of Developers | Exchanged = 6 Pipeline = 9 | | Exchanged = 2 Pipeline = 1 |
| Commentary | A total of 1,525 private units have currently exchanged at Wembley where the majority of developments have averaged just 67 private residential units. Albeit for these schemes a considerable proportion of affordable housing has been included. The high proportion of affordable housing is a clear strategy for driving value and including more private development in future phases when the market and values are potentially established. For example out of the 1,000 units currently under construction just 115 are affordable. | | |
| Earls Court | | | |
| Residential Units | Exchanged = 237 Pipeline = 1,087 | Exchanged = 96 Pipeline = 651 | Exchanged = 0 Pipeline = 199 |
| Number of Developers | Exchanged = 1 Pipeline = 1 | | Exchanged = 1 Pipeline = 1 |
| Commentary | Earls Court is at very early stages of delivering the masterplan. Lillie Square is currently under construction where Phase 1 is complete and Phases 2 and 3 are currently under construction and are currently available on the market. In 2014, Phase 1 of Lillie Square came to the market and quickly sold all of the 237 private units. Phases 2 and 3 came to the market in December 2015. Since the launch only 50 units have sold and is predominantly due to the current market conditions and the price point of units at Lillie Square and the current lack of foreign investors. | | |

5) Old Oak Common Residential Sub-markets and Indicative Absorption Rate Analysis

Old Oak Common Sub-markets

Capital value range from £650 per sqft to £875 per sqft



Old Oak Common Sub-markets

Five key submarkets with discrete residential value categories

| | Sub-market category | Description | Residential Capital Value Category | Unit Mix and Case Study Typology |
|---|--|--|------------------------------------|---|
| A | Immediate proximity to the HS2 and Crossrail Station | High density development above the HS2 and Crossrail Station. Assumed to be the highest value residential location due to storey heights and prestige of being above the station. | High | Business and executive apartments accommodation – similar to Kings Cross |
| B | Adjacent to the Canal | Medium density location to the north of the Crossrail Depot Box and southern part of the Car Giant site. The submarket runs along the canal and is within a 5 minute walk from the HS2 and Crossrail station. | Medium | Family accommodation with more 3 and 4 beds – similar to Earls Court |
| C | North of the Canal and Willesden Junction | Submarket up towards Willesden Junction, EMR and Powerday where development is further away from the commercial core around the HS2 and Crossrail Station. This submarket is considered to be less desirable as site B and subsequently justifies another submarket. | Medium | Increasingly more family accommodation with 3 and 4 beds – similar to Earls Court |
| D | Scrubs Lane | Low density development constrained by the conservation area to the east. Scrubs Lane is a busy artery road around the site and with low rise development values will be hindered. | Low | Greater young professional demand due to affordability justifying smaller unit mixes – similar to Stratford |
| E | North Acton including the HS2 Box and Shield | Potential for high density development, albeit the immediate environment and connectivity to the HS2 and Crossrail Station is hindered. | Low | Greater young professional demand due to affordability justifying smaller unit mixes – similar to Stratford |

Considering The Potential Impact of Market Uncertainty

Market condition scenarios

The following tables provide an indicative view on absorption rates per annum that might be applicable for Old Oak in different economic market conditions and across the sub-market categories. The capital value category depicts the housing submarkets and it is assumed these areas will be in limited competition with one another, helping to justify the quantum of developers present in a single market where they could be delivering between 75 – 150 private units per annum across the different economic market conditions.

The table provides a view on the quantum of active developers across the three value categories. This analysis has been captured from our case study research and based on our experience when informing similar projects; particularly for the low market condition, where our case studies do not cover the market cycle between 2006-08.

It is important to note that this matrix is a guide and within the first four years if markets D and E are the only areas delivering homes then it could justify more than 3 developers and within a stable market potentially more than 375 private units could be delivered.

| PEAK MARKET CONDITIONS | Capital Value Submarket | | | Total |
|---------------------------------|-------------------------|----------------------|-------------------|-------|
| | High Value (A) | Medium Value (B & C) | Low Value (D & E) | |
| Max number of developers | 2 | 3 | 3 | 8 |
| Max private units per developer | 100 | 125 | 150 | |
| Max private units sold annum | 200 | 375 | 450 | 1,025 |
| Max units inc. 40% Affordable | 330 | 625 | 750 | 1,705 |

| STABLE MARKET CONDITIONS | Capital Value Submarket | | | Total |
|---------------------------------|-------------------------|----------------------|-------------------|-------|
| | High Value (A) | Medium Value (B & C) | Low Value (D & E) | |
| Max number of developers | 2 | 3 | 3 | 8 |
| Max private units per developer | 75 | 100 | 125 | |
| Max private units sold annum | 150 | 300 | 375 | 825 |
| Max units inc. 40% Affordable | 250 | 500 | 625 | 1,375 |

| LOW MARKET CONDITIONS | Capital Value Submarket | | | Total |
|---------------------------------|-------------------------|----------------------|-------------------|-------|
| | High Value (A) | Medium Value (B & C) | Low Value (D & E) | |
| Max number of developers | 1 | 2 | 2 | 5 |
| Max private units per developer | 75 | 75 | 125 | |
| Max private units sold annum | 75 | 150 | 250 | 475 |
| Max units inc. 40% Affordable | 125 | 250 | 415 | 790 |

Absorption Impact of Affordable Housing Percentage

Potentially 6 years longer when delivering 30% Affordable

On the assumption that the total number of units in the Old Oak area is fixed at 25,500 and under the assumption that registered providers will readily soak up any affordable housing supply; the lower the percentage of affordable houses, the longer the further out the housing trajectory will be. This is predicated on the assumption that the delivery and absorption of private units to the market has a cap. On face value this appears to be logical, however as indicated earlier (page 15) a developer will have limited appetite to deliver high percentages of affordable housing due to:

- Viability – high percentage of affordable housing will reduce the financial return of schemes (less private delivered).
- Private sales values - The high affordable housing could potentially adversely impact the private sales values.
- Private sales rates - High affordable housing levels could impact on the sales rates of private dwellings.

Conversely – lower levels of affordable housing would be seen as attractive by developers and could promote delivery.

The below table illustrates how the housing trajectory is impacted by this phenomenon. As can be seen, assuming stable market conditions, the maximum private units sold per annum increases as the affordable housing provision increases. At 40% (our assumed rate) the equates to be 825 units pa resulting in a trajectory of 18 and a half years, ending in 2034.

| Affordable housing provision (%) | Total Private Units | Max Private Units Sold per Annum | Trajectory period (number of years) | Trajectory end date |
|----------------------------------|---------------------|----------------------------------|-------------------------------------|---------------------|
| 30% | 17,850 | 725 | 19.3 | 2035 |
| 40% | 15,300 | 825 | 18.5 | 2034 |
| 50% | 12,750 | 925 | 17.6 | 2033 |

6) Commercial Absorption Rate Analysis

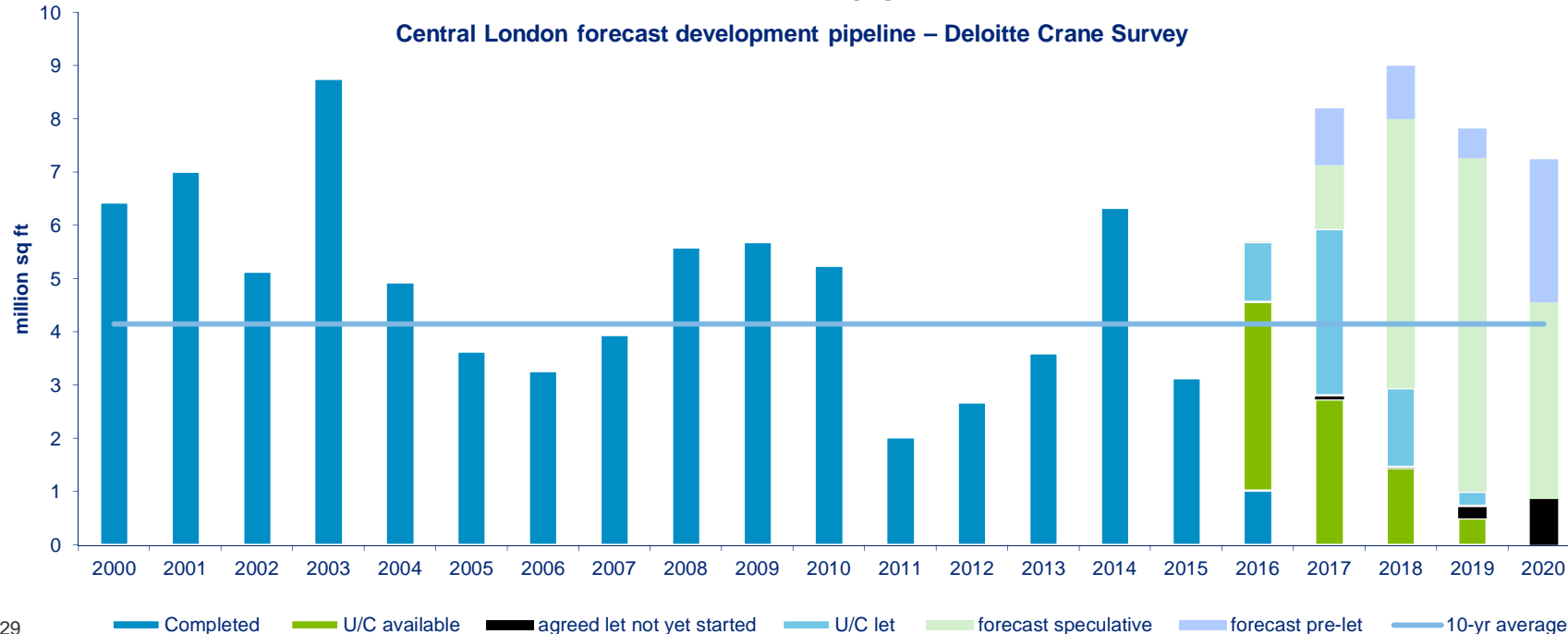
Completed and Forecasted Office Floor Space (Central London)

78m sq ft of office space completed since the year 2000

The following slides review the construction, pre-lets and take-up of office space across the Central London office market over the past 16 years.

The following graph shows the space completed since 2000 and the development pipeline both actual and forecast until 2020.

Source: Deloitte Real Estate

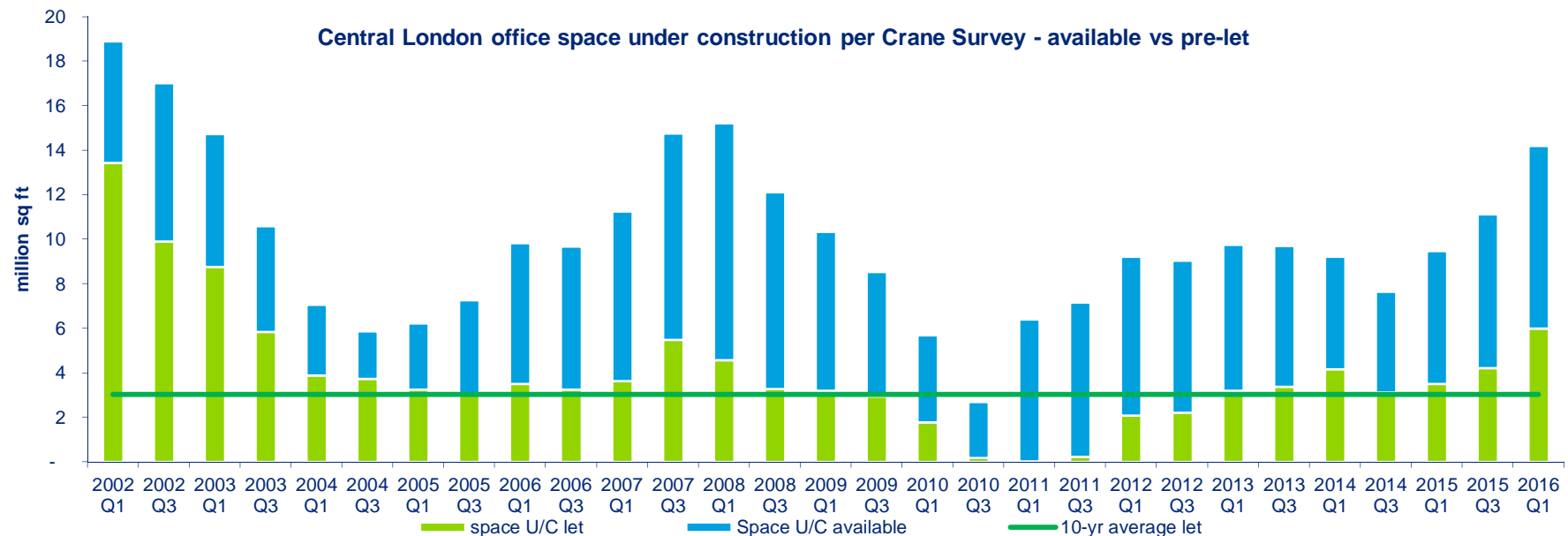


Office Space Under Construction and Pre-let per Q1 and Q3 (Central London)

Q1 2016 saw a healthy 42% pre-let rate

The below graph shows the volume of office space under construction at half-yearly points since 2002, split the amount pre-let and available. The data shows that four years after a period of financial uncertainty the construction of office space more than halves. During the 2007 recession office construction fell by 82% between Q1 2008 and Q3 2010.

Since 2002, on average 40% of all office space under construction has been pre-let. During 2002 to 2005 the market achieved 59% pre-lets, albeit this dropped off significantly between 2007 and 2011. Pre-lets fell to just 28% of all space. The percentage of pre-lets has since recovered to 42% in Q1 2016. This highlights that there needs to be certainty of demand and pre-lets to kick start office developments – this will help justify funding and reduce risk.



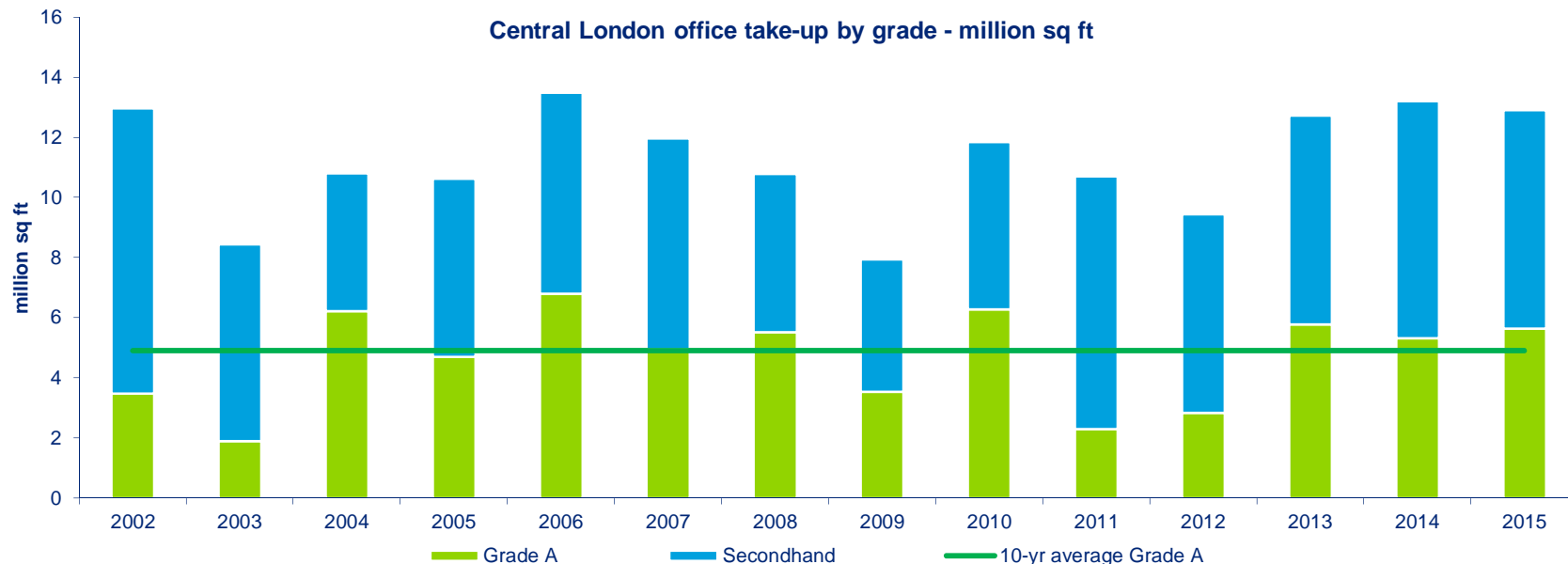
Take up of Grade A v second-hand Office Space (Central London)

10-year average of Grade A space let at 4.9m sqft pa

The below graph shows take-up of Grade A and second-hand office space. The recent economic downturn reduced the level of tenant demand, yet it recovered faster than construction activity, as seen in previous charts. Pent-up demand led to an increased level of leasing in 2010, at a point where construction was at its lowest. Limited supply and continuing market uncertainties forced businesses to take second-hand space (73% in 2011).

The 10-year average of Grade A space leased across the Central London market equated to 4.9 million sqft per annum, compared to an average of 6.6 million sqft per annum of second-hand space.

This graph illustrates the high demand for Grade A office space and with the Old Oak scheme being 100% Grade A this space could be more appealing than second-hand locations on the outskirts of Zone 1 such as Canary Wharf.

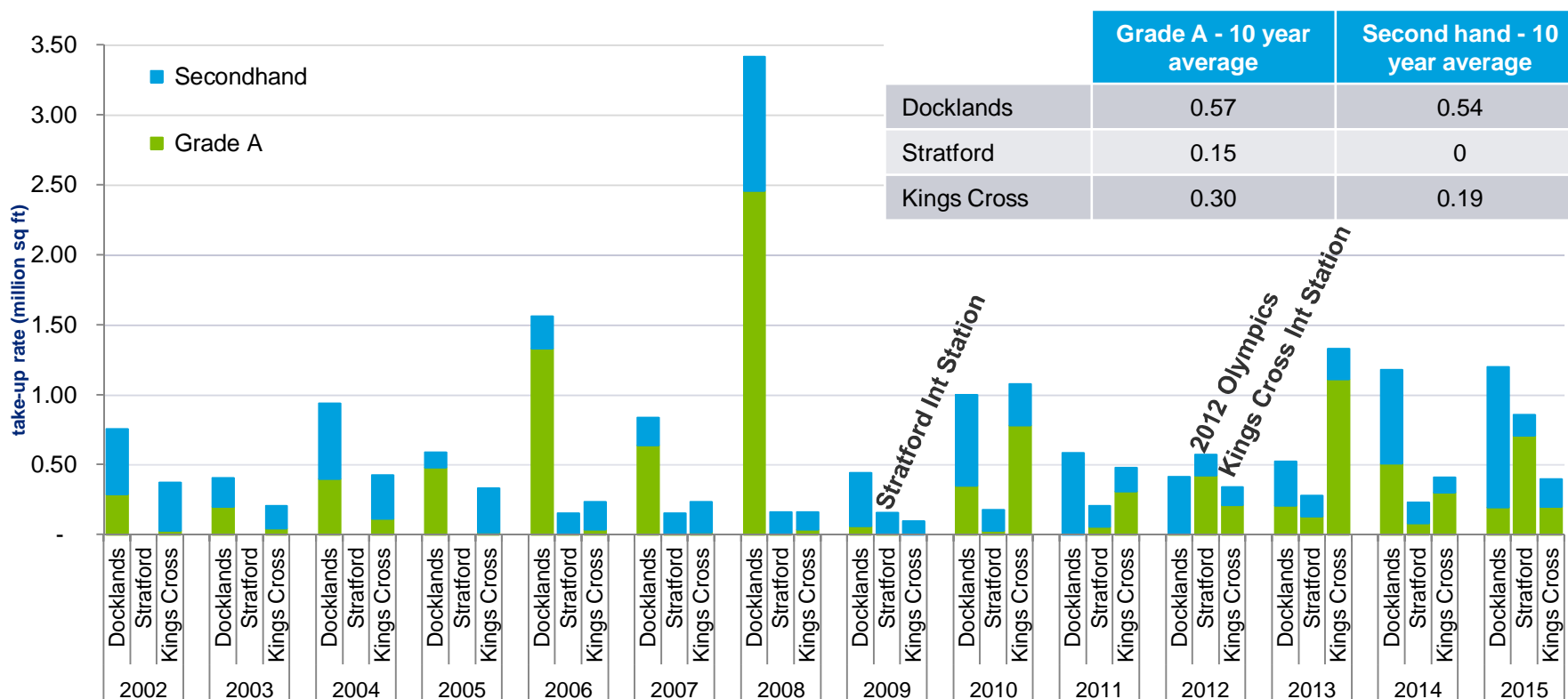


Commercial Take-up Rate (Docklands, Stratford and Kings Cross)

Only 0.62m sq ft of Grade A take-up between 2009-11

The below table analyses the take up rate of Grade A and Second hand office space across the Docklands, Stratford and Kings Cross case studies since 2002. The one key anomaly within the data is in 2008 where J P Morgan agreed to pre-let 1.9m sq ft of space at the Docklands. The graph below highlights some of the major

infrastructure items and draws out upward trends in take-up rates. This is particularly noticeable for Kings Cross following the opening of the International Station in 2012 where the average take-up rate increased from an average of 0.36m sq ft between 2002 to 2011 to an average of 0.7m sq ft per annum for the three years thereafter.



Office Take-up Rate (Periphery v Core)

Take up could increase to more than 0.5m sq ft per annum in established market conditions

In addition to providing a holistic view of the three commercial case studies, (Docklands, Stratford and Kings Cross,) to review how the take-up rate have fluctuated over time, we have also analysed periphery and core office locations across London. The periphery and core locations have been selected to resemble market conditions within Old Oak over time as the market location becomes established and demand increases.

The below office take-up rates suggested for Old Oak assumes stable market conditions. We consider a market take-up rate of 0.05m sq ft is appropriate until HS2 and Crossrail open in 2026, albeit after the stations open there will be a considerable 'interim' period whilst the market obtains momentum. Throughout this 'interim' period low rents will probably be necessary until the market establishes itself and large corporate occupiers are attracted.

| | Maximum office sq ft delivered per annum (million sq ft) |
|-------------------------------|--|
| Capital value category | Stable Market Conditions |
| Current market conditions | 0.05 |
| Interim market conditions | 0.1* |
| Established market conditions | 0.5 |

| Take up data (periphery markets) | | | |
|----------------------------------|------|---------|------|
| 10-year stats (m sq ft p.a.) | High | Average | Low |
| Stratford | 0.53 | 0.15 | 0.01 |
| Greenwich | 0.22 | 0.03 | 0.00 |
| Vauxhall | 0.09 | 0.05 | 0.01 |
| White City | 0.07 | 0.02 | 0.00 |

| Take up data (core markets) | | | |
|------------------------------|------|---------|------|
| 10-year stats (m sq ft p.a.) | High | Average | Low |
| King's Cross | 1.11 | 0.30 | 0.10 |
| Paddington | 0.41 | 0.19 | 0.09 |
| Docklands | 2.46 | 0.57 | 0.13 |
| South Bank | 1.77 | 0.79 | 0.28 |
| Victoria | 0.78 | 0.50 | 0.25 |

*The interim market take-up rate assumes a large pre-let. Typically this might be to a public sector organisation to help establish the market.

Appendix A – Scope and basis of our work



Real Estate

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Old Oak and Park Royal Development Corporation
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06th June 2016

Dear Davena

STRICTLY PRIVATE AND CONFIDENTIAL
OPDC Strategic Real Estate, Financial and Business Planning Services: Contract
Addendum for Market Absorption Rate Study – DRAFT for Client Comment

1 Introduction

This letter (the "Contract Addendum"), which sets out the terms on which we offer to perform the additional services specified below, is supplemental to and should be read in conjunction with the call-off contract between the Old Oak and Park Royal Development Corporation ("OPDC") and Deloitte LLP ("Deloitte") dated 4th April 2016 (the "Contract").

The terms of the Contract apply to the provision of our additional services under this Contract Addendum as if these supplementary instructions had been included in the Contract, subject only to the modifications set out in this Contract Addendum. Except for those terms modified below, all of the terms of the Contract shall remain unchanged. In particular, our agreeing to undertake the additional work under this Contract Addendum will not in any circumstances increase our aggregate liability to all parties for all services provided under this Contract Addendum and under the Contract beyond the limit of our liability already specified in the Contract. Please confirm your acceptance of this Contract Addendum by signing and returning the attached copy of it.

Please note the report will be strictly Confidential and is for OPDC's Internal Purposes Only.

2 Context

Following the completion of your Draft Phasing Trajectory outlining the plot release dates, construction periods and delivery of homes, office space and jobs, you have raised your concerns over the peak delivery of jobs and homes per annum that are currently forecasted across the trajectory.

We recognise the Phasing Trajectory is an OPDC document which sets out the phasing of the development sites

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Real Estate

within OOC and will be updated by the Land/Planning Teams to reflect new title information, pre application discussions and planning permissions. OPDC have currently separated the masterplan into four key markets listed below:

- Old Oak Common North, Scrubs Lane and Willesden Junction
- Old Oak South and Victoria Road
- North Acton
- Park Royal

The OPDC Phasing Trajectory builds upon the updated planning policy jobs and housing numbers and captures the residential units and office floorspace from pre-application discussions and planning applications within OPDC's boundary. This subsequently provides a real time view on the trajectory based on current applications and discussions. The trajectory also captures technical studies that have been undertaken, principally the over station development (OSD) above the HS2 site.

From the updated housing and office floor space, we understand that OPDC have phased the public and private sector land by realistic dates the sites could become available and have tried to keep the development programme within a 30 year period; as set out within the Growth Strategy. We also understand that the current trajectory assumes an absorption rate of 180 units per annum per development site, where circa 4-6 development sites could be developed and brought to the market at the same time.

3 Purpose of Study

OPDC have outlined certain aspects detailing the purpose of the study below, so fundamentally they can manipulate the Phasing Trajectory based on clear market evidence and rational:

- Optimum office and residential absorption rates per annum to enable OPDC to re-run their housing trajectory based on market justification and market conditions.
- Determine an internal view on optimum absorption rates, particularly when speaking to private sector land owners about their proposed phasing plans. Layering what is known in terms of third party delivery of land and projections against OOC's controlled land.
- Competing schemes throughout London to understand supply over the next 10 years and the robustness of OOC absorption rates.
- Assumptions around the four identified markets and whether there are actually additional, smaller sub markets, i.e. Scrubs Lane and Willesden Junction. If there are additional submarkets how does this affect the total cumulative absorption rate and how much competition is generated within these sub markets?
- How different housing typologies could make up the overall housing supply on a yearly basis (i.e. PRS, private sale and affordable) and how the different combinations could shape or influence the number of homes that could be delivered.

4 Scope of Services

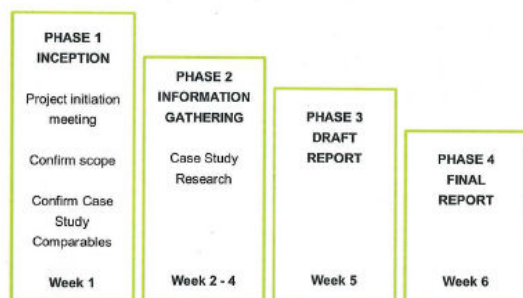
The scope of our work under the Contract will be extended to include undertaking a Market Absorption Rate Study for OPDC.

The Absorption Rate Study will comprise of a short report where we will undertake a detailed review of no more than 5 case studies to help address the following key questions:

- Maximum number of residential units delivered to the market per annum.
- Maximum office floor space delivered to the market per annum.
- Influence of market conditions and other external factors on housing absorption.

- Highlight of concerns about the trajectory and how schemes might compete with each other within the OOC as well as schemes across London.
- Advice on how many submarket and developers could be assumed to be selling residential units and letting office space at any one time across the masterplan.
- Provide an indicative housing mix based on different typologies that will impact on the absorption rate per annum.

5 Methodology



The Study methodology comprises four phases, where the bulk of the information gathering is within Phase 2 and it is anticipated it will take at least 1 month to complete.

During **Phase 1**, we will identify a list of large regeneration sites across London to discuss at the inception meeting. During this meeting we will review the above scope of services and confirm the level of detail we can review. To aid this conversation we will bring along a draft template outlining the key areas we will research for each of the case studies. It is important to note that this work will help feed into the background research for the master planning study.

Following on from confirming the scope and case studies **Phase 2** is about undertaking the detailed research and mapping out the historic and future trajectory for the delivery of residential units and commercial floor space. While we do not intend to forecast future absorption rates it is envisaged that we will use our analysis from the case studies to inform what absorption could look like in a strong, medium and weak market. Towards the end of Phase 2 we will be in a position to share the draft report for client comments.

6 Personnel and project management

The Partner in charge of this instruction is Clive Pane (0207 303 3843 / cpane@deloitte.co.uk). He will be supported by Hari Sothnathan as Project Manager and will be supported by Jason Turner (Assistant Manager).

Davena Wilson will manage this instruction for OPDC. We will also work with a wider group of OPDC staff and stakeholders, including Michael Mulhern. It is envisaged that towards the end of Phase 2 we will arrange a few client meetings to update on progress, report findings and gain OPDC's input on the project.

7 Estimated fee budget

Our fees and expenses will be payable in accordance with the terms and conditions of the Contract, based on our agreed framework rates and associated 25% discount to hours charged.

Our charges for support to the project will be based on a maximum budget of £30,000.

We would be grateful if you could sign and return a copy of this contract addendum for our records.

Yours sincerely,

Deloitte LLP

Deloitte LLP

D Wilson

I hereby confirm the agreement to the terms set out above on behalf of OPDC.....

Name and position..... Davena Wilson (Head of Land)

Date..... 14 June 2016

Appendix B – Case Study Templates



1) Nine Elms

Development Status

Planning Application

A range of planning applications have been granted for mixed use developments, offering B1 office space, A1-3 retail, leisure facilities, hotels, student accommodation and both affordable and private residential.

Construction

The majority of developments in the Nine Elms redevelopment area have had their planning application approved or are under construction. Currently approximately 9,000 units are under construction to be completed before 2022, with the remainder commencing construction in the next few years or still being in the predevelopment phase (like Battersea Power Station phases 4-7 comprising of 1,476 units). Average development unit size is 450.

Sales Release

There are currently 337 units on the market in the Nine Elms redevelopment area, with a further 6,500 in the pipeline to be released as developments near completion.

Source: Nine Elms planning strategy (nineelmslondon.com) / Molior Research database / Planning Documents / Local Developers

| | |
|---------------------|--|
| Developers | Multiple (Battersea Power Station Development / other) |
| Funder / Mechanism | Multiple |
| Borough | Wandsworth / Lambeth |
| Total Unit Numbers | 20,000 |
| Total Private Units | 16,186 |
| Total Acres | 227 |

Sales Commentary

The average sales period for the area is 14 months (this is the average length a development has been on the market to date).

The average number of units sold to date (for those developments with properties on the market) is 269.

It is assumed that the 2849 affordable homes are instantly taken off the market once complete.

Difference from initial projected development forecasts

From talking with local developers it became apparent that there is a heavy reliance on 'place making' in the area and there has been a conscious effort to embed this within all developments.

Through this 'place making', especially around Battersea Power Station, it was forecast that developments would sell out within months. This was true for the first sales phase, however has slowed down considerably with the release of further schemes and phases.

| Absorption / Sub-markets | |
|---|---------|
| Assumed number of submarkets | 3 |
| Average private residential take-up pa | 687 |
| Average private unit take up per development pa | 145 |
| Construction programme | 2007-30 |

Residential Unit Analysis (Selected Developments)

| | Private | Affordable |
|---------|-------------|-------------|
| 1 Bed | 4,204 (31%) | 925 (35%) |
| 2 Bed | 6,851 (51%) | 1,070 (40%) |
| 3 Bed | 2,247 (17%) | 543 (20%) |
| 4 Bed + | 251 (2%) | 115 (4%) |
| Total | 13,553 | 2,653 |

Commercial Analysis

| | |
|---------------------|-----------|
| Office (sq ft) | 2,601,000 |
| Retail (sq ft) | 1,691,000 |
| Hotel (beds) | 1011 |
| Student Accm (beds) | 950 |

Summary of Nine Elms Residential Development Activity & Pipeline

| Development / Phase | Developer | Total Resi Units | Private Resi Units | Total Commercial Floor Area (sq ft) | Construction Programme | Planning / Development Status |
|--|-------------------------------------|------------------|--------------------|-------------------------------------|------------------------|-------------------------------|
| 81 Black Prince Road (Parliament House) | Telford Homes | 171 | 73 | 0 | Mar 13 – Mar 15 | Completed |
| Chelsea Bridge Wharf (Phase 6) | Berkeley Homes | 59 | 59 | 0 | Jan 10 – Dec 10 | Completed |
| Chelsea Bridge Wharf (Phase 5) | Berkeley Homes | 233 | 148 | 0 | Sep 07 – Sep 09 | Completed |
| St. George Wharf (The Vauxhall Tower) | St George Central London Ltd | 223 | 223 | 0 | Oct 10 – Feb 14 | Completed |
| St. George Wharf (Aquarius and Kestral) | St George Central London Ltd | 274 | 182 | 0 | May 08 – Mar 10 | Completed |
| Battersea Exchange | Taylor Wimpey | 290 | 230 | 0 | May 15 – May 19 | Under Construction |
| Battersea Power Station Phase 1 (Circus West) | Battersea Power Station Development | 866 | 866 | 100,000 | Nov 13 – Dec 16 | Under Construction |
| Battersea Power Station Phase 2 (Power Station) | Battersea Power Station Development | 254 | 254 | 500,000 | Jun 14 – Jan 19 | Under Construction |
| Battersea Power Station Phase 3 (Prospect Place/The Skyline) | Battersea Power Station Development | 1305 | 1109 | 0 | Jun 15 – Jun 22 | Under Construction |
| Embassy Gardens | Ballymore Group | 1978 | 1679 | 680,000 | Feb 13 – Jun 18 | Under Construction |
| Embassy Works (Park Place) | Park Place Developments | 39 | 58 | 0 | Jun 15 – Jun 17 | Under Construction |
| Merano Residences | St James | 48 | 48 | 10,000 | Jun 14 – Mar 17 | Under Construction |
| Nine Elms Point | BDWZest Developments LLP | 593 | 593 | 143,000 | Feb 14 – Dec 19 | Under Construction |
| One Nine Elms | Dalian Wanda Group | 487 | 436 | 3,500 | Jun 15 – Dec 19 | Under Construction |
| Riverlight | St James | 813 | 697 | 0 | Dec 11 – Jun 19 | Under Construction |
| Sky Gardens | Frasers Property UK Ltd | 239 | 180 | 54,000 | Feb 14 – Mar 17 | Under Construction |
| Spring Mews (Phase 2) | CLS Holdings plc | 27 | 0 | 15,000 | Jun 15 – Jun 17 | Under Construction |
| The Atlas | Downing | 533 | 0 | 0 | Jun 14 – Jun 17 | Under Construction |
| The Corniche | St James | 253 | 168 | 5,000 | Sep 14 – Mar 18 | Under Construction |
| The Residence | Bellway Homes | 510 | 434 | 26,500 | May 15 – Jun 17 | Under Construction |
| US Embassy | Harbert | NA | NA | 500,000 | May 13 – Jun 17 | Under Construction |

Source: Nine Elms planning strategy (nineelmslondon.com) / Molior Research database / Planning Documents / Local Developers

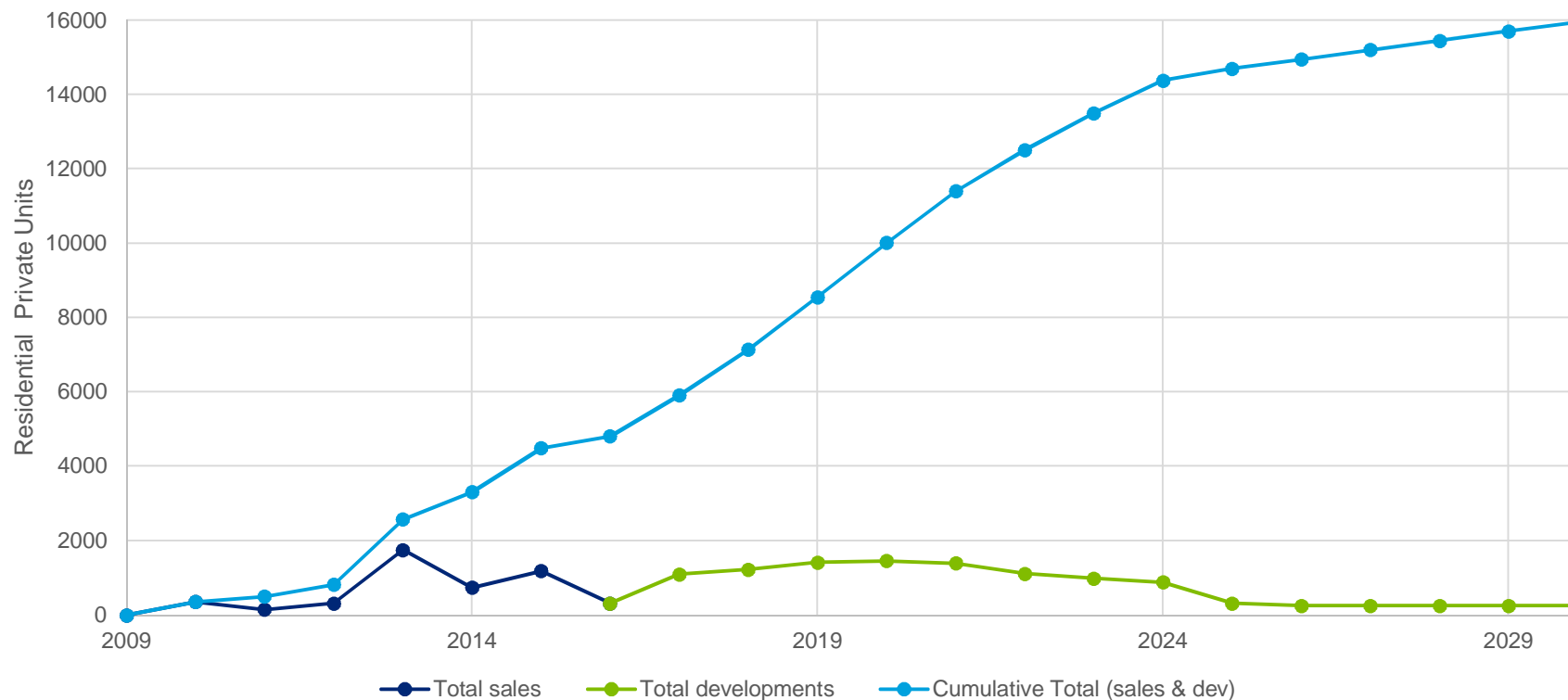
Summary of Nine Elms Residential Development Activity & Pipeline (...continued)

| Development / Phase | Developer | Total Resi Units | Private Resi Units | Total Commercial Floor Area (sq ft) | Construction Programme | Planning / Development Status |
|------------------------------------|---------------------------------|------------------|--------------------|-------------------------------------|------------------------|-------------------------------|
| Vista | Berkley Homes | 454 | 386 | 13,500 | Dec 14 – Dec 17 | Under construction |
| 22-29 Albert Embankment | St James | 141 | 123 | 9,000 | Jun 17 – Jun 18* | Application Approved |
| Grand South | TBC | 219 | 203 | 25,000 | Jun 17 – Jun 21* | Application Approved |
| Keybridge House | A2Dominion / Mount Anvil | 441 | 415 | 130,000 | Oct 16 – Oct 21* | Application Approved |
| New Bondway (Vauxhall Bondway) | DAMAC Group | 450 | 360 | 81,000 | Dec 16 – Jun 19* | Application Approved |
| New Covent Garden Market | VSM Estates Limited | 2971 | 2525 | 800,000 | Jun 20 – Jun 30* | Application Approved |
| Nine Elms Parkside | TBC | 1870 | 1590 | 270,000 | Jun 20 – Jun 24* | Application Approved |
| Vauxhall Cross | Kylun Ltd | 291 | 225 | 45,000 | Jun 19 – Jun 21* | Application Approved |
| Vauxhall Square | TBC | 520 | 410 | 280,000 | Jun 19 – Jun 21* | Application Approved |
| 101 Prince of Wales Drive | St William | 839 | 638 | 60,000 | Jul 16 – Jul 23* | Application Submitted |
| 36-46 Albert Embankment | TBC | 166 | 118 | 1,500 | Jun 20 – Jun 25* | Pre-Development |
| 46 Ponton Road | London & Quadrant Housing Trust | 357 | 262 | 0 | Jun 20 – Jun 25* | Pre-Development |
| Battersea Power Station Phases 4-7 | TBC | 1476 | 1476 | TBC | Jun 20 – Jun 25 | Pre-Development |

*Timescales predicted / forecast

Source: Nine Elms planning strategy (nineelmslondon.com) / Molior Research database / Planning Documents / Local Developers

Summary of Nine Elms Residential Development Activity & Pipeline (...continued)



Timeframe for Completion/Trajectory of Private Residential Units

| Date | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|-----------------|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Number of Units | 356 | 146 | 318 | 1751 | 737 | 1186 | 318 | 1100 | 1225 | 1414 | 1460 | 1392 | 1113 | 987 | 879 | 315 | 252 | 252 | 252 | 252 | 252 |
| % Total | 2.2% | 0.9% | 2.0% | 10.9% | 4.6% | 7.4% | 2.0% | 6.9% | 7.7% | 8.9% | 9.1% | 8.7% | 7.0% | 6.2% | 5.5% | 2.0% | 1.6% | 1.6% | 1.6% | 1.6% | 1.6% |

Source: Nine Elms planning strategy (nineelmslondon.com) / Molior Research database / Planning Documents / Local Developers



2) Kings Cross

| | |
|---------------------|------------------------|
| Developer | Argent / Taylor Wimpey |
| Funder / Mechanism | AustralianSuper Fund |
| Borough | Camden |
| Total Unit Numbers | 1,452 |
| Total Private Units | 1,105 |
| Total Acres | 64.5 |

Development Status

Planning Application

Full permission was granted in 2004 for mixed-use redevelopment of the former railway lands. In addition to the 2,000 homes, permission has been given for B1, C3 (inc student accommodation), leisure facilities (inc D1 nightclubs), open spaces and infrastructure works including new streets and landscaping.

Construction

Construction started in Jan 2012 and is likely to be completed by 2020. 40% of schemes are under construction, comprising of approximately 500 units, with a further 550 units in planning and likely to begin construction over the next 2 years. Average development unit size is 111.

Sales Release

There are currently 552 units on the market with approximately a further 100 units to be released this year. 40% of developments (380 units) have not been released as they are still in the planning stages.

Source: Kings Cross Masterplan (<https://www.kingscross.co.uk/development>) / Molior Research database / Planning Documents

Sales Commentary

The average sales period (for those developments released onto the market) is 17 months.

The average sales period to sell all units (for those developments that have sold out) is 33 months.

The average number of units sold to date (for those developments with properties on the market) is 79.

To date the construction of 177 affordable units are complete and we have assumed these units absorbed instantly on to the market.

Absorption / Sub-markets

| | |
|---|---------|
| Assumed number of submarkets | 2 |
| Average private residential take-up pa | 79 |
| Average private unit take up per development pa | 36 |
| Construction programme | 2004-20 |

Residential Unit Analysis (Selected Developments)

| | Private | Affordable |
|---------|-----------|------------|
| 1 Bed | 401 (36%) | 117 (34%) |
| 2 Bed | 470 (43%) | 154 (44%) |
| 3 Bed | 221 (20%) | 67 (19%) |
| 4 Bed + | 13 (1%) | 10 (3%) |
| Total | 1105 | 348 |

Commercial Analysis

| | |
|---------------------|--------|
| Office (sq ft) | 3,000k |
| Retail (sq ft) | 1,428k |
| Hotel (beds) | 500 |
| Student Accm (beds) | 600 |

Largest Office Pre-lets

| Building | Tenant | Sq Ft | Year Agreed Pre-let |
|------------------------|----------------|---------|---------------------|
| Kings Cross Central | Google | 860,000 | 2013 |
| 3 Pancras Square | Camden Council | 180,000 | 2011 |
| S2 Kings Cross Central | Google | 180,000 | 2015 |
| Three Pancras Square | Havas Media | 163,000 | 2014 |

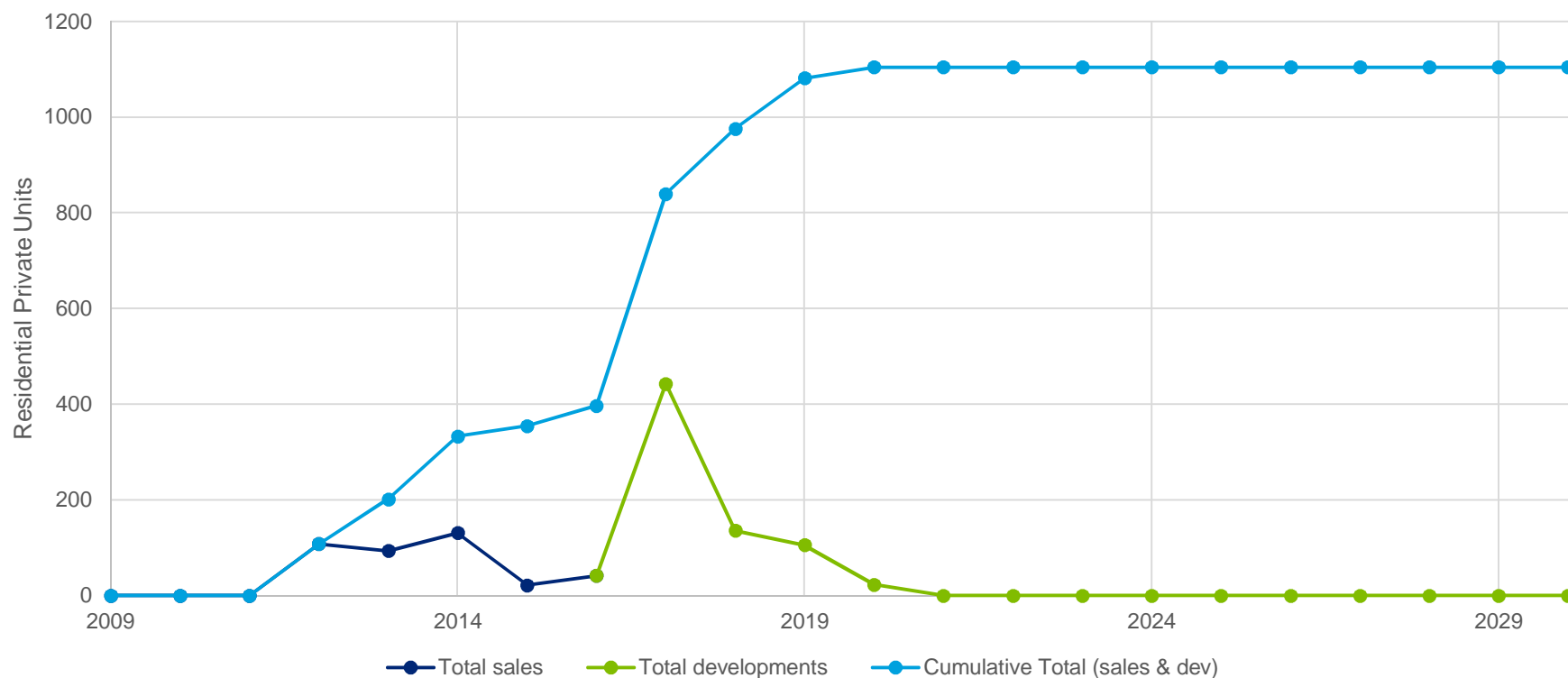
Summary of Kings Cross Development Activity & Pipeline

| Development / Phase | Developer | Total Resi Units | Private Resi Units | Total Commercial Floor Area (sq ft) | Construction Programme | Planning / Development Status |
|--|---------------|------------------|--------------------|-------------------------------------|------------------------|-------------------------------|
| Kings Cross Central - P1 - The Plimsoll Building | Argent | 255 | 179 | TBC | Aug 13 – Oct 15 | Completed |
| Kings Cross Central - J - Arthouse | Argent | 143 | 114 | TBC | Jan 12 – Dec 13 | Completed |
| Kings Cross Central - R5 South - Fenman House | Argent | 76 | 76 | TBC | Dec 15 – Jun 17 | Under Construction |
| Kings Cross Central - Gas Holders | Argent | 144 | 144 | TBC | Feb 15 – Sep 17 | Under Construction |
| Kings Cross Central - T1 - Tapestry Building | Argent | 129 | 95 | TBC | Apr 13 – Jun 16 | Under Construction |
| ONYX Apartments | Taylor Wimpey | 154 | 117 | TBC | Mar 16 – Jun 18 | Under Construction |
| Kings Cross Central - Triangle Camden - W1W/W2 | Argent | 218 | 159 | TBC | Jun 17 – Jun 19* | Application Approved |
| 101 Camley Street | Market Tech | 121 | 91 | TBC | Jun 17 – Jun 19* | Application Approved |
| Kings Cross Central - R3 | Argent | 61 | 61 | TBC | Jun 17 – Jun 18* | Application Approved |
| Kings Cross Central - R8 | Argent | 151 | 69 | TBC | Jun 18 – Jun 20* | Planning Submitted |

*Timescales predicted / forecast

Source: Kings Cross Masterplan (<https://www.kingscross.co.uk/development>) / Molior Research database / Planning Documents

Summary of Kings Cross Residential Development Activity & Pipeline (...continued)



Anticipated Timeframe for Completion/Trajectory of Private Residential Units

| Date | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|-----------------|------|------|------|-------|------|-------|------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| Number of Units | 0 | 0 | 0 | 108 | 94 | 131 | 22 | 42 | 443 | 136 | 106 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Total | 0% | 0% | 0% | 10.2% | 8.5% | 11.9% | 2.0% | 3.8% | 40.1% | 12.3% | 9.6% | 2.1% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% |

Source: Kings Cross Masterplan (<https://www.kingscross.co.uk/development>) / Molior Research database / Planning Documents

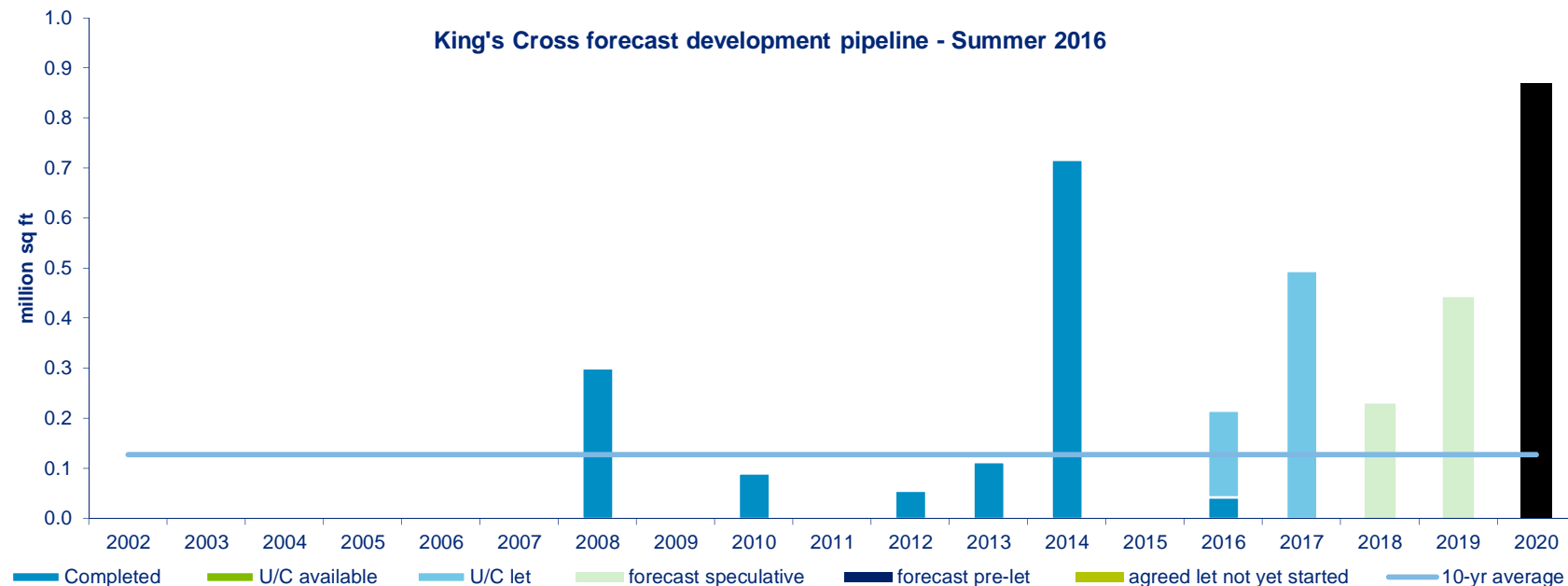
Kings Cross Historic and Forecast - Office

1.2 million completed since 2008

The below graphs shows the development pipeline for the King's Cross office market showing historic completion, actual and forecast construction. The majority of the development that has taken place over the past ten years has been in and around the King's Cross Central (KCC) site. Just over 1 million sq ft has been delivered to the market over the past 10-years, with 2014 representing the largest of this with 717,000 sq ft.

Phased development of the KCC site will now see the construction of office buildings heading northwards of Pancras Square.

At the end of Q1 2016 668,000 sq ft was under construction across five buildings. All of which had been fully let. The next five years we expect to see above average development of over 2 million sq ft, with further extension of this market expected should demand for this location continue.



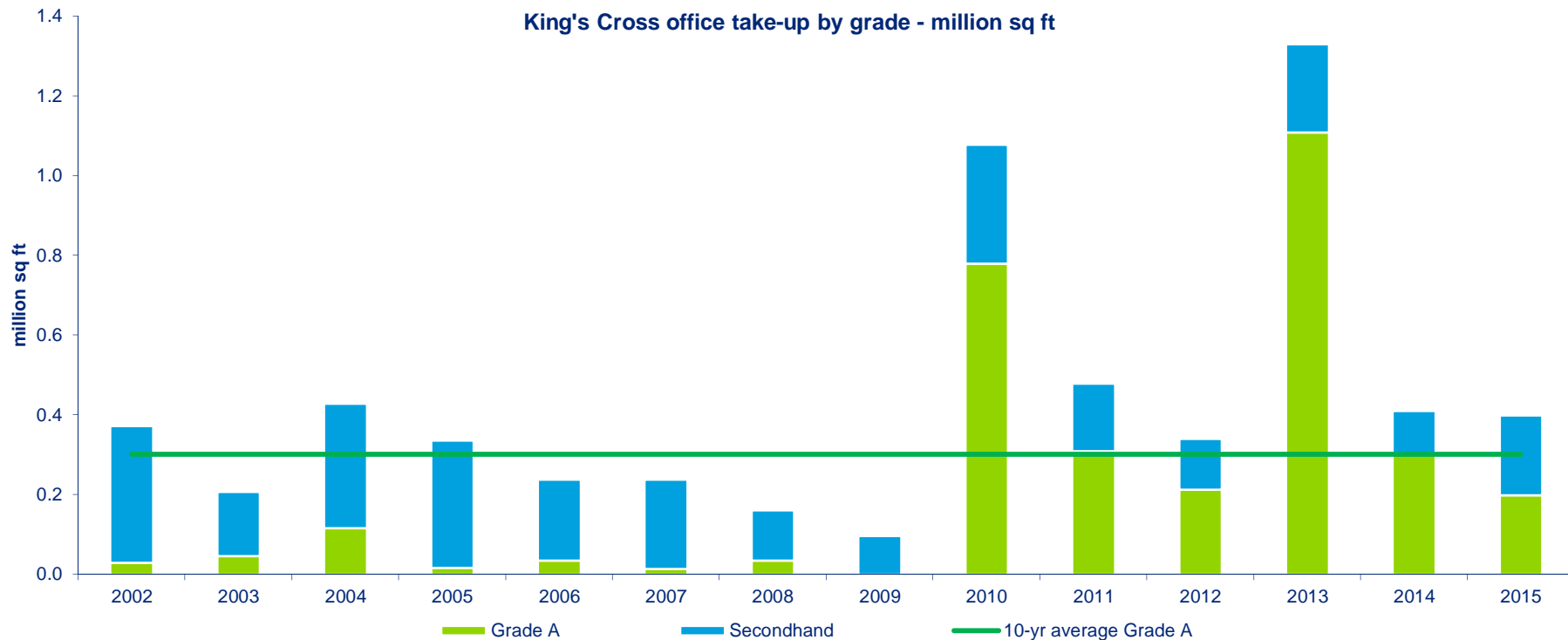
Source: Deloitte Real Estate

Kings Cross Summary take-up rate - Office

10-year average of Grade A take up rate at 45%

The success of the King's Cross Central scheme led to above high levels of leasing in recent years, especially Grade A. The 10-year average of Grade A take-up stands at 45%, a level that has been surpassed each year since 2010. Pre-letting activity contributed largely to 2013, as a result of Google choosing a new site at KCC.

Secondhand space is predominately located away from the train station, but the wider attraction of this location and its transport benefits has led to businesses wishing to top closer to the action.



Source: Deloitte Real Estate



3) Stratford

| | |
|---------------------|---------------------------------|
| Developer | Multiple (Qatari Diar Delancey) |
| Funder / Mechanism | Multiple |
| Borough | Newham |
| Total Unit Numbers | 21,552 |
| Total Private Units | 16,604 |
| Total Acres | Approx. 700 |

Development Stats

Planning Application

Throughout the 4 key submarkets, developments differ in current planning application status. Overall, 92% of the schemes analysed have had planning approved. Of these mixed use developments, on average there is a healthy 30% affordable housing provision. The masterplan for the area highlights the mixed land use, proposing 8 new schools, 20,000 new homes and range of retail (A1-3) and B1 office space.

Construction

Of the schemes analysed, 19% are under construction and a further 19 developments comprising of a total of 11,700 units have had planning approved and are likely to begin construction before 2019. Average unit development size 145.

Sales Release

Across the 5 schemes currently on the market there are 223 units for sale with a further 70 on hold to be released later in the year. There are a further 13,451 units in planning which are likely to be phased onto the market up until 2031.

Source: Stratford Redevelopment Masterplan([https://www.newham.gov.uk/.../Stratford%20Metropolitan%20Masterplan%20\(SMM\)](https://www.newham.gov.uk/.../Stratford%20Metropolitan%20Masterplan%20(SMM))) / Molior Research Database / Master planning documents

Sales Commentary

The average sales period (for those developments released onto the market) is 14.7 months.

The average sales period to sell all units (for those developments that have sold out) is 14.2 months.

The average number of units sold to date (for those developments with properties on the market) is 169.

It is assumed that the 2,169 affordable units released to date have been absorbed instantly into the market.

Absorption / Sub-markets

| | |
|---|---------|
| Assumed number of submarkets | 4 |
| Average private residential take-up pa | 615 |
| Average private unit take up per development pa | 144 |
| Construction programme | 2011-31 |

Residential Unit Analysis (Selected Developments)

| | Private | Affordable |
|---------|------------|------------|
| 1 Bed | 5919 (36%) | 1608 (32%) |
| 2 Bed | 7215 (43%) | 2128 (43%) |
| 3 Bed | 3043 (18%) | 941 (19%) |
| 4 Bed + | 427 (3%) | 291 (6%) |
| Total | 16604 | 4968 |

Commercial Analysis

| | |
|---------------------|--------|
| Office (sq ft) | 1,306k |
| Retail (sq ft) | 1,070k |
| Hotel (beds) | 853 |
| Student Accm (beds) | 0 |

Largest Office Pre-lets

| Building | Tenant | Sq Ft | Year Agreed Pre-let |
|------------------|---------------------------------|---------|---------------------|
| S5 TIQ | The Financial Conduct Authority | 425,000 | 2015 |
| Broadcast Centre | Infinity Data Centre | 270,000 | 2012 |
| S6 TIQ | Transport for London | 265,000 | 2015 |
| Broadcast Centre | BT Sport | 80,000 | 2013 |
| Broadcast Centre | Loughborough University | 60,000 | 2012 |

Summary of Stratford Development Activity & Pipeline

| Development / Phase | Developer | Total Resi Units | Private Resi Units | Total Commercial Floor Area (sq ft) | Construction Programme | Planning / Development Status |
|--|---------------------------------|------------------|--------------------|-------------------------------------|------------------------|-------------------------------|
| Stratford Halo (Spirit of Stratford / Walton House) | Genesis Housing Association | 639 | 410 | 24,500 | May 08 – Sep 13 | Completed |
| Aurora | One Housing Group | 173 | 90 | 10,000 | Jan 10 – Dec 11 | Completed |
| One Eighty Stratford High Street (Athena Court) | Aberdeen Asset Management | 298 | 166 | 0 | Jun 07 – Aug 10 | Completed |
| Velocity | One Housing Group | 113 | 56 | 19,000 | Jul 09 – Dec 10 | Completed |
| Stratford Plaza (Station House) | Telford Homes | 220 | 198 | 61,700 | Dec 12 – Jan 16 | Completed |
| One Stratford | Telford Homes | 301 | 179 | 8,000 | Dec 06 – May 09 | Completed |
| Stratford Eye (Former Maryland Works) | London & Quadrant Housing Trust | 160 | 62 | 41,300 | Dec 06 – Mar 08 | Completed |
| Stratford City - Z4/5 - Athletes' / East Village - N01 | Qatari Diar Delancey | 288 | 253 | 5,000 | Jun 09 – Jun 14 | Completed |
| Stratford City - Z4/5 - Athletes' / East Village - N02 | Qatari Diar Delancey | 298 | 186 | 2,000 | Jun 09 – Jun 14 | Completed |
| Stratford City - Z4/5 - Athletes' / East Village - N03 | Qatari Diar Delancey | 297 | 185 | 7,000 | Jun 09 – Aug 14 | Completed |
| Stratford City - Z4/5 - Athletes' / East Village - N04 | Qatari Diar Delancey | 290 | 178 | 7,000 | Jun 09 – Jun 14 | Completed |
| Stratford City - Z4/5 - Athletes' / East Village - N07 | Qatari Diar Delancey | 318 | 200 | 6,000 | Jun 09 – Jun 14 | Completed |
| Stratford City - Z4/5 - Athletes' / East Village - N09 | Qatari Diar Delancey | 120 | 79 | 5,000 | Jun 09 – Oct 13 | Completed |
| Stratford City - Z4/5 - Athletes' / East Village - N10 | Qatari Diar Delancey | 281 | 171 | 4,000 | Jun 09 – Oct 13 | Completed |
| Stratford City - Z4/5 - Athletes' / East Village - N13 | Qatari Diar Delancey | 185 | 135 | 0 | Mar 10 – Mar 14 | Completed |
| Stratford City - Z4/5 - Athletes' / East Village - N14 | Qatari Diar Delancey | 201 | 126 | 0 | Jun 09 – Apr 14 | Completed |
| Stratford City - Z4/5 - Athletes' / East Village - N15 | Qatari Diar Delancey | 298 | 177 | 2,500 | Mar 10 – Mar 14 | Completed |
| Stratford City - Z4/5 - Athletes' / East Village - N26 | Qatari Diar Delancey | 243 | 129 | 5,000 | Mar 10 – Mar 14 | Completed |
| Vantage Square (Biggs Square) | Family Moosaic | 123 | 24 | 10,000 | Dec 07 – Oct 08 | Completed |
| Wick Lane Wharf (Riverside Works) | London Green Developments Ltd | 104 | 104 | 13,000 | Oct 07 – Mar 09 | Completed |

Source: Stratford Redevelopment Masterplan([https://www.newham.gov.uk/.../Stratford%20Metropolitan%20Masterplan%20\(SMM\)](https://www.newham.gov.uk/.../Stratford%20Metropolitan%20Masterplan%20(SMM))) / Molior Research Database / Master planning documents

Summary of Stratford Development Activity & Pipeline

| Development / Phase | Developer | Total Resi Units | Private Resi Units | Total Commercial Floor Area (sq ft) | Construction Programme | Planning / Development Status |
|--|--|------------------|--------------------|-------------------------------------|------------------------|-------------------------------|
| Bow River Village | Southern Housing Group | 741 | 74 | 12,000 | Nov 14 – Jun 21* | Under Construction |
| Capital Towers | Gilliard Homes | 191 | 0 | 7,500 | Dec 14 – Dec 16 | Under Construction |
| Stratford Riverside (Stratford Edge) | Western Homes Plc | 202 | 42 | 8,500 | Jun 14 – Sep 17 | Under Construction |
| Stratosphere (Broadway Chambers / Central House) | Telford Homes | 342 | 52 | 18,500 | Dec 14 – Sep 18 | Under Construction |
| Stratford City - Z1 - Stratford Central | Telford Homes | 181 | 24 | 0 | Sep 14 – Dec 18 | Under Construction |
| Stratford City - Z2 - Glasshouse Gardens | Lendlease | 333 | 20 | 0 | Sep 14 – Dec 18 | Under Construction |
| Stratford City - Z3 - Manhattan Loft Gardens (N24) | Manhattan Loft Corporation | 248 | 248 | 3,500 | Mar 15 – Apr 18 | Under Construction |
| Stratford City - Z4/5 - Athletes' / East Village - N08 | Qatari Diar Delancey | 481 | 481 | 14,500 | Feb 16 – Aug 18 | Under Construction |
| Chobham Farm - 1 - Prospect East | East Thames Group | 173 | 36 | 12,500 | Nov 14 – Jul 16 | Under Construction |
| Chobham Manor - PDZ6.1 | L&Q / Taylor Wimpey | 259 | 79 | 8,500 | Oct 14 – Jan 17 | Under Construction |
| Strand East Master Consent | Vastint / Inter IKEA Property Division | 1192 | 132 | 499,500 | Jun 16 – Dec 23* | Application Approved |
| Queen Elizabeth Olympic Park - Pudding Mill - PDZ8 | London Legacy DC / Olympic Park Legacy Company | 1258 | 491 | 412,500 | Jun 18 – Dec 25* | Application Approved |
| Queen Elizabeth Olympic Park - Pudding Mill - PDZ12 | London Legacy DC / Olympic Park Legacy Company | 400 | 212 | 13,500 | Jun 18 – Dec 21* | Application Approved |
| Queen Elizabeth Olympic Park - Marshgate Wharf - PDZ1 | London Legacy DC / Olympic Park Legacy Company | 1705 | 375 | 310,000 | Jun 18 – Dec 25* | Application Approved |
| Queen Elizabeth Olympic Park - Marshgate Wharf - PDZ2 | London Legacy DC / Olympic Park Legacy Company | 959 | 335 | 35,000 | Jun 18 – Dec 24* | Application Approved |
| Queen Elizabeth Olympic Park - Marshgate Wharf - PDZ4 | London Legacy DC / Olympic Park Legacy Company | 760 | 365 | 71,000 | Jun 18 – Dec 24* | Application Approved |

*Timescales predicted / forecast

Source: Stratford Redevelopment Masterplan([https://www.newham.gov.uk/.../Stratford%20Metropolitan%20Masterplan%20\(SMM\)](https://www.newham.gov.uk/.../Stratford%20Metropolitan%20Masterplan%20(SMM))) / Molior Research Database / Master planning documents

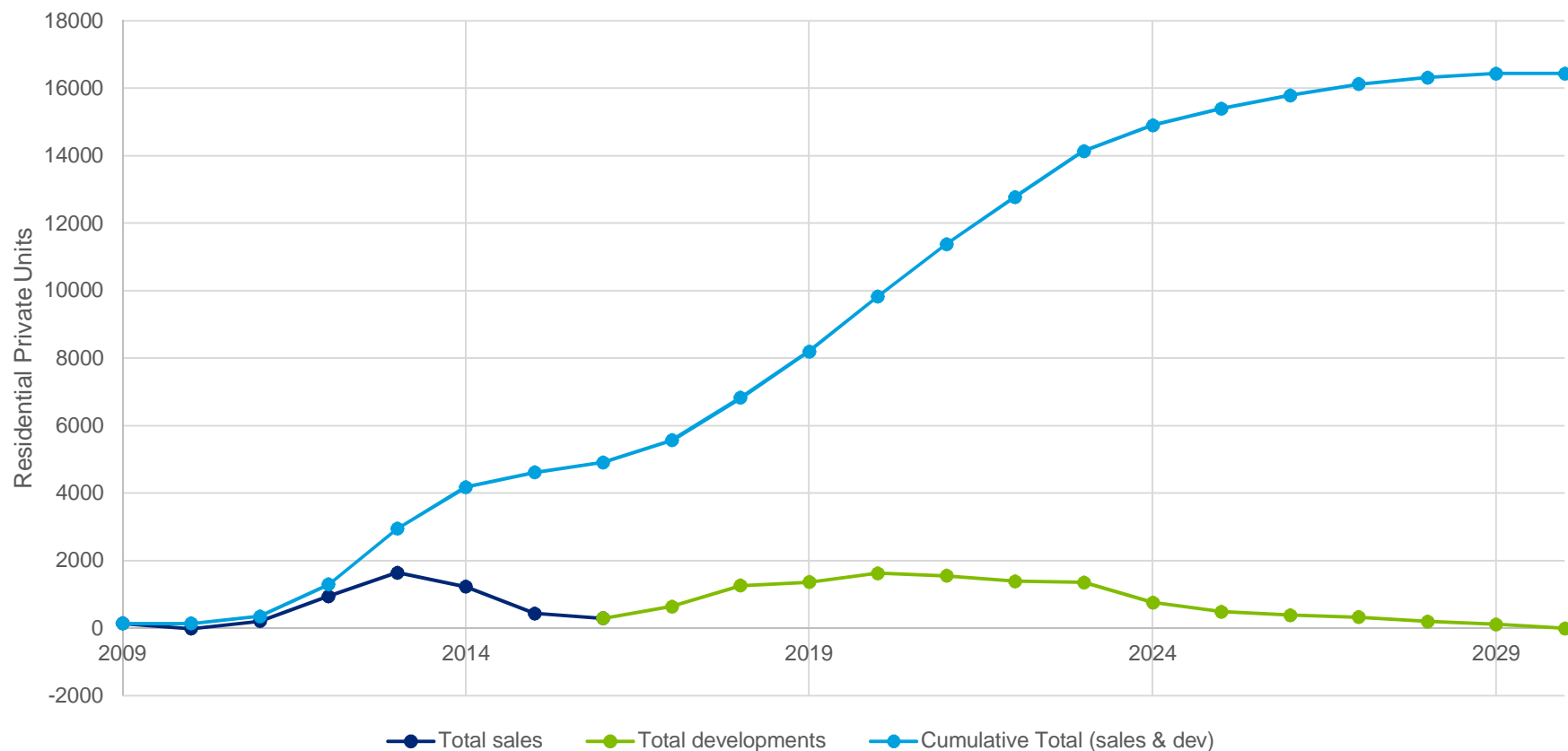
Summary of Stratford Development Activity & Pipeline

| Development / Phase | Developer | Total Resi Units | Private Resi Units | Total Commercial Floor Area (sq ft) | Construction Programme | Planning / Development Status |
|---|--|------------------|--------------------|-------------------------------------|------------------------|-------------------------------|
| Queen Elizabeth Olympic Park - Marshgate Wharf - PDZ5 | London Legacy DC / Olympic Park Legacy Company | 890 | 623 | 162,000 | Jun 18 – Dec 25* | Application Approved |
| Stratford Island (Stratford Centre & Morgan House) | Catalyst Capital LLP | 587 | 506 | 62,000 | Jun 19 – Jun 27* | Application Approved |
| Chobham Farm - 4 - New Garden Quarter | Telford Homes | 471 | 297 | 7,500 | Jun 19 – Jun 27* | Application Approved |
| Stratford City - Z4/5 - Athletes' / East Village - N06 | Qatari Diar Delancey | 422 | 422 | 0 | Jun 18 – Jun 23* | Application Approved |
| Stratford City - Z4/5 - Athletes' / East Village - N16 | Qatari Diar Delancey | 188 | 188 | 7,000 | Jun 18 – Jun 23* | Application Approved |
| Stratford City - Z4/5 - Athletes' / East Village - N18/19 | Qatari Diar Delancey | 710 | 710 | 20,000 | Jun 20 – Jun 28* | Application Approved |
| Chobham Farm - Master Cosent | East Thames Group | 1036 | 870 | 67,000 | Jun 19 – Jun 27* | Application Approved |
| Chobham Manor - PDZ6.2 | L&Q / Taylor Wimpey | 207 | 185 | 6,500 | Jun 17 – Jun 20* | Application Approved |
| Hackney Wick Central - 62 Wallis Road | London Legacy DC / Olympic Park Legacy Company | 130 | 130 | 85,000 | Jun 17 – Jun 21* | Application Approved |
| 24-26 White Post Lane | Aitch Group | 103 | 80 | 33,000 | Jun 18 – Jun 20* | Application Approved |
| 85-115 Monior Road | Peabody | 71 | 56 | 12,000 | Jun 17 - Jun 19* | Application Approved |
| 1 Smeed Road | City & Suburban Homes | 126 | 106 | 2,000 | Jun 17 – Jun 19* | Application Approved |
| Neptune Wharf / Courage Depot | Peabody | 522 | 506 | 61,000 | Jun 17 – Jun 23* | Application Approved |
| Stratford City - Z1 - Cherry Park - Master Consent | Westfield Europe (Residential) | 1224 | 1224 | 145,000 | Jun 20 – Jun 29* | Planning Submitted |
| Stratford Office Village | Workspace Group plc | 101 | 81 | 15,000 | Jun 20 – Jun 23* | Planning Submitted |
| Hackney Wick Central - 80-88 Wallis Road | Groveworld Ltd. | 121 | 121 | 0 | Jun 20 – Jun 23* | Planning Submitted |
| Marshgate Industrial Estate | Workspace Group plc | 268 | 183 | 32,000 | Jun 20 – Jun 23* | Planning Submitted |

*Timescales predicted / forecast

Source: Stratford Redevelopment Masterplan([https://www.newham.gov.uk/.../Stratford%20Metropolitan%20Masterplan%20\(SMM\)](https://www.newham.gov.uk/.../Stratford%20Metropolitan%20Masterplan%20(SMM))) / Molior Research Database / Master planning documents

Summary of Stratford Residential Development Activity & Pipeline (...continued)



Timeframe for Completion/Trajectory of Private Residential Units

| Date | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|-----------------|------|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Number of Units | 148 | -5 | 211 | 951 | 1648 | 1231 | 439 | 300 | 649 | 1264 | 1370 | 1630 | 1554 | 1397 | 1358 | 769 | 489 | 393 | 330 | 200 | 122 | 0 |
| % Total | 0.9% | 0.0% | 1.3% | 5.8% | 10.0% | 7.5% | 2.7% | 1.8% | 3.9% | 7.7% | 8.3% | 9.9% | 9.4% | 8.5% | 8.3% | 4.7% | 3.0% | 2.4% | 2.0% | 1.2% | 0.7% | 0.0% |

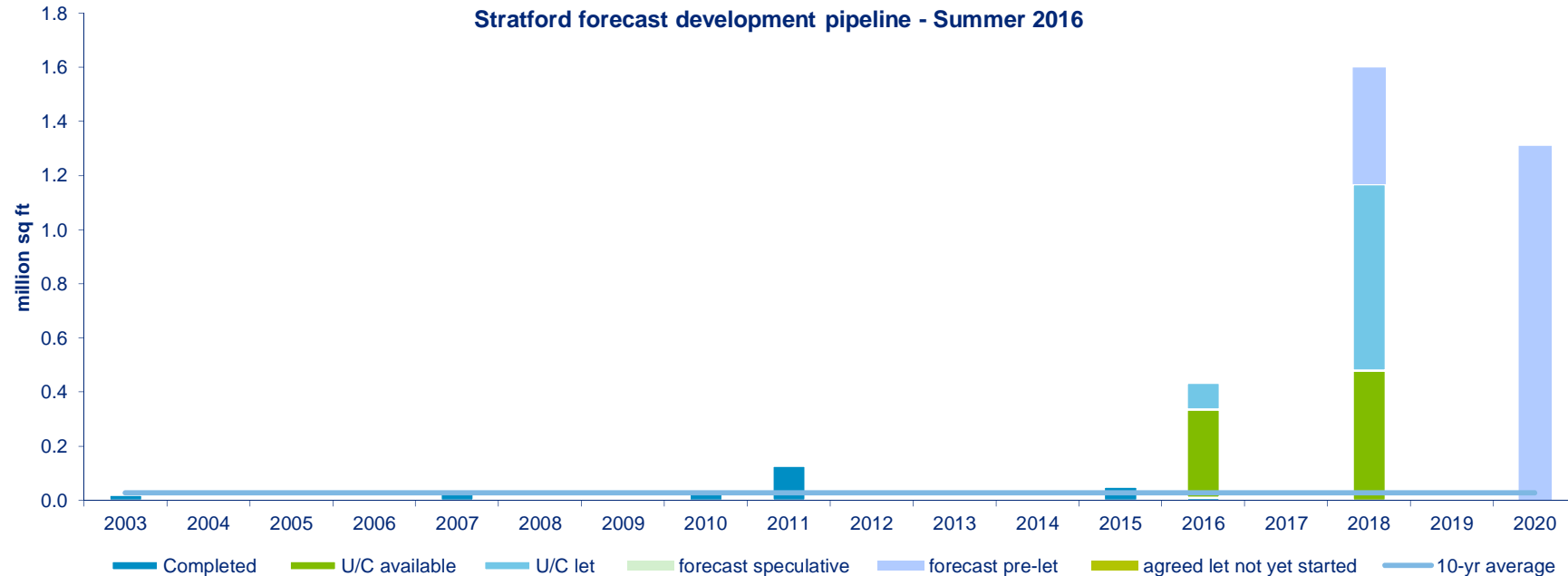
Source: Stratford Redevelopment Masterplan([https://www.newham.gov.uk/.../Stratford%20Metropolitan%20Masterplan%20\(SMM\)](https://www.newham.gov.uk/.../Stratford%20Metropolitan%20Masterplan%20(SMM))) / Molior Research Database / Master planning documents

Stratford Historic and Forecast - Office

3.4m sqft expected to be constructed by 2020

The development of office space has been slow to occur post 2012 Games. A focus on residential development and wider park regenerations is only now turning to the commercial element. With 3.4 million sq ft expected to complete by 2020 the market represents a larger volume of new space than either King's Cross or the forecast for Docklands. The site is distinctly split between the Here East scheme and The International Quarter (TIQ).

Close to 800,000 sq ft of space that is under construction is already let. Successful leasing at the Press and Broadcast buildings on Here East and the attraction of TFL and the FCA at TIQ. It is expected that pre-letting will dominate the timing of further buildings at TIQ.



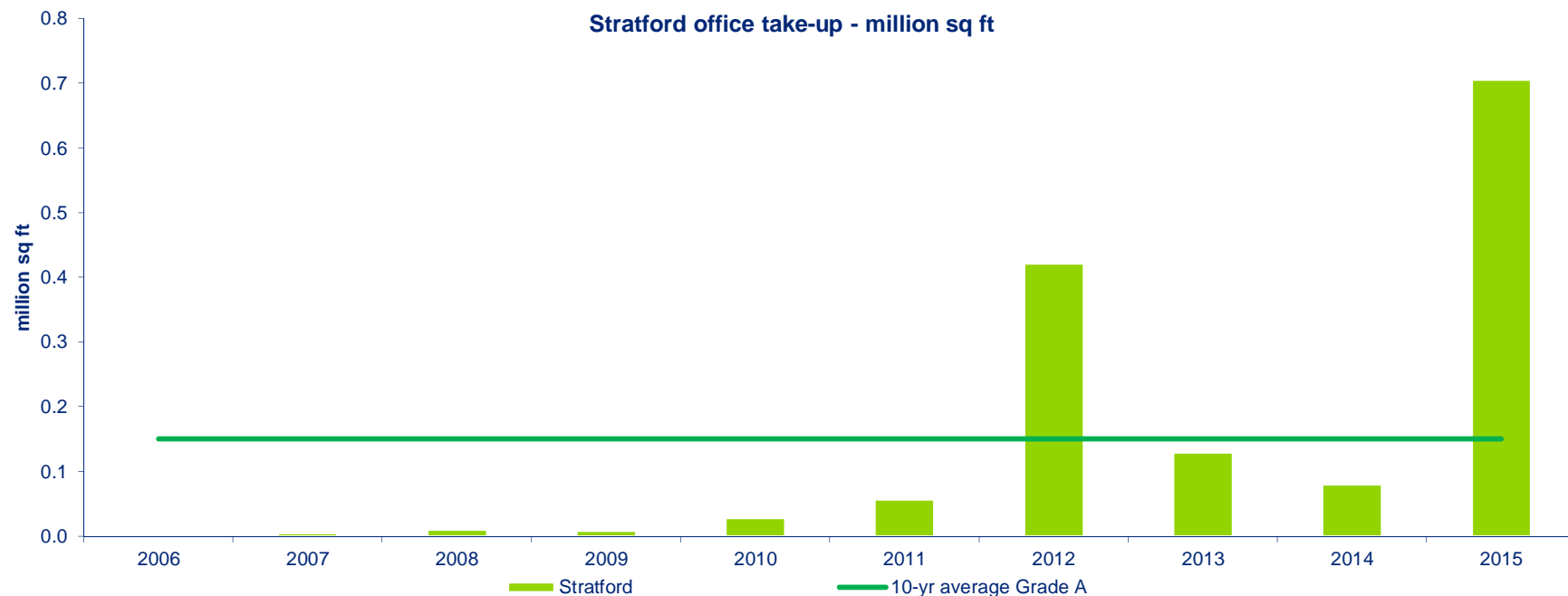
Source: Deloitte Real Estate

Stratford Summary Take-up Rate - Office

150k sqft average absorption rate pa over the past 10 years

As a new office market the space that is leased will generally be Grade A. Second-hand space is limited and is mainly situated around the main town centre of Stratford. Leasing activity has been relatively slow with two recent peaks (2012 and 2015) recorded. The non-speculative approach to development will continue to see a 'lumpy' rate of take-up.

On average 150,000 sq ft has been absorbed per annum over the past 10 years. Recent large lettings at TIQ complement tenants in the Here East development.



Source: Deloitte Real Estate



Development Status

Planning Application

Lillie Square obtained full planning consent in Feb 2012. Outline planning permission for Master Consent B (Hammersmith) obtained approval in Nov 2013. Full planning permission for Master Consent A (Kensington) obtained approval in Nov 2013. Full planning permission for (Hammersmith) Earls Court Village was granted April 2014. Full planning permission for Empress State Building was granted in May 2014.

Construction

Construction of Lillie Square is well underway with some units within Phase 1 having reached completion. Demolition of Earls Court 2 is almost complete and demolition of Earls Court 1 should be finished by the late summer 2016. Average development unit size is 407.

Sales Release

Phase 1 of Lillie Square was released during March 2014 where 204 units were reserved within the first five weeks and the remaining 33 sold shortly after. Phase 2 was released in September 2015 and is taking considerably longer.

4) Earls Court

| | |
|---------------------|---|
| Developer | Earls Court Partnership Limited (Capco and TfL) |
| Funder / Mechanism | Master Consent TBC Lillie Square is a JV between Capco and Kwok Family |
| Borough | H&F and RBKC |
| Total Unit Numbers | 9,235 |
| Total Private Units | 8,279 |
| Total Acres | 77 |

Sales Commentary

For the units sold within the first release in March 2014 the average 1 – 3 bed apartments achieved £1,400 - £1,500 per sq ft and the penthouses on the top floors achieved circa £2,000 per sq ft.

The average sales period (for those developments released onto the market) is 3 months.

The average number of units sold to date (for those developments with properties on the market) is 237.

It is assumed that the 200 affordable units released to date have been absorbed instantly into the market.

Absorption / Sub-markets

| | |
|---|---------|
| Assumed number of submarkets | 4 |
| Average private residential take-up pa | 96 |
| Average private unit take up per development pa | 144 |
| Construction programme | 2015-30 |

Residential Unit Analysis - Full Planning Application / Construction Complete

| | Private | Affordable |
|---------|-----------|------------|
| 1 Bed | 973 (40%) | 169 (46%) |
| 2 Bed | 696 (29%) | 150 (41%) |
| 3 Bed | 570 (24%) | 33 (9%) |
| 4 Bed + | 165 (7%) | 14 (4%) |
| Total | 2404 | 366 (15%) |

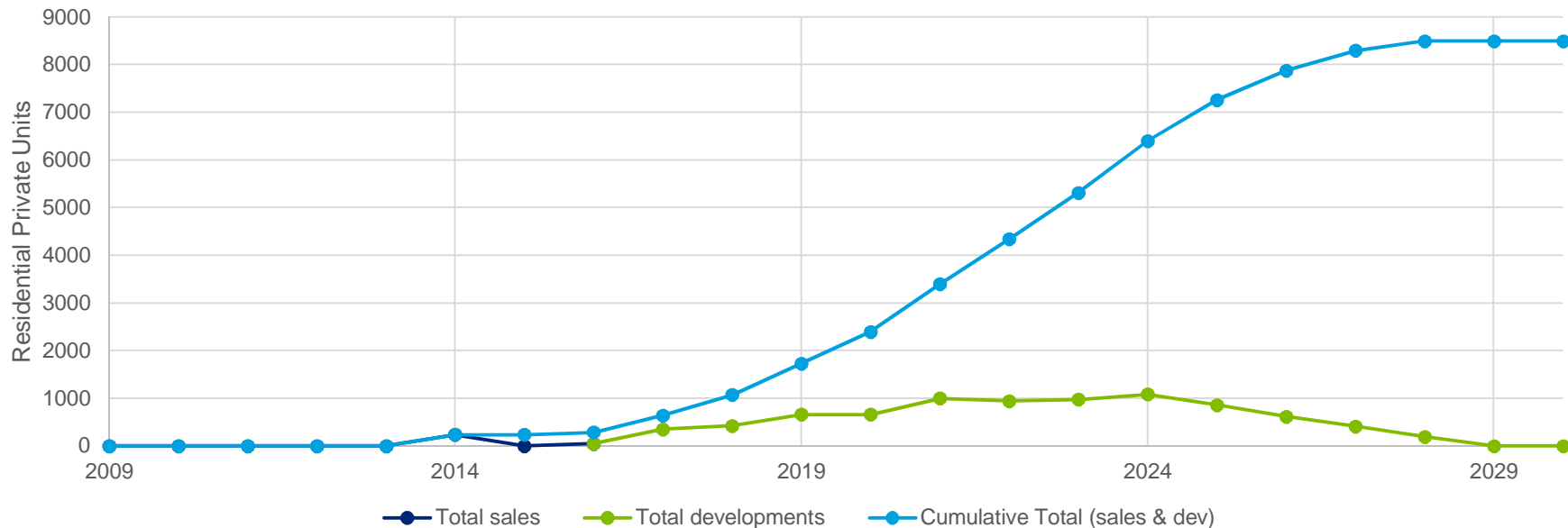
Commercial Analysis in Master Consent

| | |
|--------------------|------|
| Office (sq ft) | 593k |
| Retail (sq ft) | 398k |
| Hotel (sq ft) | 343k |
| PRS (beds) | 2k |
| Student Acc (beds) | 0 |

Source: Earls Court Masterplan (www.myearlscourt.com/the-future) / Master Planning Documents / Molior Research Database

Summary of Earls Court Development Activity & Pipeline

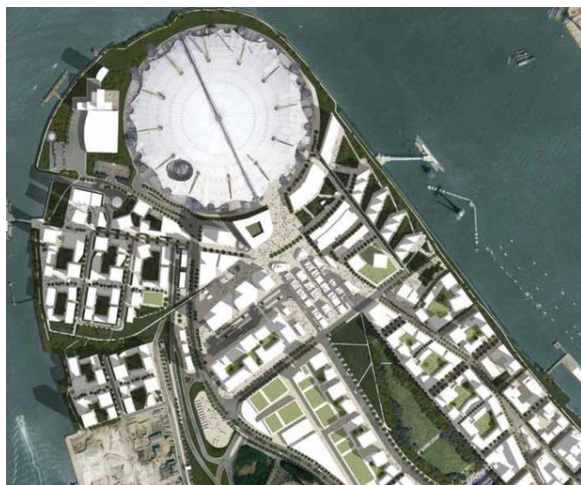
| Development / Phase | Developer | Total Resi Units | Private Resi Units | Total Commercial Floor Area (sq ft) | Construction Programme | Planning / Development Status |
|---|---------------------------------|------------------|--------------------|-------------------------------------|------------------------|-------------------------------|
| Phase 1 – Lillie Square | Capco | 808 | 608 | 0 | Aug-14 – Jan-19 | Under Construction |
| Phase 2 + (Earls Court Village, Empress State Building and West Kensington Village) | Earls Court Partnership Limited | 8,862 | 7,816 | 593,306 | Jan-16 – Jan-28 | Under Construction |



Timeframe for Completion/Trajectory of Private Residential Units

| Date | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|------|------|------|------|------|
| Number of Units | 0 | 0 | 0 | 0 | 0 | 237 | 0 | 50 | 355 | 428 | 661 | 665 | 1001 | 946 | 975 | 1087 | 860 | 619 | 413 | 199 | 0 | 0 |
| % Total | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.8% | 0.0% | 0.6% | 4.2% | 5.0% | 7.8% | 7.8% | 11.8% | 11.1% | 11.5% | 12.8% | 10.1% | 7.3% | 4.9% | 2.3% | 0.0% | 0.0% |

Source: Earls Court Masterplan (www.myearlscourt.com/the-future) / Master Planning Documents / Molior Research Database



5) Greenwich Peninsula

| | |
|---------------------|---------------------------------|
| Developer | Knight Dragon Developments Ltd. |
| Funder / Mechanism | Knight Dragon |
| Borough | Greenwich |
| Total Unit Numbers | 12,678 |
| Total Private Units | 9,750 |
| Total Acres | 190 |

Development Status

Planning Application

Full outline planning permission has been granted for demolition of existing sites and a mixed use redevelopment comprising of residential dwellings, food and non-food retail, office space, hotels, education facilities, health care facilities, film and media studios and visitor attraction areas

Construction

Construction is already underway, with 2,577 residential units either complete or nearing completion. The remaining redevelopments are in the pipeline with construction due to start later in 2016 / early 2017. The average unit development size is 399.

Sales Release

Knight Dragon have released the majority of their units for sale. Of the private units already completed or under construction 72% have been sold.

Source: greenwichpeninsula.co.uk/ / Greenwich Peninsular Masterplans / Molior Research Database / Industry Experts

Sales Commentary

Average sales per annum across all of Knight Dragon's developments is 82 units.

For all developments (apart from The Waterman) all units available were sold within a 24 month period.

From 2014-2016 average £/sqft across all developments has increased year on year.

The average sales period (for those developments released onto the market) is 18.5 months.

The average sales period to sell all units (for those developments that have sold out) is 9.8 months.

The total number of units sold to date (for those developments with properties on the market) is 1,783 and the average number of units sold is 137.

Absorption / Sub-markets

| | |
|---|---------|
| Assumed number of submarkets | 2 |
| Average private residential take-up pa | 223 |
| Average private unit take up per development pa | 86 |
| Construction programme | 2015-35 |

Residential Unit Analysis - Planning Application - Construction Complete

| | Private | Affordable |
|---------|-------------|------------|
| 1 Bed | 1,517 (34%) | 463 (30%) |
| 2 Bed | 2,025 (45%) | 731 (48%) |
| 3 Bed | 790 (18%) | 295 (19%) |
| 4 Bed + | 111 (3%) | 47 (3%) |
| Total | 4,443 | 1,536 |

Commercial Analysis

| | |
|---------------------|--------|
| Office (sq ft) | 1,400k |
| Retail (sq ft) | 250k |
| Hotel (beds) | 905 |
| Student Accm (beds) | 0 |

Difference from initial projected development forecasts

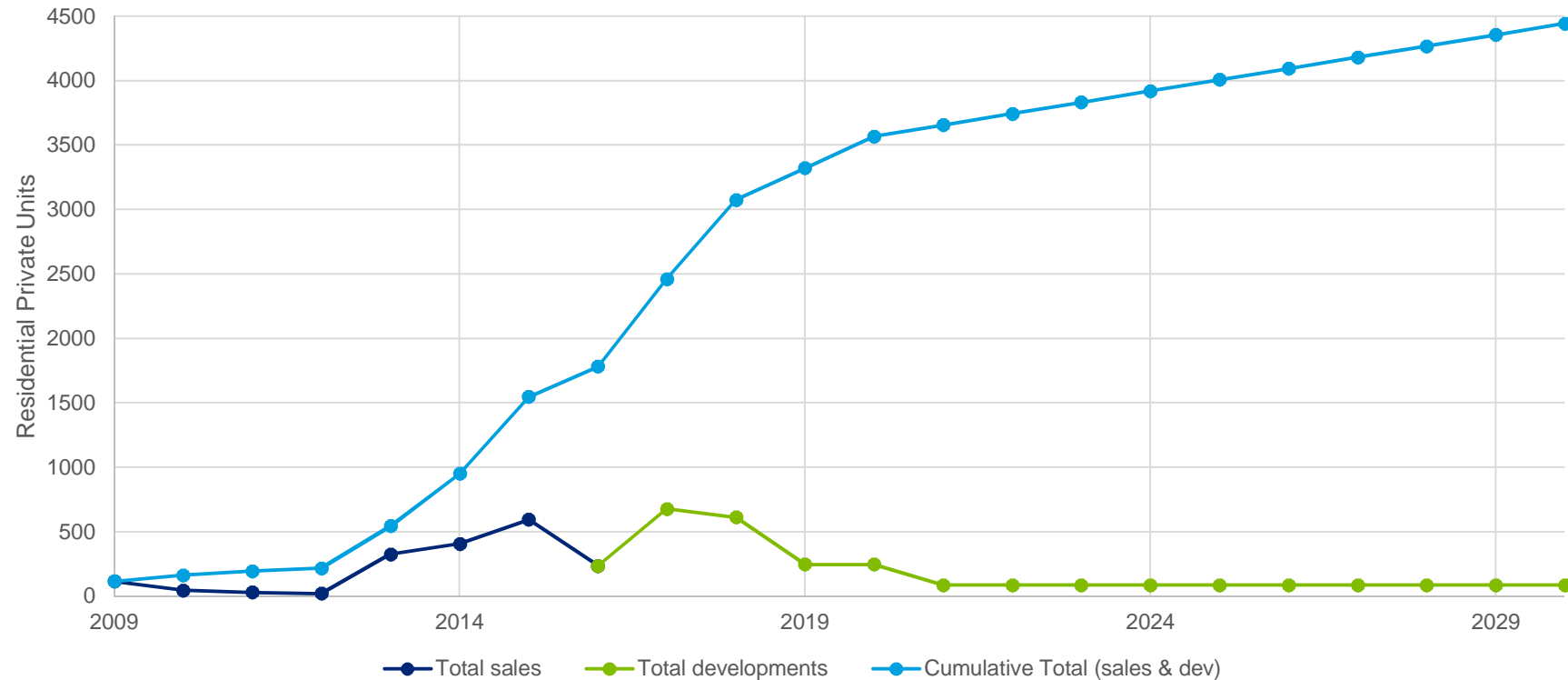
Initially in 2004 Knight Dragon proposed 3.5m sqft of commercial space, which has since been reduced to approx. 1.5m. Due to the difficulty renting the commercial space and to gain critical mass Knight Dragon are occupying the space themselves alongside TFL.

Summary of Greenwich Peninsula Development Activity & Pipeline

| Development / Phase | Developer | Total Resi Units | Private Resi Units | Total Commercial Floor Area (sq ft) | Construction Programme | Planning / Development Status |
|-------------------------------------|---------------------------------|------------------|--------------------|-------------------------------------|------------------------|-------------------------------|
| The Norton | Knight Dragon Developments Ltd. | 161 | 67 | TBC | Dec 13 – Nov -15 | Completed |
| Cable & Roper | Knight Dragon Developments Ltd. | 201 | 92 | TBC | Dec 13 – Mar 16 | Completed |
| The Moore | Knight Dragon Developments Ltd. | 144 | 64 | TBC | Dec 13 – Nov 15 | Completed |
| The Peninsula Tower | AEG Europe | 100 | 100 | TBC | Jul 13 – Jan -16 | Completed |
| Bellway - The City Peninsula | Bellway Homes Thames Gateway | 229 | 169 | TBC | Jun 09 – Aug 11 | Completed |
| Bellway - Platinum Riverside | Bellway Homes Thames Gateway | 198 | 156 | TBC | Sep 13 – Jan 16 | Completed |
| No 1 & No 2 Upper Riverside | Knight Dragon Developments Ltd. | 464 | 324 | TBC | Mar 15 – Mar 18 | Under construction |
| The Waterman | Knight Dragon Developments Ltd. | 519 | 308 | TBC | Nov 14 – Dec 16 | Under construction |
| The Fulmar | Knight Dragon Developments Ltd. | 139 | 60 | TBC | Jan 15 – Jun 16 | Under construction |
| Enderby Wharf/Riverside/Isle/Place | Barratt London | 477 | 402 | TBC | May 14 – Jun 16 | Under construction |
| The Lighterman | Knight Dragon Developments Ltd. | 224 | 103 | TBC | Dec 14 – Mar 17 | Under construction |
| The River Gardens (Greenwich Wharf) | London and Regional Properties | 439 | 408 | TBC | Jan 08 – Sep 16 | Under construction |
| No 3, No 4, No 5 Upper Riverside | Knight Dragon Developments Ltd. | 543 | 478 | TBC | Jun 16 – Jun 20 | Planning approved |
| AEG N0201 | AEG Europe | 395 | 315 | TBC | Sep 16 – Mar 18 | Planning approved |

Source: greenwichpeninsula.co.uk/ / Greenwich Peninsular Masterplans / Molior Research Database / Industry Experts

Summary of Greenwich Peninsula Residential Development Activity & Pipeline (...continued)



Timeframe for Completion/Trajectory of Private Residential Units

| Date | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|-----------------|------|------|------|------|------|------|-------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| Number of Units | 117 | 47 | 32 | 22 | 327 | 407 | 595 | 236 | 678 | 614 | 247 | 247 | 88 | 88 | 88 | 88 | 87 | 87 | 87 | 87 | 87 | 87 |
| % Total | 2.6% | 1.1% | 0.7% | 0.5% | 7.4% | 9.2% | 13.4% | 5.3% | 15.3% | 13.8% | 5.6% | 5.6% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% | 2.0% |

Source: greenwichpeninsula.co.uk/ / Greenwich Peninsular Masterplans / Molior Research Database / Industry Experts



6) Wembley

Development Status

Planning Application

Multiple hybrid planning applications, accompanied by environmental impact assessments have been approved for the Wembley redevelopment area (with some still in the approval process). The planning requirements permit demolition of existing buildings and construction of residential, commercial, retail, student and leisure facilities across the 171.2 hectare site.

Construction

The majority of the schemes in the area have had their applications approved and are either under construction or pending a construction start date. Projected timescales for construction run up until 2029. The average development unit size is 197.

Sales Release

Almost all of the units under construction or complete have been sold and there is very limited new development stock on the market. However, with many schemes in the pipeline it is likely that new units, in the Wembley Park area will be coming onto the market shortly.

| | |
|---------------------|--|
| Developer | Quintain / St Modwen Properties Plc / other developers |
| Funder / Mechanism | Multiple |
| Borough | Brent |
| Total Unit Numbers | 11,500 |
| Total Private Units | 3,898 |
| Total Acres | 171.2 |

Sales Commentary

The average sales period (for those developments released onto the market) is 17.8 months.

The average sales period to sell all units (for those developments that have sold out) is 18.1 months.

The total number of units sold to date (for those developments with properties on the market) is 1,525 with average sales per development being 102 units.

It is assumed that the 708 affordable units released to date have been absorbed instantly into the market.

Absorption / Sub-markets

| | |
|---|---------|
| Assumed number of submarkets | 2 |
| Average private residential take-up pa | 190 |
| Average private unit take up per development pa | 62 |
| Construction programme | 2004-29 |

Residential Unit Analysis (Selected Developments)

| | Private | Affordable |
|---------|------------|------------|
| 1 Bed | 1709 (44%) | 431 (35%) |
| 2 Bed | 1915 (49%) | 508 (41%) |
| 3 Bed | 264 (7%) | 272 (22%) |
| 4 Bed + | 10 (0.3%) | 23 (2%) |
| Total | 3898 | 1234 |

Commercial Analysis

| | |
|---------------------|--------|
| Office (sq ft) | 1,090k |
| Retail (sq ft) | 200k |
| Hotel (beds) | 475 |
| Student Accm (beds) | 500 |

Source: Wembley Regeneration Masterplan (<https://www.brent.gov.uk/media/333266/Wembley%20Masterplan.pdf>) / Molior Research Database / Local Planning Documents

Summary of Wembley Development Activity & Pipeline

| Development / Phase | Developer | Total Resi Units | Private Resi Units | Total Retail Floor Area (sq ft) | Construction Programme | Planning / Development Status |
|--|--------------------------------|------------------|--------------------|---------------------------------|------------------------|-------------------------------|
| Pinnacle Tower (Atomosphere / Shubette House) | London Prestige Developments | 158 | 131 | 0 | Apr 11 – Mar 13 | Completed |
| 29-31 Brook Avenue | LHA-ASRA | 33 | 0 | 0 | Nov 12 – May 14 | Completed |
| Lime Walk (Wembley Park Station Car Park) | Network Housing Group | 111 | 56 | 0 | Nov 13 – Sep 15 | Completed |
| Vision | Ducklease Properties Ltd | 45 | 29 | 0 | Oct 08 – Apr 10 | Completed |
| Wembley Central - 1/2 | St Modwen Properties Plc | 223 | 138 | 100000 | Nov 06 – Mar 10 | Completed |
| Wembley Central - 3 - Metro Apartments (Central Square) | St Modwen Properties Plc | 38 | 38 | 27000 | Oct 13 – Mar 15 | Completed |
| Wembley Central - 4 - Ramsey House | St Modwen Properties Plc | 33 | 33 | 0 | Mar 14 – Jul 14 | Completed |
| Octave (Ada Lewis House) | Southern Space | 84 | 27 | 0 | Oct 09 – Mar 11 | Completed |
| Wembley Park - W01 - Forum House | Quintain Estates & Development | 286 | 145 | 0 | Aug 06 – Oct 08 | Completed |
| Wembley Park - W04 - Quadrant House | Quintain Estates & Development | 232 | 88 | 0 | Jun 07 – Mar 10 | Completed |
| Elizabeth House | Octavia Housing | 115 | 80 | 0 | Oct 11 – Jun 13 | Completed |
| Wembley Park - North West Village - NW01 - Emerald Gardens | Quintain Estates & Development | 475 | 428 | 0 | Jun 14 – Nov 16 | Under Construction |
| Wembley Park - North West Village - NW06 - Alto | Quintain Estates & Development | 370 | 339 | 7000 | Aug 15 – Aug 17 | Under Construction |
| Brent House Annexe | Jenga Group | 25 | 25 | 0 | Aug 15 – Jun 16 | Under Construction |
| Lanmor House | Grovecrest Properties Ltd | 34 | 34 | 0 | Aug 15 – Dec 16 | Under Construction |
| Wembley Park Gate (Olympic Office Centre - Plot C) | Barratt London | 211 | 174 | 0 | Aug 15 – Jun 17 | Under Construction |

Source: Wembley Regeneration Masterplan (<https://www.brent.gov.uk/media/333266/Wembley%20Masterplan.pdf>) / Molior Research Database / Local Planning Documents

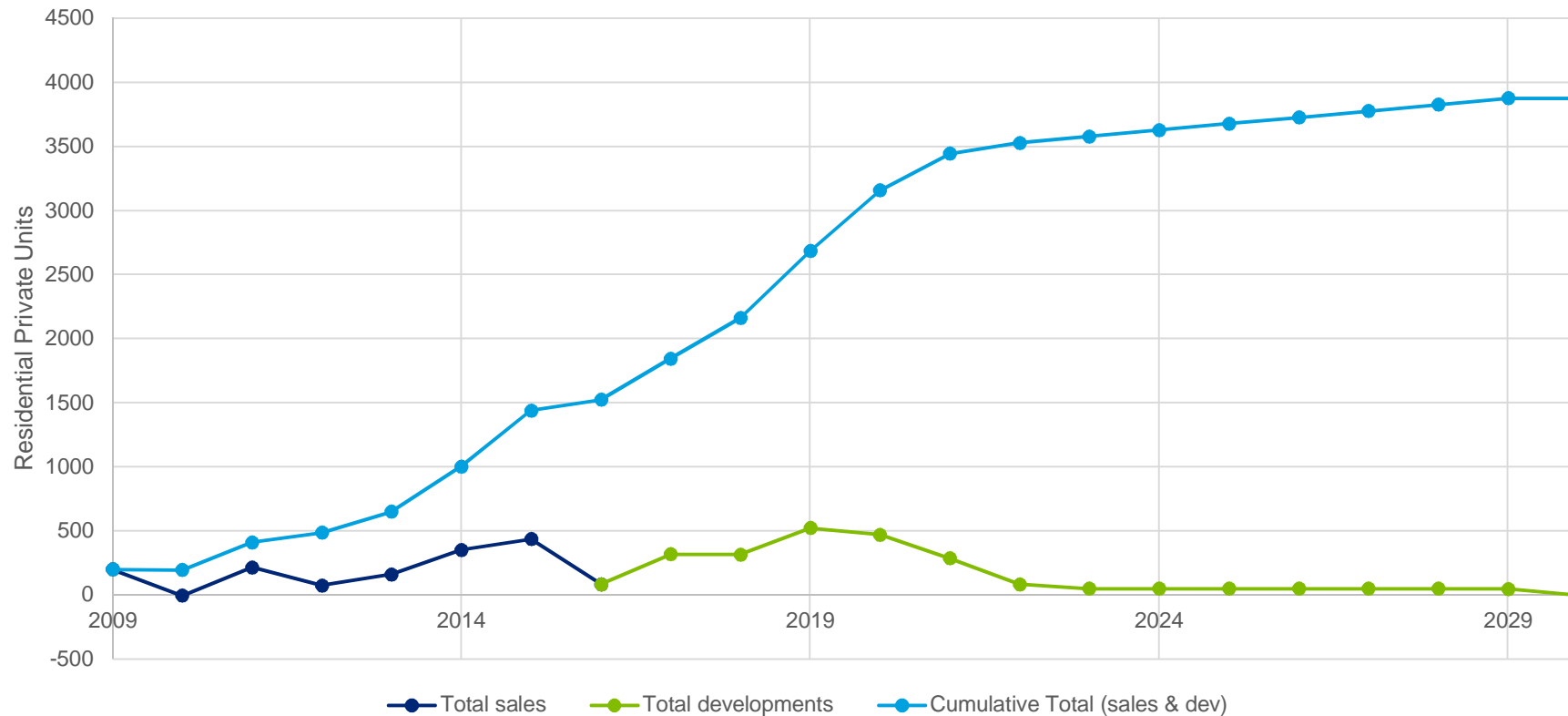
Summary of Wembley Development Activity & Pipeline

| Development / Phase | Developer | Total Resi Units | Private Resi Units | Total Retail Floor Area (sq ft) | Construction Programme | Planning / Development Status |
|---|--------------------------------|------------------|--------------------|---------------------------------|------------------------|-------------------------------|
| Wembley Park - W03 | Quintain Estates & Development | 336 | 336 | 40000 | Jun 18 – Jun 20* | Application Approved |
| Wembley Park - North West Village - NW07 & NW08 | Quintain Estates & Development | 361 | 295 | 0 | Jun 19 - Jun 21* | Application Approved |
| Raglan Court & Garages | Reading Residential | 69 | 56 | 2000 | Jun 19 – Jun 20* | Application Approved |
| Heron House | Mizen Properties | 23 | 23 | 0 | Jan 18 – Dec 18* | Application Approved |
| Mahatma Gandhi House | Hongkong Land | 198 | 157 | 13000 | Jun 19 – Jun 21* | Application Approved |
| Station Grove Car Park | Unknown | 186 | 152 | 0 | Jun 17 – Jun 19* | Application Approved |
| Chesterfield House | Hub Residential | 239 | 136 | 0 | Jun 18 – Jun 20* | Application Submitted |
| Brent Hosue | Henley Homes | 248 | 174 | 0 | Jun 18 – Jun 22* | Application Submitted |
| Wembley Park - South West Lands - SW01-SW07 | Quintain Estates & Development | 804 | 649 | 10000 | Jun 17 – Jun 29* | Application Submitted |
| Amex House (Durkin & Sons) | Anthology | 195 | 155 | 0 | Jun 19 – Jun 21* | Application Submitted |

*Timescales predicted / forecast

Source: Wembley Regeneration Masterplan (<https://www.brent.gov.uk/media/333266/Wembley%20Masterplan.pdf>) / Molior Research Database / Local Planning Documents

Summary of Wembley Residential Development Activity & Pipeline (...continued)



Timeframe for Completion/Trajectory of Private Residential Units

| Date | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 |
|-----------------|------|-------|------|------|------|------|-------|------|------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| Number of Units | 201 | -5 | 216 | 76 | 163 | 352 | 438 | 84 | 320 | 317 | 524 | 472 | 286 | 84 | 50 | 50 | 50 | 50 | 50 | 50 | 49 | 0 |
| % Total | 5.2% | -0.1% | 5.6% | 2.0% | 4.2% | 9.1% | 11.3% | 2.2% | 8.3% | 8.2% | 13.5% | 12.2% | 7.4% | 2.2% | 1.3% | 1.3% | 1.3% | 1.3% | 1.3% | 1.3% | 1.3% | 0.0% |

Source: Wembley Regeneration Masterplan (<https://www.brent.gov.uk/media/333266/Wembley%20Masterplan.pdf>) / Molior Research Database / Local Planning Documents



7) Docklands – (Office only)

| | |
|-------------------------------|---------------|
| Developer | Multiple |
| Funder / Mechanism | Multiple |
| Borough | Tower Hamlets |
| Total Commercial space (sqft) | 14,100k |
| Total Acres | 97 |

Development Status

Planning Application

Historically, the majority of planning applications were granted in the 90s (for mixed developments comprising primarily of B1 office space). There are currently a range of applications in the pipeline, mainly to the south of the central Canary Wharf Estate where remaining industrial property such as the Westferry Printworks are to be developed.

Construction

There is currently 688k sqft of office space that is under construction and due to be completed in 2019 (of which 262k is pre-let). In addition, there is a speculative forecast 2.28m sqft of office space, 2m of which is speculative pre-let space.

Sales Release

It is forecast that in 2018 there will be 0.48m sqft released onto the market, 2019 0.69m and 2020 1.8m. Since Q1 2015 38% of space has been let whilst under construction.

Anticipated Timeframe for Completion of Office Space

| Date | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Million sqft | 0 | 0 | 0.1 | 0 | 0 | 0.1 | 2 | 0 | 0.3 | 1.8 | 2.5 | 1 | 0 | 0 | 0 | 0 | 0.7 | 0.3 | 0 | 0 | 0 | 0.5 | 0 | 0.1 | 0 | 0.5 | 0.7 | 1.8 |

Difference from initial projected development forecasts

Historically, One Canada Square was the independent commercial development in Canary Wharf. Two separate developers of this site went into administration prior to the area gaining critical mass and demand for office space in the region increasing.

Lessons can be learnt from the Docklands through the way in which 'place making' and the idea of critical mass play a role in determining the success of an independent development area such as Old Oak and Park Royal.

Source: Docklands Planning Documents
(<http://towerhamlets.maps.arcgis.com/apps/webappviewer/index.html?id=b0448c3d9f254bf683e200174fc3f729>) / CoStar / Industry Experts

Absorption / Sub-markets

| | |
|------------------------------|--------------|
| Assumed number of submarkets | 1 |
| Construction programme | 1994-ongoing |

Commercial Analysis

| | |
|---------------------|---------|
| Office (sq ft) | 12,600k |
| Retail (sq ft) | 1,500k |
| Hotel (beds) | 1227 |
| Student Accm (beds) | 0 |

Largest Pre-lets

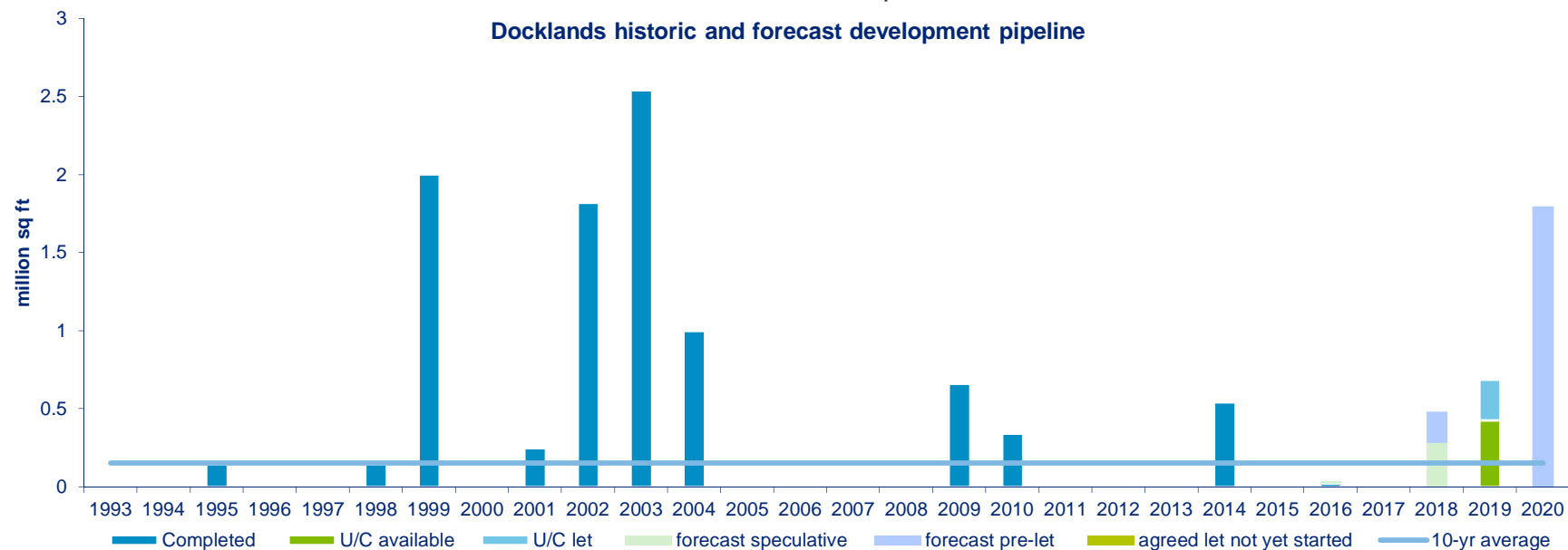
| Building | Tenant | Sq Ft | Year Agreed Pre-let |
|----------------------|-----------------|-----------|---------------------|
| Riverside South | JP Morgan Chase | 1,900,000 | 2008 |
| 8 Canada Square | HSBC Holdings | 1,100,000 | 1998 |
| Heron Quay | Lehman Brothers | 1,000,000 | 2001 |
| 10 Upper Bank Street | Clifford Chance | 785,000 | 2000 |
| 1 Churchill Place | Barclays | 650,000 | 2001 |

Docklands Summary Historic and Forecast - Office

3 million sq ft to be constructed within 5 years

The below graphs shows the development pipeline for the Docklands office market, showing historic completion, actual and forecast construction. The core of the present day stock was delivered between 1999 and 2004 where 7.6 million sq ft of office space was completed. There has been intermittent levels of development over the past 10 years and this is reflected in the 10-year average at 150,000 sq ft constructed per annum.

The geographical constraints of the market has limited the level of development in the forecast. However, the Wood Wharf and the North Quay schemes offer a circa 3 million sq ft expansion to the Canary Wharf Estate over the next few years, which are seen as the final pieces of the estate regeneration. There is speculation around the percentage of this space which will be pre-let. This speculative figure currently stands at approximately 2 million sq ft; representing 67% take up of the total pipeline developments.



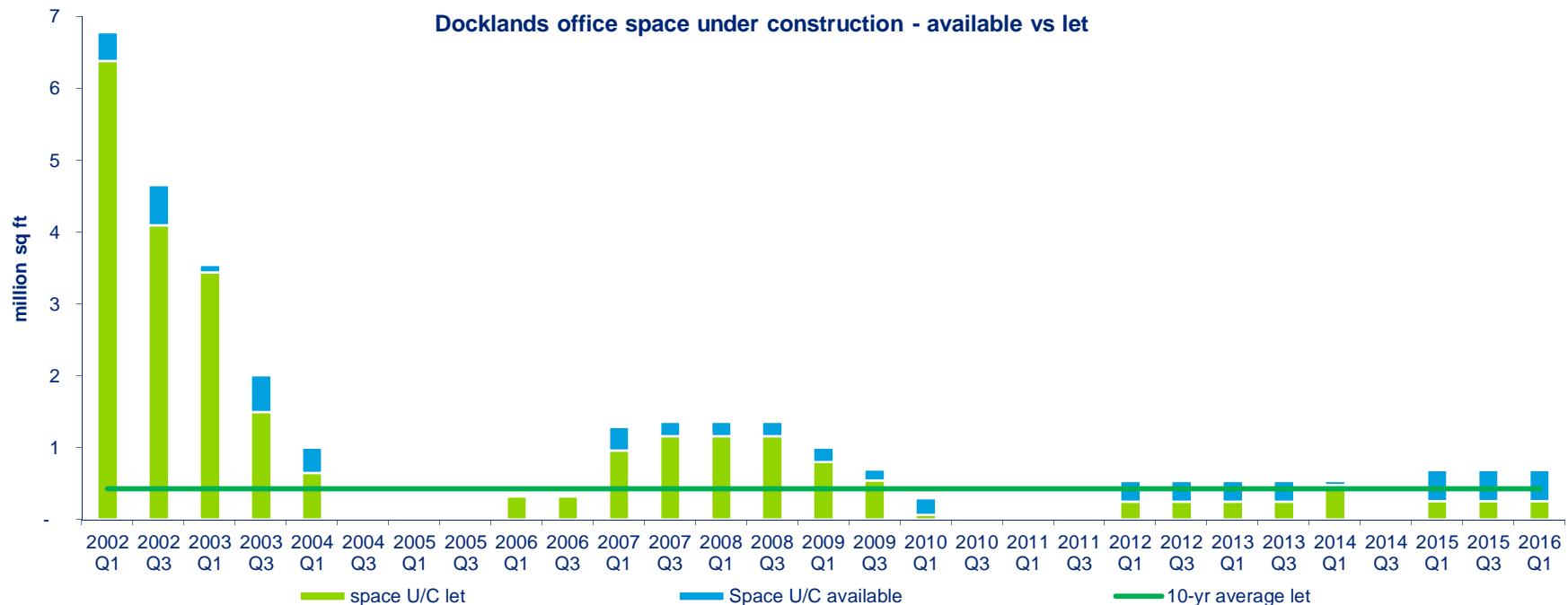
Source: Deloitte Real Estate

Docklands Summary Pre-let Space - Office

7.6 million sq ft delivered within 5 years

Pre-letting of space has dominated the level and timing of construction schemes in the Docklands. The below graph shows the significant volume of space that has been pre-let either before construction start or throughout the construction period. Since 2002 the total percentage of pre-let space equates to 81% of the total space constructed.

This is an indication of the scale of occupiers who are attracted to this location. Speculative schemes are not very common, due to the size of schemes developed certainty of tenancy would be needed to start. In relation to Old Oak scheme large corporate occupiers could potentially be attracted to the space around the stations of HS2 and Crossrail Station; where pre-lets would be entered into.



Appendix C – Assumptions and Caveats

Caveats and Assumptions

Introduction

The information provided in this report is confidential to the addressees and should only be reviewed for internal purposes only.

Where the data has been obtained from third party sources it should be reviewed as indicative and Deloitte has no liability for the creditability or accuracy of information and OPDC should not rely on the contents of the data.

This document includes certain analysis based on market performance where we have estimated high and low market absorption rates to reflect various assumptions concerning business, economic and competitive uncertainties; many of which are beyond the control of Deloitte and OPDC and the markets could exceed or underperform historic trends. Caution should be taken when interpreting the different levels of absorption rate for the submarkets as the absorption rates may vary considerably over time and this report just provides an indicative view on averages.

Interpretation of Data

OPDC should review this report as a guide when reviewing the housing trajectory and considering appropriate absorption rates over time. OPDC should understand the report, recommendations and case studies before interpreting the information and analysing how the submarkets might compete with one another.

We are aware that not all markets may be active at any one time and consequently if only one market is active (i.e. North Acton and Scrubs lane within the first five years) then the market could potentially absorb more than the maximum number recommended. This is principally because the demand from purchasers who would have consider other submarkets only have one choice, so this raises the demand on the single market.

The submarkets identified within this report could potentially change following further design studies and the master planning exercise. The main reason for this change is the fact we have not considered the location of potential catalyst uses (i.e a stadium) and the impact the catalyst might have on absorption rates. For the purpose of this study we have analysed the potential submarkets within the masterplan set out in the Draft Local Plan.

Caveats and Assumptions

Key Sources of Data

Deloitte have analysed the case studies by obtaining data from numerous resources including:

- Speaking to developers and sales agents
- Molior (Residential Research Database)
- CoStar (Commercial Research Database)
- News articles and press releases
- Planning applications
- Deloitte's Real Estate Research Team (drawing upon the current and historic Crane Surveys)

The case study information is factual and is heavily relied on third party information, however, where we have not been able to obtain information we have made an educated guess and have referenced these throughout the report.

Deloitte's interpretation of the case studies, submarkets, price points and levels of demand have been determined by discussion with numerous Deloitte Partners and from having a good understanding of the current scheme and proposal at Old Oak Common.



Real Estate

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