

ROYAL BROMPTON HOSPITAL

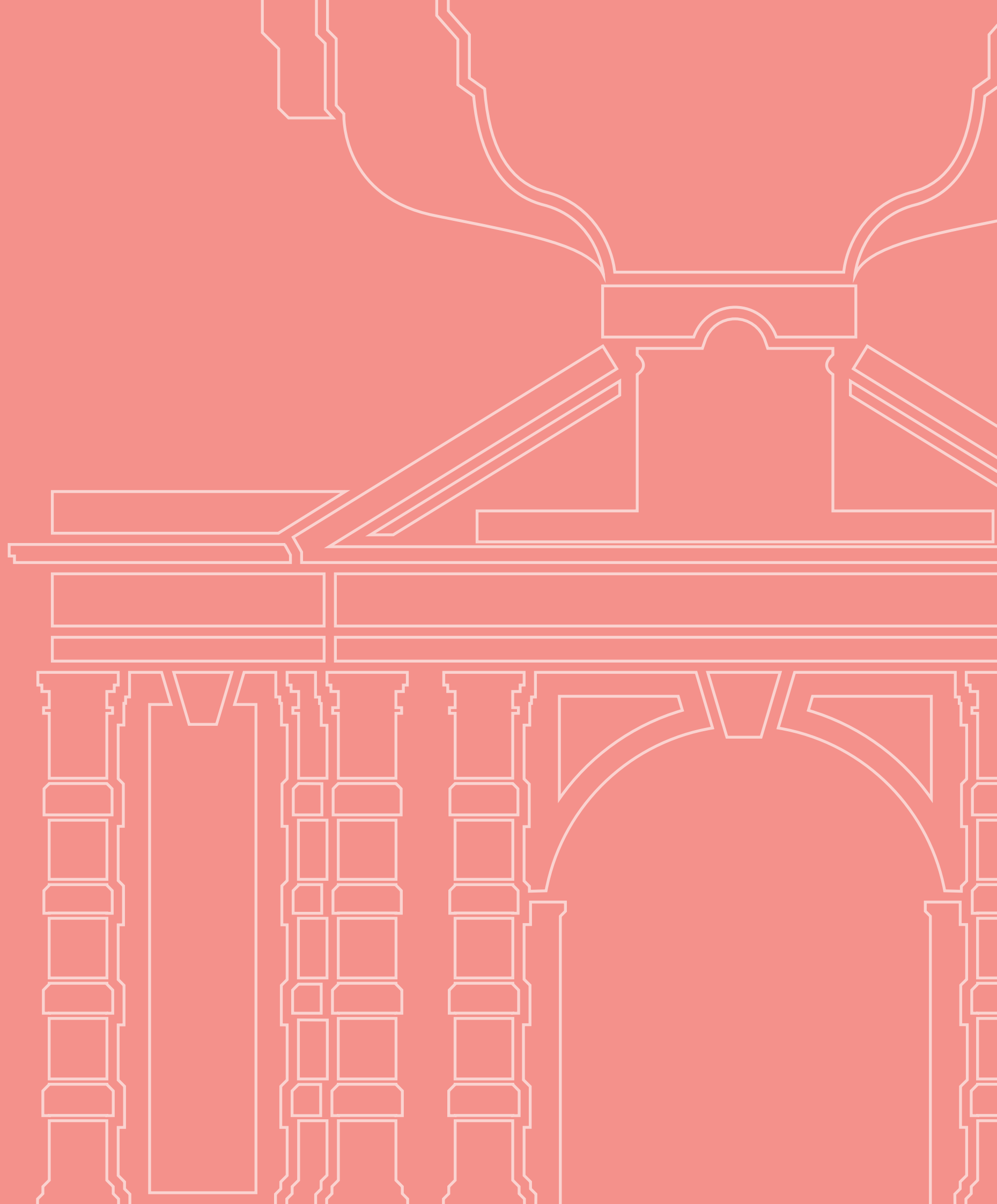
CONCEPT DESIGN REPORT

JULY 2020



CBRE

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Contact Details

John Prevc
Regional Leader of Planning

Qube, 90 Whitfield Street
London W1T 4EZ

e: john.prevc@hok.com

hok.com

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PREFACE

The Royal Borough of Kensington and Chelsea (RBKC) appointed HOK and its subconsultants CBRE to consider how medical uses might be incorporated on land owned by the Royal Brompton Hospital in Chelsea. Based on discussions with RBKC and the brief that they had set, HOK proposed to frame the study by answering the following six questions:

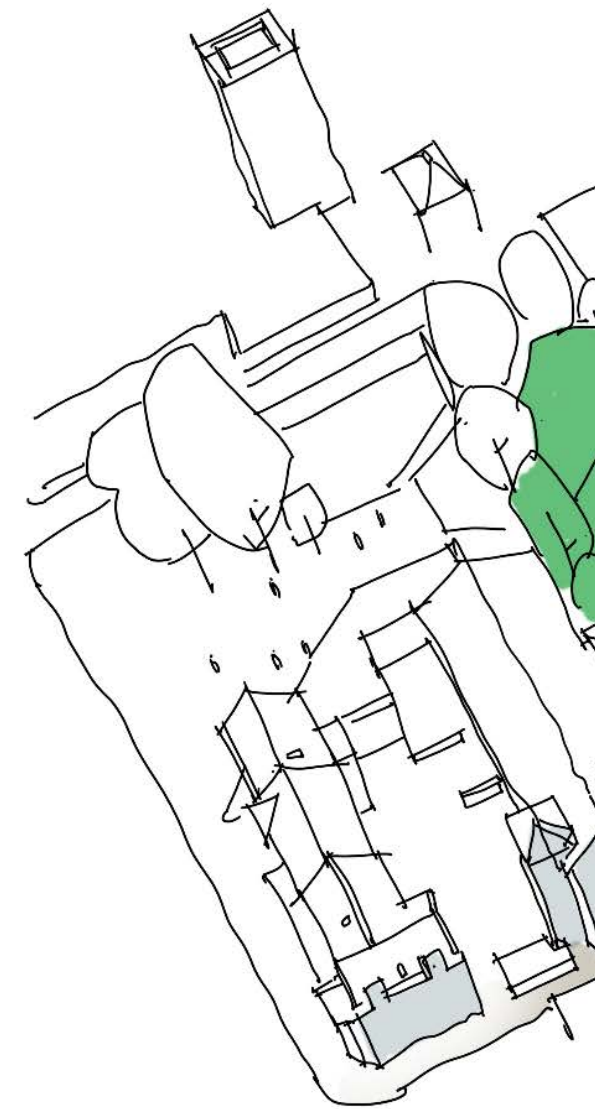
1. Which buildings should be retained for medical use?
2. Which buildings should be re-purposed for other medical uses including R+D?
3. Which buildings should be released for housing?
4. How will the site function more efficiently, logistically and within the community?
5. Where can we increase density maximising height and massing?
6. How can we improve both social and commercial value?

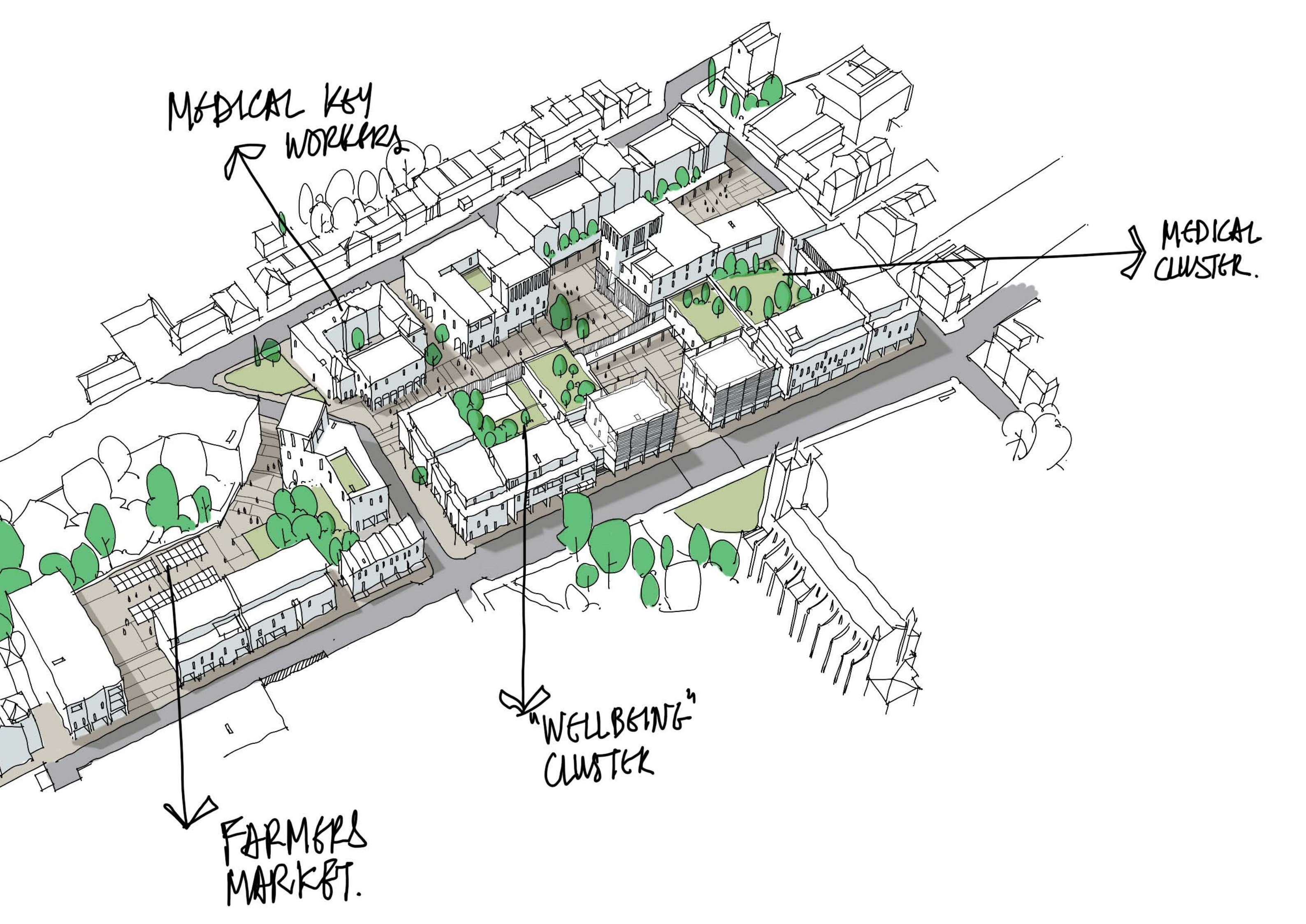
The study has focused on three specific work streams with associated outputs. They are:

7. Will any of the broad range of medical uses and medical use providers be attracted to the Royal Brompton sites?
8. If so which uses are they, how might they cluster together with other uses and how much space do they need to be viable?
9. How will they be physically configured into the specific RBKC context to establish a unique place with a specific identity and 'fit' into the broader community.

This report has drawn on specific studies and team experience guided by the RBKC team which has now established that a real opportunity for the incorporation of medical uses does exist on these sites owned by the Royal Brompton. This report illustrates these opportunities and how they might be configured.

We have made a more detailed study for the site currently occupied by the Fulham Wing to address potential interests from the Royal Marsden. A review of the planning application and uses defined therein have formed the basis for this more detailed piece of work. We felt that as the Royal Marsden was the only current potential end user for one of the sites, it would help the RBKC team with its discussions with the hospital.





MEDICAL KEY WORKERS

MEDICAL CLUSTER.

"WELLBEING" CLUSTER

FARMERS MARKET.

CHAPTER 1

COMMERCIAL STRATEGY

This first chapter establishes the current and future trajectory of the healthcare sector in London. It presents London's current healthcare environment, followed by an assessment of the suitability of various services for the Royal Brompton Hospital sites. The assessment also includes several senior living typologies - including elderly care, extra and retirement living - as a way of generating social value from the development. The chapter concludes with an overview of recent developments in the institutional healthcare real estate investment market and an overview of the 'council wrapper' model through which RBKC could actively play a role in widening the social benefits of the scheme.

1.1 LONDON CONTEXT

1.1.1 LONDON AS A DESTINATION FOR LIFE SCIENCES

By virtue of its world-class academia and research institutions, London has historically always been a key Life Sciences location, and continues to attract high levels of Foreign Direct Investment from global corporates and Venture Capitalists. With its wealth of technology talent, and the rapid growth of digitally enabled Life Sciences, the city is poised to become an even more important player in the sector. The importance of Life Sciences is recognised by the Mayor of London, who has promoted public backed initiatives such as MedCity to drive growth in the sector.

According to CBRE's occupier survey, London ranks first in the UK for talent availability, funding and proximity to other Life Sciences companies, but last for costs relating to labour, real estate and living expenses. The lack of affordability in London, particularly for younger workers and for start-up companies, along with a dearth of suitable space also pushing up prices, is a significant barrier to entry on the Life Sciences scene.

DRIVERS / ENABLERS



WORLD CLASS ACADEMIA

Proximity to 3 of the world's top 10 universities, providing a strong science base



DEEP TALENT POOL

Global companies choose London for regional HQs due to its skilled workforce



DIGITAL EXPERTISE

Top-ranked location globally for technology talent - sector has grown 20% since 2008



MEDCITY

Promoting Life Sciences investment, particularly in the King's Cross area



PRESTIGE

Maintaining a base in London gives occupiers credibility with clients and the industry



AVAILABILITY OF FUNDS

Significant recent investment incl. Francis Crick Institute, Imperial West and UCL East



FOREIGN INVESTMENT

UK received highest level of Life Sciences FDI in Europe, and second only to the US



TRANSPORT LINKS

Six international airports plus Eurostar. Excellent links across the UK by road and train.



KNOWLEDGE CLUSTERS

Ecosystems for collaboration between academia, pharma, tech, hospitals, SMEs etc.



GOVERNMENT STRATEGY

Life Sciences Industrial Strategy acknowledges London's position and the vision for growth

BARRIERS



COST OF LIVING

While London salaries are generally higher than in the UK, differences in cost outstrip these benefits. University graduates perceiving London as unaffordable may start to look for employment elsewhere, and attracting talent from other locations may become challenging.



LACK OF LIFE SCIENCES SPACE

Insufficient space to cater to demand is currently a significant factor impeding the further growth of the Life Sciences sector in London. Demand for space in far exceeds the current supply; there is a perception that London is 'full'.



BREXIT UNCERTAINTY

Ambiguity around the impact of Brexit remains as no deal has been struck, and the risk to talent availability and EU funding (the UK receives far more than it pays into EU funds, and could lose c. 1 bn per year) are causes for concern within the UK Life Sciences industry.

LONDON CONTEXT

1.1.2 LONDON'S KNOWLEDGE CLUSTERS

KING'S CROSS / EUSTON - THE KNOWLEDGE QUARTER

- The cluster has formed predominately around the Francis Crick development, bringing 1,600 scientists and support staff under one roof
- Knowledge Quarter partnership with 90 members from technology, research, arts and academia
- The area benefits from unrivalled transport connections
- Proximity to top data, technology and AI companies
- Notable occupiers: Google, Facebook, London BioScience Innovation Centre, Turing Institute, Wellcome Trust, UCL
- Challenges: Available space and cost

WHITECHAPEL

- The Whitechapel masterplan was signed off by the London Borough of Tower Hamlets. Tower Hamlets, Barts and QMUL have agreed to jointly support the development of a Life Sciences campus.
- Queen Mary Bioenterprises Innovation Centre is the largest commercial incubator space in central London
- Key attributes: Incubator, scale up businesses and large organisations are being targeted to occupy a roughly 400,000 sq ft complete campus.
- Challenges: Speed of development and competition with King's Cross and White City

WHITE CITY

- The cluster was formed alongside Imperial College, the BBC and London Borough of Hammersmith and City - serendipitous moments with active involvement from the council
- Key attributes: To house Imperial's Dept. for Chemistry next to I-HUB. Opposite the campus there is a large number of mixed uses which help to attract talent.
- Notable tenants: Imperial White City Incubator, Huckletree, BBC, Synthace
- Challenges: Lack of anchor corporates, limited scale.

SUTTON

- The London Borough of Sutton and the Royal Marsden Hospital with the Institute for Cancer Research have set up the London Cancer Hub
- Key attributes: When complete, the Hub will total over 3million sq ft.
- To become a hybrid model of out of town science park and urban knowledge clusters
- Challenges: Location, competition and growth through a ripple effect from the London Cancer Hub

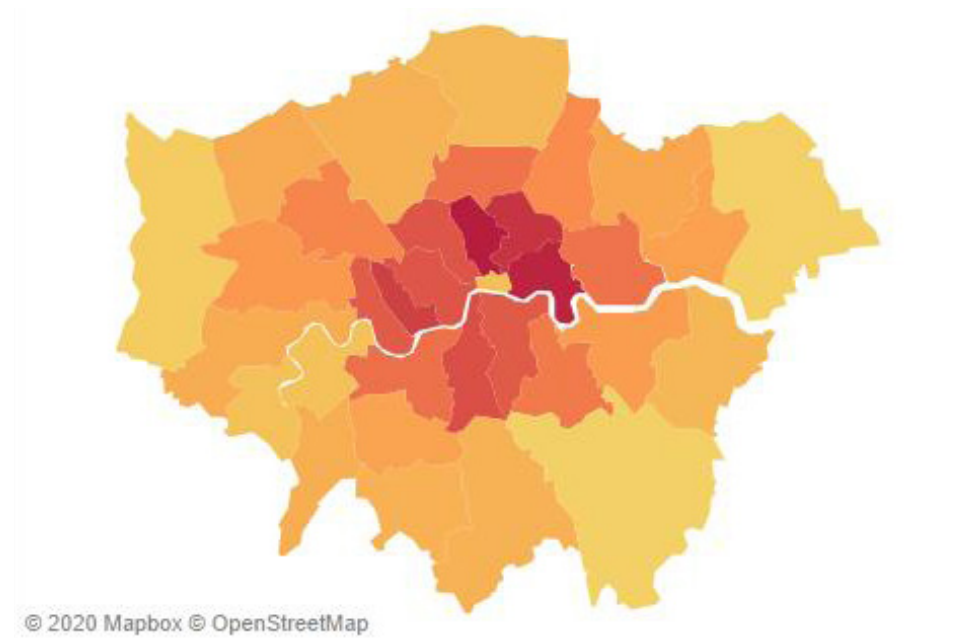
LONDON CONTEXT

1.1.3 HEALTHCARE FUNDAMENTALS: DEMOGRAPHICS

Across the UK there have been gains in population health due to the considerable scientific and technological advances in the healthcare sector. However, with the ageing population we observe a rise in long-term chronic diseases which drives healthcare costs and demand. There are also added demand pressures from an educated population who want access to new technology based cures.

London is densely and diversely populated and shows strong affluence compared to the rest of the UK. Further, the Royal Borough of Kensington and Chelsea is one of the most densely populated and affluent areas in the UK.

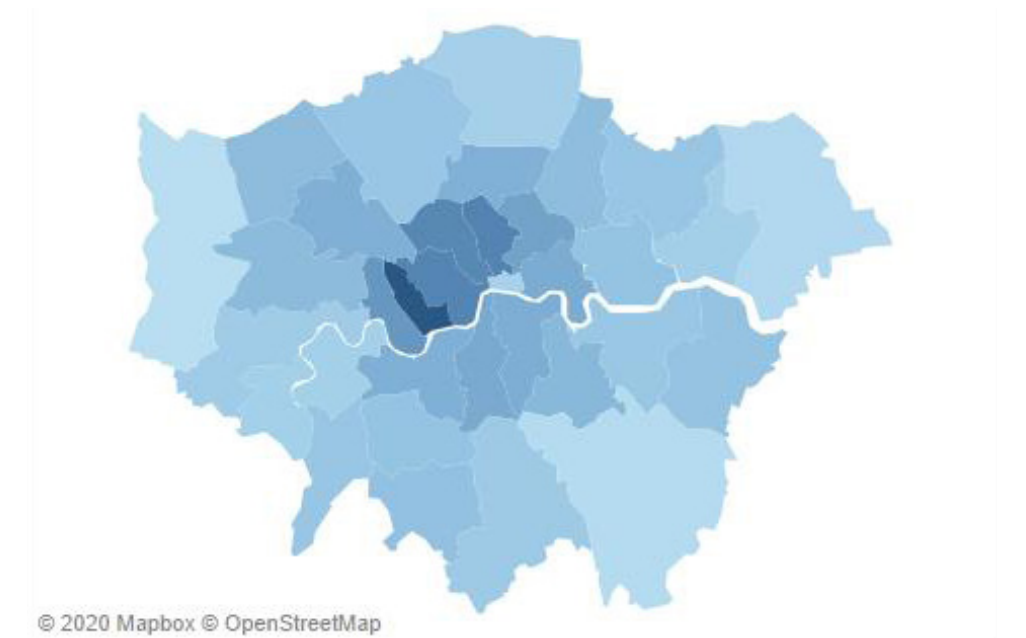
We have analysed Land Registry data to understand the variance in affluence across the different boroughs of London. House prices in Kensington & Chelsea are the highest nationally with an average of over £1m. As such, a very high level of privately funded fees will be achievable across all healthcare and medical uses.



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2,182  16,469

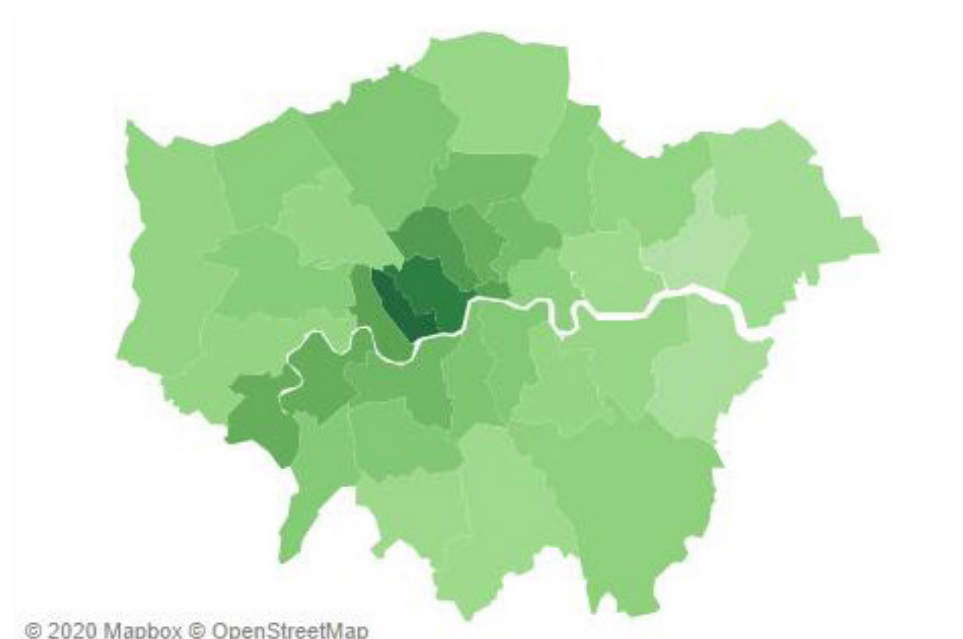
Population density per sq km



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342  2,029

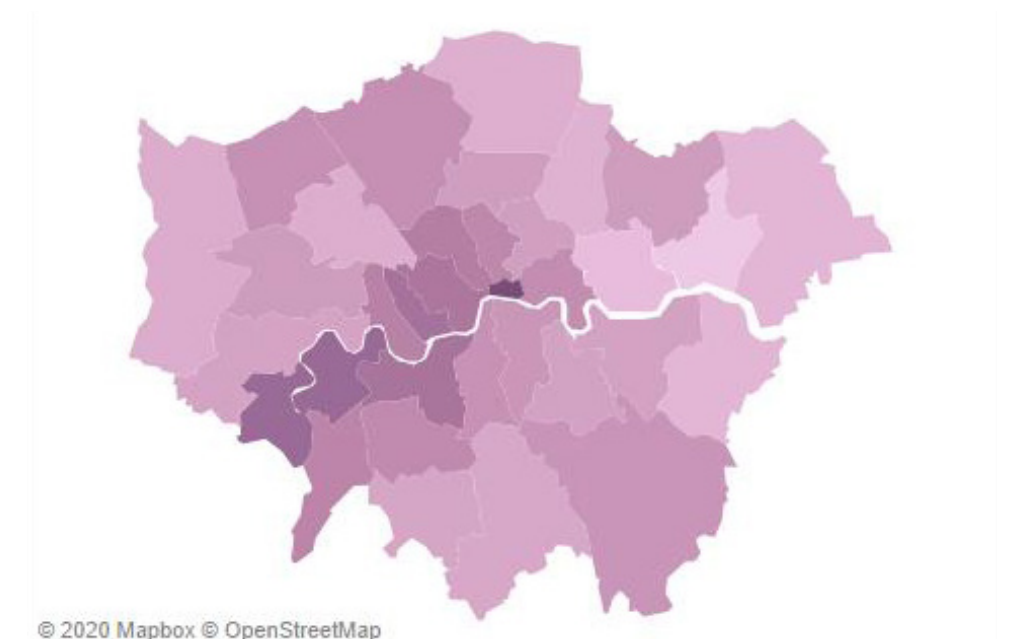
65+ density per sq km



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301,057  1,178,166

Average house prices



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12.6%  60.4%

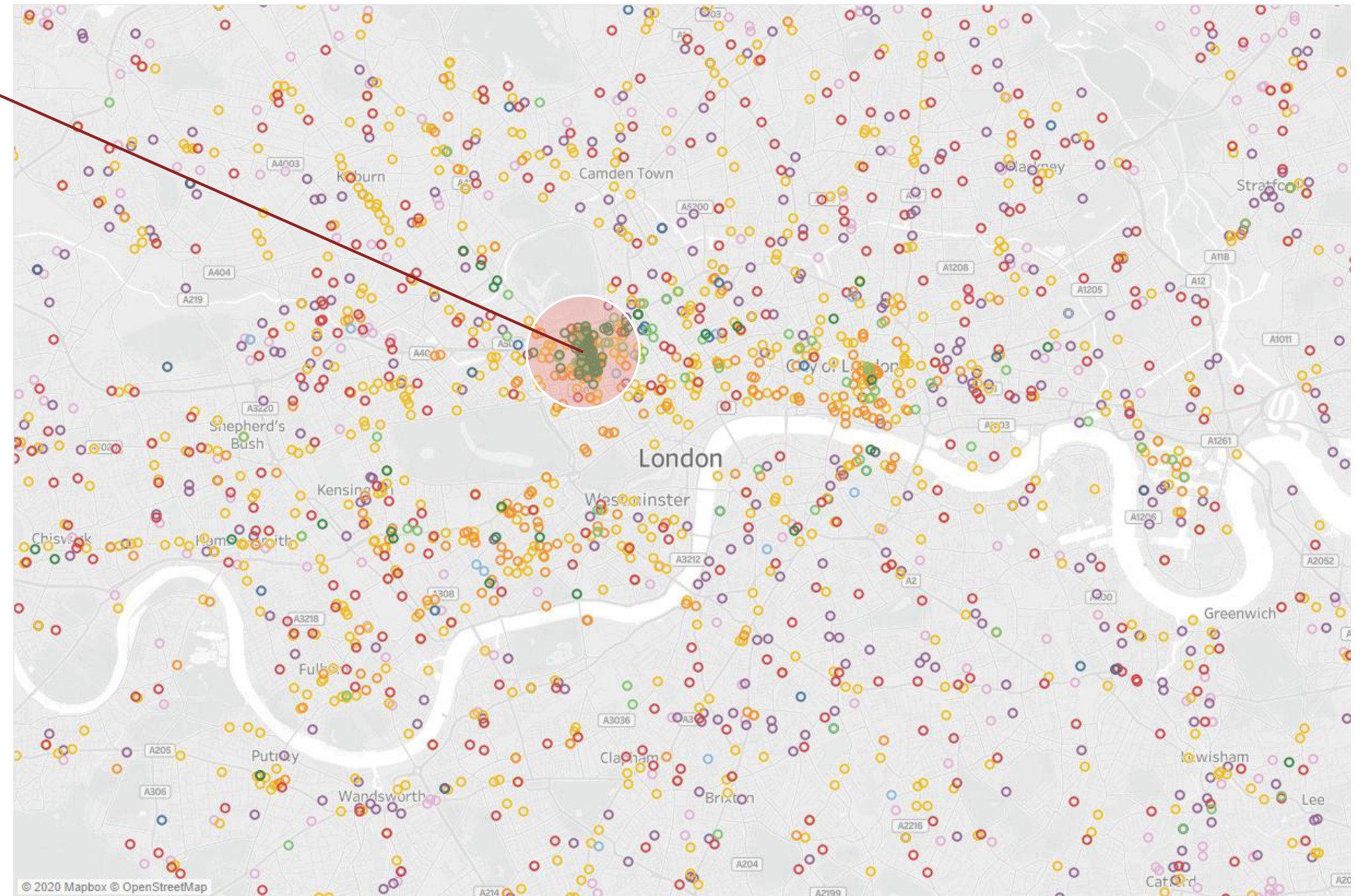
Social grade AB %

LONDON CONTEXT

1.1.4 HEALTHCARE CONCENTRATION IN LONDON

Harley Street Medical Area (HSMA)

- Origins in mid-19th Century. Relative decline in Marylebone's prestige, combined with large houses with space for living quarters and consulting rooms, attracted surgeons.
- Improving transport links and their increasing prosperity resulted in surgeons moving homes to leafier suburbs.
- Intensification of medical use of the Harley Street premises through development of multiple tenancies, and the now famous cluster of consulting rooms.
- Active promotion of medical uses by the Howard de Walden family. Restricted impetus to speculate, e.g. through conversion of houses back into single dwellings.
- Currently more than 5,000 medical specialists operating out of the HSMA.
- Significant investment in dedicated treatment centres (e.g. by London Clinic, HCA)
- Harley Street is attractive to new entrants such as the Schoen Clinic (August 2018), the Mayo Clinic (summer 2019), the Cleveland Clinic (summer 2020) and the planned opening of Royal Marsden's outpatient and diagnostic clinic in Cavendish Sq
- HCA's activities in London Bridge and St. John's Wood suggest that private care could expand into new locations that don't have the difficult property and planning issues that are faced in Marylebone



Location primary inspection category



1.2 SECTOR REVIEWS

1.2.1 LIFE SCIENCES

Social need and benefit

The global Life Sciences industry is on a path of continual growth. The market is driven by the ageing population and subsequent increase of chronic diseases. The industry is responding to the needs of this changing demographic by growing its use of data analytics and technology to deliver 'smarter healthcare.'

London is uniquely positioned to facilitate collaboration across Life Sciences segmentation through its emerging 'Knowledge Clusters'. However, The Royal Brompton Hospital site does not align with an existing cluster and therefore, a new cluster would need to be formed.

Although the demand for space exceeds current supply, there is a perception that London is 'full'.

Design and configuration

In terms of design and configuration of Life Sciences real estate, the space needs to be flexible enough to cater to differing requirements in differing 'volumes', and to allow for a 'graduating'/step-out space for start-ups on a growth path.

Developers need to consider additional, specific requirements of Life Sciences development over standard office, e.g. vibration, structural capacity, heights, high M&E costs.

The above is likely to impact on affordability of solution. Further, there are enhanced needs for safety, security, compliance and privacy balanced with collaboration space.

Key operator and investor activity and demand

The Life Sciences sector is complex, fragmented and diverse in terms of size and specialisms.

There has been significant recent investment incl. Francis Crick Institute, Imperial West and UCL East.

London is a good location in terms of talent availability, funding and proximity to other Life Sciences companies. However, the lack of affordability in London, particularly for younger workers and for start-up companies, along with a dearth of suitable space also pushing up prices, is a significant barrier to entry to the Life Sciences market.

"The Life Sciences sector is a complex ecosystem of interconnected industries comprising a diverse range of knowledge-intensive and often highly specialised firms. This includes companies in the fields of biotechnology, pharmaceuticals, biomedical technologies, life systems technologies, nutraceuticals, food processing, environmental, biomedical devices, and organizations that are involved in the various stages of research, development, technology transfer and commercialisation."

- CBRE Life Sciences London

Commercial and real estate parameters

In the Life Science industry there is frequent dependence on public subsidy or benevolent endowment to bridge cost of delivery and putative turnkey values. Even in the presence of clear underlying demand, supplementary investment might be required from RBKC or elsewhere.

Life sciences	
Optimal size of services	No specific upper or lower bound, but substantial premises required to provide critical mass outside of existing clusters.

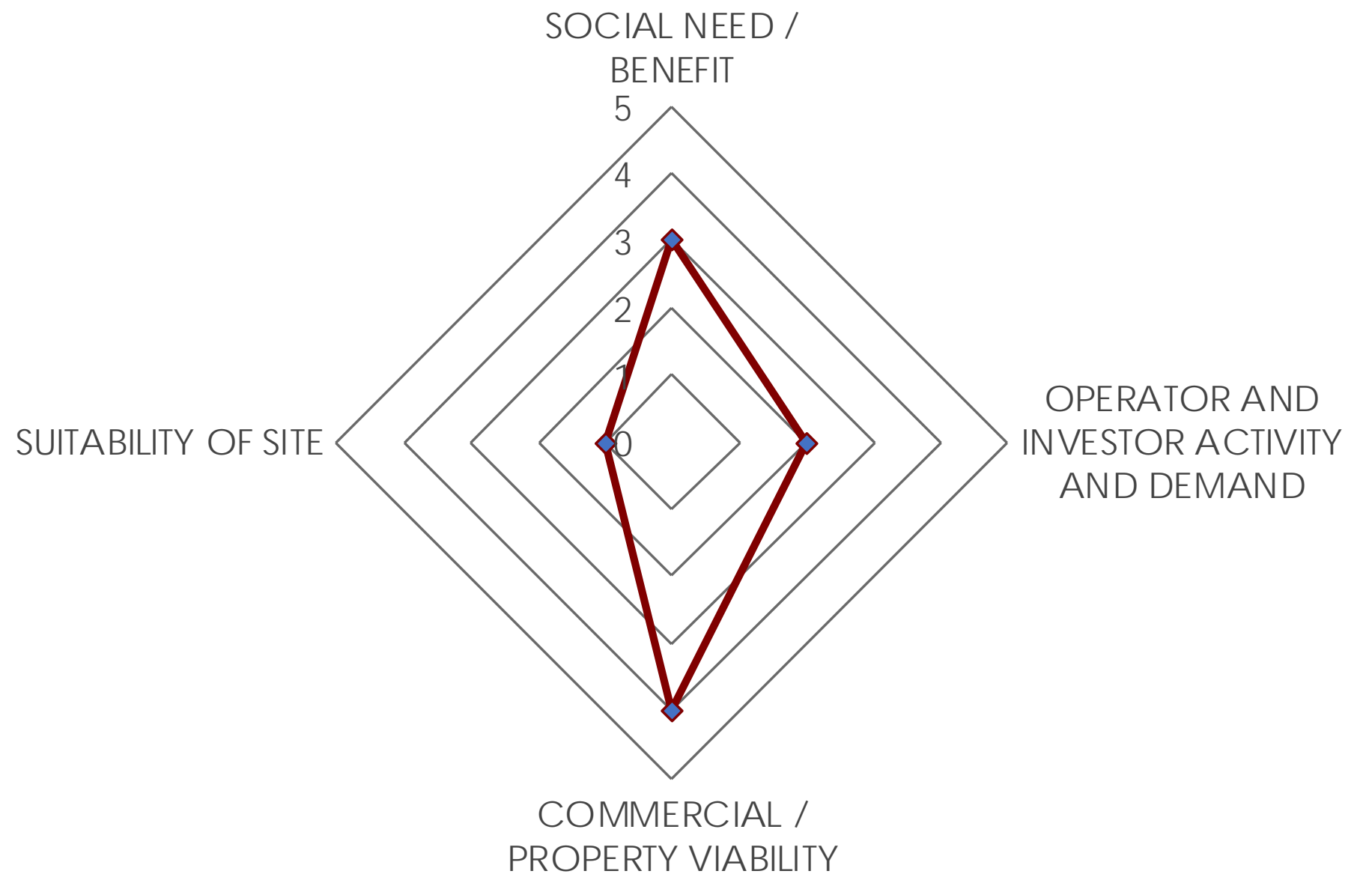
Overall site assessment

Traffic light rating



There is limited opportunity to offer Life Sciences at the former Royal Brompton Hospital sites for the following reasons:

- To our knowledge, there is no identified cornerstone sponsor in Kensington & Chelsea (for example, Imperial College has interest in established cluster in White City).
- The site is not located to an existing cluster and lacks critical mass for formation of a new one.
- There are mediocre transport links for a central London location.
- The typical workforce is young and living costs are prohibitive in this location.



Radar diagram illustrating overall opportunity for the site: 1= poor opportunity; 5 = strong opportunity

SECTOR REVIEWS

1.2.2 OUTPATIENT SERVICES & SPECIALIST TREATMENTS

Social need and benefit

In the last decade there has been a shift in the secondary care market towards outpatients services as more procedures and treatments can be provided away from hospital operating theatres.

New acute services within community settings allow care pathways to be joined up with larger hospital facilities.

With regard to PET/CT, MRI and CT imaging the UK is well behind the rest of Europe and Poor diagnosis means that UK cancer survival rates lag West Europe.

In terms of dialysis, a major trend is an ageing and therefore higher-acuity dialysis population.

Design and configuration

The design and configuration requirements for acute services are varied depending on the type of service being provided.

Notably, dialysis units increasingly require beds instead of seats meaning a high capex burden.

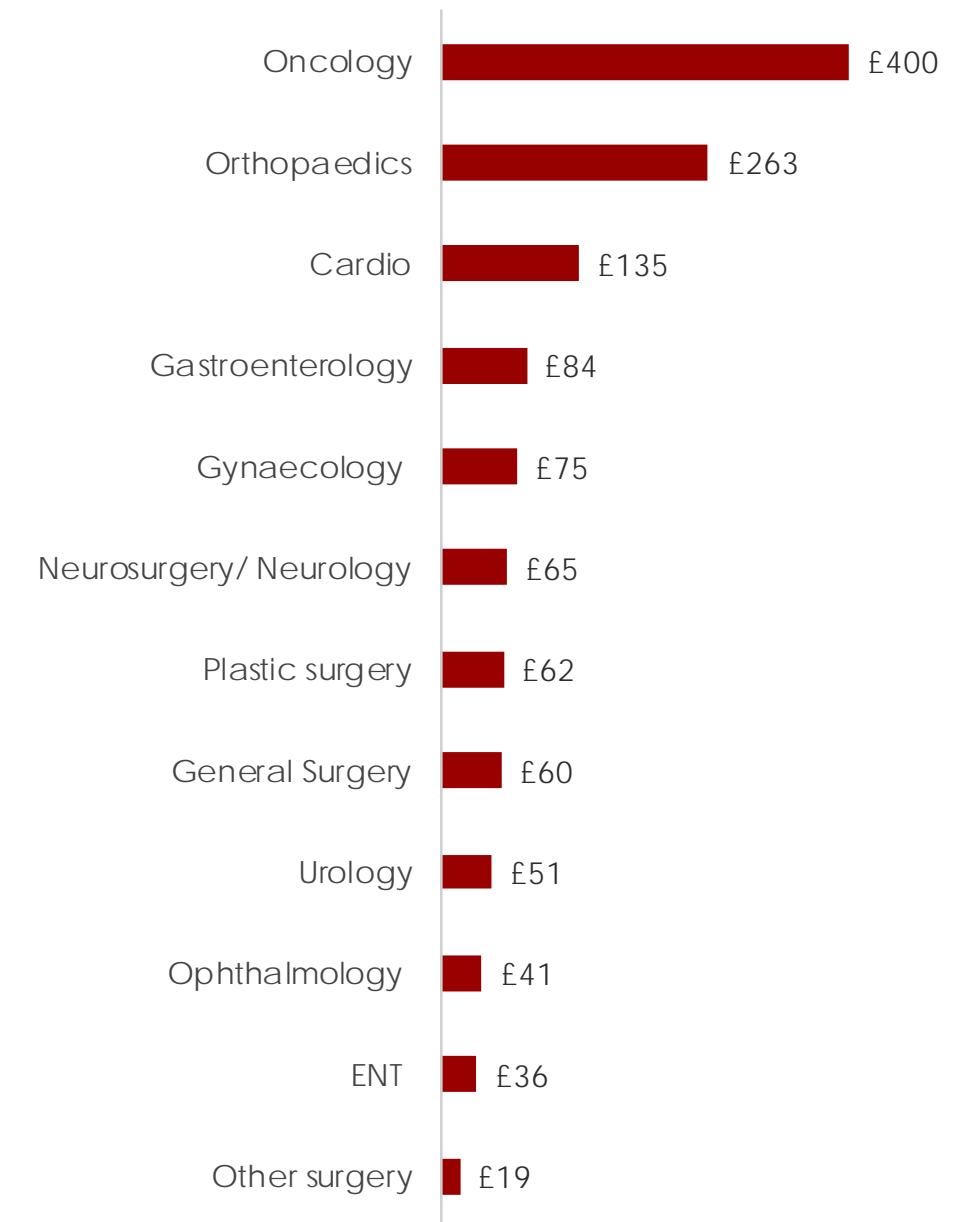
Diagnostics services require a relatively high amount of space for specialist equipment. Cancer treatment and diagnostics operators typically require anywhere between 15,000 and 40,000 sq ft for a site in London.

Key operator and investor activity and demand

Growth in the sector has been largely supply-led with many independent operators developing outpatient facilities in order to offer their customers with convenient access to consultation, diagnostics, and treatment for customers. In particular, there has been considerable development in London by both corporates like HCA and consultants looking to start their own specialist clinics.

It is apparent also that the NHS does not have the money to meet demand for imaging services so there is private sector opportunity in this subsector.

In addition, cancer treatment is one of the biggest and fastest growing revenue streams for central London's private hospitals and accounts for 25.1% of total sector revenue.



Central London Private Acute Specialties Revenue. Source: Laing & Buisson

Commercial and real estate parameters

- Rental values typically geared to ambient local office rents
- Capital values contingent on creditworthiness of end user
- Generally strong interest from institutional and specialist investors

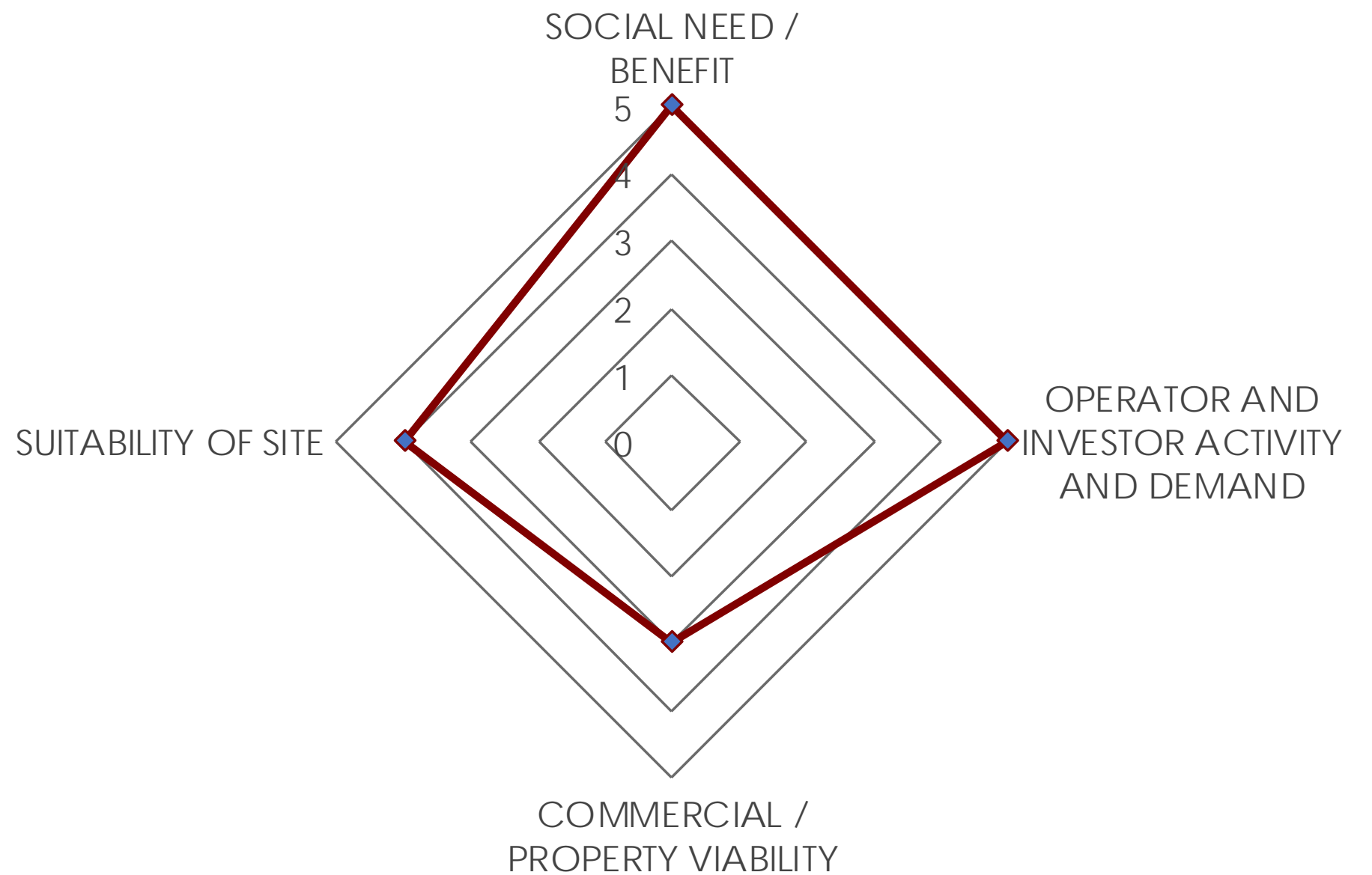
Outpatient	
Optimal size of services	No strict upper or lower limit. Typical requirements for larger standalone facilities c. 4,000 – 6,000m ²

Overall site assessment

Traffic light rating



- The opportunity for outpatient services and specialist treatments at the site is strong.
- It is important to note however, that potential spatial requirements would need to be proven through appropriate marketing.
- The proximity of the existing private and public hospitals would enable the use of a facility on site as a 'spoke' to a central hub facility.



Radar diagram illustrating overall opportunity for the site: 1= poor opportunity; 5 = strong opportunity

SECTOR REVIEWS

1.2.3 ACUTE / INPATIENT CARE

Social need and benefit

The UK's growing and ageing population continues to drive demand for acute care and the need for fast access to diagnosis and appropriate treatment.

There is scope to improve the delivery of both private and NHS healthcare and therefore manage the increasing demand for effective and efficient treatment. The NHS Long Term Plan outlines the new models of care delivery that aim to achieve this. Public policy makers believe that demand for hospital services can be met appropriately in other settings and that technology can help to deliver massive efficiencies in the system.

The model of care for both the private and public sector is moving away from 'fee per service' towards care pathway models designed to encourage consistent and appropriate provision of care, efficiently and at predictable prices.

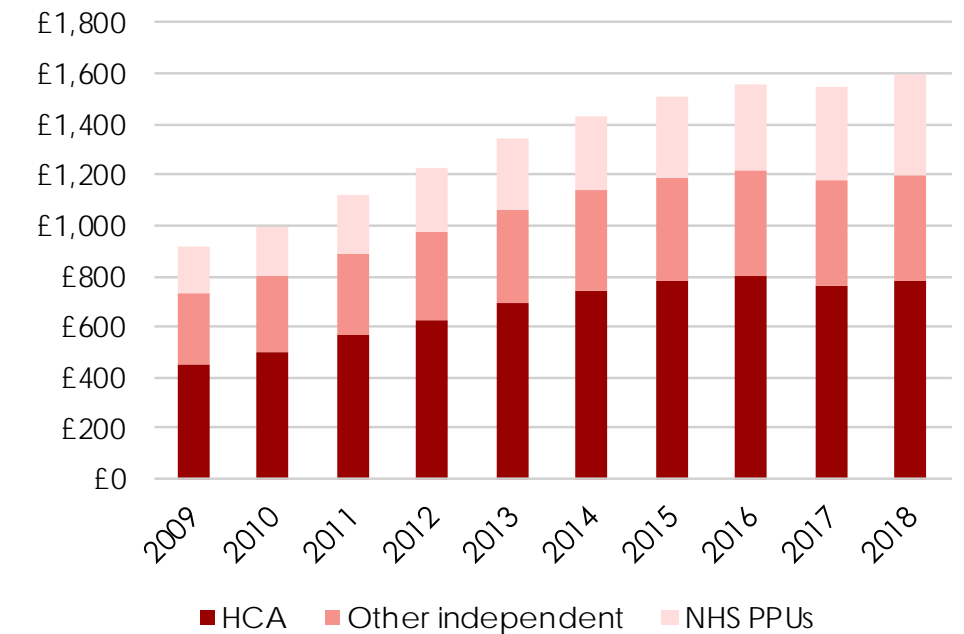
The private sector is well placed to meet the demand for appropriate, high-quality and efficiently delivered healthcare.

Key operator and investor activity and demand

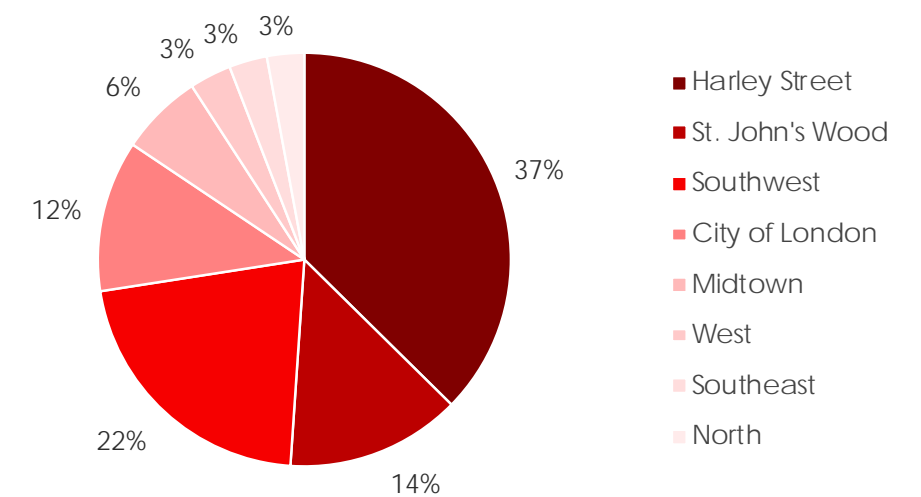
The Central London market has very little NHS business but its important overseas revenues have fallen driven by weak Middle Eastern demand. Further, the PMI market is stagnating meaning hospitals are looking to self-pay for growth.

In the private sector, medical insurers believe that the cost of cover is a barrier to market growth. As more consumers consider spending on private alternatives for quick access to diagnosis and treatment, private healthcare delivery which can generate cost efficiencies while ensuring high quality outcomes is likely to attract interest.

There has been ongoing demand for hospitals let on long RPI-linked leases, notwithstanding a difficult current underlying trading environment.



London Private Acute Sector Revenue Growth. Source: Laing & Buisson



London Private Acute Revenues by Region. Source: Laing & Buisson

Commercial and real estate parameters

- 2019 was the first active year in the UK private hospital sector for more than 5 years, with the market accounting for over half of the transactions with the £1.5bn acquisition of the BMI PropCo by MPT.
- Current confidential transaction attracting considerable international institutional investor interest.

Acute / inpatient	
Optimal size of services	Dependent on operators' specific requirements - recent transactions and known current requirements for accom. Of 4,000-6,000m ²

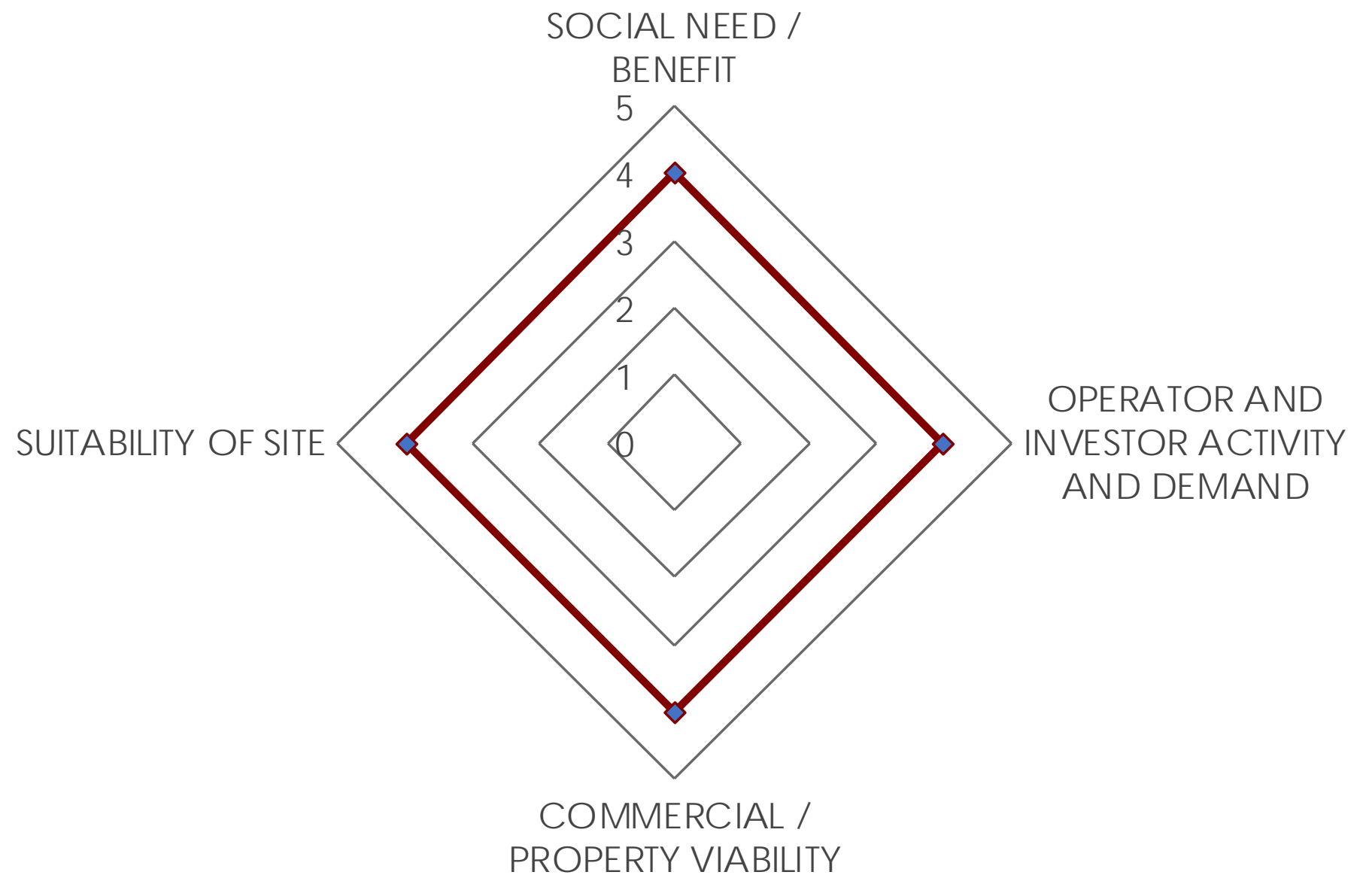
Overall site assessment

Traffic light rating



Generically, the site and location would be suitable for acute / inpatient care, however, current uncertainty around underlying demand would perhaps preclude a large facility.

It is recommended that market testing is undertaken in order to establish scope of demand.



Radar diagram illustrating overall opportunity for the site: 1= poor opportunity; 5 = strong opportunity

SECTOR REVIEWS

1.2.4 POST-ACUTE REHABILITATION CARE

Social need and benefit

Post-acute rehabilitation is a small and undeveloped sector in the UK despite the bed-blocking crisis. Generally, post-acute care is handled by hospitals themselves. The fee-for-service model means that operators are incentivised to keep patients in beds as long as possible and do any rehab needed there.

The main area in which the for-profit specialised rehab sector play for now is in post-stroke cases and brain/spinal injuries.

In terms of demand for post-acute rehab care, across England there have been over 1.2m trauma & orthopaedics admissions and nearly 62,000 hospital admissions due to transport accidents. In particular, the growth of hospital admissions due to transport accidents in London has been significantly higher than the national average. Many of these patients are likely to require further physical rehabilitation after discharge.

Design and configuration

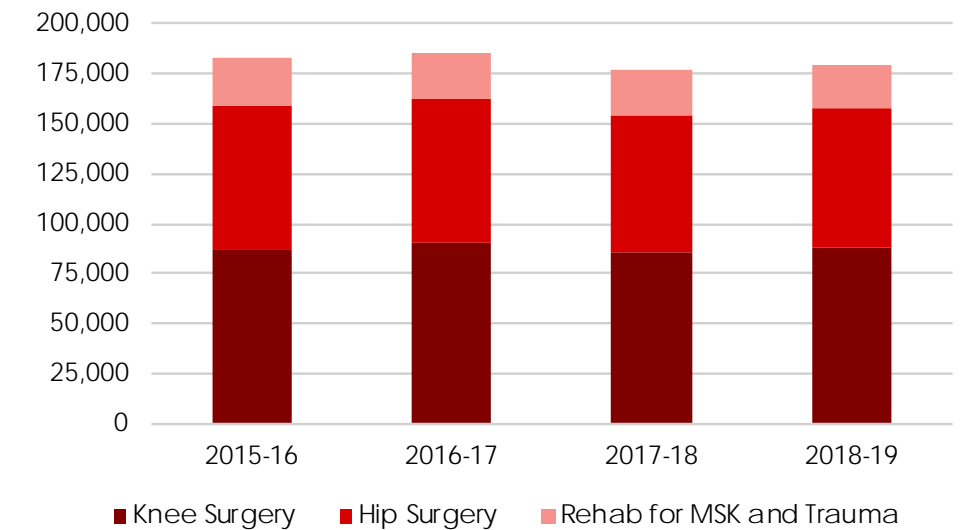
There is no established UK configuration benchmark, but prime nursing homes are seen as a plausible benchmark.

Central European model (Austria, Germany) largely focuses on large (200+ beds) facilities with large self-contained bedrooms and central treatment / communal / dining facilities.

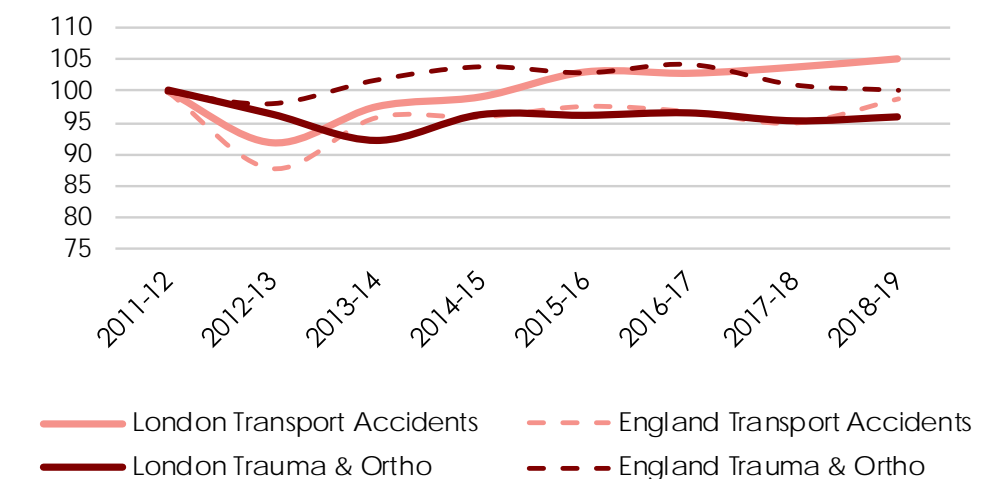
Key operator and investor activity and demand

The for-profit market is small and the largest operators in the sector include Hobbs Rehabilitation, Royal Buckinghamshire Hospital, Neuro-rehab department of HCA's Wellington Hospital and Huntercombe Group (part of Four Seasons).

Circle Health has partnered with Vamed to open a German-style specialist rehab hospital in Reading, the only one of its kind in the country.



Hospital Admission by Procedure (England). Source: NHS Digital, Hospital Episode Statistics



Growth of Hospital Admissions by Department & Reason (Base=100). Source: NHS Digital, Hospital Episode Statistics

Commercial and real estate parameters

- Rental and capital values are dependent upon end user and precise operational model.
- Initial benchmarking to be based upon elderly care or equivalent established use.

Post-acute rehabilitation	
Optimal size of services	No established UK facility size benchmark. Continental facilities typically 150+ beds but London opportunity likely to be highly scalable. Estimate 4,000 – 6,000m ² for pilot facility.

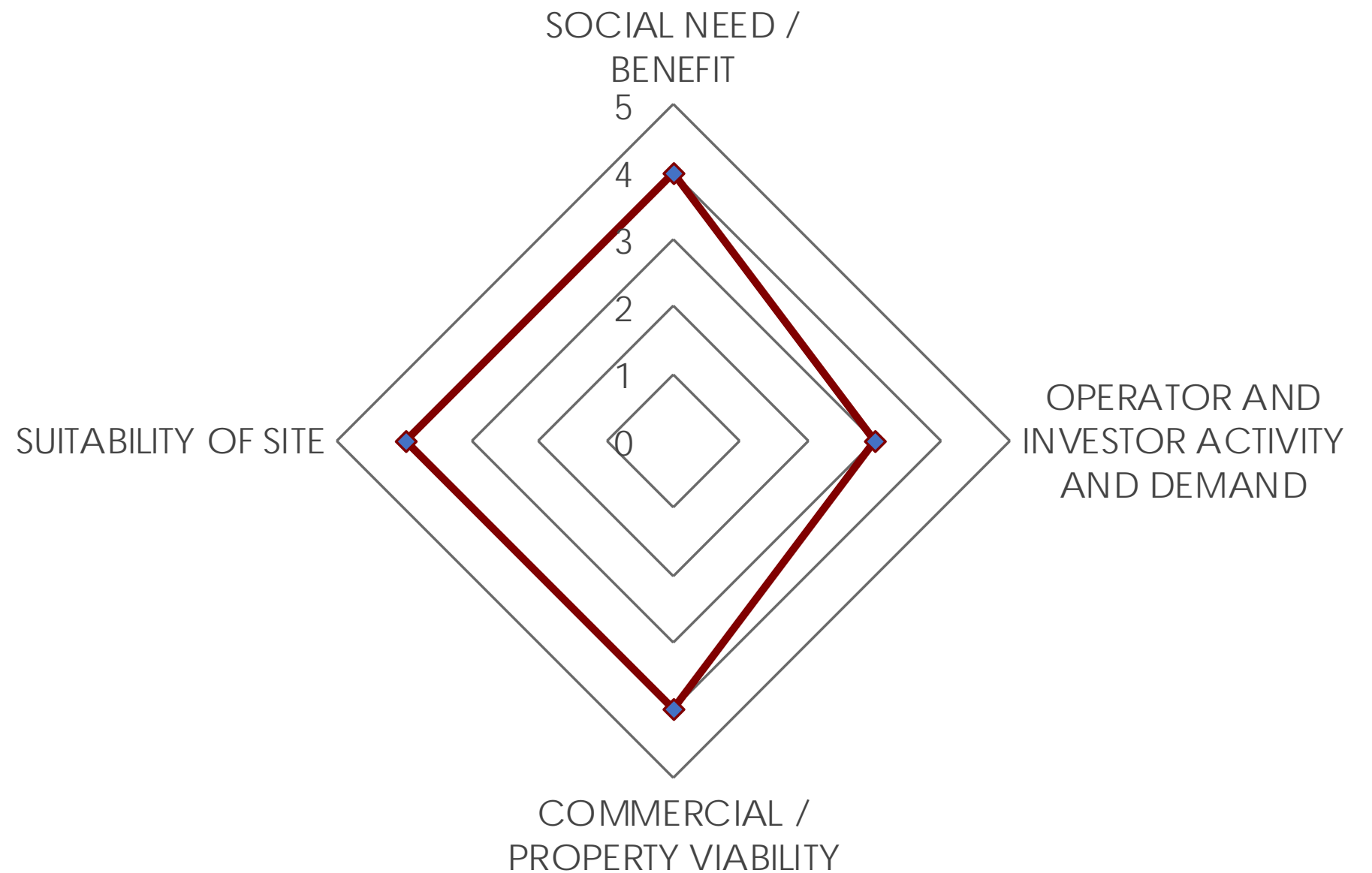
Overall site assessment

Traffic light rating



The Royal Brompton Hospital site is inherently attractive and located in quiet setting with adequate amenity space on the doorstep. As such, there is a compelling case to be made for post-acute rehabilitation at the site.

In addition, the property is both readily accessible to central London private and public hospitals and the wealthy local catchment provides a source of independent payors.



Radar diagram illustrating overall opportunity for the site: 1= poor opportunity; 5 = strong opportunity

SECTOR REVIEWS

1.2.5 ELDERLY CARE

Social need and benefit

Across the borough, there is an estimated a shortfall of 384 care beds based on Laing & Buisson metrics. In addition, the limited existing supply is of a mixed quality and when considered in conjunction with the high affluence in the area, there is a compelling case to be made for any proposed care homes.

Design and configuration

Often smaller converted homes are not equipped or configured to cater to residents with acute care needs. These homes may not be able to meet the increasing demand for elderly care.

Over the last two decades there has been a shift towards larger facilities with more beds. On average, developments built in the last few years offer 60 bed spaces compared to an average of 30 beds in the homes that have closed.

New purpose-built homes should offer en suite facilities for all residents and a single room should be at least 12 square meters. Further, there should be at least 4.1 square meters of communal space per resident. Modern best in class elderly care homes have a gross internal area of 55sq m+ per resident.

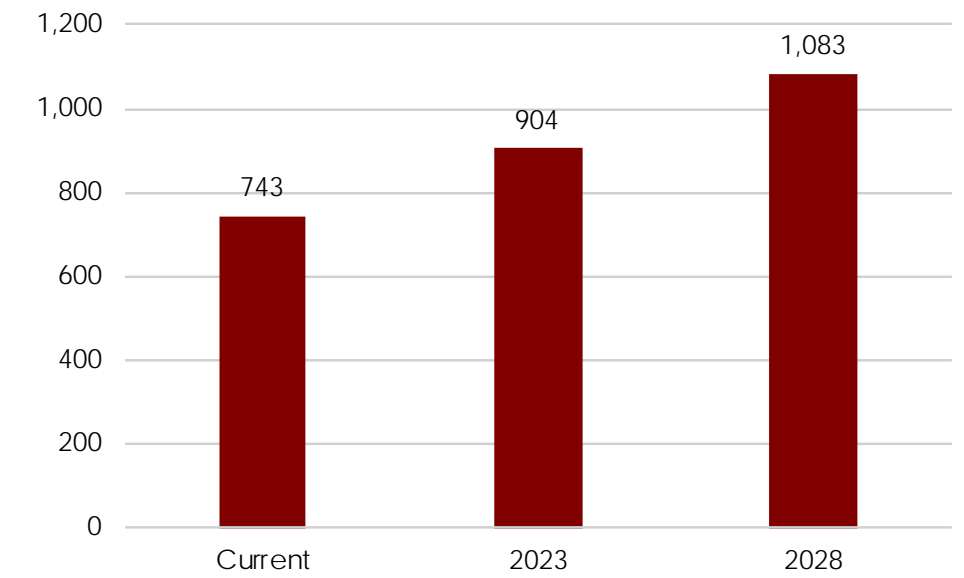
Modern best in class elderly care homes have a gross internal area of 55sq m+ per resident.

In addition, many care home residents are living with dementia and new-build homes should offer dementia friendly design principles to aid memory, orientation and minimise anxiety.

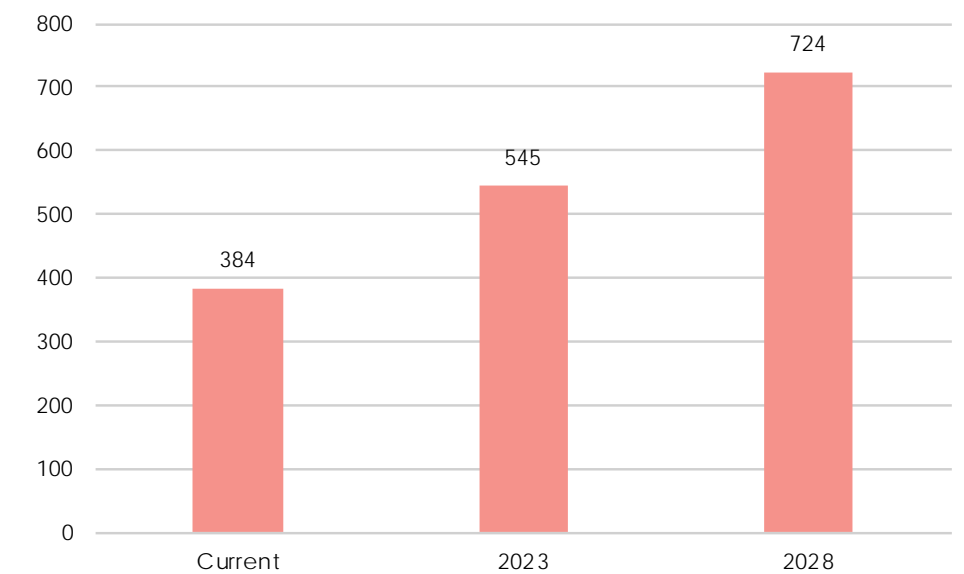
Key operator and investor activity and demand

The corporate share of the market has almost doubled in the last 20 years and in the last 2/3 years there has been divestment on the part of the major providers as they seek to slim down large portfolios, often of sub-optimal stock. It is anticipated that there will be further fragmentation due to the flux in the corporate affairs of the top four operators.

The elderly care investment market has continued to polarise over the last two years; premium private-pay focussed asset yields have compressed, whilst underinvested tertiary stock has been moved out significantly. This has cleared the way for the mid-tier, quality, well operated assets underpinned by strong demographics. There are a wealth of opportunities for investors who can become comfortable with the credit and underwrite the trading fundamentals.



Kensington and Chelsea - Elderly Care Demand Projections (L&B). Source: Laing & Buisson



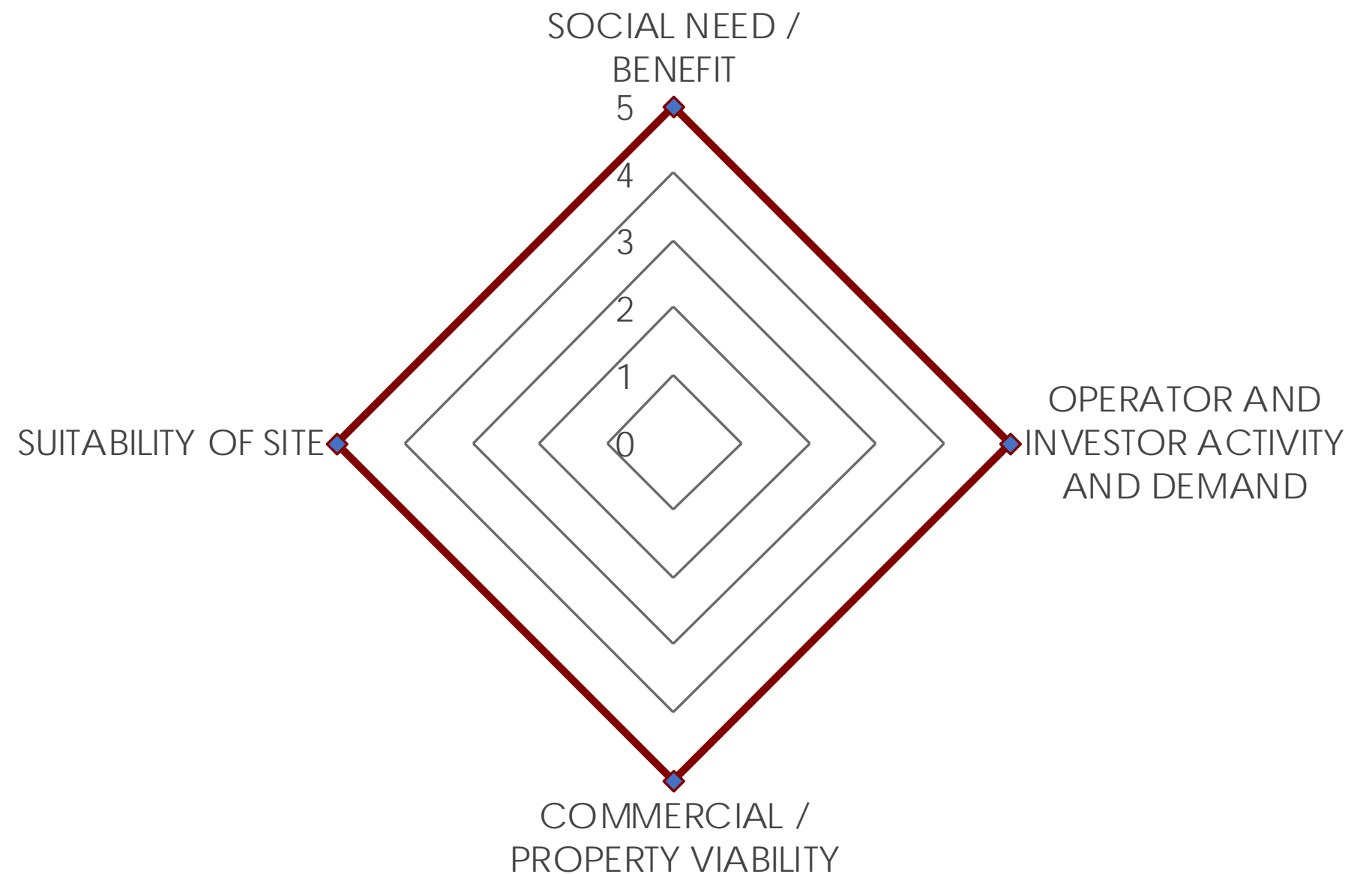
Kensington and Chelsea - Demand vs. Supply (+ve: Undersupply). Source: Laing & Buisson

Commercial and real estate parameters

The shortage of supply in RBKC has resulted in extraordinarily high fee rates being achieved in the vicinity. These high fees feed through directly to real estate value with the potential to outbid almost any competing use (implied land values upwards of £400,000 per bed).

There are a wide range of real estate structuring options in the elderly care market aided by robust institutional investor interest

Elderly care	
Optimal size of services	Nationally, corporate operators tend to require 60-80 bed capacity, corresponding to 3,000 - 5,000m ² depending on layout and specification. Prime central London market appears to be highly scalable.



Radar diagram illustrating overall opportunity for the site: 1= poor opportunity; 5 = strong opportunity

Overall site assessment

Traffic light rating



The Royal Brompton Hospital offers an optimal location and site with unprecedented scope to deliver a best-in-class elderly care facility.

There is also scope to provide more 'accessible' care through specific site sale provisions and/or long-term referrals agreements with RBKC social services.

SECTOR REVIEWS

1.2.6 RETIREMENT LIVING

Social need and benefit

There is a limited supply of old-age appropriate residential accommodation in RBKC, both private and for social rent. As such, there is a potential to liberate general needs social housing stock through provision of dedicated age-restricted accommodation.

In particular, there is a low level of existing supply in the for-profit sector which is currently targeted towards the luxury/top end of the market within London.

Increasing demand for this accommodation is driven by the high affluence and density of elderly population in Kensington & Chelsea and London.

Design and configuration

Retirement living facilities are designed to help people live alone for as long as possible with ergonomic fittings, extra-wide doorways for wheelchairs, or without difficult stairs.

The level of hospitality and leisure facilities provided vary significantly but represent a key part of the attraction and create the community within these schemes. Modern best in class elderly care homes have a gross internal area of 55sq m+ per resident.

In addition, many care home residents are living with dementia and new-build homes should offer dementia friendly design principles to aid memory, orientation and minimise anxiety.

The units within these schemes are typically one to three bedroom apartments ranging from 750 to 1,500 sq ft.

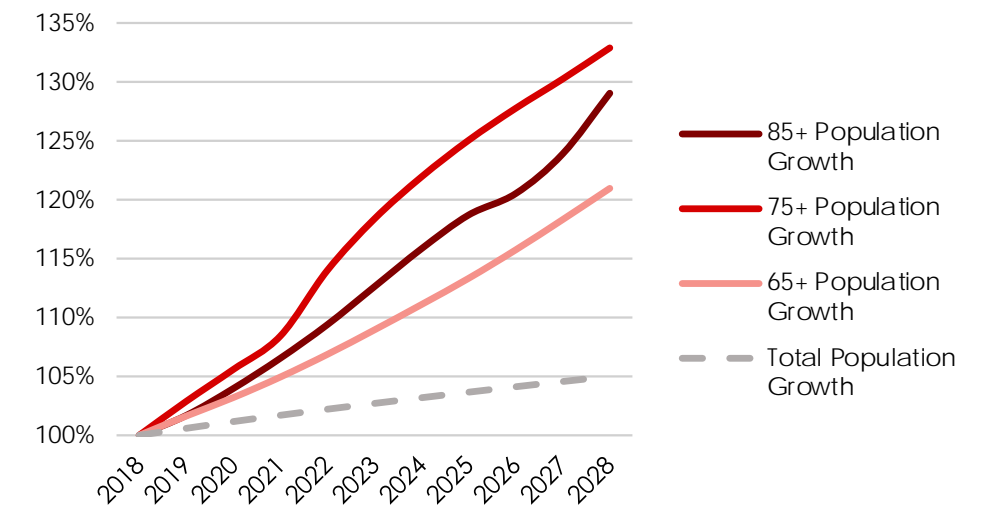
Schemes in London can provide as few as 39 units and there is no established maximum number of units.

Key operator and investor activity and demand

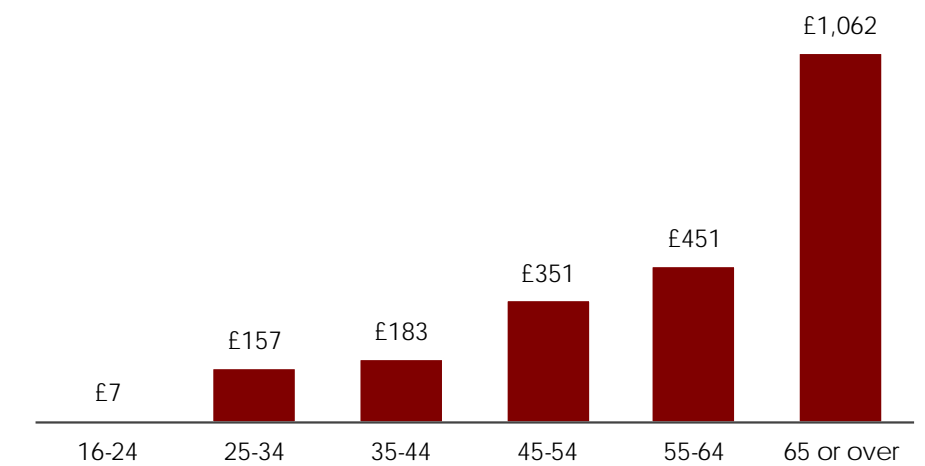
In the retirement living sector, platforms and developments offer opportunities. However, investors need to get comfortable with underwriting event fees.

Several schemes are seeking funding in central London and there is material underlying demand from investors and operators for new opportunities.

Barriers to entry have contributed to a slow uptake in the UK despite this clear demand. Barriers include availability and cost of land, planning (no designated use class) and very few existing operators with as strong track record.



UK 65+ Population Growth Projections. Source: Experian, ONS



Total UK Housing Equity by Age (£bn). Source: Experian, ONS

Commercial and real estate parameters

- Values of completed products mirror that of equivalently-pitched mainstream new-build residential.
- Implied land values are highly sensitive to expected affordable housing/S.106 requirements.
- The requirement for dedicated communal accommodation increases build cost relative to mainstream residential schemes and therefore, depresses land receipt.

Retirement living

Optimal size of services

Recent central London developments range from 25 apartments upwards. Scalable above or below this, provided that supporting infrastructure exists on site. Assume 2,500 – 10,000m².

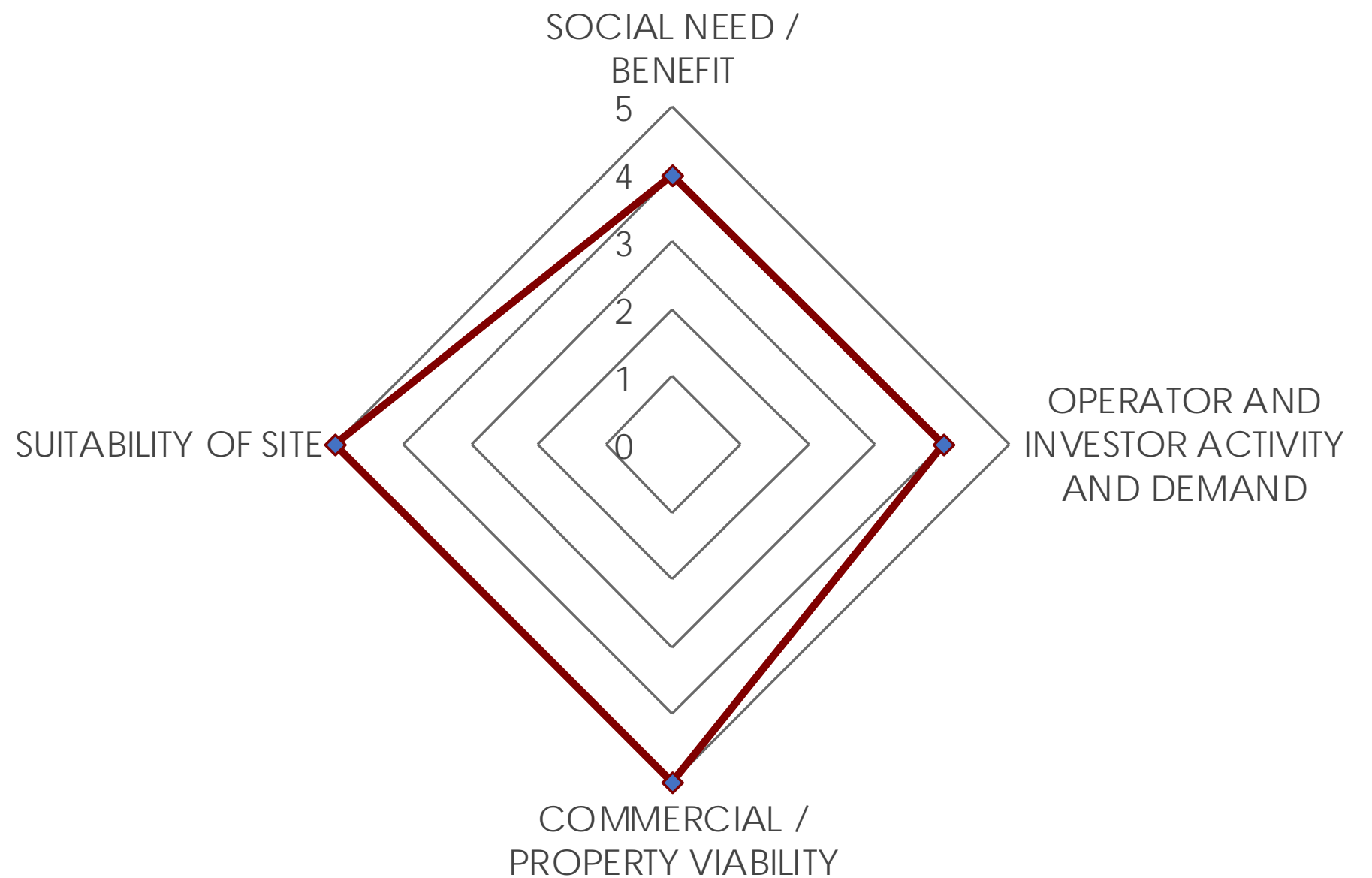
Overall site assessment

Traffic light rating



There is proven demand from premium operators/developers. Historically, demand has not been competitive in this location but a partnership model could resolve this.

There is also scope to influence development through constructive prior engagement on affordable housing provision.



Radar diagram illustrating overall opportunity for the site: 1= poor opportunity; 5 = strong opportunity

SECTOR REVIEWS

1.2.7 EXTRA CARE

Social need and benefit

Extra Care Housing is a form of social housing. The facilities aim to provide residents with a 'home for life', meaning that the residents have security of tenure. The demand for Extra Care is driven by the ageing population in the UK.

The Council published its Modernising Older People's Housing and Accommodation with Care Services Strategy in 2013 to modernise older people's housing in order to improve independence of older residents, increase mobility, release family sized under-occupied dwellings, reduction in costs of residential care, prevent falls and ill health and reduce demand on adaptation spend on inaccessible and often under-occupied accommodation.

The above strategy states that the existing supply is insufficient to replace residential care services and meet the specialist housing needs of the population.

Design and configuration

Extra Care facilities comprise residential apartments that are accessible for the elderly and disabled elderly. These schemes can feature communal spaces including activity rooms, salons or restaurants.

The Borough has stated that, based on demand, an acceptable unit mix is 80% one bedroom units and 20% two bedroom units.

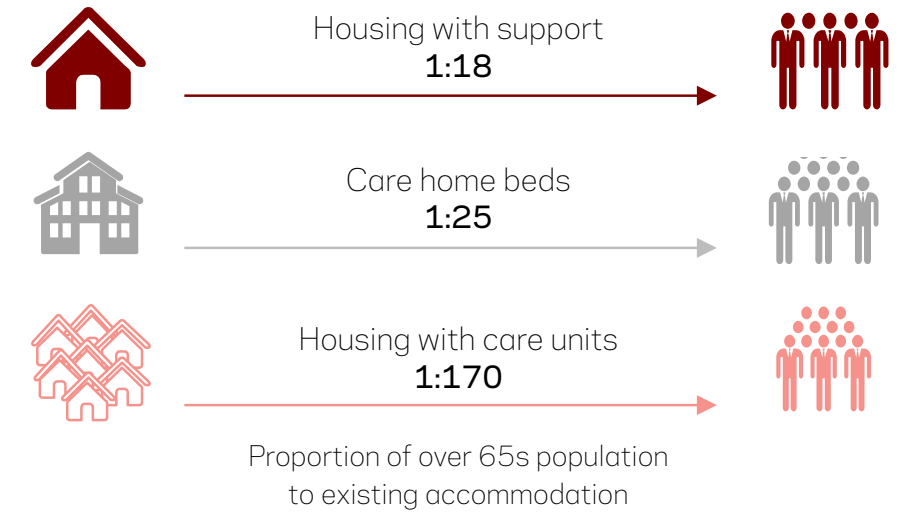
Size of scheme can vary from a handful of properties up to 300 or more properties.

Key operator and investor activity and demand

There is a strong level of investor demand in this sector due to the fact that not-for-profits and Councils are typically viewed as having robust covenants, allowing them to fund new developments at attractive yields.

The sector offers long-term income structures for community-based care under-pinned by housing association providers and is lucrative to institutional investors

In 2016, planning permission for a luxury "extra care" development at 28 Pavilion Road in Knightsbridge after receiving a unanimous vote of support from the borough.



Infographic illustrating insufficient supply of housing with care units in the UK. Source: EAC, Experian



Health and social benefits. Source: EAC, Experian

Commercial and real estate parameters

There are a range of potential options in terms of real estate structuring and financing and pricing and end-value is dictated by the adopted structure.

Values are benchmarked against open residential or general needs housing depending on structure and user restrictions.

Extra care	
Optimal size of services	As with Retirement Living, reasonable minimum number of units c. 20/30. In practice undersupply would justify much larger facility. Assume 3,000 – 6,000 units to avoid dominance of scheme.

Overall site assessment

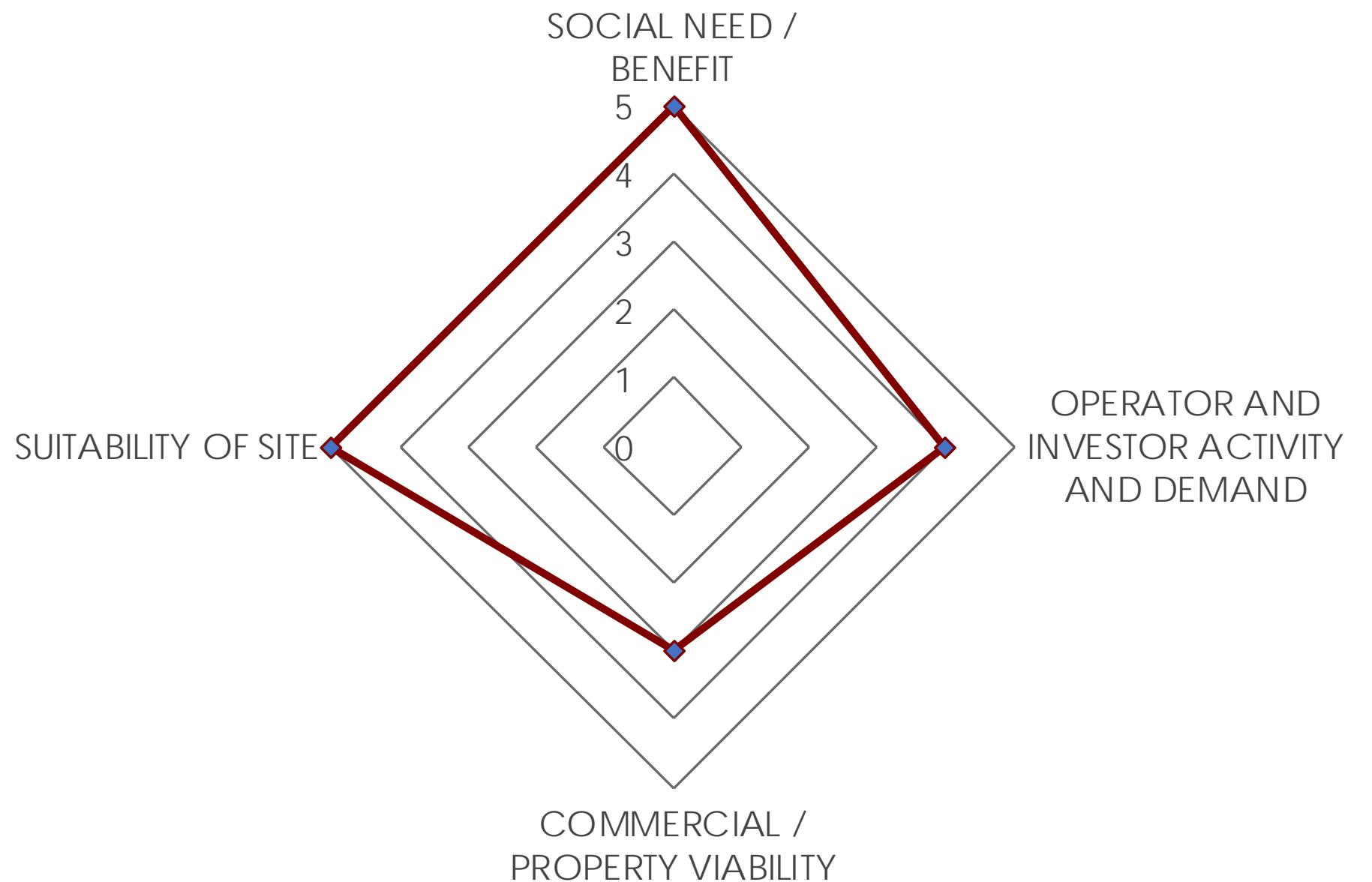
Traffic light rating



The site and location is well situated in proximity of amenities and would be suitable for an Extra Care facility.

Providing Extra Care in this location provides significant scope to reduce pressure on the existing general needs social housing stock.

Positively, there is also scope to consider a range of structuring options with different balance of social benefit and land proceeds.



Radar diagram illustrating overall opportunity for the site: 1= poor opportunity; 5 = strong opportunity

SECTOR REVIEWS

1.2.8 MOB / CONSULTING ROOMS

Social need and benefit

The Medical Office Building (MOB) market has a strong demographic underpinning characterised by the ageing population and increased healthcare expenditure.

Furthermore, the current GP surgery estate is not suitable. Only around 20% of surgeries are less than 10 years old and around two thirds are sub-standard by NHS guidelines.

There is an evident market for private consulting rooms in Central London as office workers seek fast and convenient treatment during their work day.

Design and configuration

MOB facilities require flexible design solutions to maximise floor space and usage whilst being adaptable to changing requirements.

Generally, GP practices typically require 10,000 sq ft+ and polyclinics require 20,000 – 30,000 sq ft with a few being larger.

Key operator and investor activity and demand

Investors have experience limited opportunity to build up substantial holdings quickly in this sector, other than through acquisition of established services.

The highly professionalised and specialised investor base restrict opportunities to new entrants.

In addition, there is pressure on landlords to accept shorter leases and it is important to note that the rent reimbursement system could change.

However, the sector offers stable, long-term investment in a needs-based market which remains underpinned by the government.

“Limited national data is collected on the maintenance of the primary care estate. Anecdotal evidence suggests the age and condition of the primary care estate is no better than that owned by NHS provider trusts. Certainly, the 30% of GP branches having a list size under 4,000 patients are unlikely to be large enough to meet the vision of person-centred care set out in the Five Year Forward View.”

*– NHS Property and Estates,
Why the estate matters for patients,
Sir Robert Naylor*

Commercial and real estate parameters

Rent for this typology is dependent on profitability of the tenants and at day one, rents should be set using local office and residential comparables.

There is very strong institutional demand for standing investments.

MOB / consulting rooms	
Optimal size of services	Scalable and demand would need to be market tested. Assume modest provision - c. 1,000 - 3,000m ² .

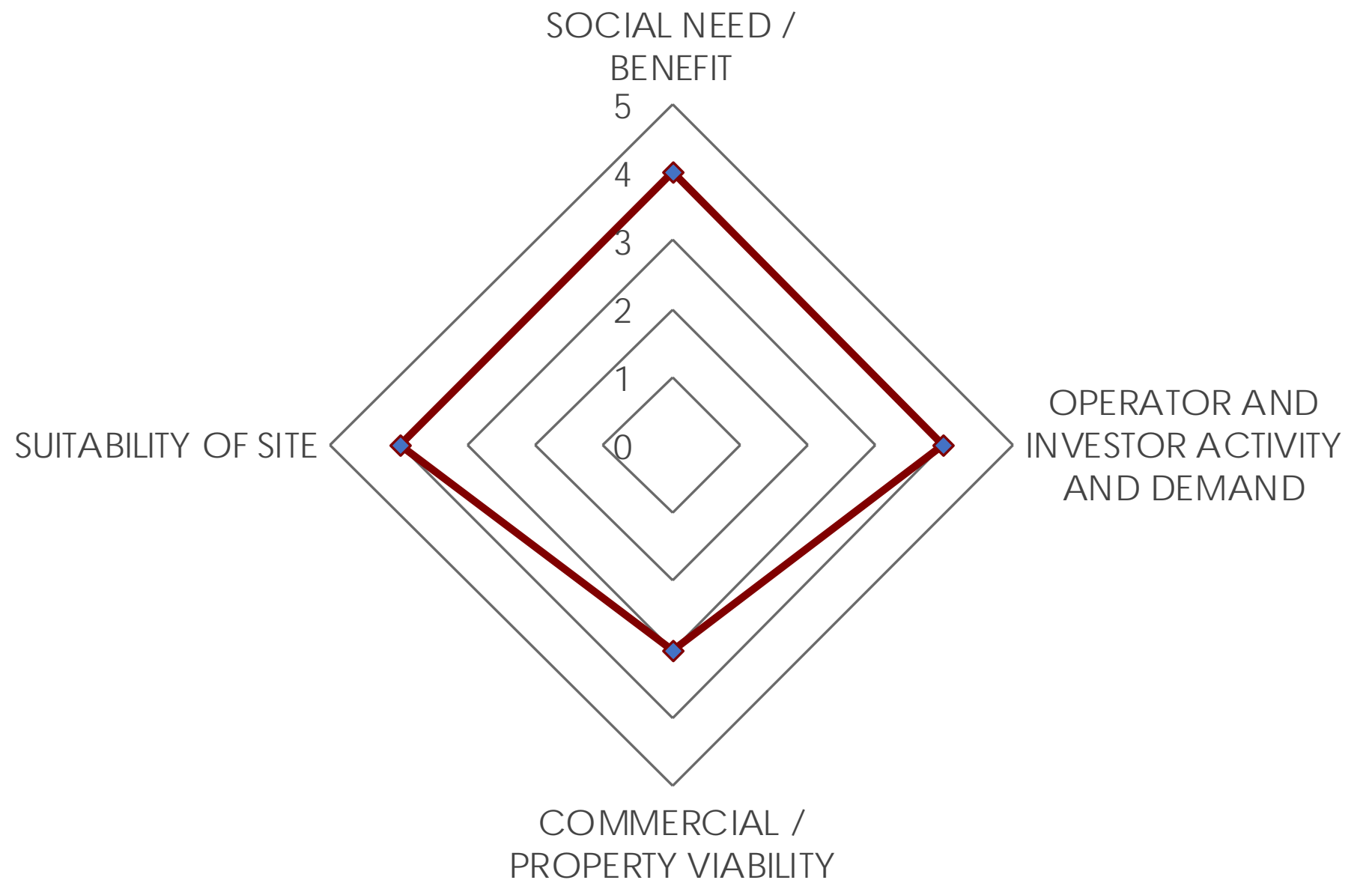
Overall site assessment

Traffic light rating



The site and location represent a good opportunity characterised by the dense population which offers a wide potential patient base for proposed MOB services. Further, the location is prestigious with an established medical use.

There is a precedent of high rents being secured for this use locally.



Radar diagram illustrating overall opportunity for the site: 1= poor opportunity; 5 = strong opportunity

SECTOR REVIEWS

1.2.9 SUMMARY: LIMITATIONS AND SOCIAL NEEDS

Limitations

CBRE's advice is provided on a preliminary basis, and from a real estate perspective, taking into account current trends in the relevant occupational and investment markets. Specifically, we have considered the following:

- Current demand dynamics in each subsector in London;
- Potential spatial requirements per use category;
- Potential proceeds to the Trust arising from a disposal of the sites for each given use.

The range of uses under consideration reflects the sites' current use by the Trust, RBKC's initial preferences as to potential replacement uses, and CBRE's supplementary guidance based on its knowledge of current demand and supply trends concerning healthcare real estate in Central London.

CBRE's contribution explicitly does not comprise a definitive, ab initio, demand and social needs analysis. It is important to emphasise that considerable further work will need to be undertaken in the form of stakeholder discussions, preliminary market testing (principally with potential operators of the healthcare/medical facilities to be developed), and additional clarification of the extent to which RBKC might be prepared to participate in the scheme in the long term. As such, any value benchmarks included in this document must be regarded as high level estimates and must not be relied upon as a guarantee of proceeds to the Trust, or as the basis of any financial commitment on the part of RBKC or any other party.

Nevertheless, it is important to emphasise that CBRE considers a range of potential uses to be viable as part of a masterplan for the sites. It is equally important to recognise that there is an inherent tension between the Trust's presumed need to maximise proceeds from disposal of the sites, and RBKC's desire to promote continued healthcare-related uses which, in aggregate, are likely to generate gross proceeds to the Trust lower than those that might be achieved from sale for the default development purpose in this area, namely prime residential.

RBKC, together with the GLA, ultimately controls the fate of the sites from a planning perspective, and a credible intent to enforce the 50/50 market/affordable guidelines for redevelopment of public sector land, along with a willingness on the part of RBKC to take a long term interest in future development will be absolutely critical to ensuring that a healthcare-focused mixed use scheme is viable from the Trust's perspective (see below).

Social needs and strategic considerations

In this wider context, the most obvious and recognised supply shortages in the borough relate to provision of accommodation for elderly people (care home beds, extra care accommodation, and generic age-appropriate residential accommodation), as well as wider categories of accommodation with critical social benefit (community centres, key worker housing).

This accommodation is usually developed on a spectrum from public/affordable to prime/high-end private, with a corresponding range of underlying land values. In recent years, the affordable end of the spectrum has generally been provided as a result of planning obligations, and has been viewed as a burden by developers and landowners, especially in a location such as RBKC with its atypically high property prices. This could be addressed by way of a facilitating long-term financial commitment (council wrapper) on the part of RBKC, which would be offset by a reduction in its outgoings elsewhere and, potentially, positive net income arising from the structure itself.

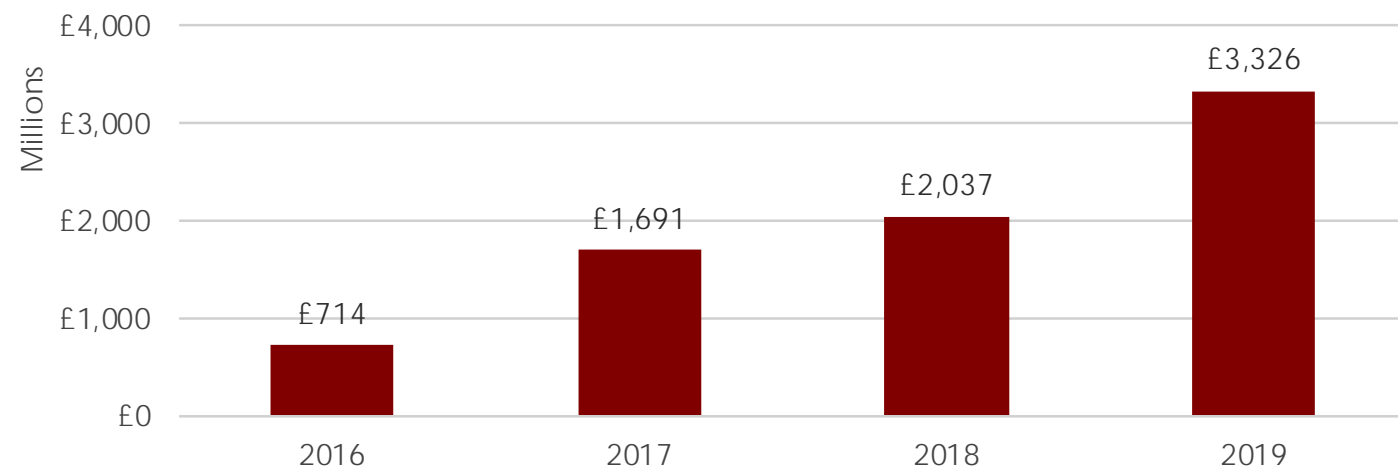
Other more conventionally healthcare-related uses explored by CBRE in the context of this exercise would, we believe, be viable on the basis of a more typical institutionally-funded development model. They would serve the wider community as well as helping to maintain the heritage of medical services and excellence on the sites themselves.



South elevation of the Clinical Skills and Simulation Centre

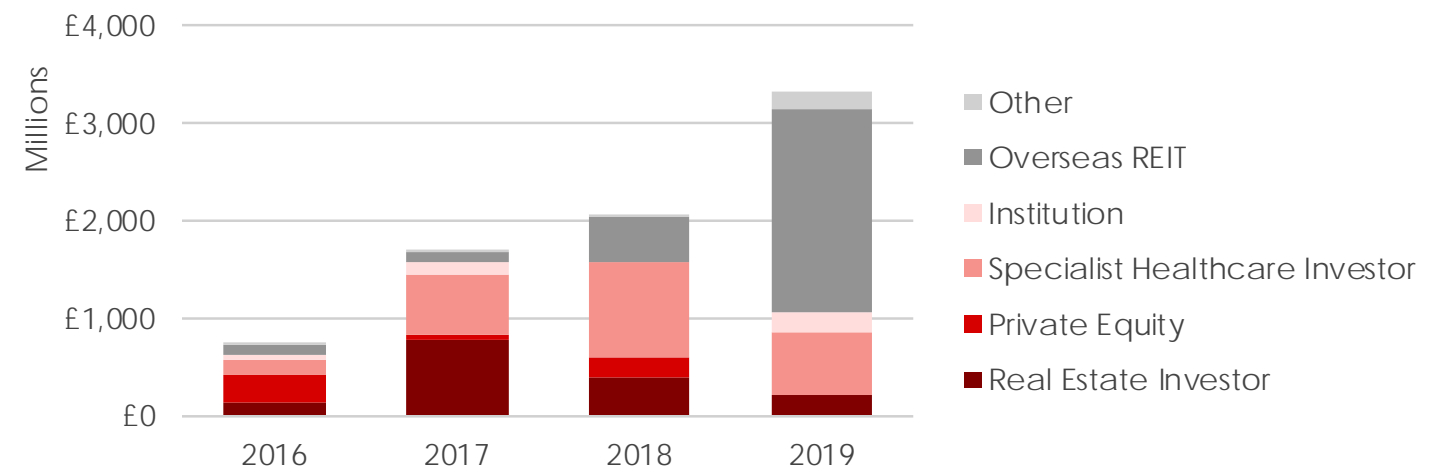
1.3 WIDER THEMES: HEALTHCARE INVESTMENT MARKET

Total healthcare investment volumes



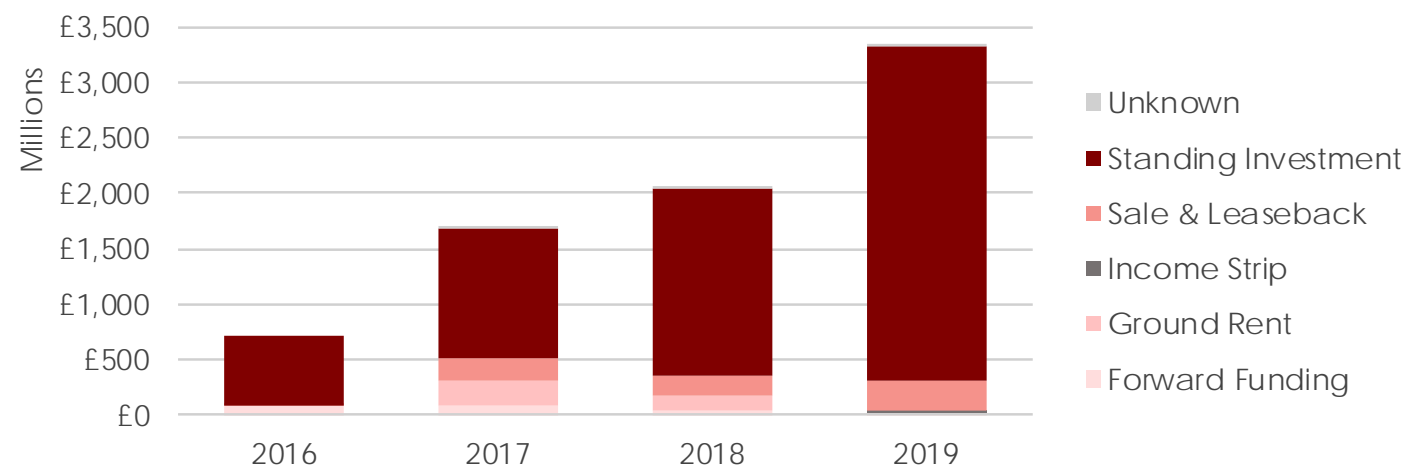
- Continued year-on-year growth
- Typically fewer but larger transactions

Investment volumes by buyer type



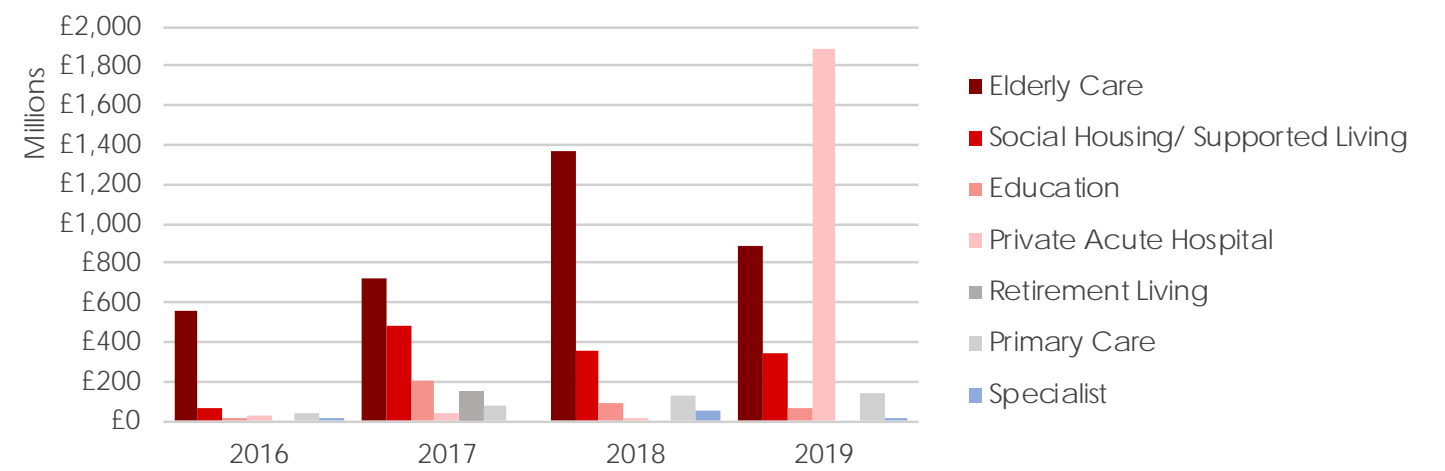
- Dominated by healthcare specialists, especially US REITS
- Domestic institutions only other buyer groups of note

Investment volumes by type



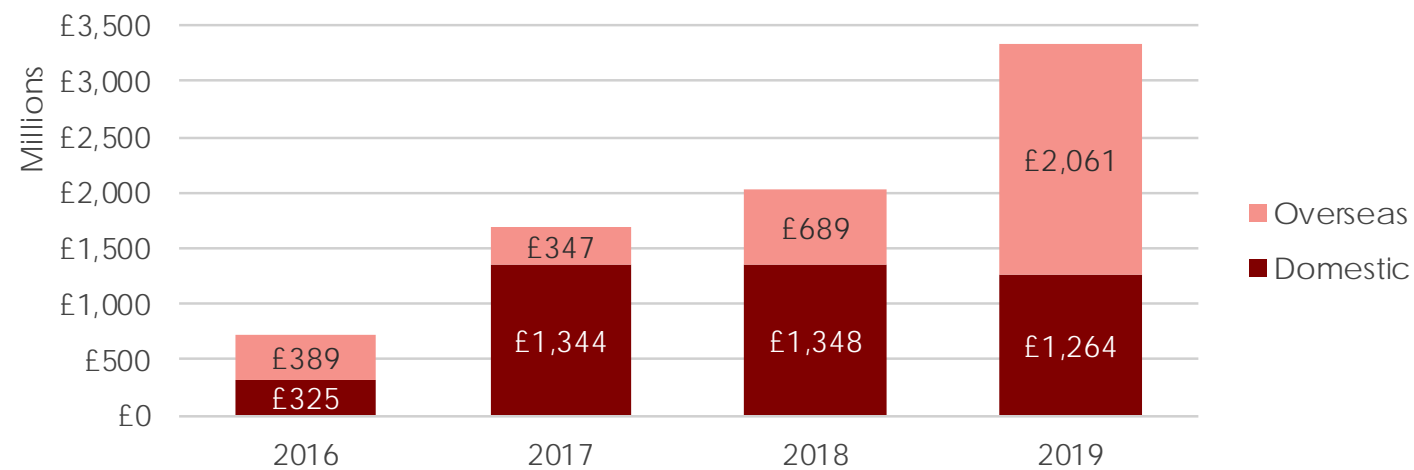
- Standing investments continue to dominate transactions by value, with long income type investments (ground rents and income strips) showing limited signs of growth despite strong demand from investors. This is likely due to limited stock.

Investment volumes by asset class



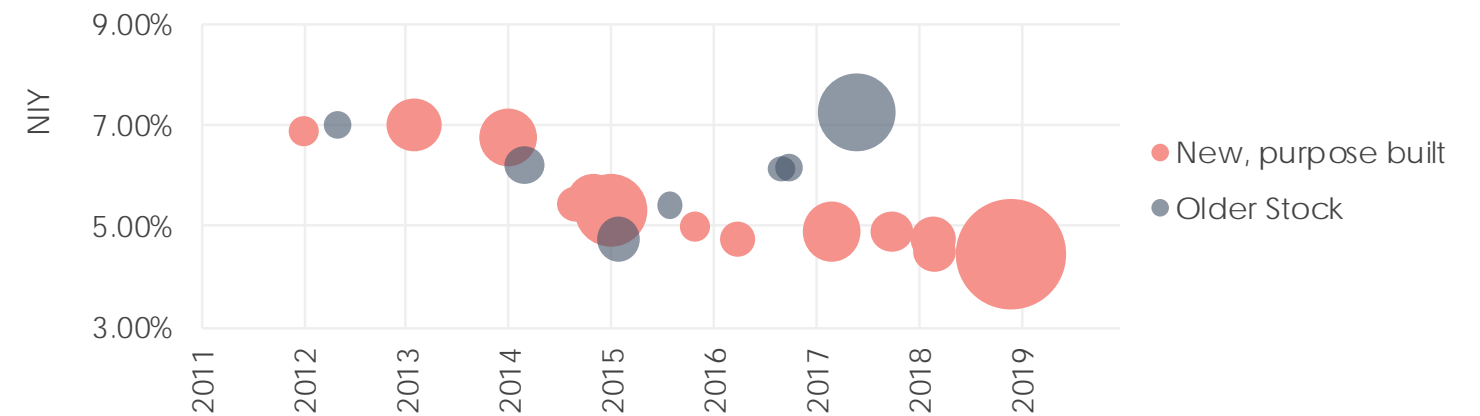
- First active year in UK private hospital sector for more than 5 years
- Decline in care home volumes
- Highest concentration of a single asset class other than care homes on record

Investment volumes by capital source



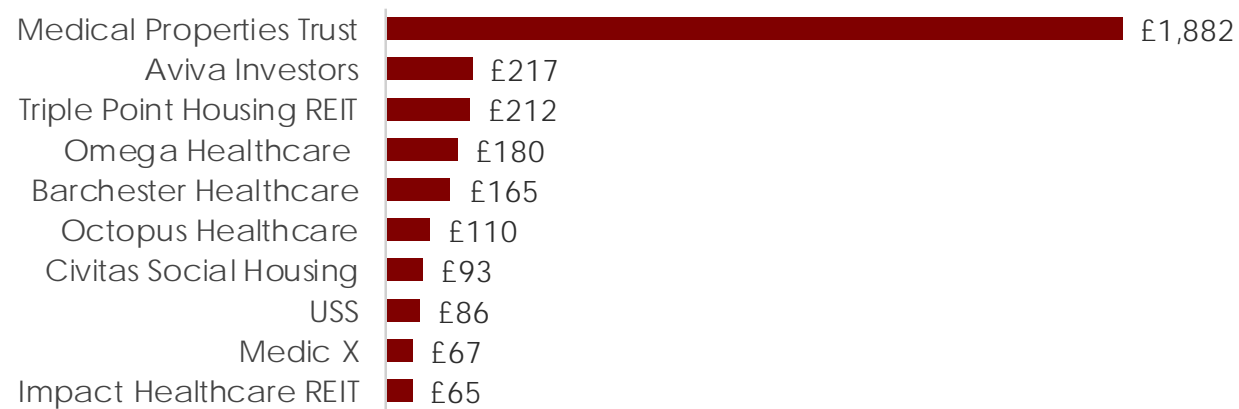
- Overseas capital continues to invest heavily into the sector, with US REITS once again returning to the market

Pricing



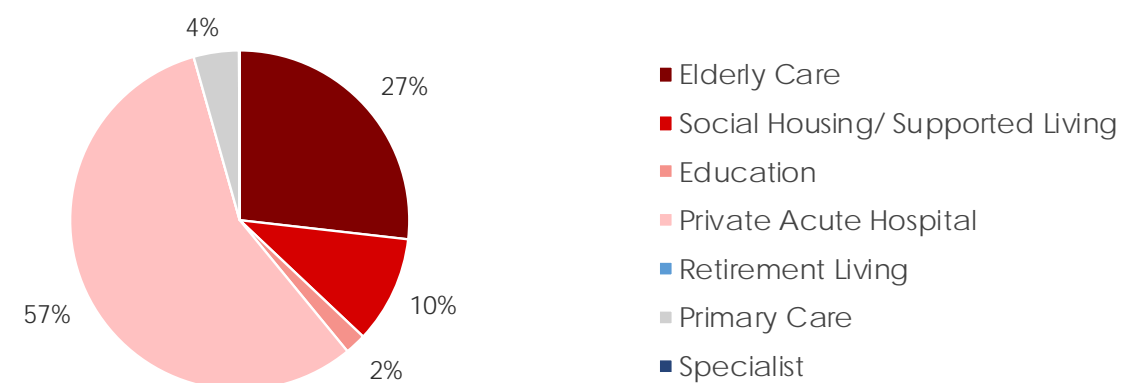
- Care UK's covenant continues to act as benchmark for yield compression across the sector
- Pricing for new, purpose built stock continues to strengthen whilst pricing for older, secondary stock moves out significantly

Top investors by investment, 2019 (millions)



- MPT's c.£1.85bn investment into UK private acute hospitals dominates the market
- The remaining investors are predominantly healthcare specialists

2019 volumes by asset class



- Private acute hospital market accounting for over half of the transactions with £1.5bn acquisition of the BMI PropCo by MPT (CBRE Advised).
- Despite continued investor demand, Retirement living made up less than 1% of the market

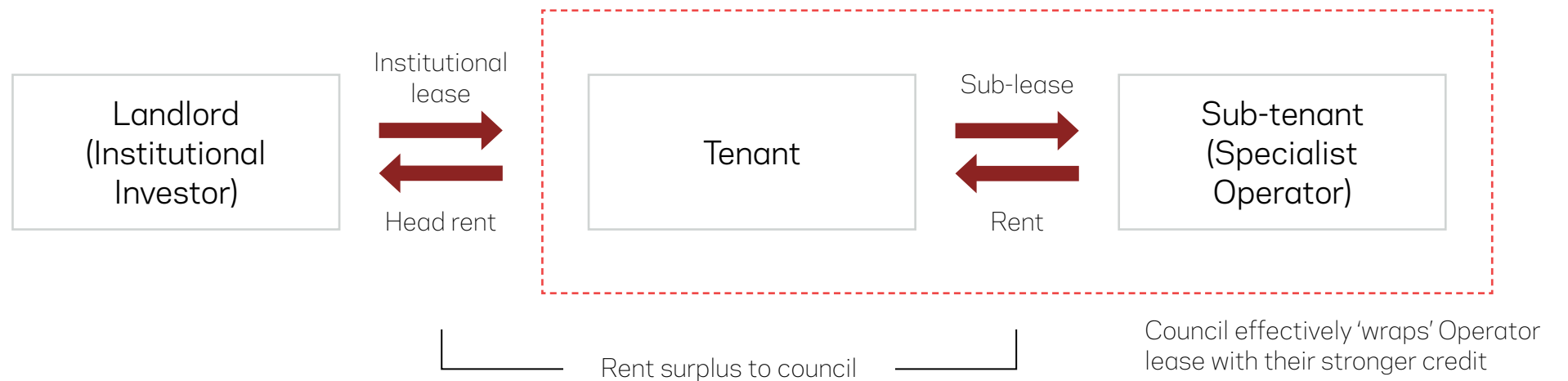
1.4 RBKC'S POTENTIAL ROLE IN DELIVERING A SUCCESSFUL HEALTH-LED SCHEME

Virtually all new healthcare facilities are developed by the private sector operators and developers. They typically target locations with higher fee levels. This means that many areas of the country have no new healthcare development, or, as in the case of RBKC, that new provision exclusively targets the top end of the market.

A similar incentive situation persists generally in respect of other forms of socially beneficial development, including key worker housing, extra care, community day care facilities, and so on. The model set out below could similarly be applied with a view to delivering these uses.










The Council Wrapper model provides a solution which capitalises on the strong credit rating of Councils in the UK. This is how the model works:

1. The Council, as Tenant, agrees to enter into an institutional quality lease with an Institutional Investor Landlord.
2. The Council then sub-lets the premises to the sub-tenant who will operate the facility. This could be a care home operator in the case of a registered setting, or a Registered Provider (Housing Association) in the context of extra care accommodation or key worker housing.
3. This specialist operator sub-tenant will be responsible for ensuring, inter alia, that the service fully complies with all regulatory (CQC) requirements (in the case of registered care settings).
4. The specialist operator sub-tenant will pay Rent to the Council at a marginally higher rent than the Council is paying the Institutional Landlord. This creates an annual surplus to the Council for the duration of the lease.
5. The Institutional Landlord owns an asset from which is paid by a high credit Tenant. The value of this stream of income is high and much sought after by Institutional investors.



1.5 CONCLUSIONS AND RECOMMENDATIONS

1.5.1 RATINGS & VALUE RANGES BY TYPOLOGY

Ratings	Social need/ benefit	Operator and investor activity and demand	Commercial / property viability	Suitability of site	Minimum value per ft ² of developable area (implied residual land pricing)	Maximum value per ft ² of developable area (implied residual land pricing)	Optimal minimum size	Optimal maximum size	Overall assessment
Residential benchmark (assumes 50/50 market/ affordable requirement)					£420	£850	-	-	-
Life sciences	3	2	4	1	£110	£600	n/a	n/a	
Outpatients services & specialist treatments	5	5	3	4	£225	£630	4,000	6,000	
Acute / inpatient care	4	4	4	4	£225	£630	4,000	6,000	
Post-acute rehabilitation	4	3	4	4	£200	£840	3,000	6,000	
Elderly care	5	5	5	5	£300	£1,150	3,000	5,000	
Retirement living	4	4	5	5	£350	£630	2,500	10,000	
Extra care*	5	4	3	5	£350	£630	3,000	6,000	
MOB / consulting rooms	4	4	3	4	£200	£400	1,000	2,000	
Key worker accommodation	5	4	3	4	£400	£700	infill	infill	

Notes:

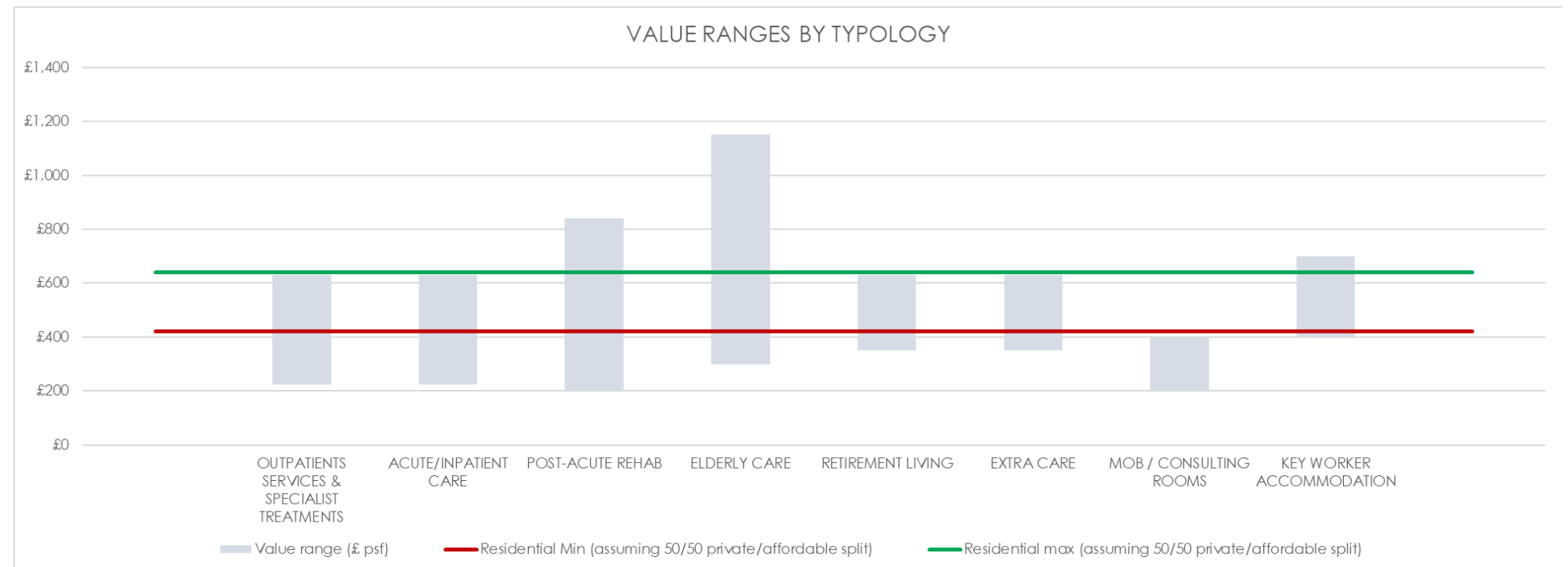
* Stated land pricing for Extra Care explicitly assumes adoption of council wrapper for completed development

Poor opportunity **1** **2** **3** **4** **5** Strong opportunity

CONCLUSIONS AND RECOMMENDATIONS

1.5.2 SUMMARY

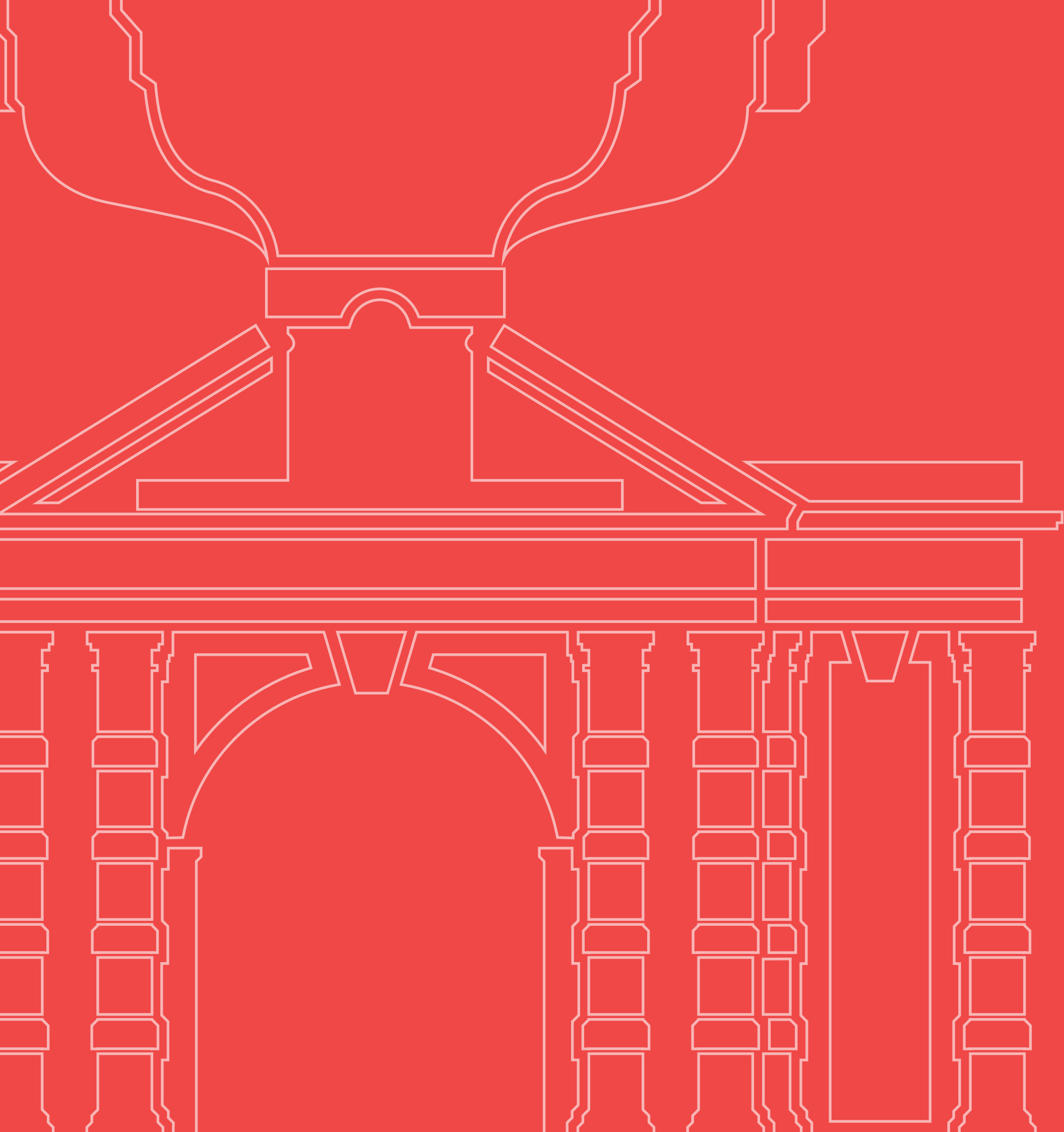
- The sites present a unique opportunity for an integrated health and social care campus in central London, underpinned by strong demographic fundamentals, shortage of existing supply in most categories, and very strong investor and operator demand for accommodation in London;
- While market testing and/or targeted discussions are required to establish the actual scope of operator and investor demand in this setting, we believe that the flexible masterplan advocated and set out herein by HOK would accommodate a range of different use typologies. All are mutually compatible and could form the basis of a sustainable healthcare-focused scheme ;
- Scope to resolve tension between 'exclusive' services, e.g, prime retirement living and elderly care, and underlying social need through active involvement of RBKC as stakeholder and commissioning party (for example through council wrapper structure);
- Viability of these uses is highly contingent on policy towards the 'default' alternative – prime residential. Will the 50/50 principle be credibly enforced? Proceeds from sale of sites for medical or social care uses will struggle to compete with prime residential-led scheme with eroded affordable housing component.



Value ranges by typology



West elevation of the Chelsea Wing



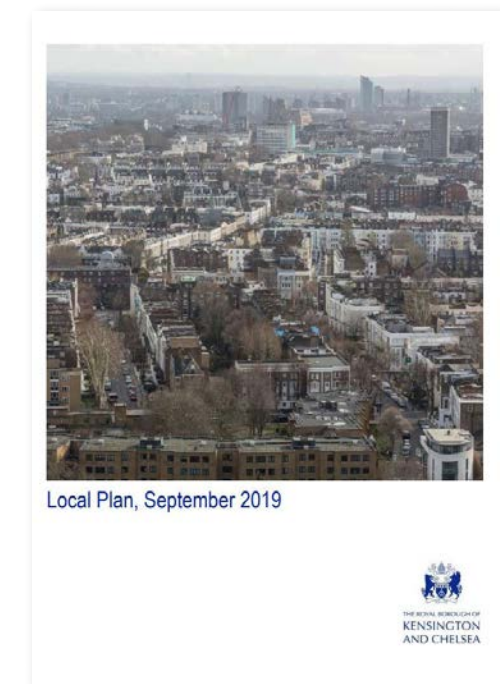
CHAPTER 2

SITE ANALYSIS

Having established an opportunity to bring a broad range of medical uses to the Royal Brompton Hospital sites exists, we now seek to establish how they might 'fit' into the urban context. Site analysis forms the foundation of best design practice. Detailed analysis is undertaken at multiple scales to clearly establish the key contextual factors affecting the Royal Brompton Hospital sites. These findings are used to inform the masterplan in terms of current conditions, constraints and opportunities - with a key focus on how the development can deliver social value beyond its physical boundaries.

2.1 POLICY CONTEXT

This study is underpinned by a detailed review of existing policies and development strategies that affect future development proposals for the Royal Brompton Hospital sites and the wider area. By understanding the general trajectory for development presented by these policies, the design proposals seek to ensure that this trajectory is respected while further expanding on its aims. A selection of key policy documents are presented opposite.



The current London Plan and the draft New London Plan

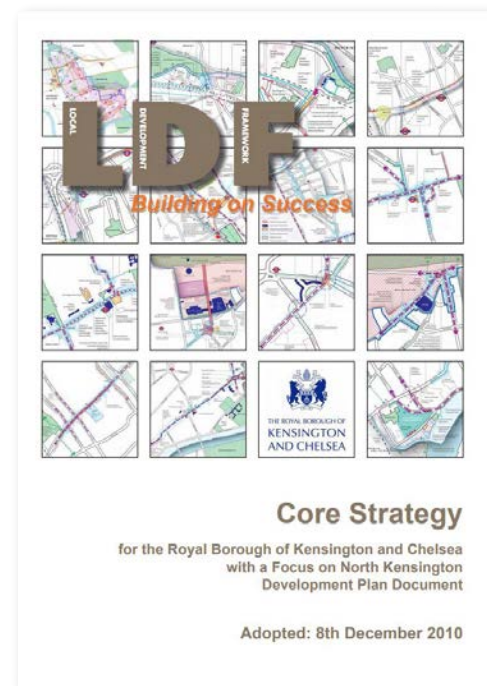
The current London Plan details its approach for health and social care facilities in Policy 3.17; firstly requiring boroughs to identify and address health and social care issues faced in their area. Policy 3.16 "Protection and Enhancement of Social Infrastructure" highlights that, in the case of a facility no longer needed, boroughs should "take reasonable steps to identify alternative community uses". In addition, the London Plan also notes that NHS Property Services, Community Health Partnerships and NHS community health and hospital trusts are seeking to make more effective use of their estates - including opportunities to create new homes on surplus sites - and support strategies to reconfigure healthcare services.

The draft New London Plan supports the current London Plan's overarching strategy for healthcare in Policies S1 and S2. It also adds that the co-location of facilities should be encouraged in order to "align service provision, use land more efficiently and facilitate opportunities for different groups of people to come together".

Royal Borough of Kensington & Chelsea Local Plan

The Local Plan sets out the development framework for the Royal Borough to 2028 and identifies where main developments will take place. The Royal Brompton Hospital is identified as part of Policy CV15 "Vision for Sloane Square and King's Road in 2028", for which the priority is "to modernise the Royal Brompton Hospital through redevelopment of the main hospital site". The Chelsea Farmers Market is also included as part of the opportunity area; the specific aims for this site include the provision of residential-led mixed use development with a new public square that links to Dovehouse Green.

In terms of heritage and new development, the Local Plan establishes that the presumption is to retain the original built fabric for any building that contributes positively to the character of the conservation area. New buildings should also contribute to the character and appearance of the conservation area.



Royal Borough of Kensington & Chelsea Core Strategy

Although the 2019 Local Plan has superseded the Core Strategy, the latter contains several policies and recommendations that can inform proposed development. For example, Policy CP15 aims to promote independent retailers and small upmarket chains and ensure public realm improvement. The creation of additional shop floorspace and larger new retail development - particularly on the Chelsea Farmers Market site - would therefore be supported.

The Core Strategy also seeks to ensure that any new development respects the context and character of the surrounding area; taking opportunities to improve the quality of buildings and improve the way the area functions. A consolidation of medical facilities in the Royal Brompton Hospital sites will likely improve the way the area currently functions. This will need to be balanced with any potential impact on the historic interest and architectural character of buildings both within and surrounding the Royal Brompton Hospital sites.



Royal Brompton Hospital Draft Supplementary Planning Document (SPD)

The purpose of this SPD is to provide guidance on how the Royal Brompton Hospital's Chelsea land holding can be developed. It aims to bring all hospital services and clinical experts into one integrated building on the Sydney Street campus, combining a new building with the existing Sydney Wing. In order to fund this consolidation, the SPD identifies several sites for disposal: 1-11 Foulis Terrace; the Fulham Wing; South Parade wing (currently the Clinical Skills and Simulation Centre); 117-151 Sydney Street; and, 250 King's Road.

Other key design considerations include:

- Ensuring a more sympathetic visual relationship with St. Luke's and Christ Church and the rest of Sydney Street
- Creating a more inviting and rational main entrance to the hospital; the current entrance is set back behind a car park
- Promoting the retail character of the King's Road by retrofitting and redeveloping 117-151 Sydney Street and 250 King's Road



The Chelsea Campus, Maximum Option: Finalised Masterplan for the Preliminary Business Case

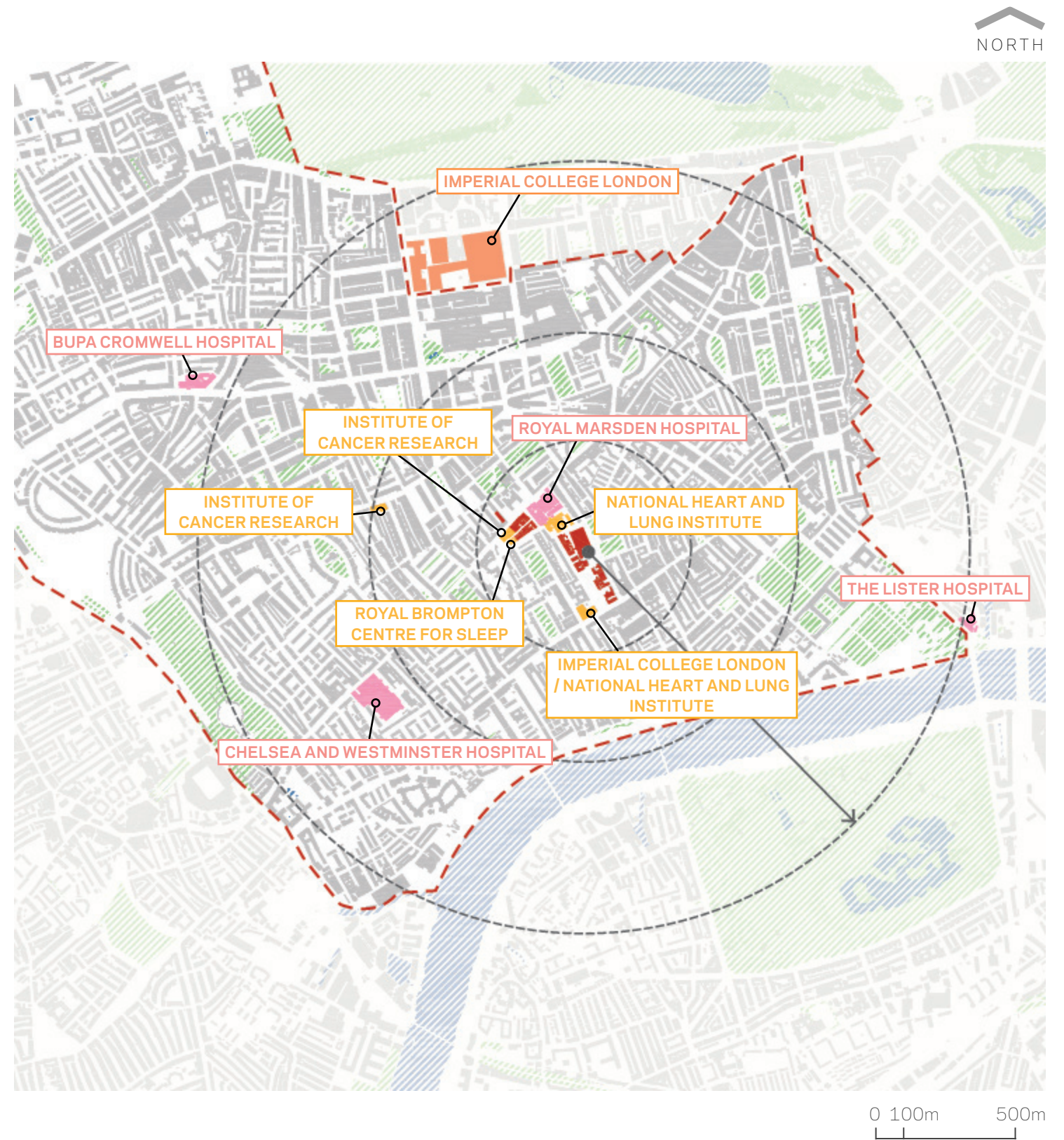
This design study includes several potential development options for the Royal Brompton Hospital sites. It presents several design strategies which should be further assessed and considered for this current design proposal, including:

- Varying the building line and massing along Sydney Street to deal with the different built form contexts. Taller buildings should also be placed at the centre of certain sites where appropriate to prevent overshadowing onto neighbouring properties.
- Creating set backs and landscape buffers where appropriate to limit light and noise pollution from the hospital
- Introducing new open spaces to create a continuous green zone through the development

2.2 BOROUGH CONTEXT

The sites are located in the southern part of the Royal Borough of Kensington and Chelsea (RBKC). The diagram opposite shows the hospitals, medical research institutes and universities that are located in and around the borough. The sites are located within a small local cluster of healthcare institutes, including the Royal Marsden Hospital directly adjacent to the Royal Brompton Hospital, and various research bodies such as the Institute of Cancer Research. Imperial College London - one of the biggest medical institutions for study and research in Europe - is located just north of the RBKC boundary.

- Site buildings
- Hospitals
- Medical research institutes
- Universities
- 400m, 800m and 1.5km isochrones



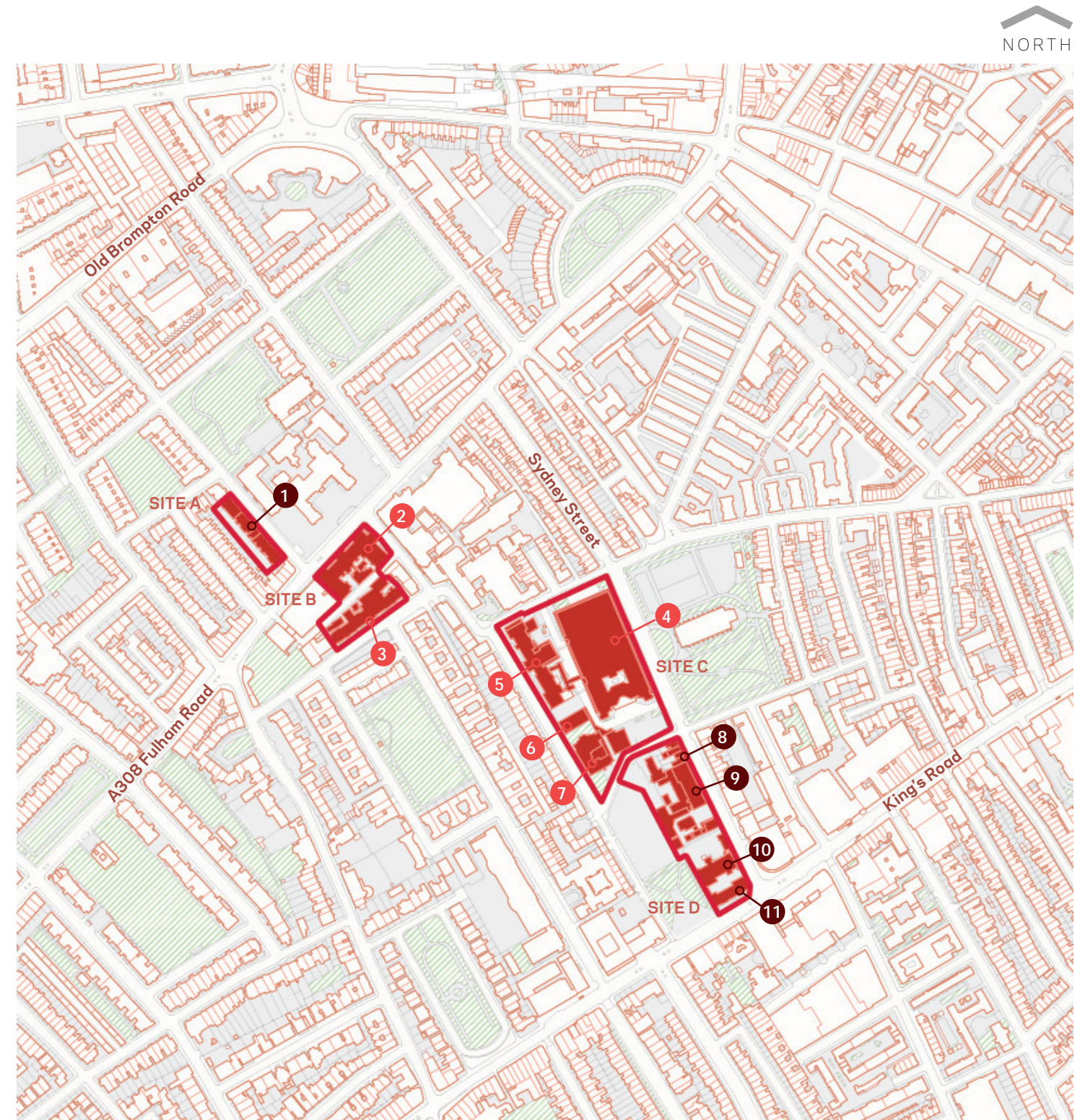
2.3 NEIGHBOURHOOD CONTEXT

2.3.1 SITE BUILDINGS

The study area consists of four sites, each currently owned by the Royal Brompton & Harefield NHS Trust. Each site consists of either non-hospital and/or hospital related buildings. The buildings are identified as follows (buildings which serve as hospital or other healthcare related function within the Royal Brompton & Harefield NHS Trust are identified by a red marker):

- 1 1-11 Foulis Terrace
- 2 Fulham Wing
- 3 Clinical Skills and Simulation Centre
- 4 Sydney Wing
- 5 Chelsea Wing (formerly the Chelsea Hospital for Women)
- 6 Imatron Building
- 7 Britten Wing (formerly the Nurses' Home for the Chelsea Hospital for Women)
- 8 117-123 Sydney Street
- 9 125 Sydney Street / Chelsea Farmers Market
- 10 151 Sydney Street
- 11 250 King's Road

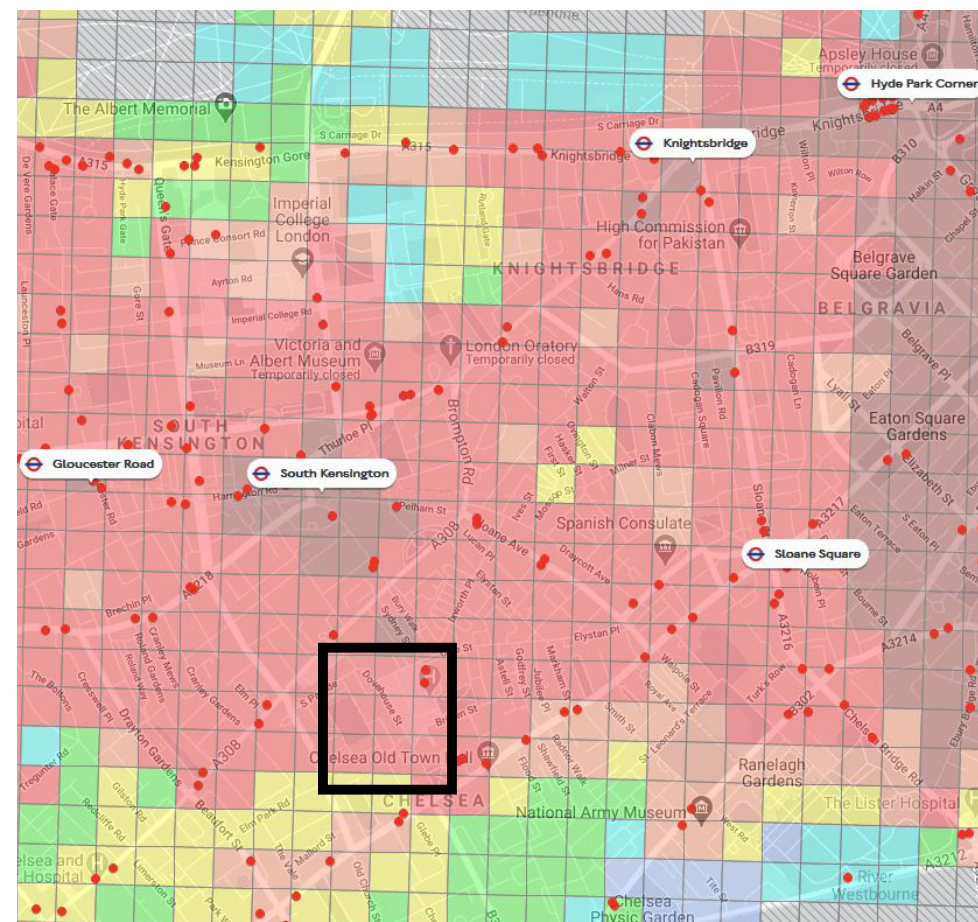
— Site boundary
■ Site buildings



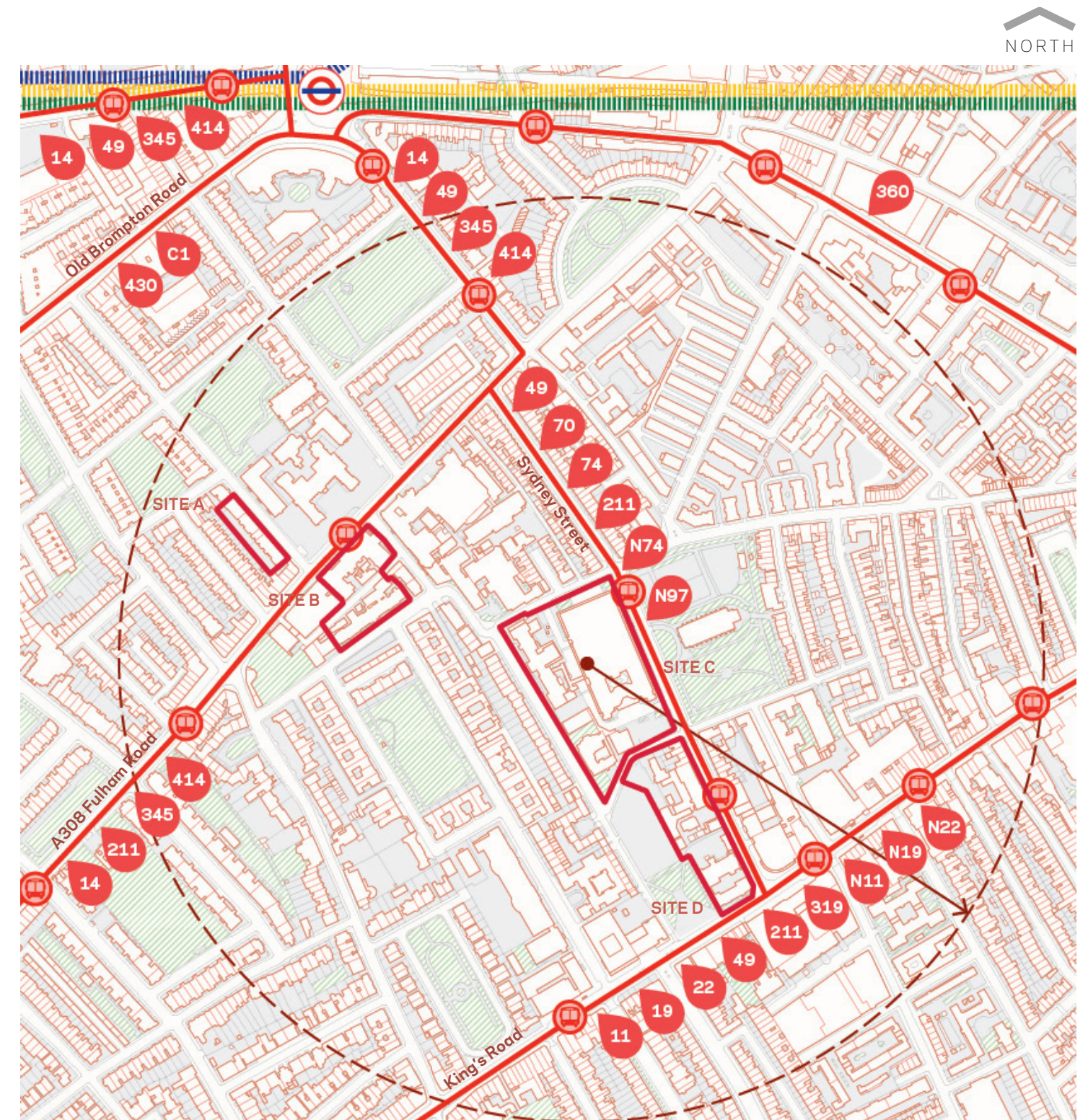
NEIGHBOURHOOD CONTEXT

2.3.2 PUBLIC TRANSPORT

The sites are well served by the public transport network; the Public Transport Accessibility Level (PTAL) for the area is 6a (where a PTAL of 1a indicates extremely poor access to the location by public transport and a PTAL of 6b indicates excellent access by public transport). All four sites have several bus stops within a 5 minute walking radius. Key destinations served from these stops include Piccadilly Circus to the east (22 minutes away), Shepherd's Bush to the north (30 minutes away), Clapham to the south (40 minutes away) and Fulham to the west (18 minutes away). South Kensington is the nearest Underground station to the sites and serves as the interchange for 3 lines, providing access to west, east and northeast London.



Public Transport Accessibility Level (PTAL) for the sites (black box). Source: Transport for London



NEIGHBOURHOOD CONTEXT

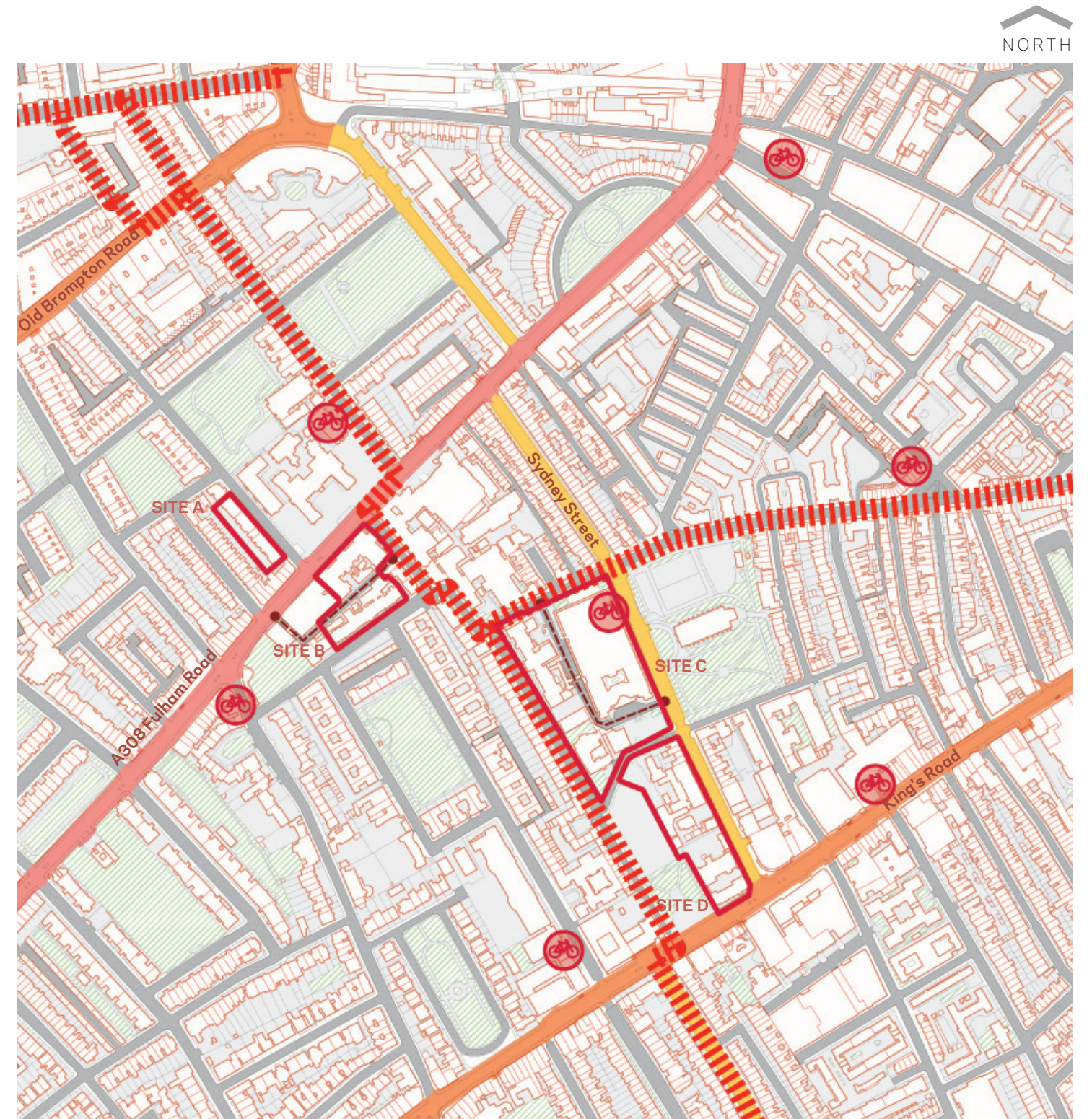
2.3.3 CYCLE AND VEHICULAR MOVEMENT

In 2017, RBKC completed Phase 1 of its new cycle route network, which is shown on the plan opposite. The current network provides access to South Kensington Underground station to the north and crosses the River Thames to Battersea to the south; it also connects to National Cycle Network Route 4 which runs along the north bank of the Thames. The routes follow Transport for London's cycle network quality criteria, which avoids or introduces interventions on roads where:

- There are more than 500 motor vehicles per hour during peak periods
- Vehicle speeds exceed 25 mph (85% percentile)
- The proportion of Heavy Goods Vehicles are more than 2% of all vehicles

The sites are well served by major and local roads, with the majority of streets surrounding all four sites being quiet and residential in nature. The main strategic road in the area is Fulham Road, which Site B sits adjacent to. It provides access to neighbouring Fulham to the southwest and Knightsbridge and Hyde Park to the northeast; located approximately 3km, 1.3km and 1.8km away respectively. Sites C and D are located adjacent to Sydney Street, with Site D also sitting at the junction between Sydney Street and another locally important road - King's Road. Within the two main hospital sites - Sites B and C - access for emergency and service vehicles is provided by a gated one-way road.

- Site boundary
- 🚲 Santander cycle docking stations
- ▬▬▬ RBKC cycle routes
- Primary routes
- 'A' roads
- 'B' roads
- Minor roads
- Emergency and service vehicle access

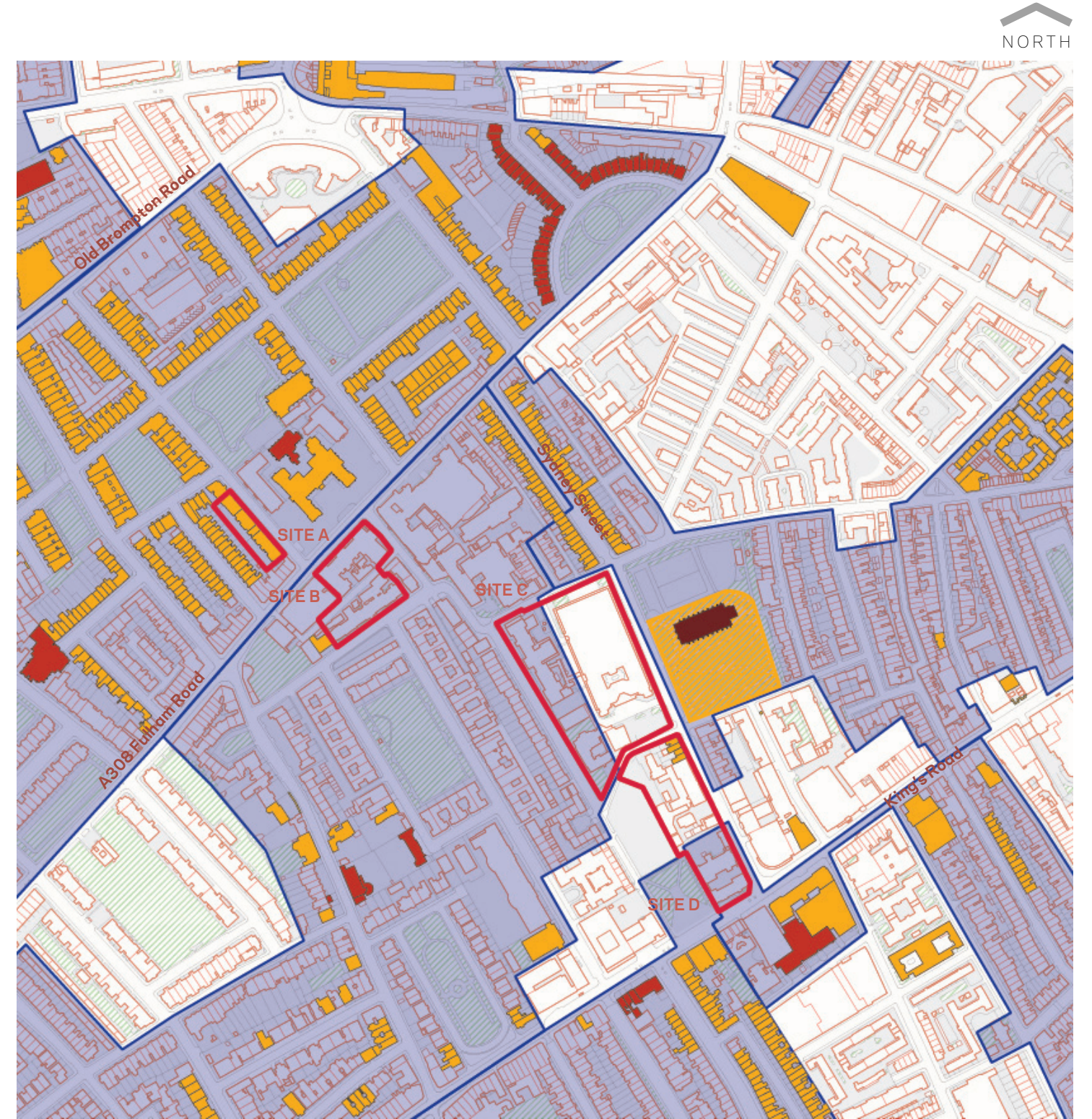


NEIGHBOURHOOD CONTEXT

2.3.4 HERITAGE

The sites sit within several conservation areas. Site A is located within Thurloe/Smith's Charity (no.13A) while Site B and the western part of Site C is located within Chelsea Park/Carlyle (no.17). As such, the sites are also located close to numerous listed buildings. The majority of these are places of worship and Victorian residential terraces. Several listed buildings are located within the sites themselves; these are 1-11 Foulis Terrace (Site A) and 117-123 Sydney Street (Site D). The Old Fire Station is also Grade II listed building that is located adjacent to the western boundary of Site B; careful consideration must therefore be given to the setting of this building when exploring redevelopment options for Site B.

- Site boundary
- Grade I listed buildings
- Grade II* listed buildings
- Grade II listed buildings
- ▨ Grade II listed parks and gardens
- Conservation areas

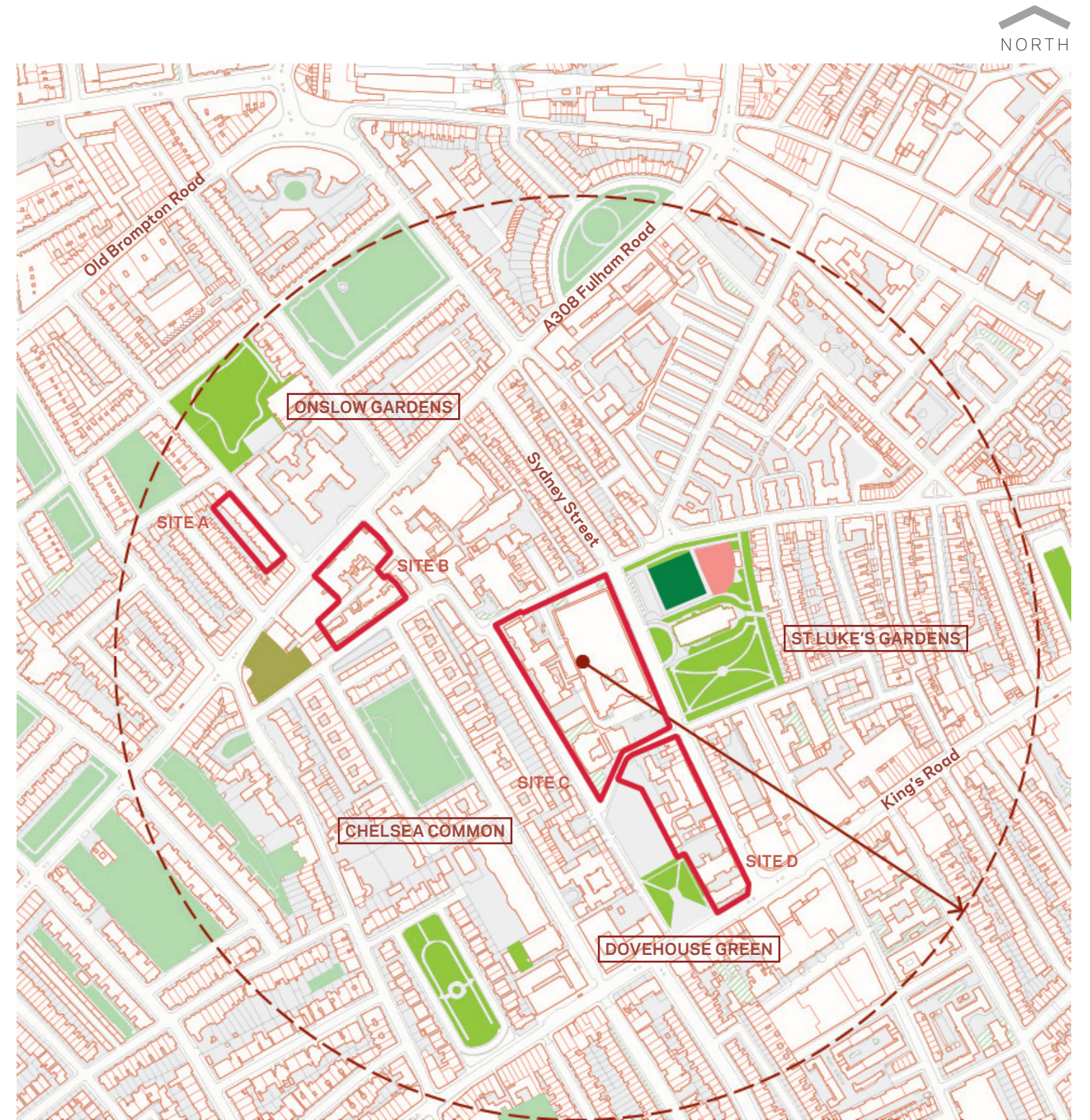


NEIGHBOURHOOD CONTEXT

2.3.5 OPEN SPACES

All sites are located in close proximity to several local public open spaces. They include the Grade II listed St. Luke's Gardens located opposite the Sydney Wing in Site C and Dovehouse Green located adjacent to Site D; the latter is an ancient burial ground owned by St. Luke's and Christ Church. The majority of open spaces in the area are commons and there is a comparative lack of designated play areas and sports grounds in the immediate area; the only space where these facilities are offered is St. Luke's Gardens.

- Site boundary
- Parks and gardens
- Sports pitches
- Playground
- Commons
- Cemetery
- 400m / 5 minute walking isochrone



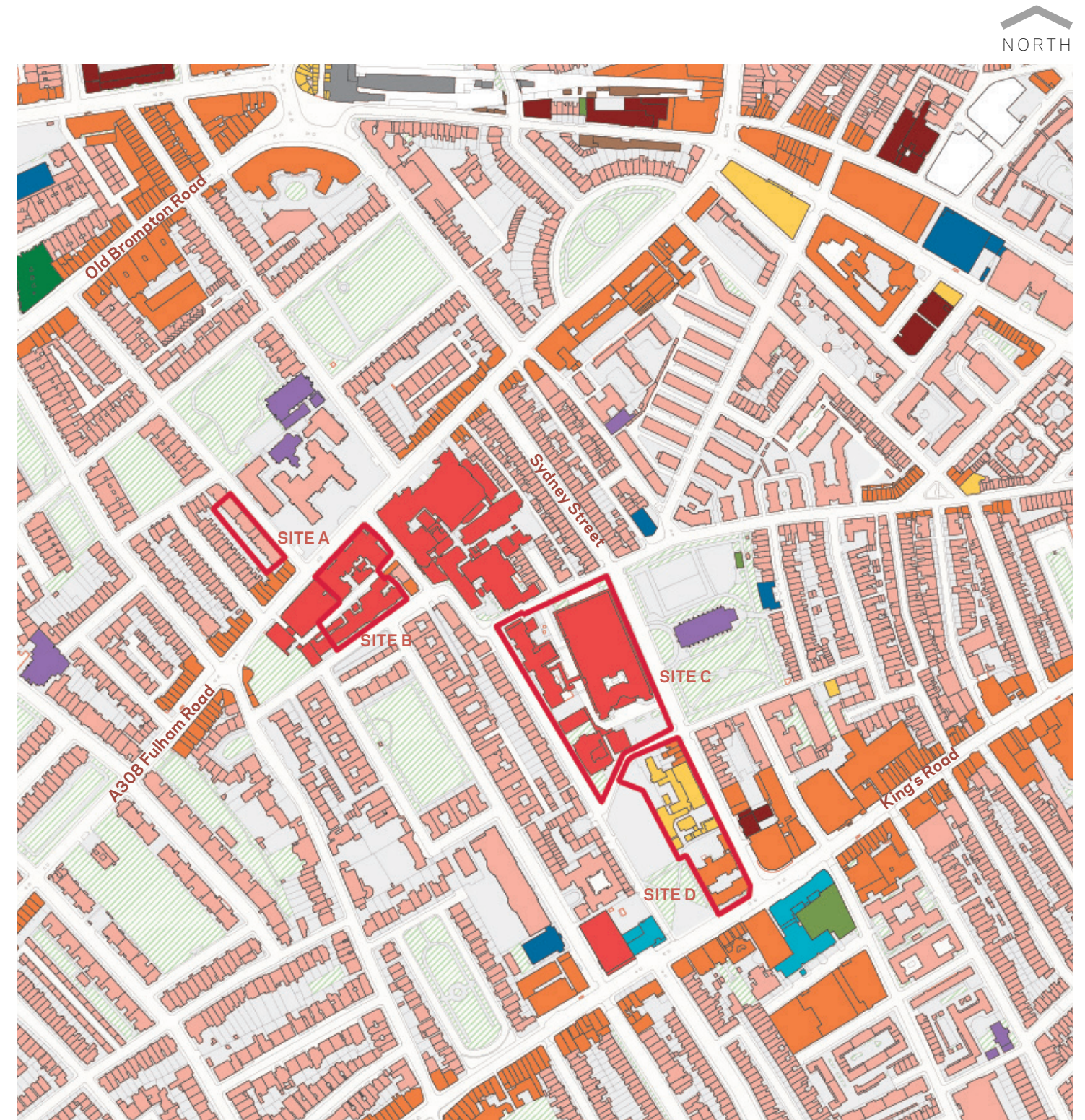
NEIGHBOURHOOD CONTEXT

2.3.6 LAND USES

The site is located in a predominantly residential area comprising of 2-4 storey Victorian terraces. Along main roads in the area, in particular Fulham Road and King's Road, there are clearly formed mixed use corridors. The majority of these corridors include retail, food and beverage, and office uses on the ground floor with residential flats above. There are also several churches and other civic institutions scattered throughout the area to serve the local community; including Chelsea Old Town Hall located along King's Road opposite Site D which houses the Kensington and Chelsea Register Office and Citizen's Advice Bureau.

While uses vary between the four sites, within each site a single use tends to dominate. Sites B and C exclusively house healthcare institutions associated with the Royal Brompton & Harefield NHS Trust, while Site A comprises of 4 storey residential terraces. The exception is Site D which includes a variety of retail and commercial uses that form part of the locally popular Chelsea Farmers Market.

- Site boundary
- Healthcare institutions
- Residential
- Mixed use
- Commercial
- Retail (including food & beverage)
- Education
- Sports facility
- Places of worship
- Civic institutions
- Hotel
- London Underground station
- Warehouses
- Vacant



NEIGHBOURHOOD CONTEXT

2.3.7 BUILDING HEIGHTS

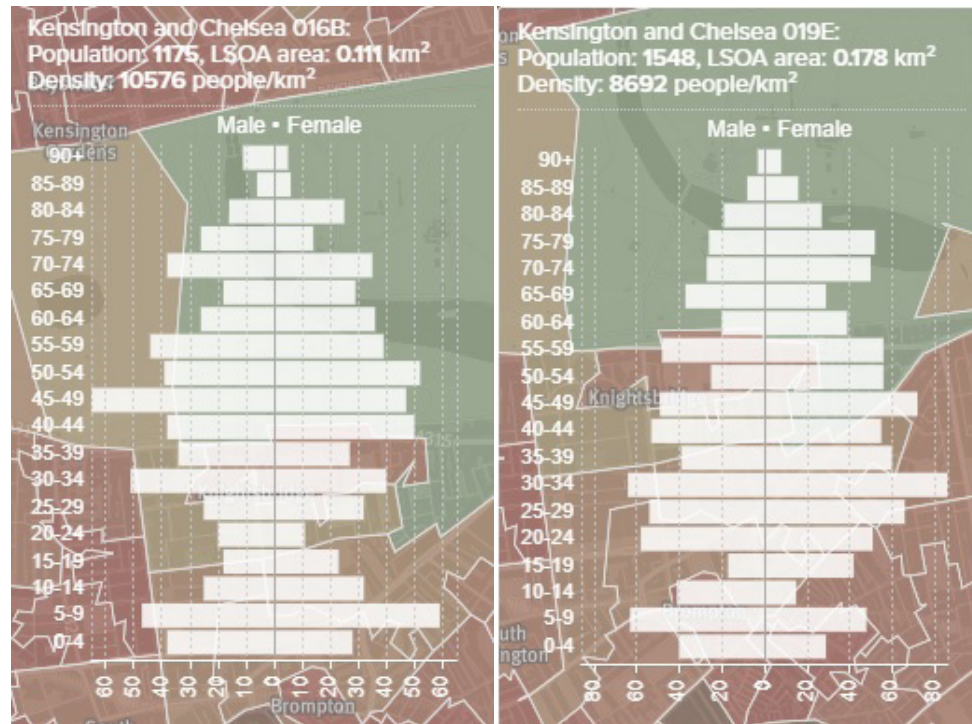
The majority of buildings in the area are 1-3 storeys; reflecting the prevalence of residential terraced housing in the area. 4-6 storey buildings are also common. These comprise of apartment blocks and mixed use buildings that feature ground floor retail with residential on floors above. The sites include 3-6 storey buildings, with the majority of buildings adjacent to them at 2-4 storeys. The exception is to the east of Site D along Sydney Street, which includes a 10+ storey block at the junction between Sydney Street and King's Road.

- Site boundary
- 1-3 storeys
- 4-6 storeys
- 7-9 storeys
- 10+ storeys



NEIGHBOURHOOD CONTEXT

2.3.8 OTHER CONSIDERATIONS

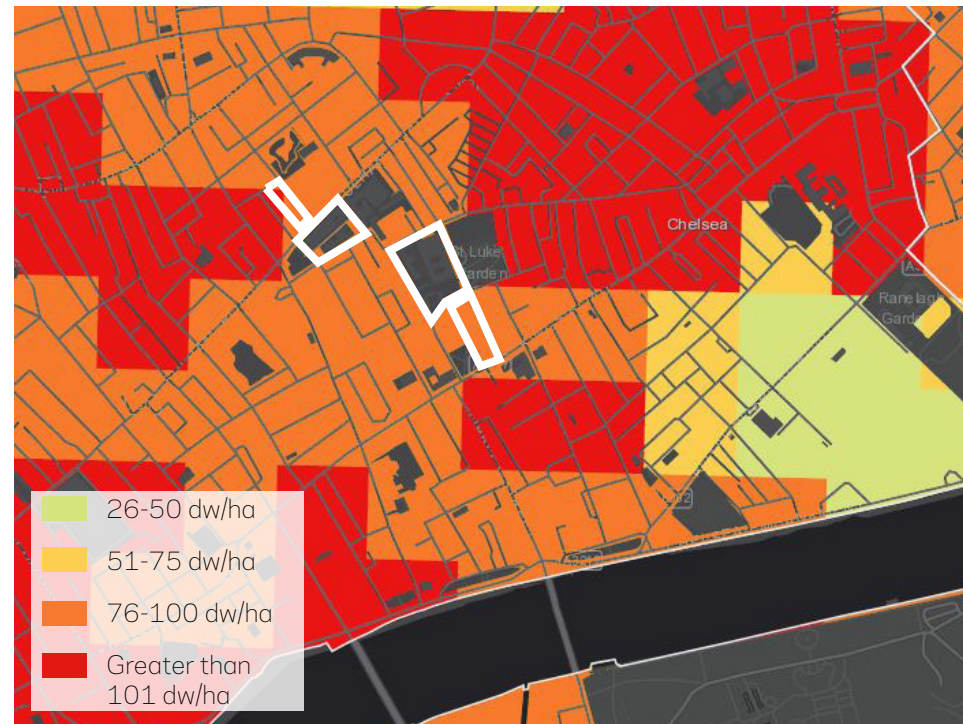


Annual Lower Super Output Area (LSOA) population estimates for mid-2018. Source: Office of National Statistics

Demographics

Site A is located within LSOA Kensington and Chelsea 016B and Sites B, C and D are located within LSOA Kensington and Chelsea 019E. Both LSOAs have relatively high population densities, ranging from 8,692-10,576 people/km². This is a reflection of the predominant building typology and use of the area: 2-4 storey Victorian terraced housing.

The age distribution of the population is fairly evenly balanced, though there are higher proportions of young children below the age of 10 and people aged 20-50 than of teenagers and people over 60.



Housing density: the sites are marked by white boxes. Source: London Housing Density, Emu Analytics

Housing density

Given the sites' location close to central London, the contextual building density is relatively high. Common building typologies along main roads include 4-6 storey buildings with apartments on upper floors, while rows of Victorian terraced housing are commonly found along residential side streets. This has resulted in housing densities upwards of 76 dwellings/hectare across much of the surrounding area. The two hospital sites (Sites B and C) have not been included in the density map above as they contain no residential buildings.



Greater London annual mean NO₂ modelled concentrations for 2020. Source: data.london.gov.uk

Atmospheric emissions

The highest levels of NO₂ emissions are found along the area's main roads; particularly the A4 which runs just north of South Kensington and at the junction of the Chelsea Embankment and Battersea Bridge. Fulham Road and King's Road - which run along the northern boundary of Site B and the southern boundary of Site D respectively - also record high levels of emissions. Both recorded an NO₂ concentration of 40µg/m³ in 2013, exceeding the EU limit for NO₂ concentration.



St. Luke's and Christ Church

2.4 SITE CONTEXT

The sites contain a mix of building typologies both in terms of architecture and use, reflecting the piecemeal nature of development through time. They include Georgian terraced housing, grand Victorian architecture constructed largely of red brick, and more modern hospital and residential buildings. Due to the size and density of the buildings on site, public realm treatment is often limited to access roads and other hardscaping. The following photos illustrate important architectural and community assets currently found on site, as well as areas which are in need of improvement.



Chelsea Farmers Market is a locally popular retail, food and beverage destination; opportunities to maintain and enhance its functionality should be explored.



The Chelsea Wing contributes to the character of the Chelsea Park/Carlyle Conservation Area



Fulham Wing. Although not listed, its decorative Victorian façade offers positive contribution to the local conservation area.

SITE CONTEXT



The western elevations of 151 Sydney Street and 250 King's Road are directly adjacent to Dovehouse Green. Special consideration should be given to this ancient burial ground when redeveloping these two buildings.



New residential development adjacent to the western boundary of Site D



Grade II listed 1-11 Foulis Terrace



151 Sydney Street (east elevation). Red brick with stone detailing is a style of architectural detailing that is characteristic of the area.

SITE CONTEXT



Public realm is generally of poor quality; it is currently dominated by hardscaping and vehicular parking with soft landscaping limited to occasional trees and shrubs.



Dovehouse Street is dominated by on-street parking for both local residents and key workers



The setting of the Grade I listed St. Luke's and Christ Church (background) should be improved as part of the development proposal. It is currently dominated by the large massing of the Sydney Wing (left).

SITE CONTEXT



View of Sydney Wing looking out from St. Luke's and Christ Church



Inactive street frontage of Sydney Wing (left) onto Sydney Street: stretches of blank wall do not enhance vitality on the street. The block form is also not sensitive to surrounding Victorian and Georgian terraced housing (background).



Partly due to its current use as a hospital, the sites are inward looking and do not integrate well with the surrounding area. Main entrances have security gates and use signage to mark them rather than more positive architectural devices.

2.5 DEVELOPMENT OPPORTUNITIES AND CONSTRAINTS

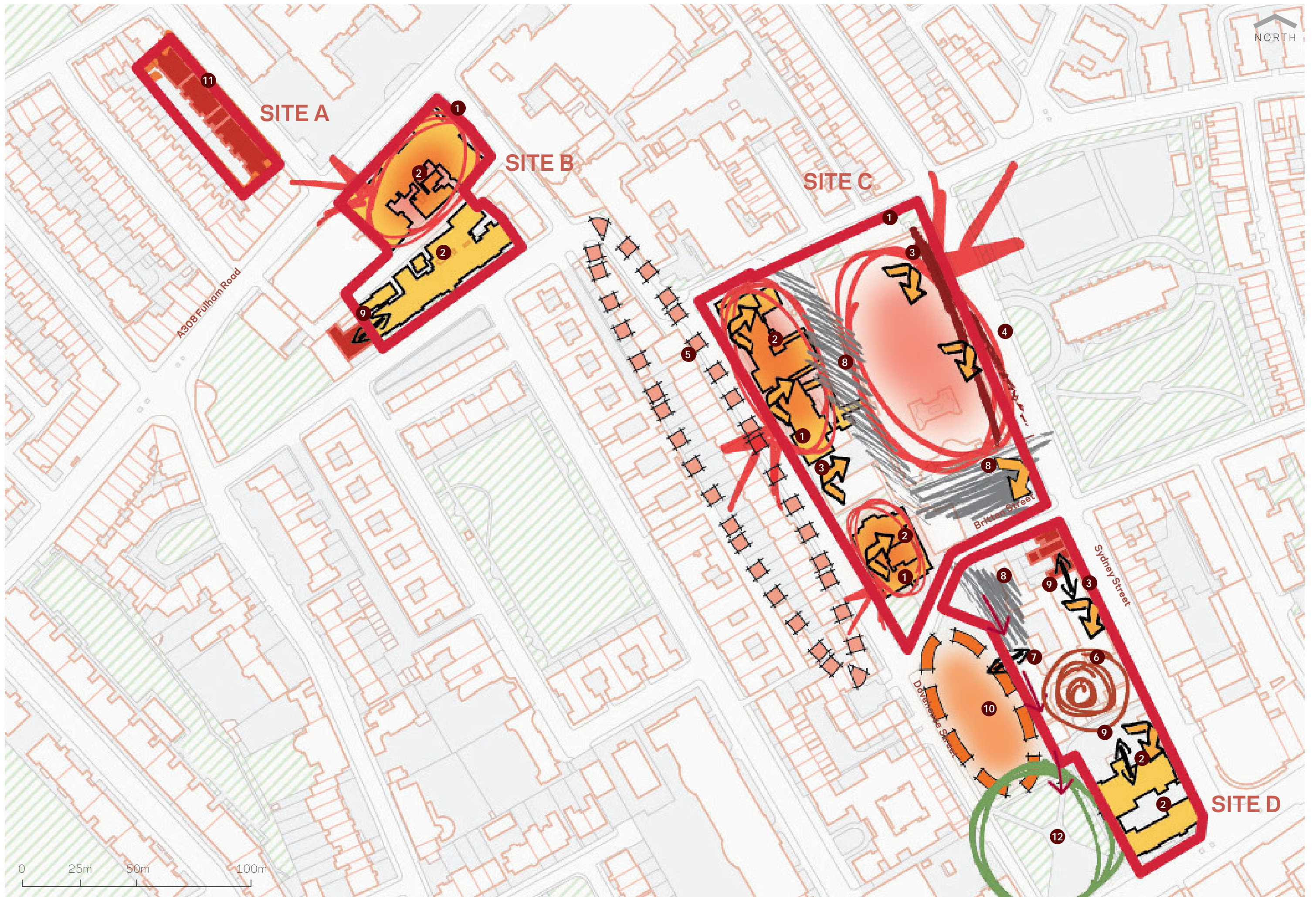
2.5.1 DEVELOPMENT CONSTRAINTS

From detailed contextual, site and existing building analysis, a series of constraints and opportunities are defined. Existing building analysis is found in 3.2 Existing Site Buildings (pages 65-75), where conclusions regarding healthcare functionality are presented.

The masterplanning for the Royal Brompton Hospital sites will need to address the inefficient layout of the built form and the hardscape-dominated public realm. It will also need to be sensitive to listed and non-listed buildings within the sites and in the surrounding context that provide a positive contribution to local conservation areas.

The development constraints are as follows:

- 1 The Fulham Wing, the Chelsea Wing, the Britten Wing and the Sydney Wing of Royal Brompton Hospital are no longer fit for healthcare uses. However, as the former three all offer positive contributions to the local conservation area, alternative uses that can be accommodated will need to be considered as opposed to full demolition.
- 2 Although not listed, the Fulham Wing, the Clinical Skills and Simulation Centre, the Chelsea Wing, the Britten Wing, 151 Sydney Street and 250 King's Road are located within local conservation areas (Chelsea Park/Carlyle and Royal Hospital Conservation Areas). It is therefore highly likely that these buildings will need to be retained; any redevelopment work will be limited to retrofitting or façade retention.
- 3 The majority of buildings face inwards, especially along Sydney Street which features long stretches of inactive frontages. Though this is partly due to the need for privacy for healthcare uses, there is opportunity to create a more outward-looking, wellbeing-focused development that caters for both patients, key workers and the wider community.
- 4 The frontage of the Sydney Wing building onto Sydney Street is of poor quality and detracts from the setting of the Grade I listed St. Luke's and Christ Church.
- 5 The height and massing of any new development along Dovehouse Street will need to ensure that there is no unacceptable overshadowing of the 2-storey buildings along the opposite side of the street.
- 6 While the Chelsea Farmers Market is very popular with the local community, the current building layout is constrained and prevents any future expansion.
- 7 Internally the sites have a poor movement network. In particular, there is limited north-south permeability to Dovehouse Green; the route is currently obstructed by a small car park and a one-storey building.
- 8 The internal public realm of the sites is of poor quality and is dominated by hardscaping; greenery is generally limited to a few sporadically placed trees and flowering shrubs. However, servicing routes will need to be considered to cater for any new healthcare facilities.
- 9 The distance between buildings both within the sites and those adjacent to them is fairly tight, which may limit the extent to which new development is possible. In particular, the distance to listed buildings will need to be sensitively treated: the Grade II listed Old Fire Station adjacent to Site B and 117-123 Sydney Street in the northeast corner of Site D.
- 10 The distance between any new development in Site D will need to be respectful of the extra care facility currently under construction on Dovehouse Street, which backs onto the western boundary of Site D.
- 11 Additional development of Site A (1-11 Foulis Terrace) will be challenging as all buildings are Grade II listed and they are not suitable for healthcare redevelopment. An additional roof level floor might be possible subject to planning.
- 12 Dovehouse Green is an ancient burial ground located directly adjacent to 151 Sydney Street and 250 King's Road. Any proposed redevelopment of these two buildings will need to make careful considerations so as not to negatively impact the green's setting.



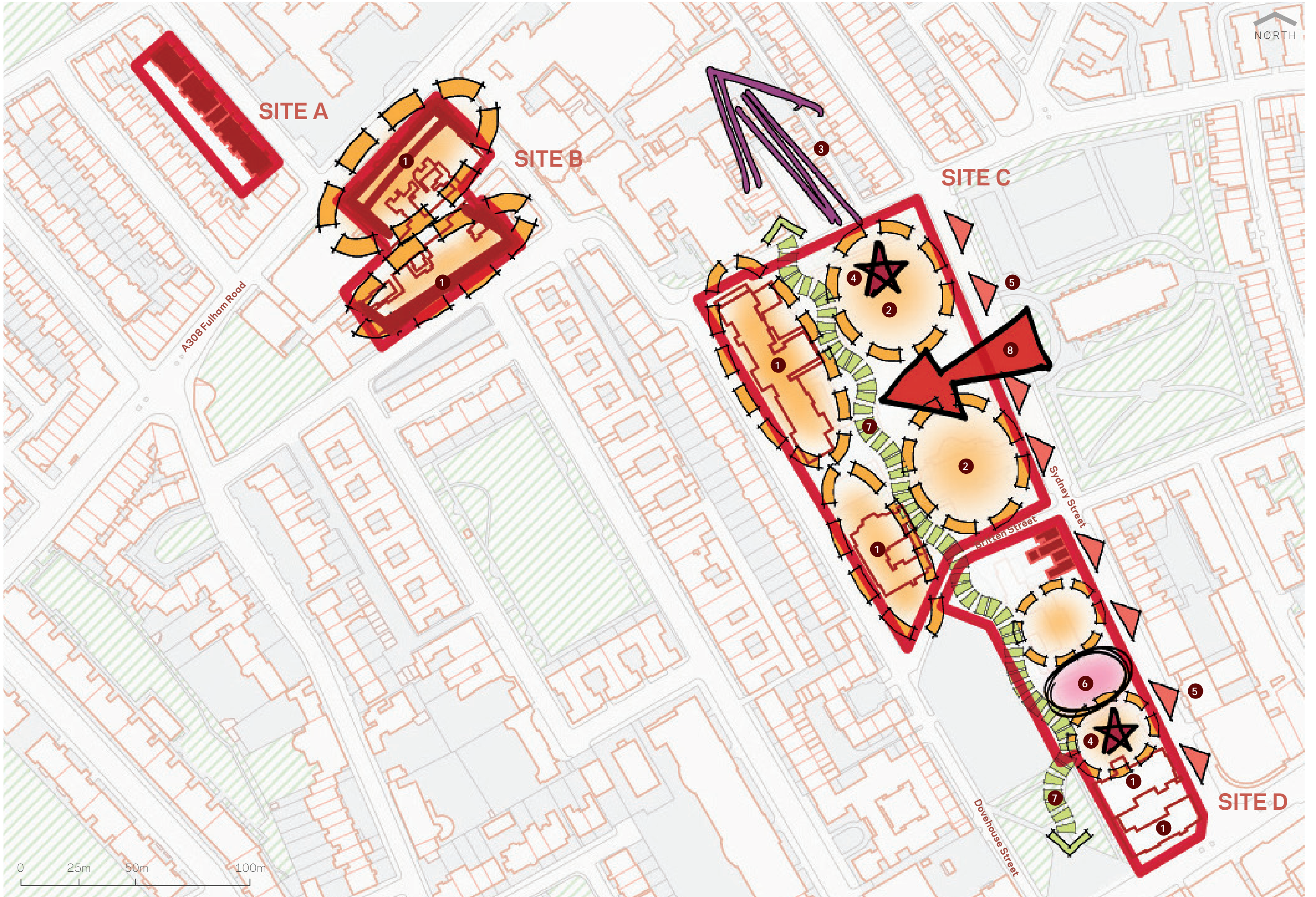
DEVELOPMENT OPPORTUNITIES AND CONSTRAINTS

2.5.2 DEVELOPMENT OPPORTUNITIES

The redevelopment of the Royal Brompton Hospital provides a significant opportunity to deliver a new healthcare and mixed use development fit for the 21st century. The overarching aim is to create a new neighbourhood that not only includes state-of-the-art healthcare facilities, but also generates wider social value for the whole community.

The development opportunities are as follows:

- 1 Non-listed buildings that offer positive contribution to the surrounding conservation areas should be retained. These include the Fulham Wing, the Clinical Skills and Simulation Centre (CSSC), the Chelsea Wing, the Britten Wing, 151 Sydney Street and 250 King's Road. This approach will ensure that the heritage of the sites is still celebrated while converting the buildings into more suitable uses, such as residential. The Chelsea and Britten Wings can likely be retrofitted, while the Fulham Wing and the CSSC may need to be partially demolished with their façades retained to allow for expansion.
- 2 The Sydney Wing should be demolished and replaced with a new fit-for-purpose healthcare development. This can include both new medical facilities as well as space for the relocation of existing healthcare uses from the Fulham, Chelsea and Britten Wings.
- 3 Locating new healthcare facilities at the northeastern corner of Site C will ensure physical proximity and collaboration with the Royal Marsden Hospital to the north.
- 4 Opportunities for greater height and massing along the northeastern boundary of Site C and in the southern portion of Site D. These two locations are adjacent to existing buildings of larger massing; the Royal Marsden Hospital complex for the former and the 4-5 storey 151 Sydney Street for the latter.
- 5 Creating a more continuous stretch of active frontages along Sydney Street will create a more vibrant and outward-looking streetscape.
- 6 A new public square should be provided in the same location as the current Chelsea Farmers Market. This square can continue to be used for the Market and for other events when the Market is closed. Existing retail and food & beverage units can also be reprovided in the new buildings that will front onto the square; ensuring that this new public space is active through all times of day and night.
- 7 A new north-south connection from the north of Site C to Dovehouse Green. This connection will provide pedestrian and cyclist permeability and will also be landscaped to create a new public space for key workers, patients and the wider public to enjoy.
- 8 The new development blocks along Sydney Street should be oriented such that a clear view corridor to St. Luke's and Christ Church is created. This design move will both celebrate this important heritage asset as well as acting as a legibility landmark.





CHAPTER 3

DESIGN DEVELOPMENT

The design development process is split into three parts. First, an overview of standard dimensions for modern healthcare buildings is presented. A scale comparison study is also used to show the typologies that could function on the Royal Brompton Hospital sites. Second, a detailed assessment of existing site buildings establishes which are suitable for modern healthcare and which would require retrofitting into alternative uses or full redevelopment. Third, these analyses are combined to create standard block types for healthcare and non-healthcare uses.

3.1 HEALTHCARE TYPOLOGIES

3.1.1 TYPOLOGY MATRIX

Healthcare facilities need to be flexible and adaptable to respond to advances in technology and changes in clinical service delivery. To successfully analyse the existing estate for suitability for healthcare redevelopment or fitout, we have developed a Healthcare / Science Use building typologies table (see opposite page). The table sets out the various parameters which form the basis for best practice, modern healthcare buildings.

Use Typologies

The use typology table sets out each use type and the building parameter characteristics needed to provide a suitable building framework for clinical or science-based functionality. This has been developed based on benchmarking of recent healthcare projects and best practice clinical design based on government guidance established in the Health Building Notes (the Government recommended guidance for healthcare building design) and HOK's extensive experience in designing healthcare facilities both in the UK and internationally.

The rationale for the building parameters is based on key building elements and predominantly includes the building services strategy and the structural strategy.

Building Parameters

- **Ceiling height** is generally determined by the function within a room and any ceiling mounted equipment required. The HBNs recommend minimum ceiling heights which are reflected in the table. The ceiling heights contribute to the overall typical floor height zone.
- **Typical Floor Height Zone** combines the ceiling height requirement and the service zone void required.
- **Typical Plan Depths** are based on best practice knowledge of rooms layouts and departmental sizes for clinical functionality, ensuring that clinical flows are effective, and that natural daylighting is present.

- **Structural grid** is a balance of several elements. The structural design needs to: take into consideration loading requirements; potentially provide flat soffits with no down stand or upstand beams to maximise the service zone void; provide floor recess zones for equipment; enable penetrations for servicing; and voids for service risers. The structural grid provides a structural solution which optimises flexibility and capacity to respond different use typologies, enables a logical clinical planning grid for departmental layouts, minimising the number of columns which fall into the spaces.
- **Service Zone Void** is determined by the type of accommodation and the MEP servicing strategy. Servicing requirements are determined by the size of the room, the activities carried out in the room, the number of air changes required for that function and the type of equipment and any resultant heat load. The ceiling void is greater in High-Tech areas to accommodate the increase in ductwork sizes for the ventilation strategy. This zone is clear of the structural solution.
- **Lift Type** has an impact on the building grossing factor and net usable area. Bed lifts are significantly larger than public lifts and require a larger lift lobby for manoeuvring the bed. This drives up the area required for vertical and horizontal circulation.

Each typology would also need to be considered within the context of the site, the masterplan and the clinical and operational strategies which also impose requirements and constraints to building design.

HEALTHCARE / SCIENCE USE TYPOLOGIES		Typical Plan Depths	Typical Structural Grid	Typical Floor Height Zone	Ceiling Height Requirement	Lift Type Requirement
TYPE	Use Typology Accommodation					ServiceZone Void Dimensions
	Inpatient Wards Support Accommodation	16m +	8.4m + 6.8m +	4.5m	2.7m	Public/Bed/FM Medium 1200mm
	Consulting Rooms Clinical Offices	7.5m +	16m +	4.0-4.5m	2.7m	Public/FM Medium 1200mm
	Cat 1 Lab	-	16m +	4.5m	2.7m	Public/FM Medium 1200mm
	Diagnostics Critical Care Surgery Emergency	24-26m +	8.4m + 8.4m + 6.8m +	4.8-5.0m	3.0m	Public/Bed/FM High Tech 1500mm
	Cat 2 & 3 Lab	24m +	16m +	4.8-5.0m	2.7m	Public/FM High Tech 1500mm

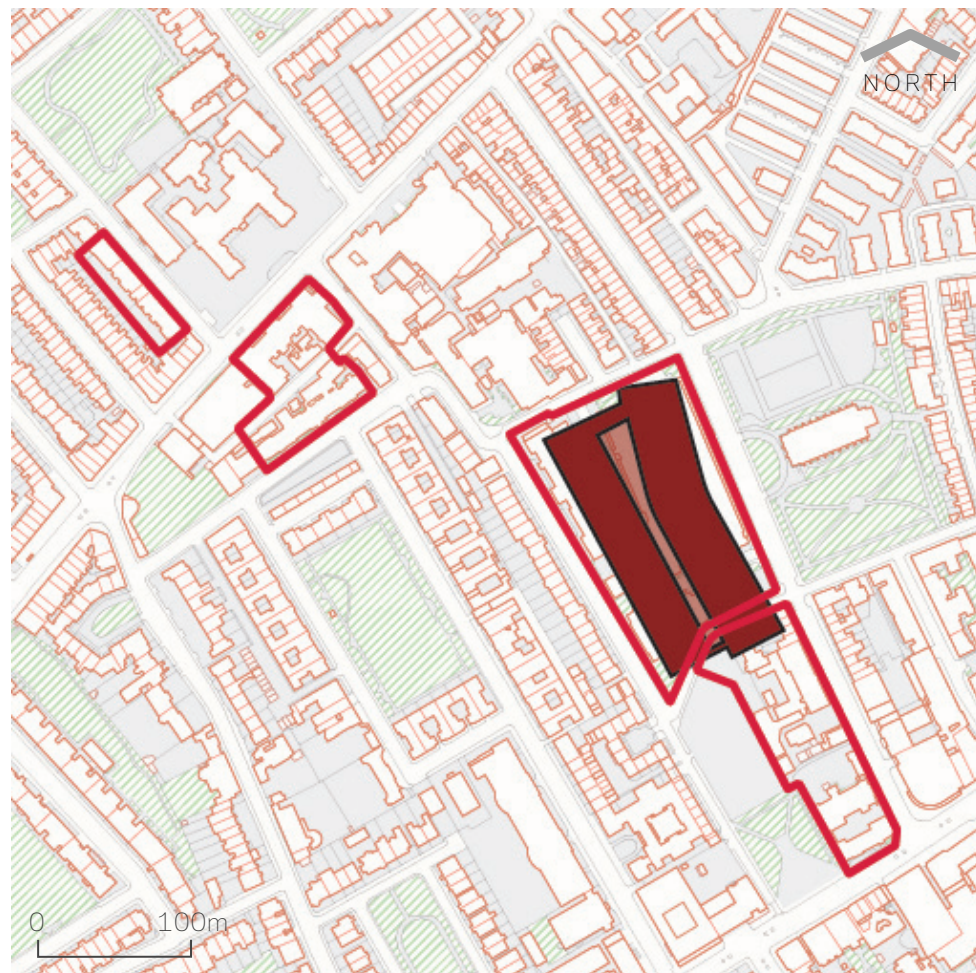
HEALTHCARE TYPOLOGIES

3.1.2 SCALE COMPARISON

Francis Crick Institute

Context: the largest biomedical laboratory in Europe, located next to St Pancras International railway station. The total internal floor area is 82,578m², including 29,179m² of laboratories. The Institute also includes a public exhibition space, an educational space and a community facility to foster an outward-looking institution that actively engages with the surrounding community.

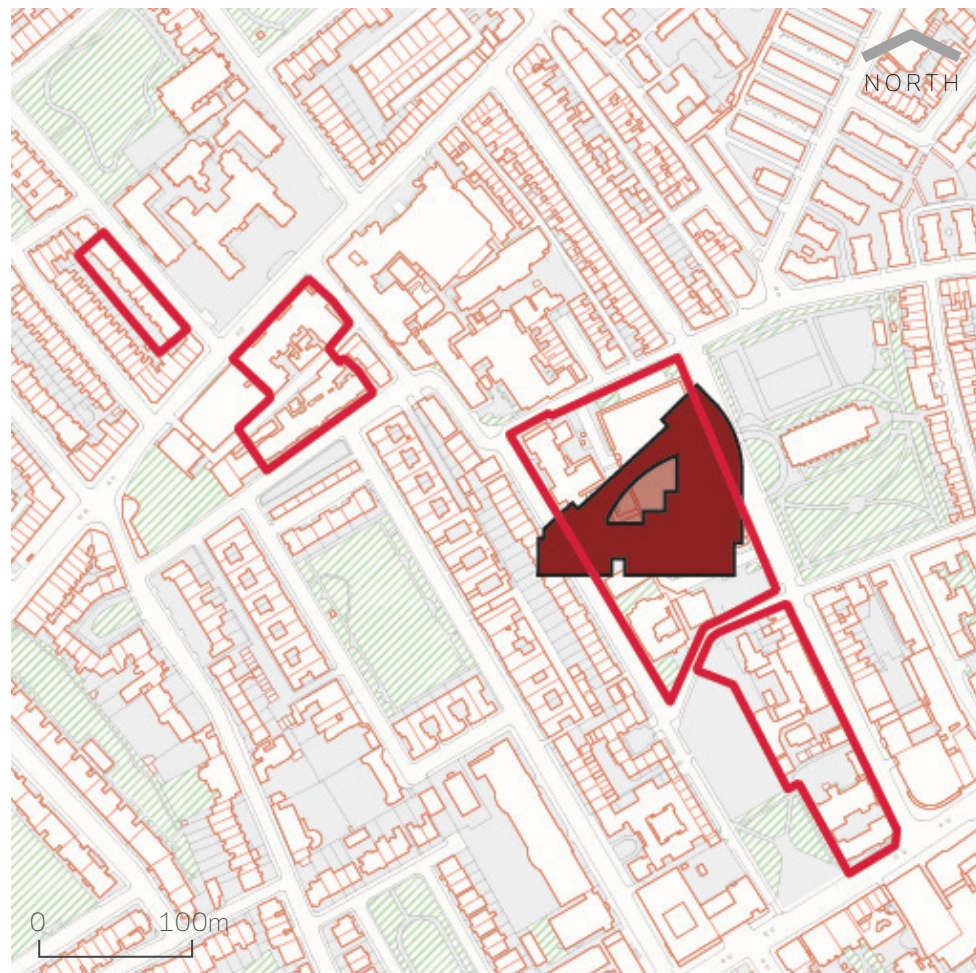
Relevance: the Institute offers significant floorspace for research and medical facilities. However, the scale of the building would not be sensitive to the local context in RBKC; the surrounding area has a fine urban grain due to the prevalence of Victorian terraced housing. It may also not be viable to create another research facility of this size in London. The commercial viability assessment highlighted that life sciences would not be a suitable use for the site.



St Bartholomew's Hospital (King George V Building)

Context: a teaching hospital in the City of London that has recently undergone significant redevelopment. It offers a large range of local and specialist services, including a specialist Heart Centre and Cancer Centre.

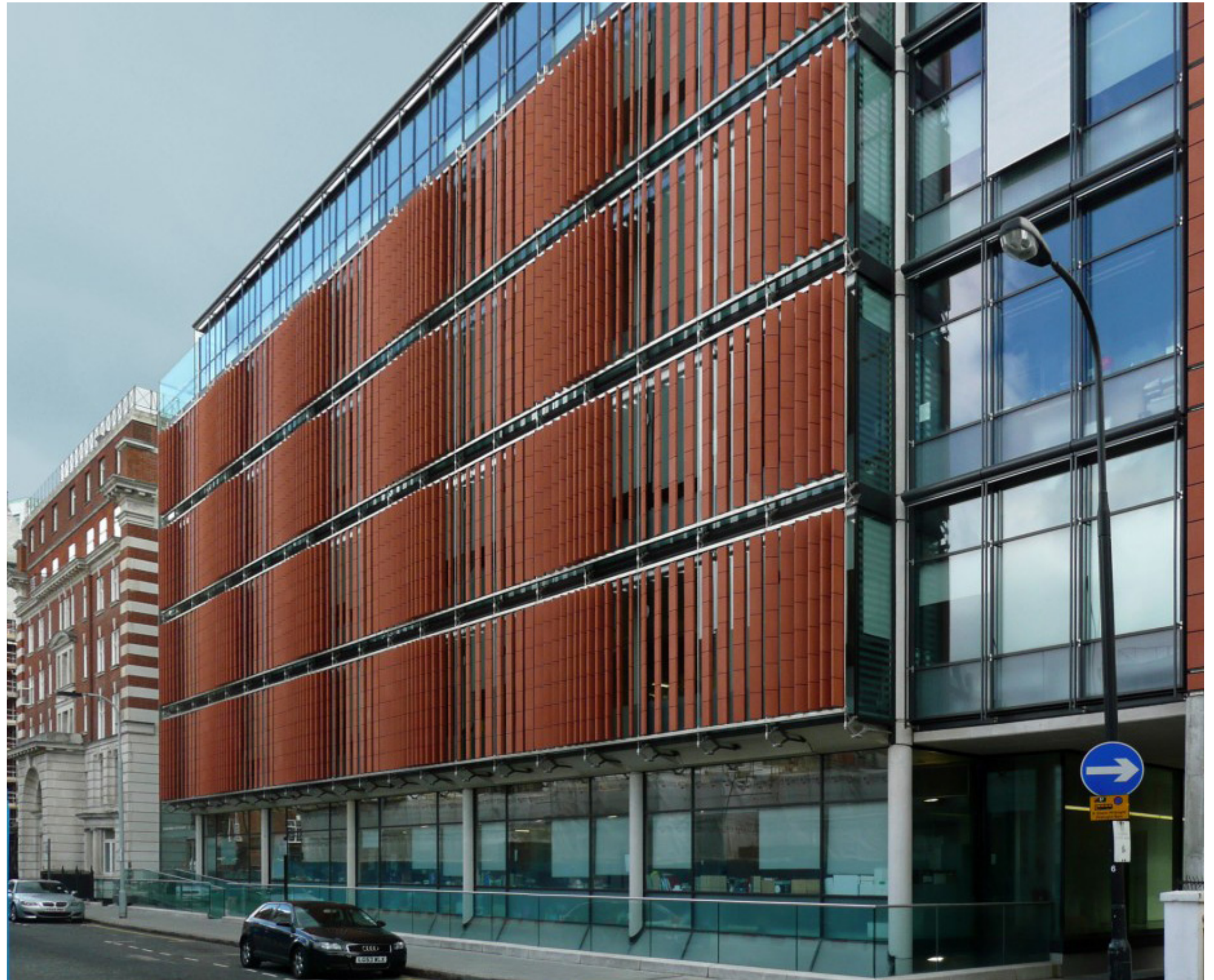
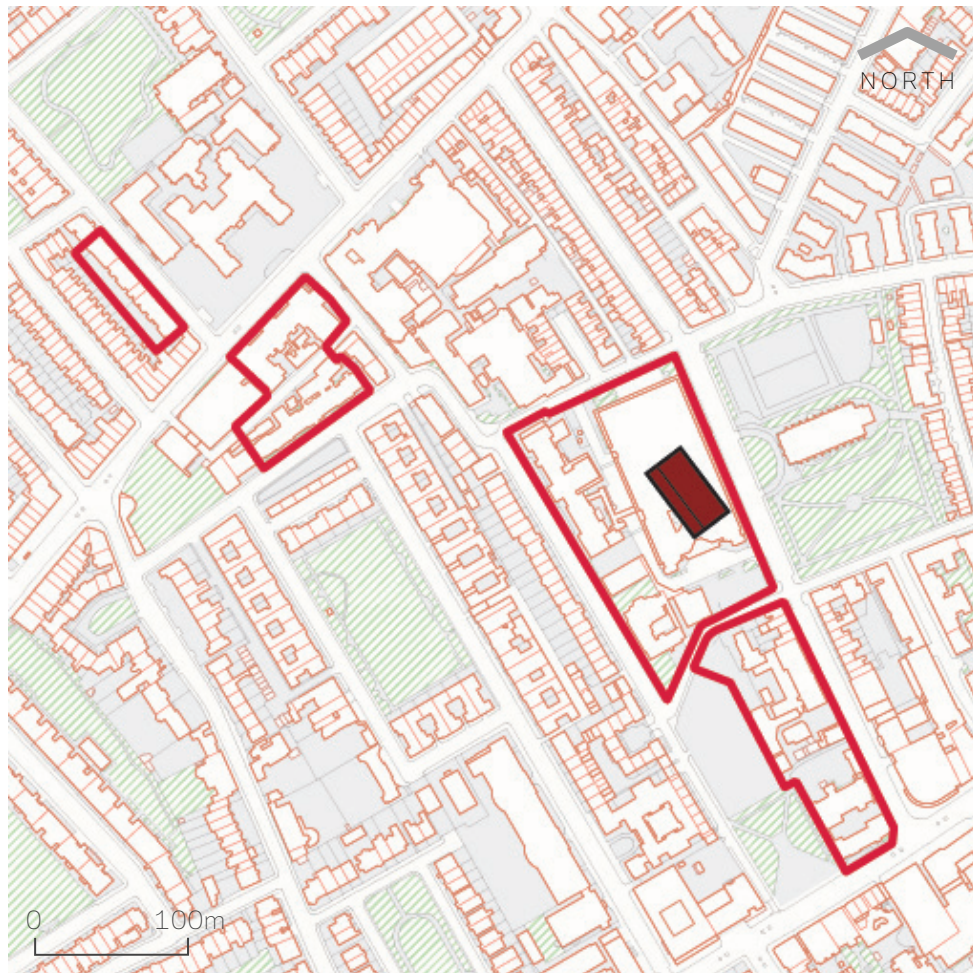
Relevance: the hospital is similar in scale and function to the existing Royal Brompton Hospital. While the Royal Brompton Hospital is split into several buildings, St Bartholomew's Hospital has consolidated many of its uses into a single building - the new King George V Building. This may be a more efficient use of land compared to the current site layout; both hospitals are located in dense urban contexts.



UCL Cancer Institute

Context: a centre for cancer research for University College London (UCL) located in central London. It houses approximately 4,500m² of laboratory space and is one of the largest biomedical research centres in Europe.

Relevance: similar to the sites at the Royal Brompton Hospital, the UCL Cancer Institute is located in a historically sensitive area: within the Bloomsbury Conservation Area and adjacent to a refurbished Grade II listed building. The site for the UCL Cancer Institute was therefore limited in its size, hence the small building footprint. While any new development at the Royal Brompton Hospital must likewise respect its urban context, there is greater scope for a large healthcare facility to maximise viability of the site.



3.2 EXISTING SITE BUILDINGS

3.2.1 1-11 FOULIS TERRACE

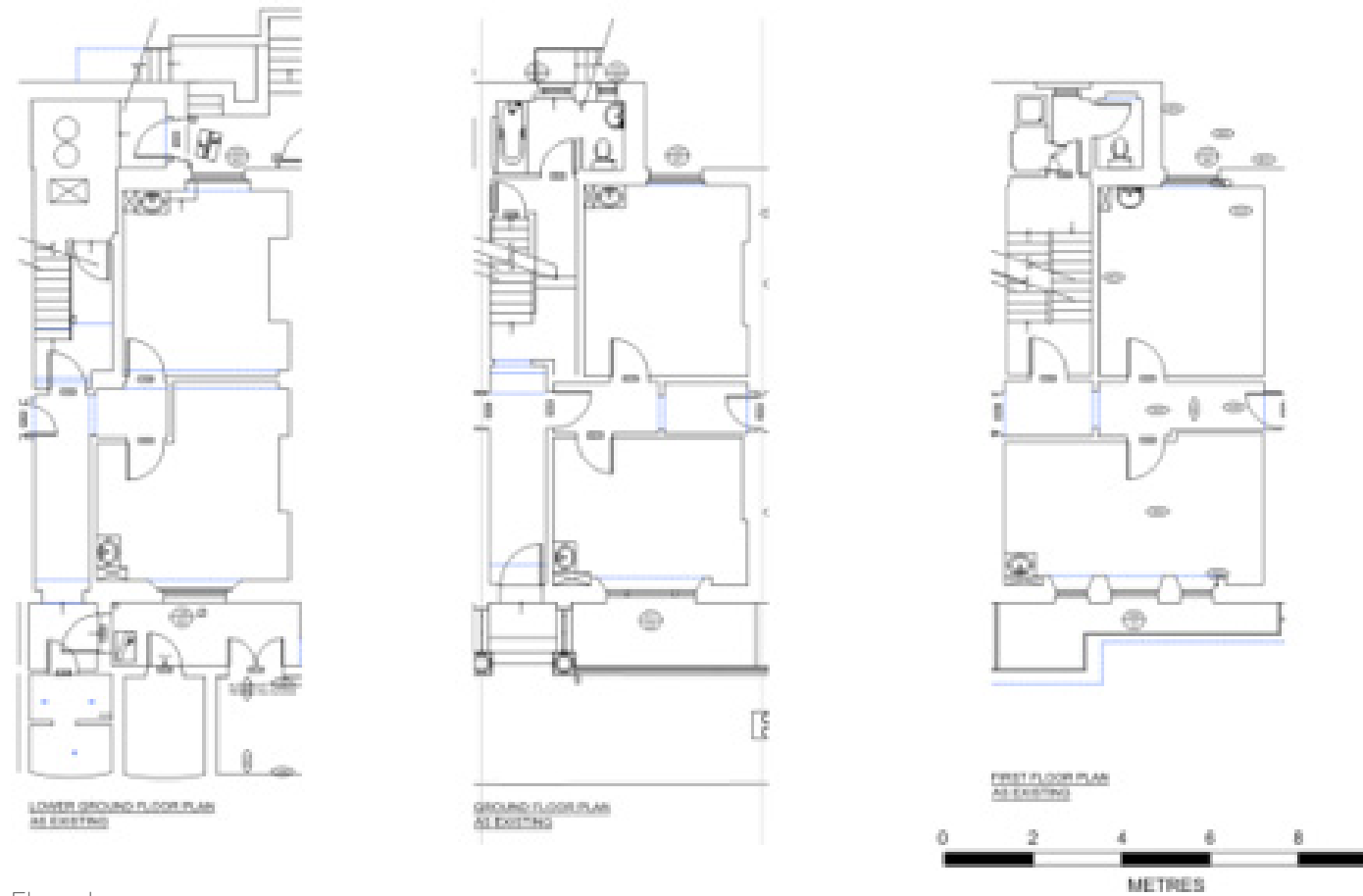
KEY INFORMATION

Heritage

- Grade II listed

Building refurbishment options

- None - not suitable for healthcare development



Floor plans



Street elevation



EXISTING SITE BUILDINGS

3.2.2 FULHAM WING

KEY INFORMATION

Current condition

- Reasonable site size
- Reasonably constrained floorplate depth
- Limited floor to floor heights – approx. 4m
- Irregular Structural grid

Heritage

- Positive contribution to conservation area

Building refurbishment options

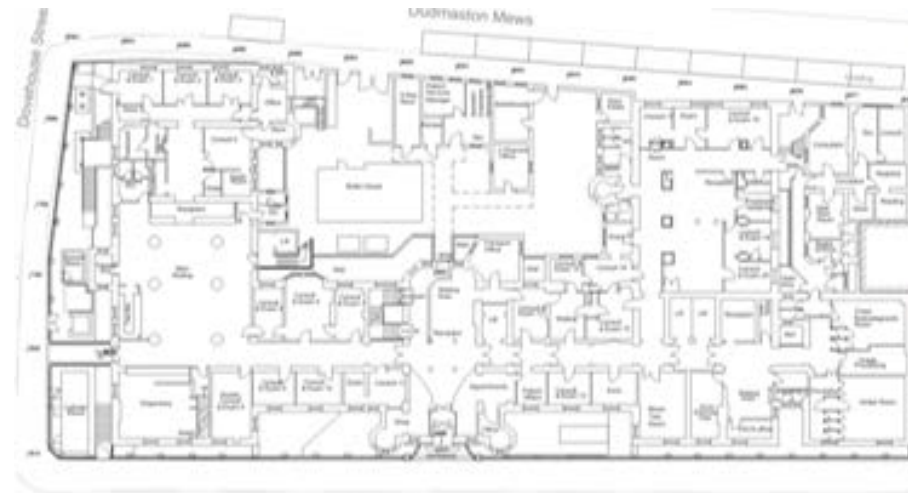
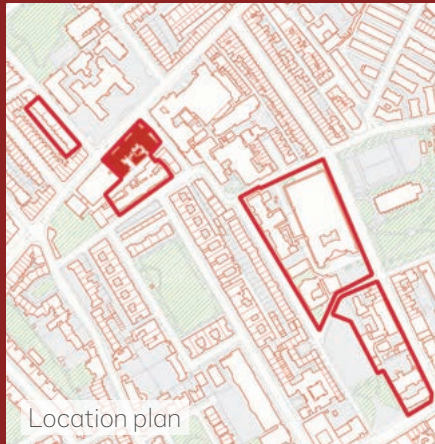
- Medical Office Building
- Low tech Clinic Facilities

Façade retention

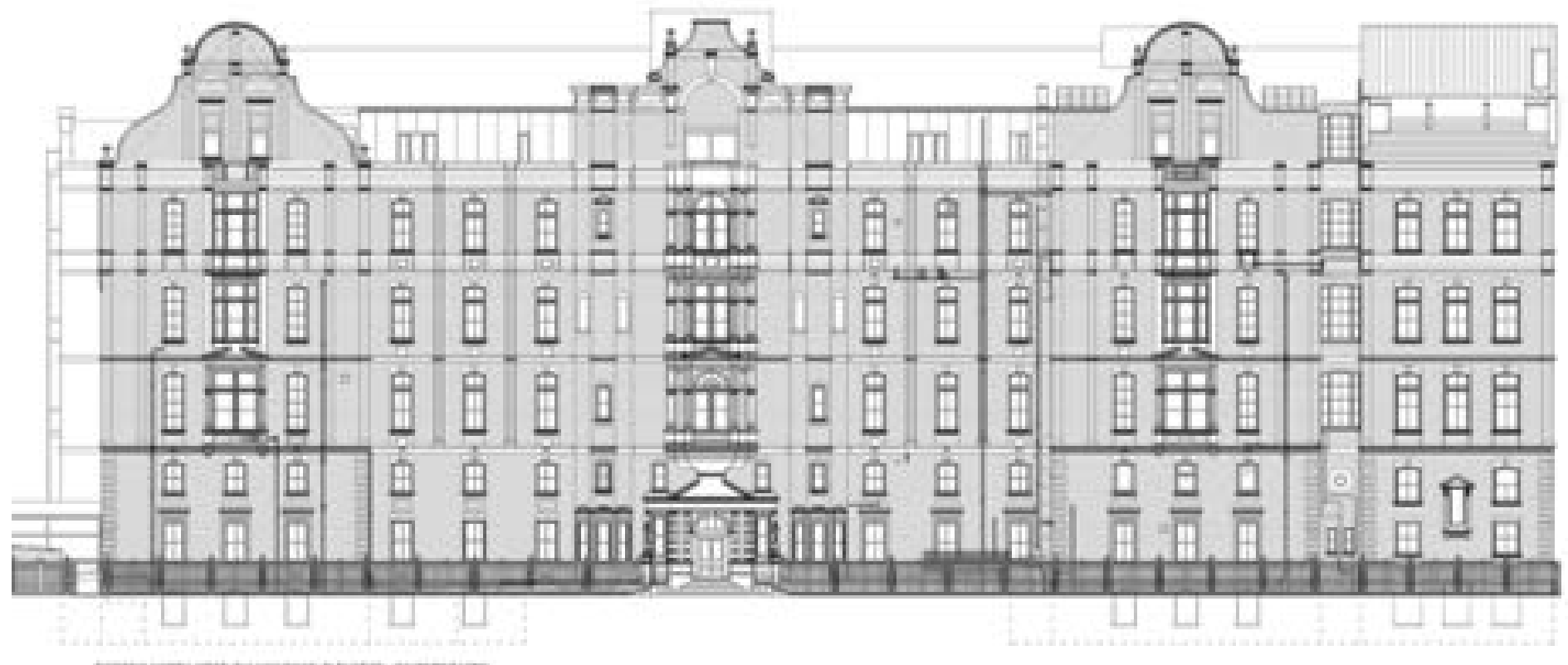
- Offers no improved provision for healthcare redevelopment - limited floor to floor heights & alignment of windows, limited opportunity for appropriate service void.

Demolition

- Could provide a reasonable healthcare redevelopment option on its own.
- Would provide a significant site for healthcare redevelopment with Dudmaston Mews and Eastern end of South Parade



Floor plans



Street elevation

EXISTING SITE BUILDINGS

3.2.3 CLINICAL SKILLS AND SIMULATION CENTRE

KEY INFORMATION

Current condition

- Narrow site
- Limited floorplate depth
- Limited floor to floor heights
- Irregular Structural grid

Heritage

- Western End - limited interest
- Fire Station (outside of site boundary, adjacent to western edge) - Grade II listed
- Eastern End - positive contribution

Building refurbishment options

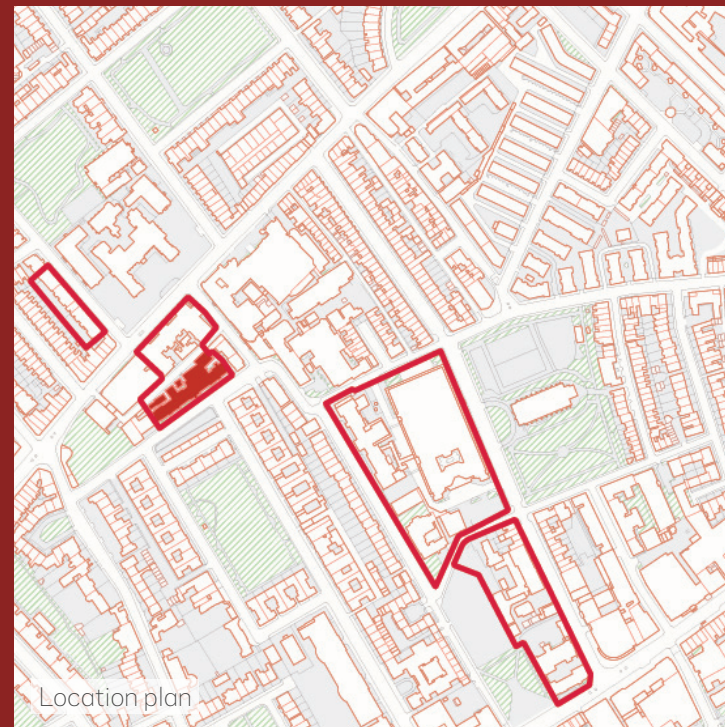
- Medical Office Building
- Low tech Clinic Facilities

Façade retention

- Offers no improved provision for healthcare redevelopment - limited floor to floor heights & alignment of windows, limited opportunity for appropriate service void.

Demolition

- Would not provide a significant healthcare redevelopment option on its own because of the limited depth of the site.
- Would provide a significant site for healthcare redevelopment with Dudmaston Mews and Eastern end of South Parade



EXISTING SITE BUILDINGS

3.2.4 CHELSEA WING

KEY INFORMATION

Current condition

- Reasonable site size
- Narrow floorplate
- Limited floor to floor heights
- Irregular Structural grid

Heritage

- Positive contribution to conservation area except the end section

Building refurbishment options

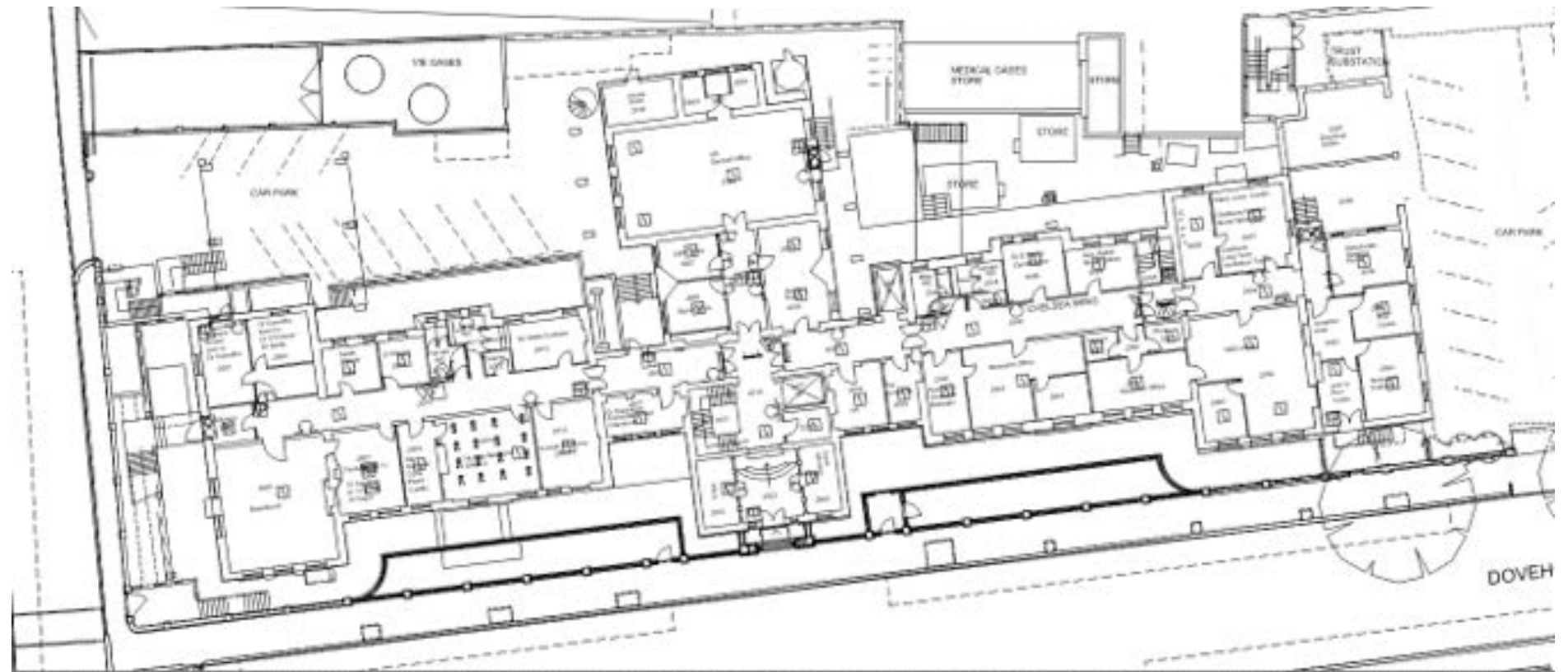
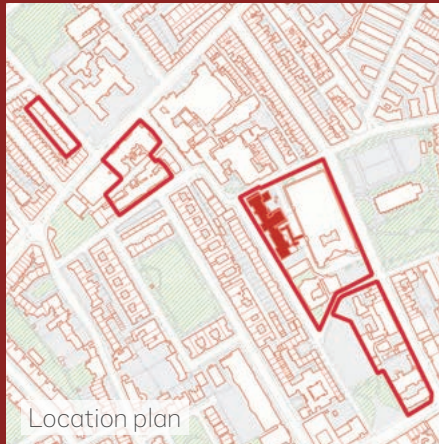
- Medical Office Building
- Low tech Clinic Facilities

Façade retention

- Offers no improved provision for healthcare redevelopment - limited floor to floor heights & alignment of windows, limited opportunity for appropriate service void.

Demolition

- Would provide healthcare redevelopment opportunity on its own.
- Would provide a significant site for healthcare redevelopment with Royal Brompton Sydney Street Site



Floor plan



Street elevation

EXISTING SITE BUILDINGS

3.2.5 IMATRON BUILDING

KEY INFORMATION

Heritage

- Negative contribution

Building refurbishment options

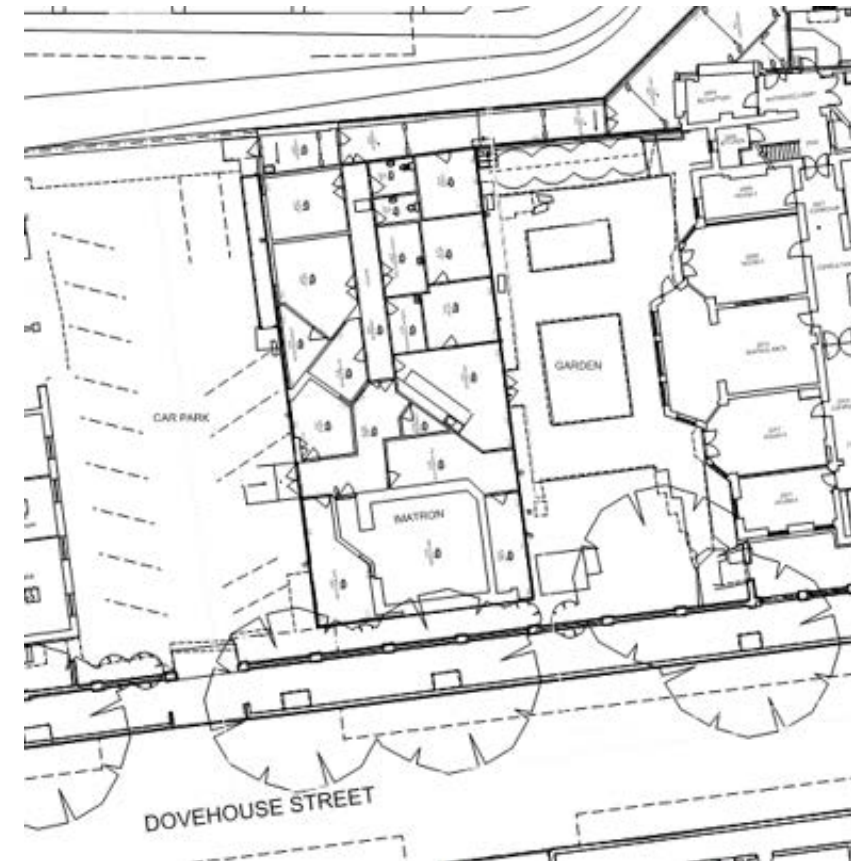
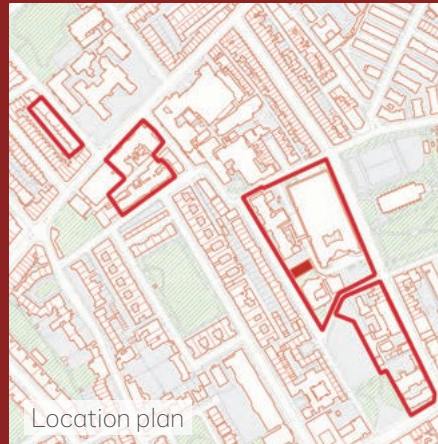
- None

Façade retention

- No

Demolition

- Would not provide a significant redevelopment option on its own.



EXISTING SITE BUILDINGS

3.2.6 BRITTEN WING

KEY INFORMATION

Current condition

- Small footprint
- Narrow floorplate depth
- Limited floor to floor heights
- Irregular Structural grid

Heritage

- Positive contribution to conservation area

Building refurbishment options

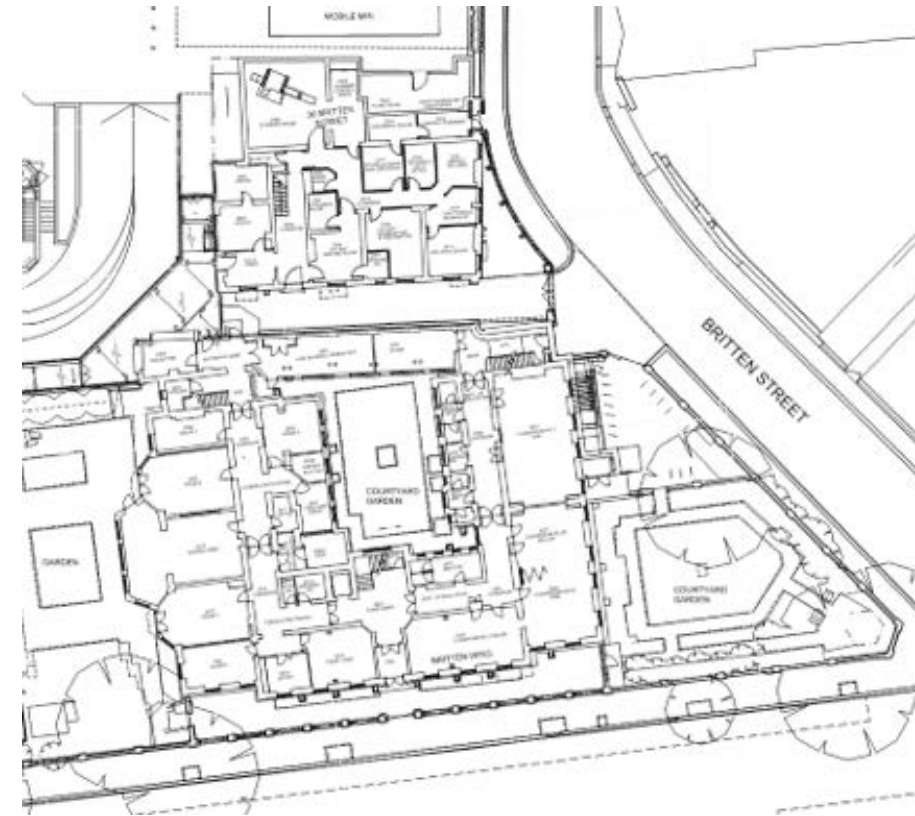
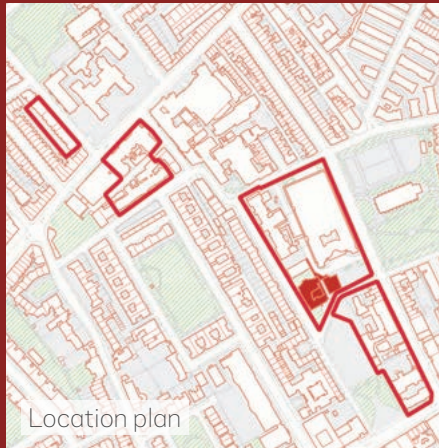
- Medical Office Building
- Low tech Clinic Facilities

Façade retention

- Possible but would not provide a significant opportunity for healthcare redevelopment.

Demolition

- Would not provide a significant healthcare redevelopment option on its own.



EXISTING SITE BUILDINGS

3.2.7 SYDNEY WING

KEY INFORMATION

Current condition

- Large site
- Deep floorplate
- Floor to floor height approximately 4m.
- Limited opportunities for appropriate ceiling void.

Heritage

- Not located in the conservation area. Value of the building aesthetic?

Building refurbishment options

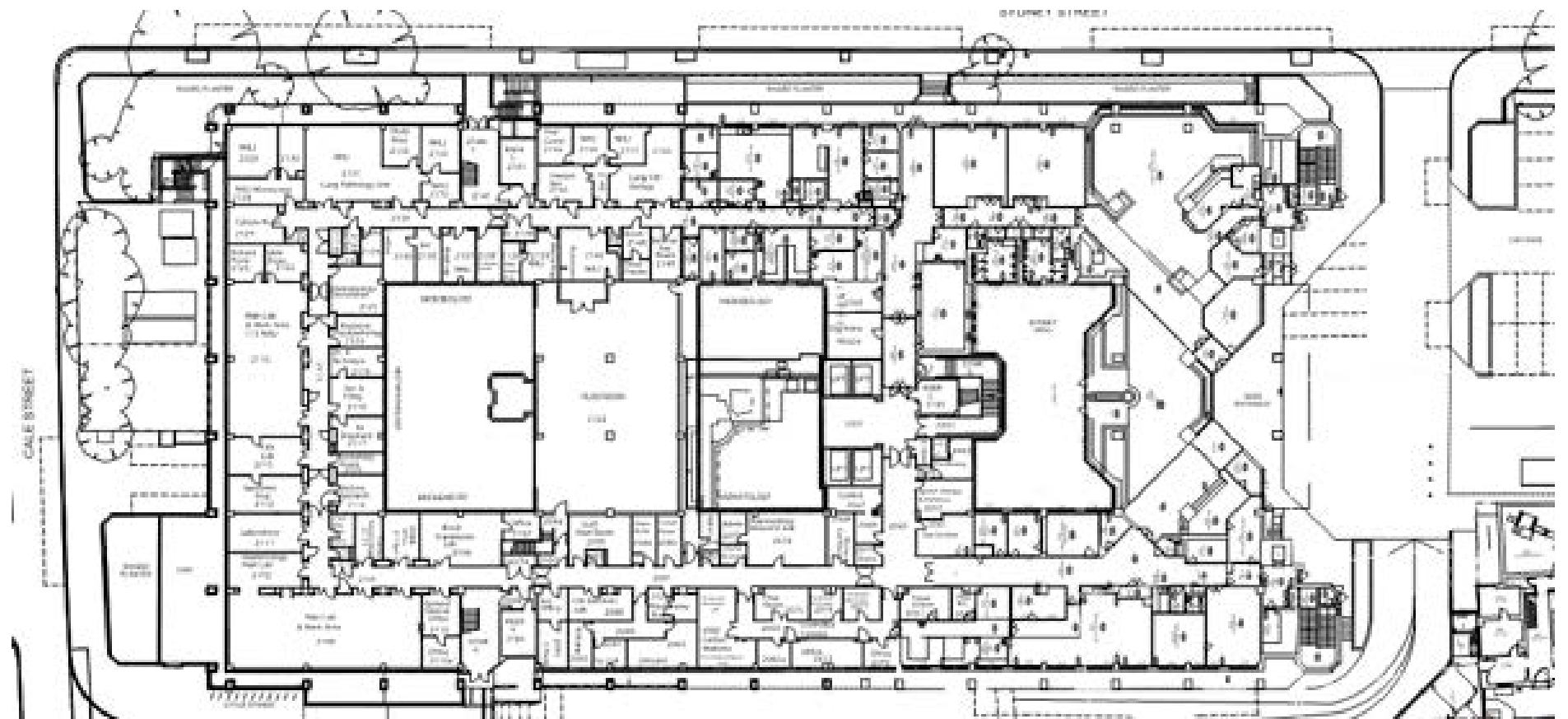
- Not appropriate for high tech healthcare
- Large building for low tech / consulting based healthcare

Façade retention

- No

Demolition

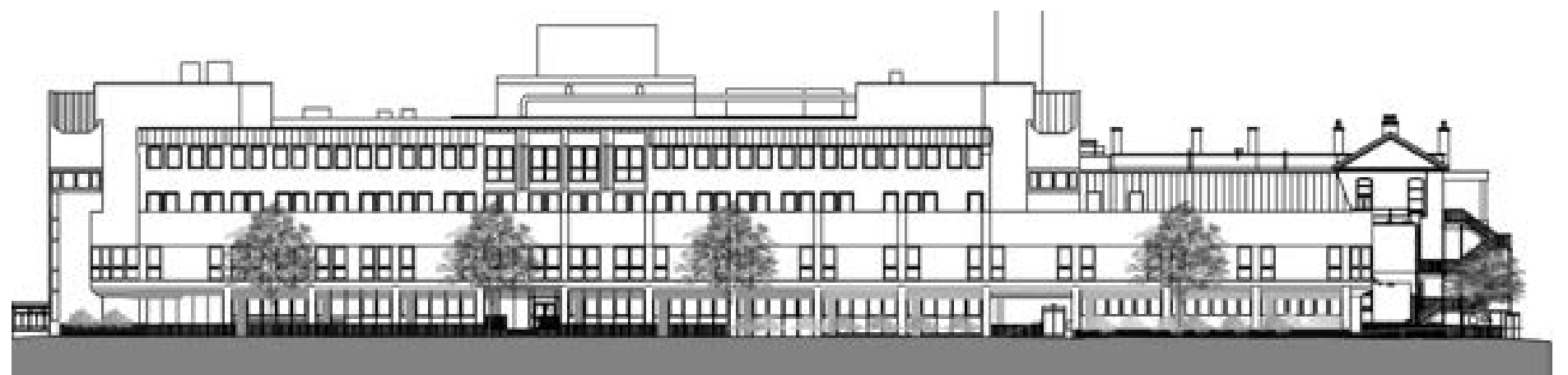
- Would provide a significant redevelopment option on its own.



Floor plan



Street view



Street elevation

EXISTING SITE BUILDINGS

3.2.8 117-123 SYDNEY STREET

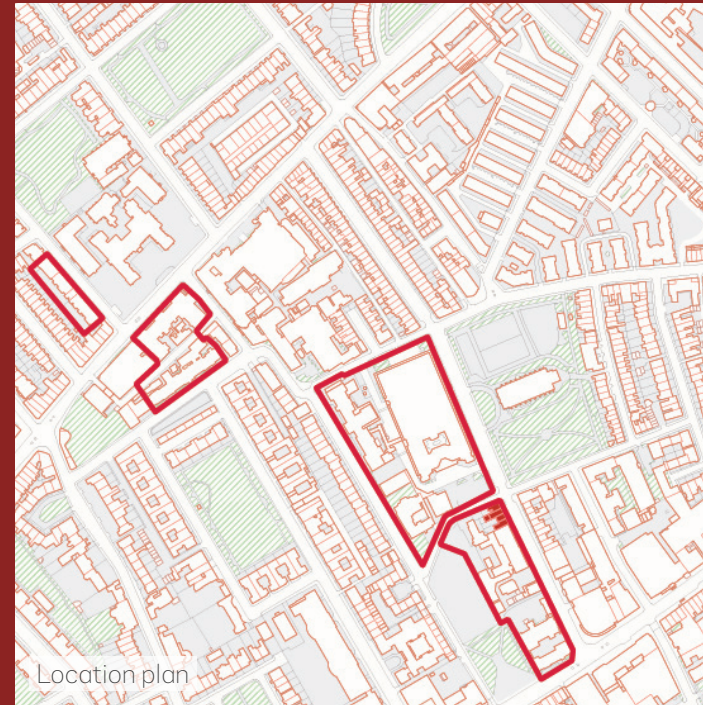
KEY INFORMATION

Heritage

- Grade II listed

Building refurbishment options

- None for healthcare



Location plan



Street view

EXISTING SITE BUILDINGS

3.2.9 125 SYDNEY STREET / CHELSEA FARMERS MARKET

KEY INFORMATION

Current condition

- Irregular Structural grid
- Flagged for Crossrail 2 station site
- Small building footprint

Heritage

- Nothing of Interest

Building refurbishment options

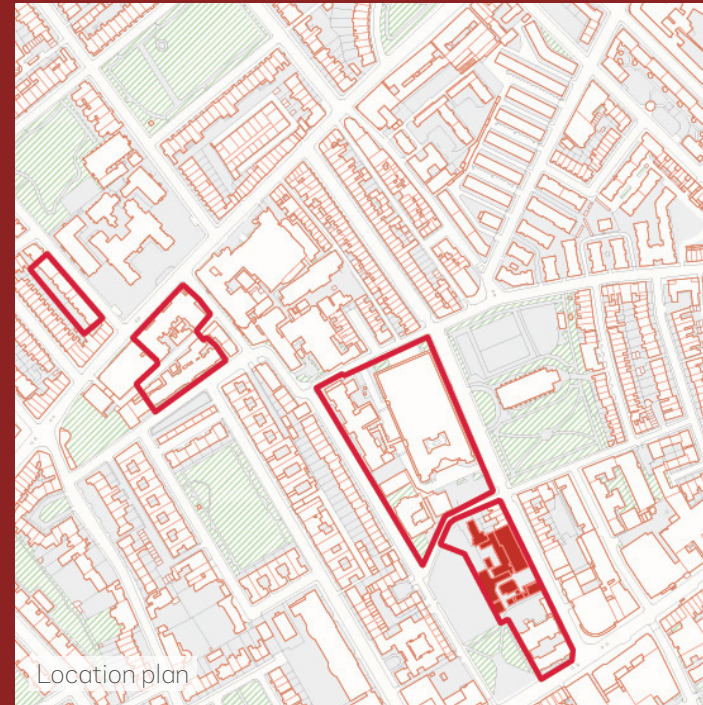
- None for healthcare

Façade retention

- No

Demolition

- Would provide a reasonable healthcare redevelopment option on its own.



Location plan



Street view

EXISTING SITE BUILDINGS

3.2.10 151 SYDNEY STREET

KEY INFORMATION

Current condition

- Small site
- Small building floorplate
- Low floor to floor heights

Heritage

- Unlikely to be listed

Building refurbishment options

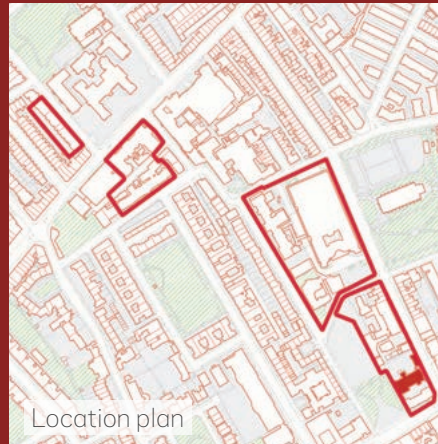
- Medical Office Building

Façade retention

- Not for Healthcare opportunity

Demolition

- Not for Healthcare opportunity



EXISTING SITE BUILDINGS

3.2.11 250 KING'S ROAD

KEY INFORMATION

Current condition

- Small site
- Small building floorplate
- Low floor to floor heights

Heritage

- Unlikely to be listed
- Decent contribution to King's Road

Building refurbishment options

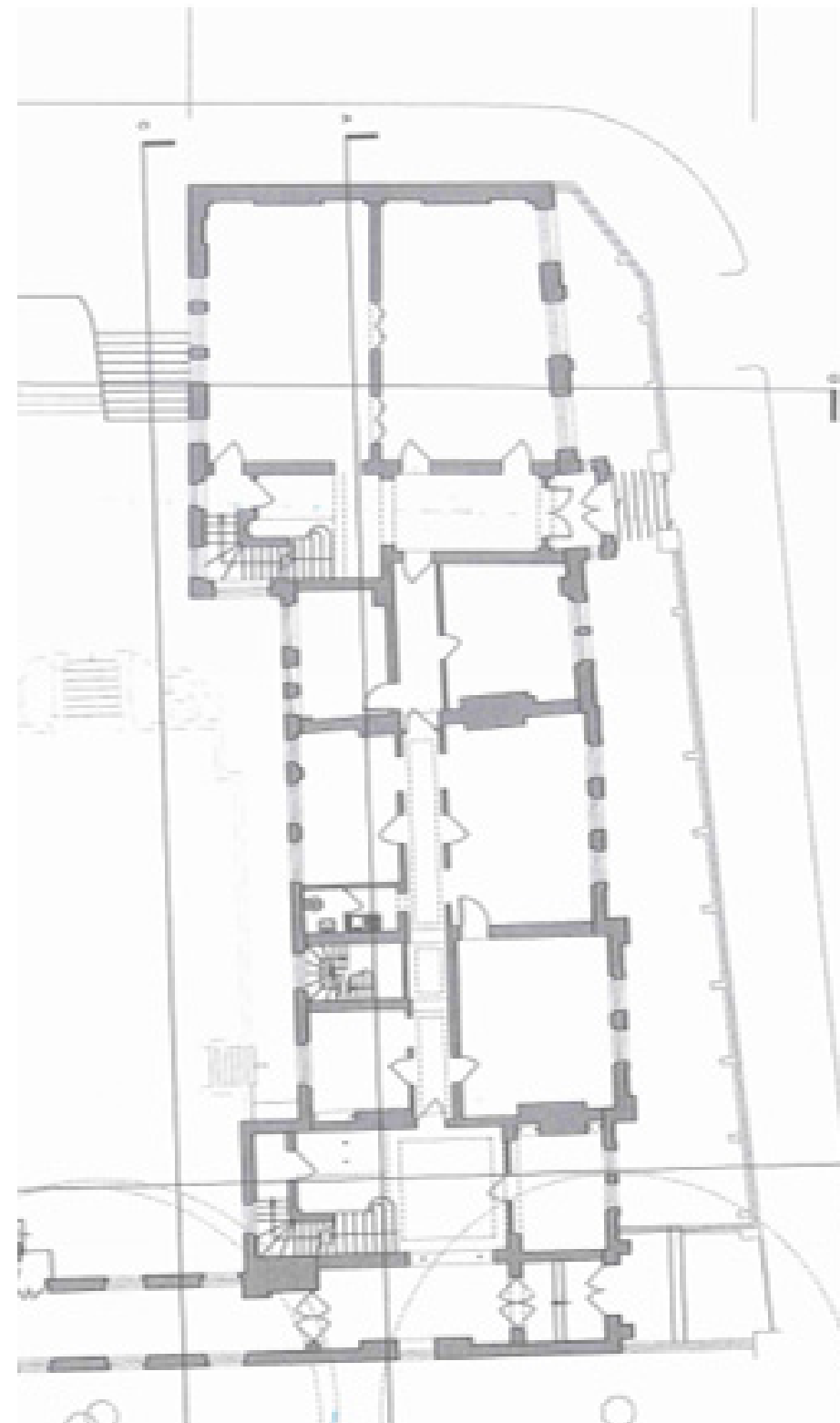
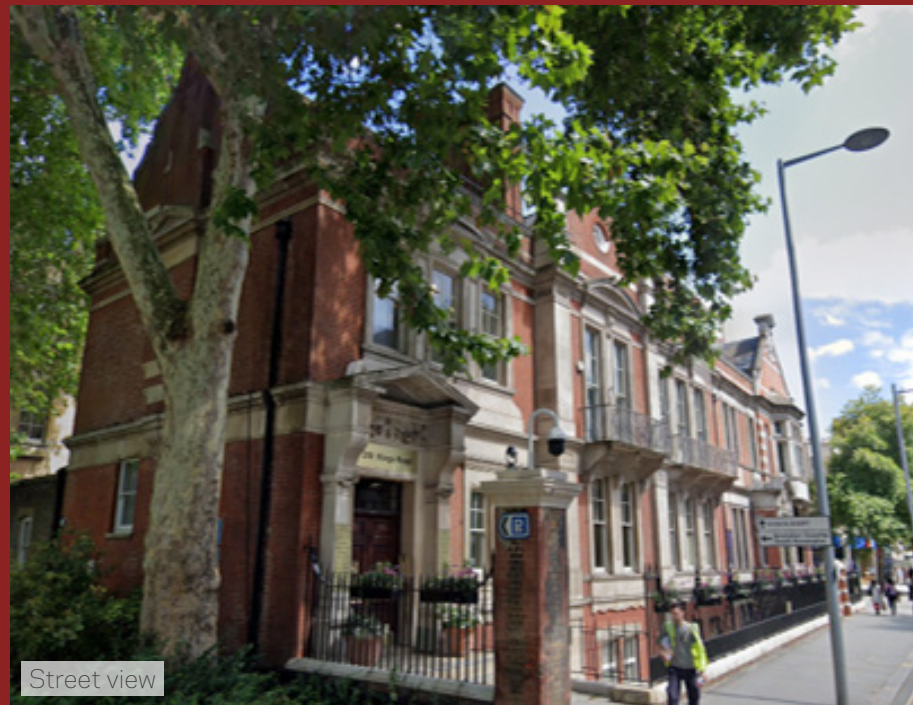
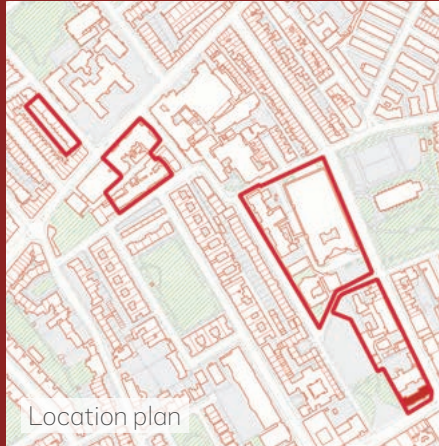
- Medical Office Building

Façade retention

- Not for Healthcare opportunity

Demolition

- Not for healthcare opportunity



3.3 STANDARD BLOCK TYPES

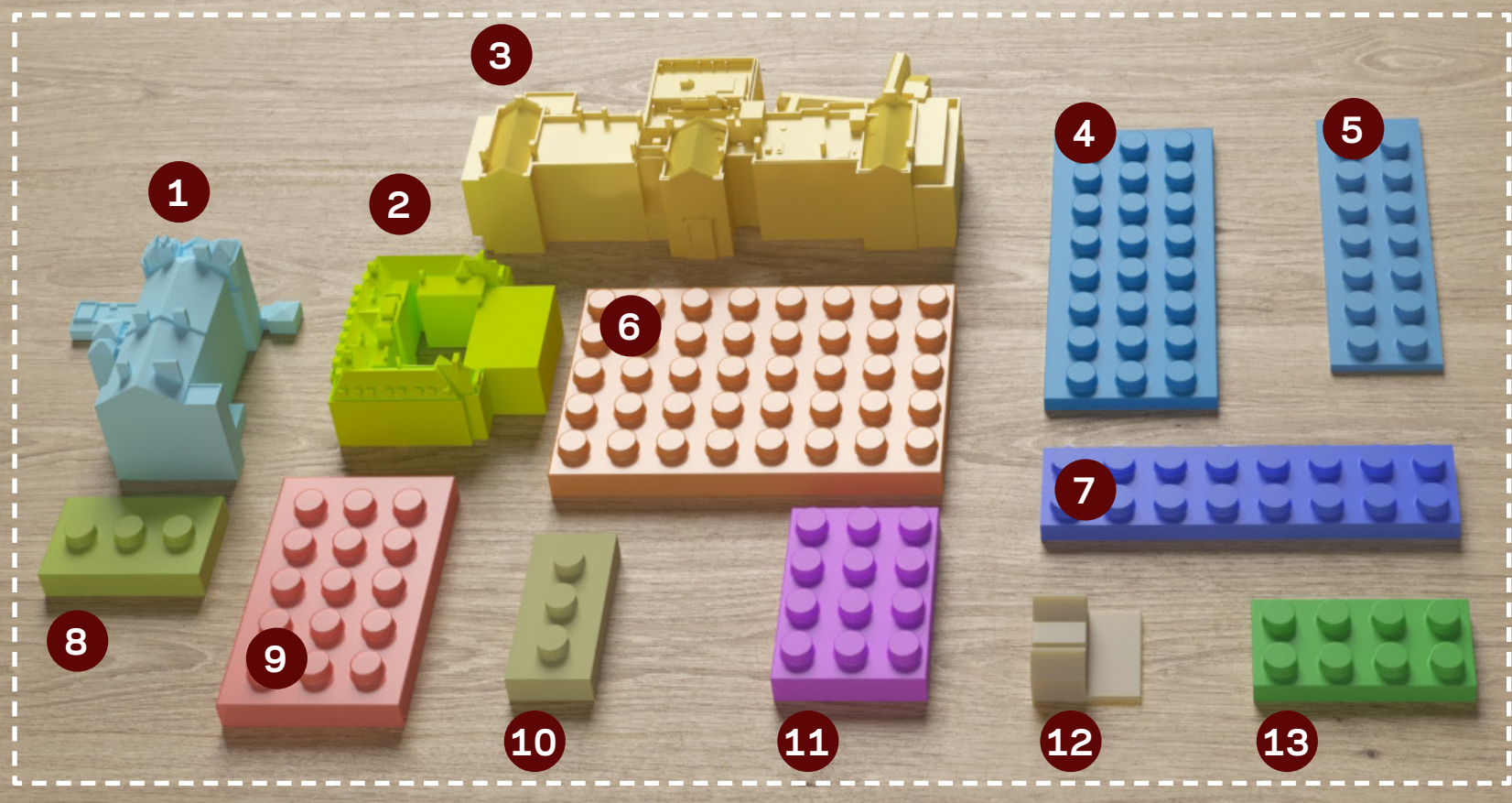
Previous analysis has shown that the existing site buildings are not suitable for modern healthcare requirements. A new range of healthcare typologies is therefore needed. Suitable options for retrofitting buildings which are no longer fit for healthcare uses but still offer positive contributions to the surrounding conservation areas are also required.

The building blocks on the following page represent standard block types for healthcare and non-healthcare uses that can be accommodated on the Royal Brompton Hospital sites. These form the building blocks for the concept design presented in the next chapter. They determine what can be built on the sites and which existing buildings need to be retained, refurbished or demolished to accommodate the new development.

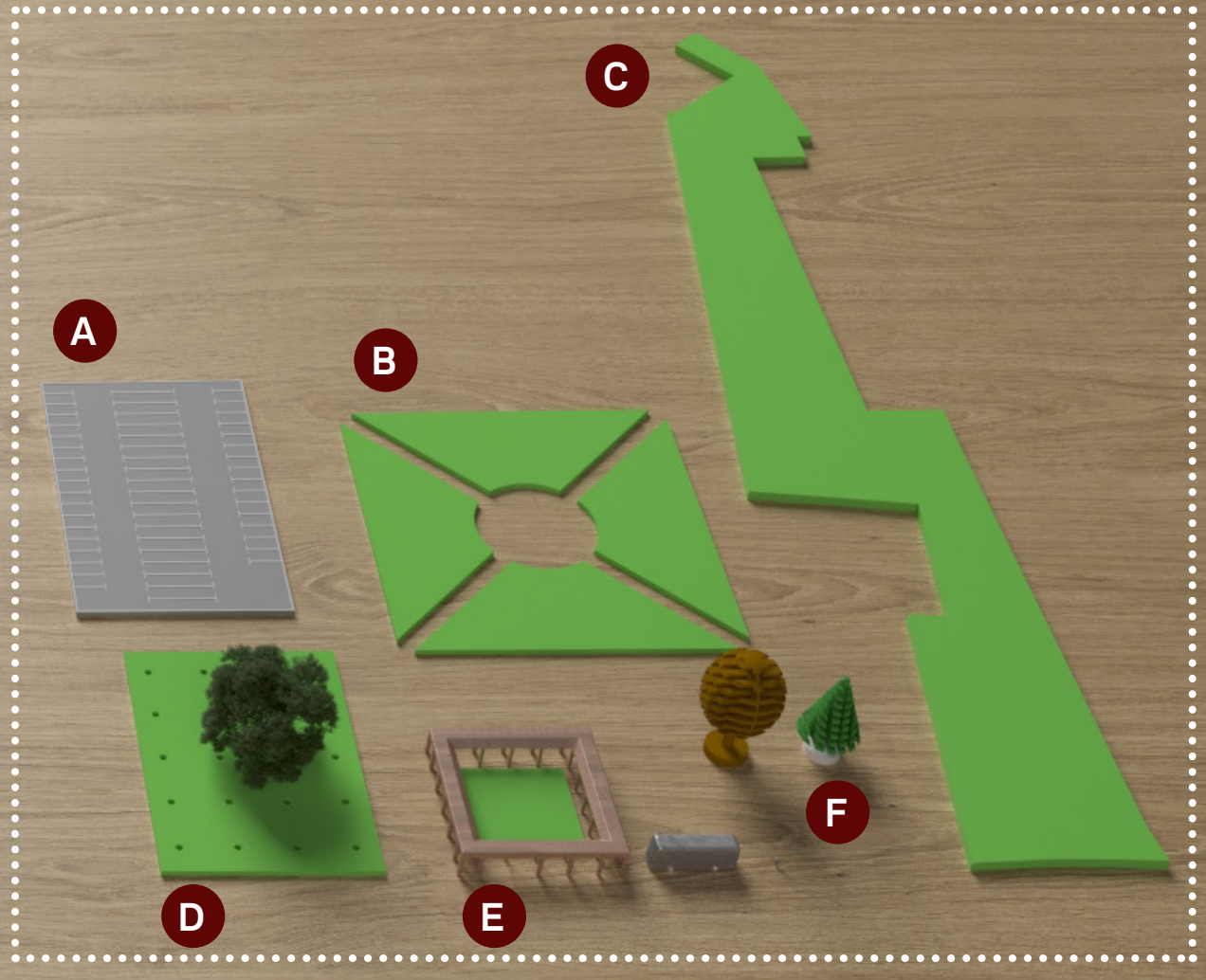
Non-healthcare uses include residential (including senior living accommodation), retail and various open space types. The addition of these uses will help to create a more holistic development that is better integrated with its surrounding context.



BLOCK TYPOLOGIES



OPEN SPACE TYPOLOGIES



- 1** RETROFITTED BUILDING: RETAIL/F&B AT GROUND FLOOR WITH OFFICES/RESIDENTIAL ABOVE
Example above shows 151 Sydney Street
- 2** RETROFITTED BUILDING: HEALTHCARE WORKER ACCOMMODATION
Example above shows Britten Wing with new-build block to rear
- 3** RETROFITTED BUILDING: ELDERLY CARE
Example above shows Chelsea Wing; could also be used interchangeably with extra care/retirement living. Proposed total provision: 3,000-5,000m²
- 4** DIAGNOSTICS
Proposed total provision: 4,000-6,000m² (note: this figure is combined with outpatients)

- 5** OUTPATIENTS
Proposed total provision: 4,000-6,000m² (note: this figure is combined with diagnostics)
- 6** ACUTE / INPATIENTS
Proposed total provision: 4,000-8,000m²
- 7** POST-ACUTE REHABILITATION
Proposed total provision: 3,000-6,000m²
- 8** EXTRA CARE
Proposed total provision: 3,000-6,000m²
- 9** LEISURE (GYM, INDOOR SWIMMING POOL, ETC.)
- 10** RETAIL
- 11** RETIREMENT LIVING
Proposed total provision: 2,500-10,000m²

- 12** MEWS HOUSE
 - 13** COMMERCIAL/RESIDENTIAL FOR UPPER FLOORS (WHERE GROUND FLOOR IS RETAIL/F&B/LEISURE)
-
- A** PARKING COURT
 - B** EXISTING OPEN SPACE (DOVEHOUSE GREEN)
 - C** LINEAR PARK
 - D** PUBLIC OPEN SPACE
 - E** SEMI-PRIVATE COMMUNAL COURTYARD
 - F** TREES



CHAPTER 4

PROPOSED MASTERPLAN

Building on the earlier analyses presented in this report, a series of design strategies are brought together into a single narrative to create a vision for change for the Royal Brompton Hospital sites. The driving influence is to bring social value for both new and existing communities, with a key focus on how to deliver wellbeing through placemaking. The proposed masterplan envisions a sense of place that goes beyond the traditional boundaries of healthcare development; creating positive synergies between healthcare and non-healthcare uses to deliver a better integrated neighbourhood.

4.1 DESIGN NARRATIVE

The design narrative for the Royal Brompton Hospital sites is driven by the need to deliver social value beyond the physical boundaries of the four sites. It aims to combine a range of complementary healthcare facilities with a wider set of uses that support community life and wellbeing. The latter includes various residential typologies (including those for senior living and key worker accommodation), retail, food and beverage and leisure facilities.

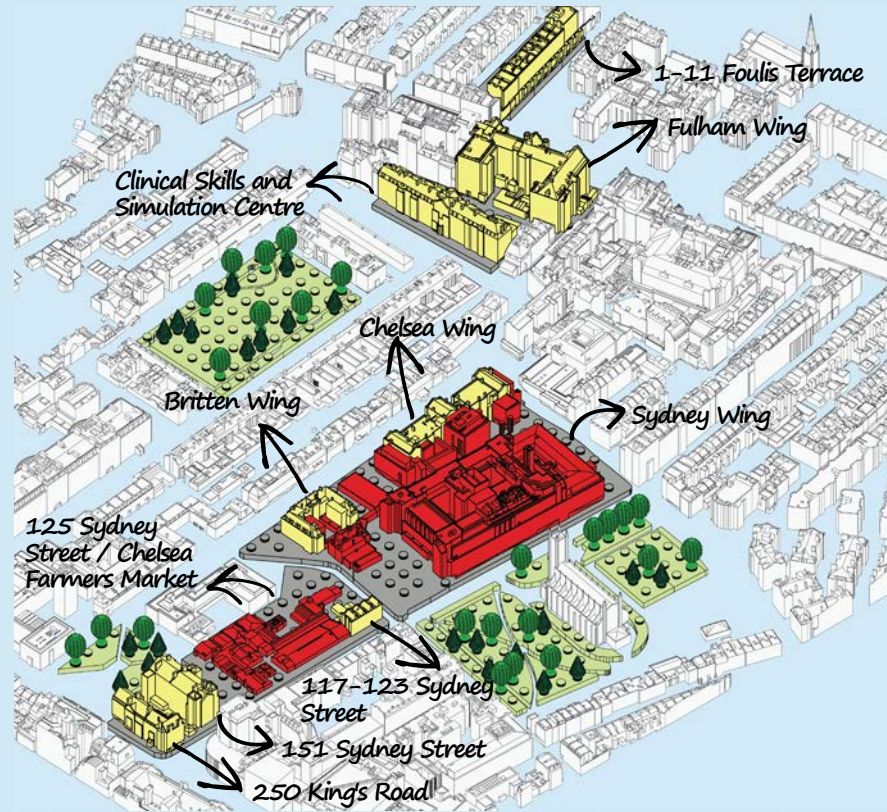
The proposed scheme is informed by an assessment of which existing buildings are suitable for current healthcare requirements and which need to be retrofitted or fully redeveloped. Commercial analysis of potential healthcare uses for the site is then combined with a broader needs assessment for the Royal Borough of Kensington & Chelsea. This analysis has been used to create the range of suitable block types illustrated in 3.3 Standard Block Types (pages 76-77), which in turn were used to develop a series of early design options. Finally, best practice urban design and placemaking principles are applied to create an arrangement of buildings and open spaces that deliver a new wellbeing-focused neighbourhood. The public open spaces are used to draw people into what was previously an inward-looking hospital site; creating a development that is both physically and socially integrated with its surrounding community.

The design narrative is presented in a series of steps on the following pages.

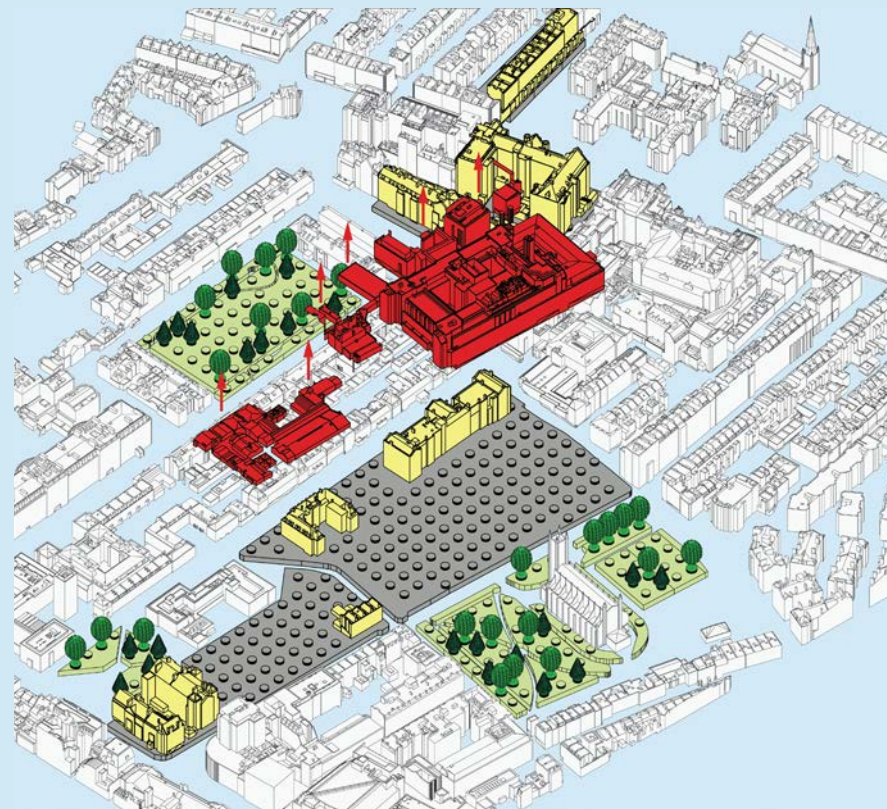
Proposed Masterplan



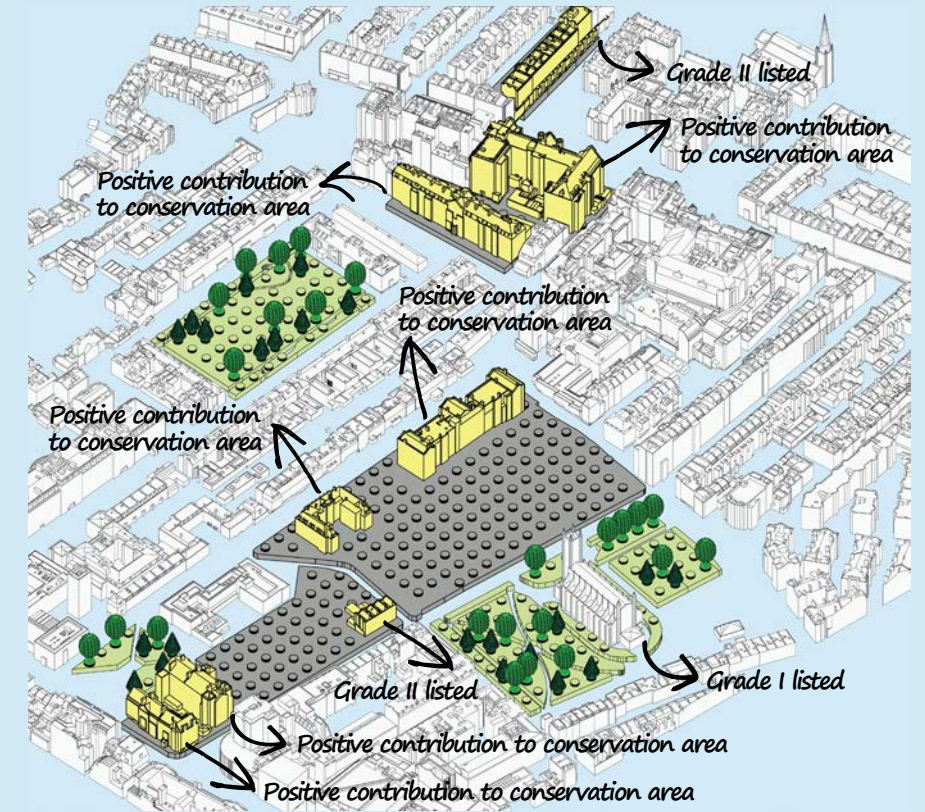
1 Existing context



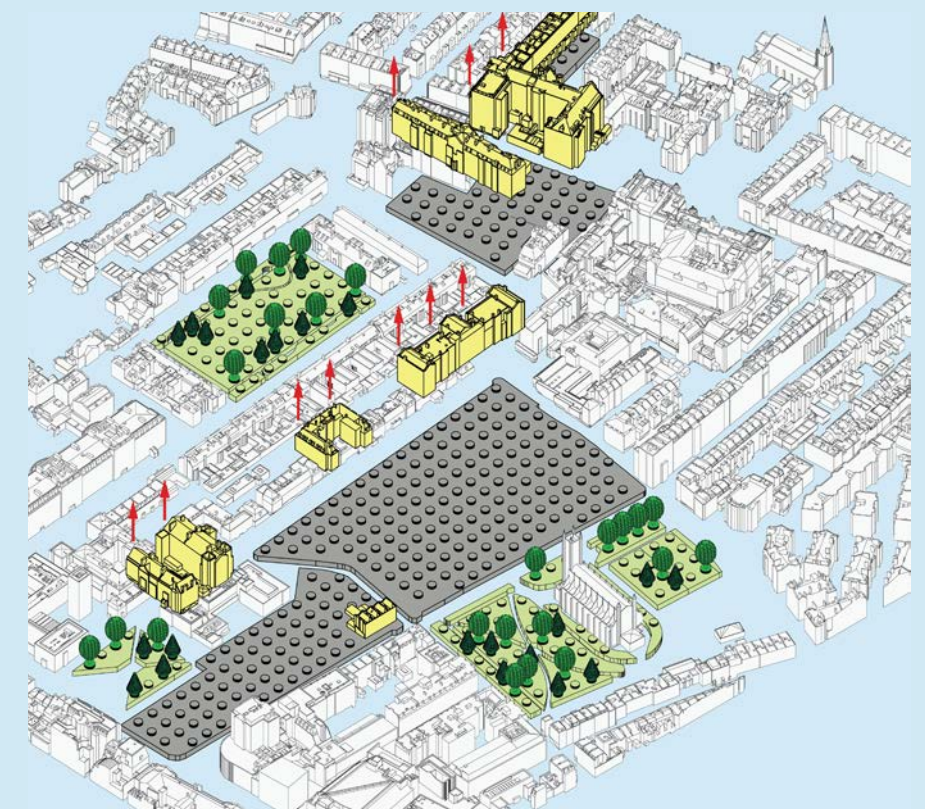
2 Demolition of healthcare buildings no longer fit for purpose



3 Retention of listed and non-listed buildings that offer a positive contribution to local conservation areas



4 Retrofit of retained buildings (1). 117-123 Sydney Street retains its current uses (ground floor retail; residential above)



Key

The icons opposite are used to illustrate the three overarching uses in the development



Healthcare uses



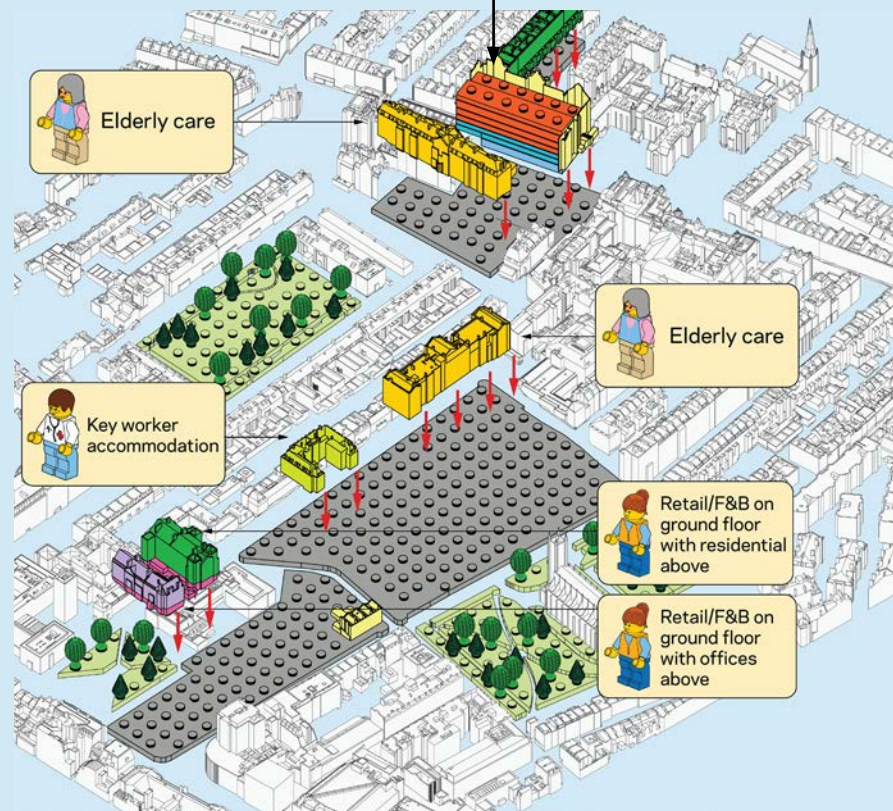
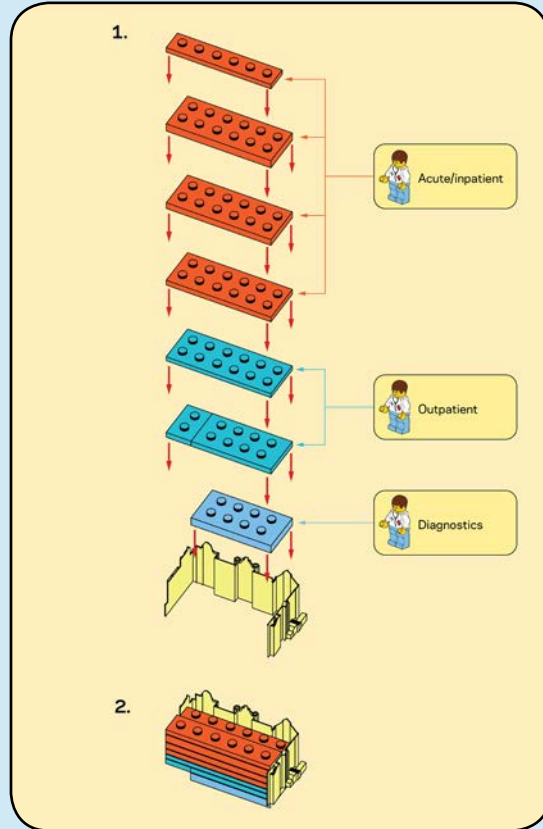
Senior living
(retirement living,
elderly care and extra
care)



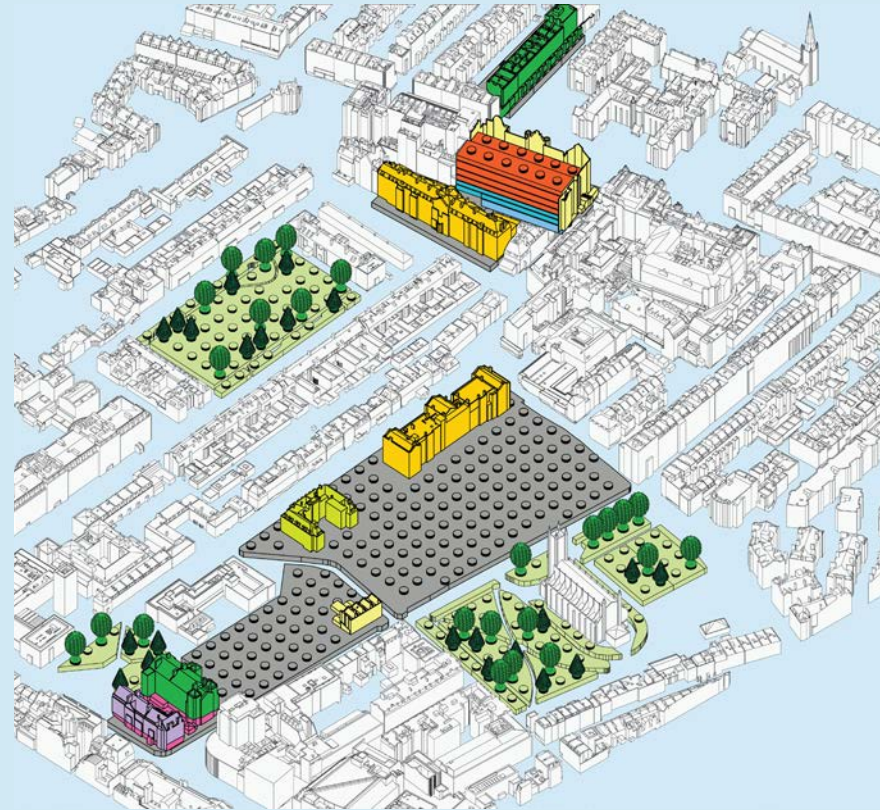
Wider community uses
(residential, retail,
leisure)

DESIGN NARRATIVE

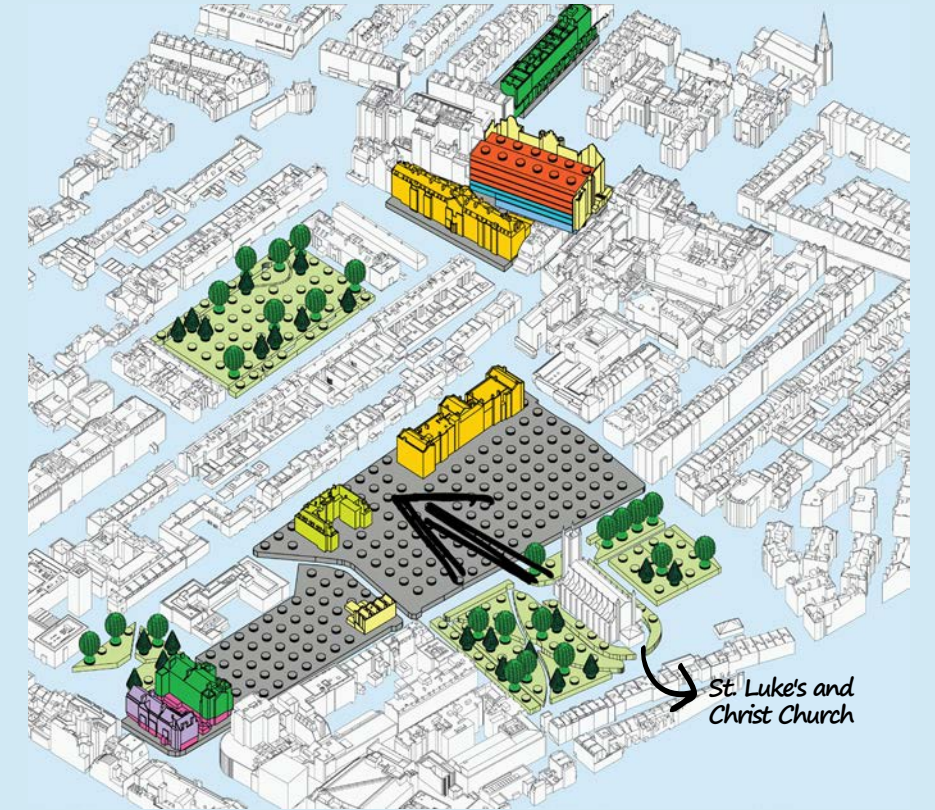
5 Retrofit of retained buildings (2). New uses designed to work with existing floor-to-ceiling heights. For Fulham Wing, façade is retained with new building featuring appropriate floorplates and floor-to-ceiling heights.



6 Retrofit of existing healthcare buildings (3)



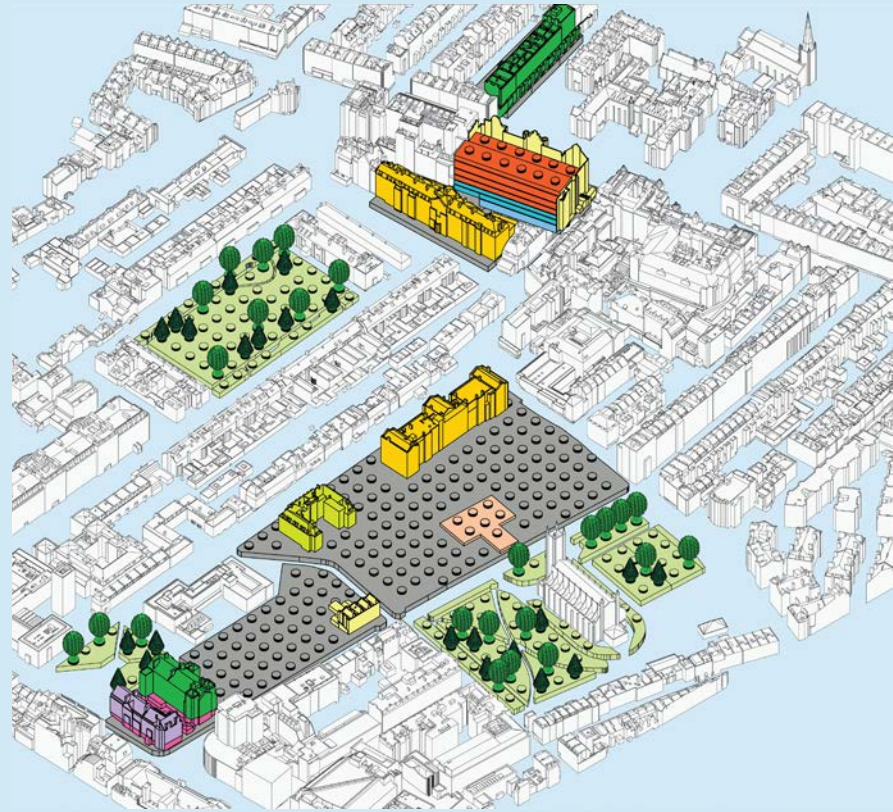
7 View corridor established to Grade I listed St. Luke's and Christ Church



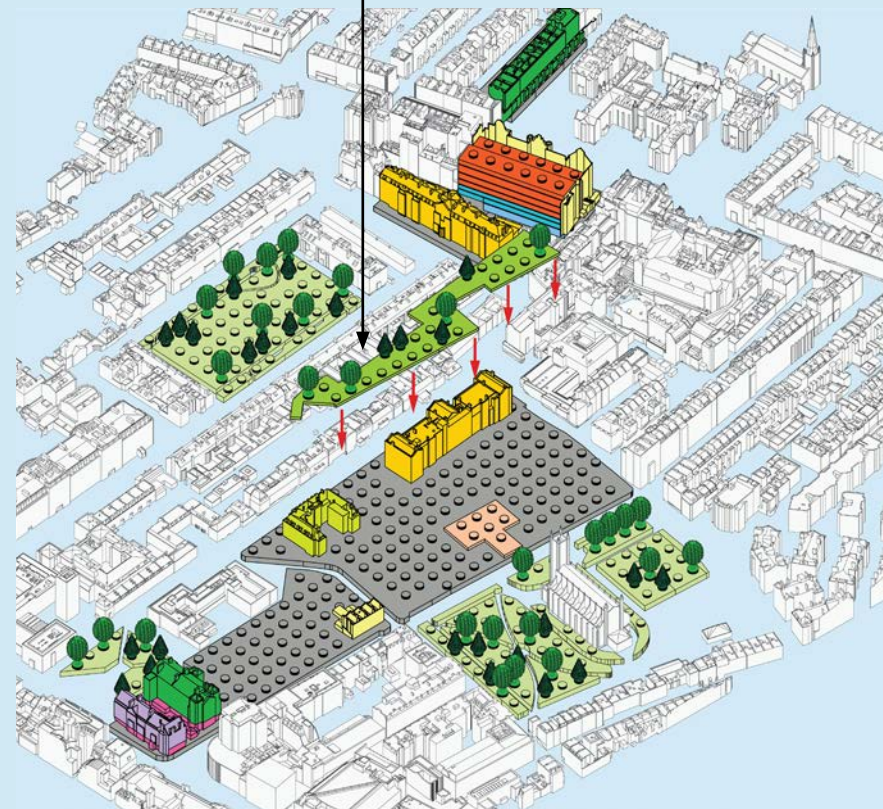
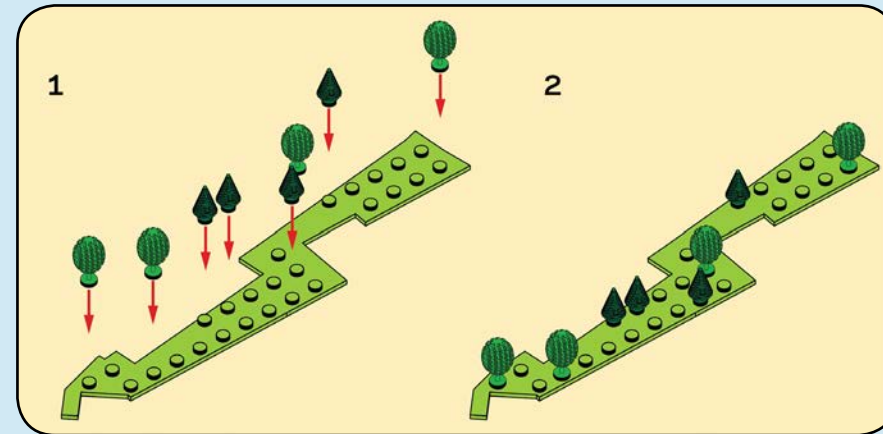
8 New public square opposite church to enhance its setting (1)



9 New public square opposite church to enhance its setting (2)



10 New north-south thoroughfare to promote pedestrian/cyclist movement and to create public amenity (1)

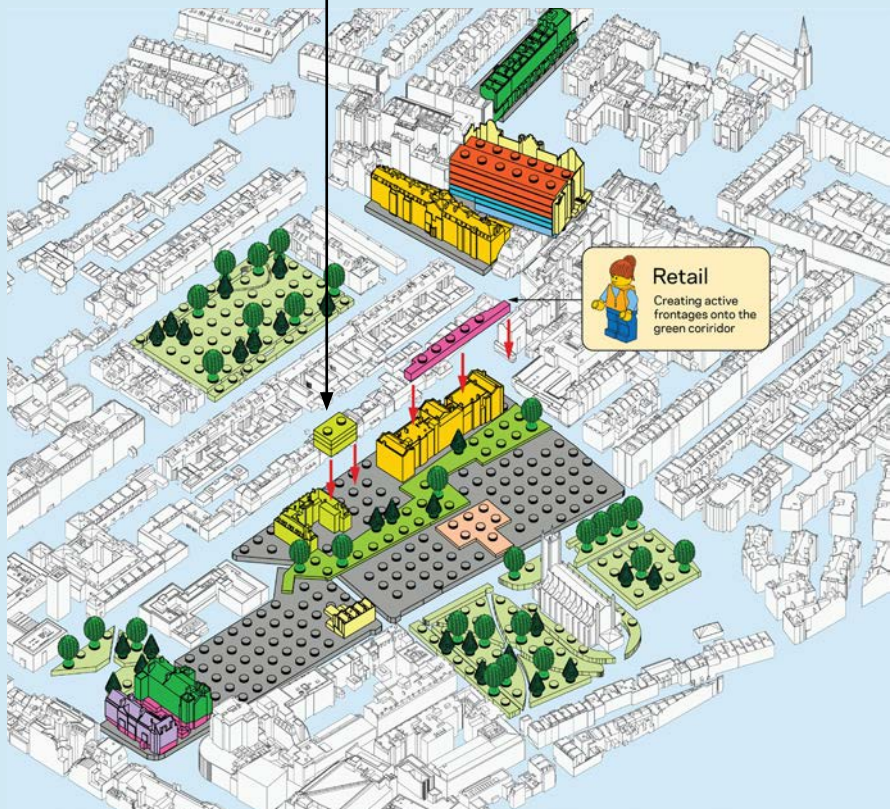
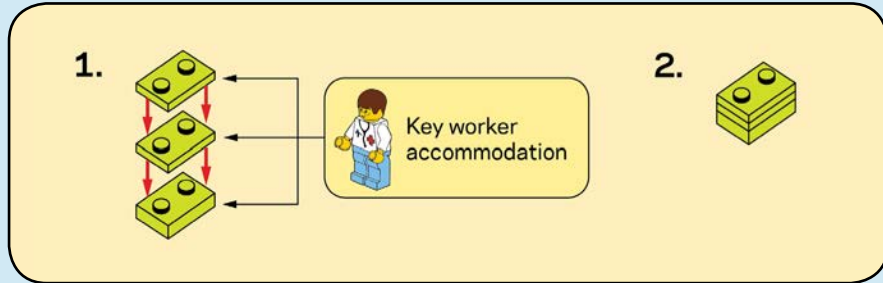


11 New north-south thoroughfare to promote pedestrian/cyclist movement and to create public amenity (2)

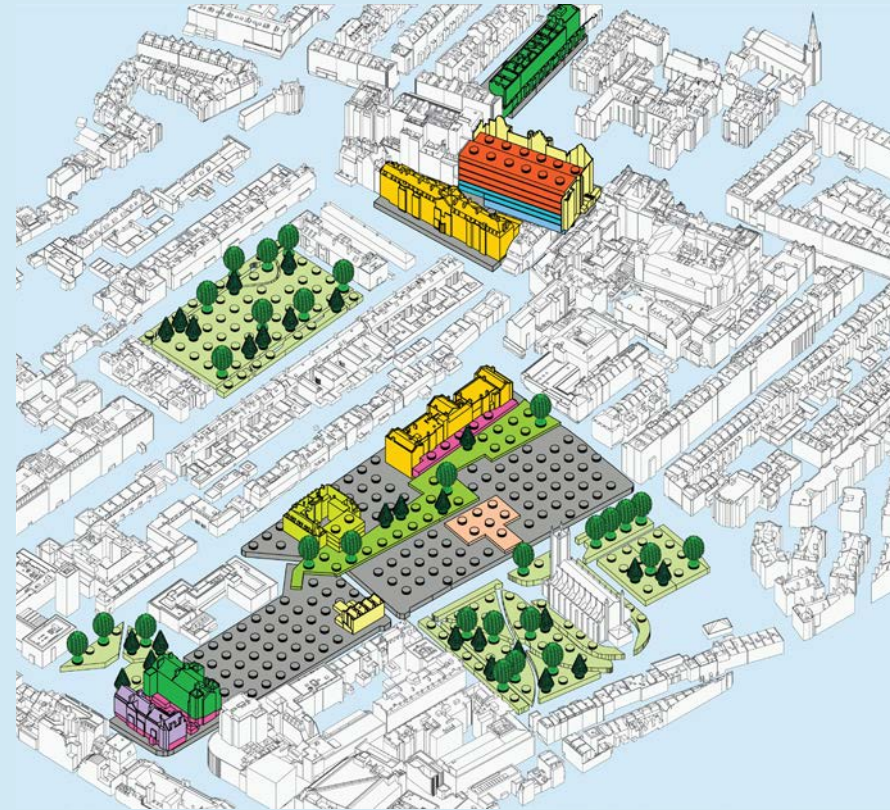


DESIGN NARRATIVE

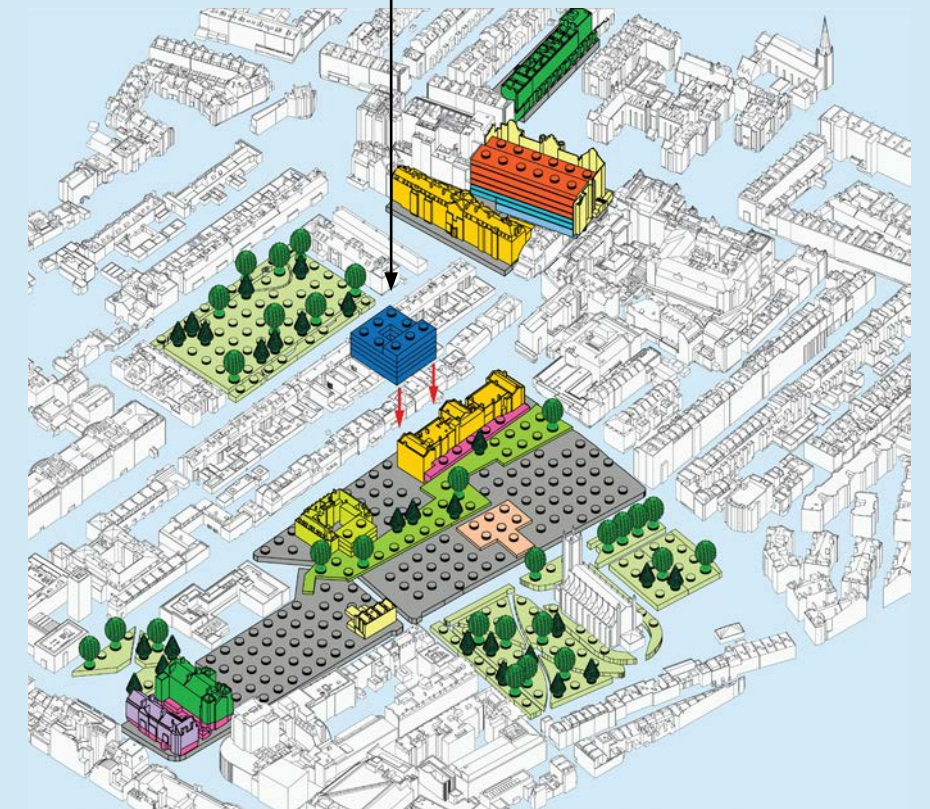
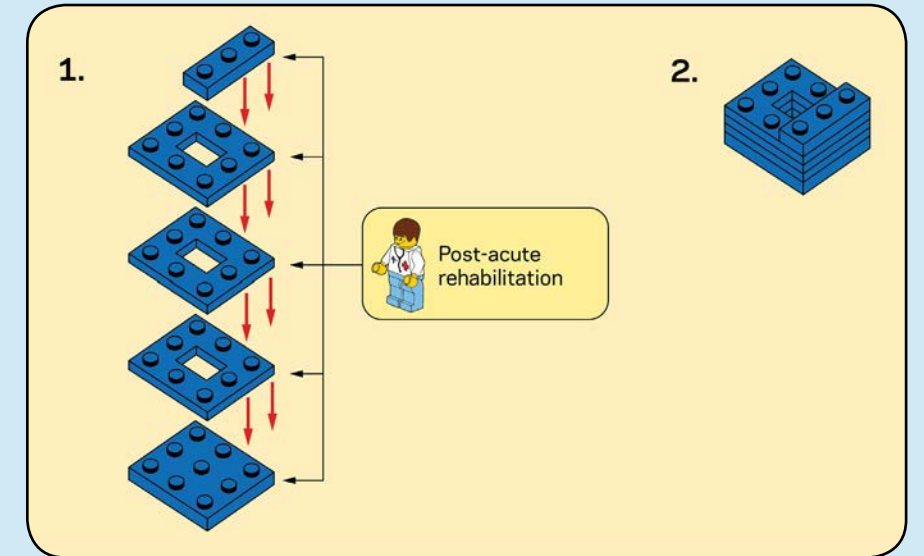
12 New blocks added to rear of Chelsea and Britten Wings to ensure active frontages around the full perimeter (1)



13 New blocks added to rear of Chelsea and Britten Wings to ensure active frontages around the full perimeter (2)



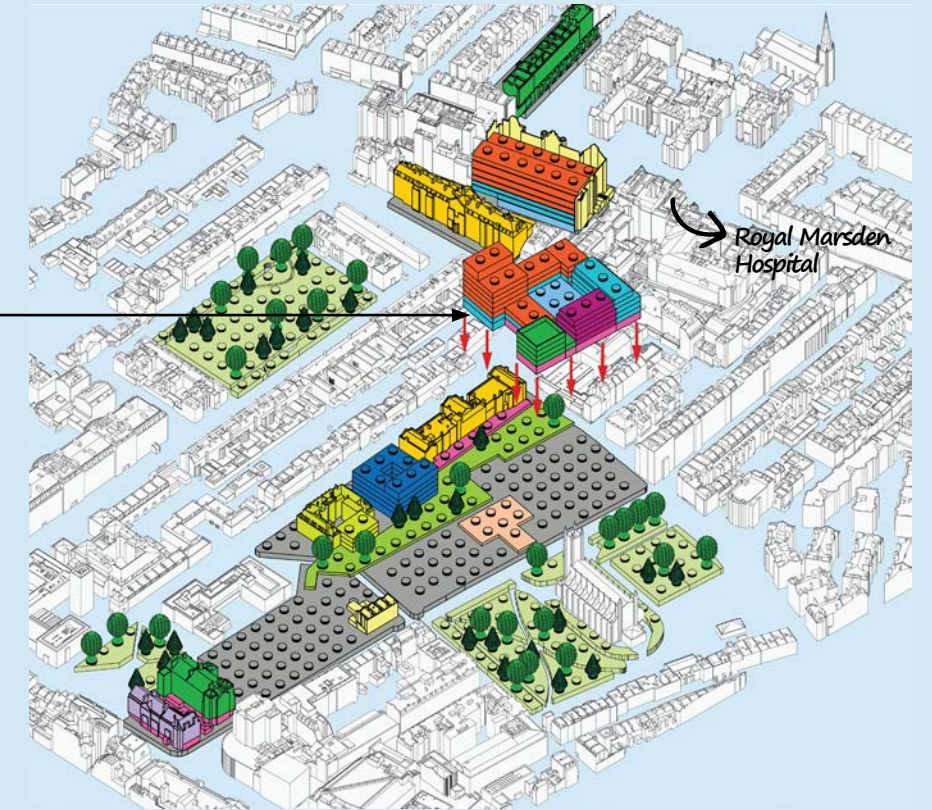
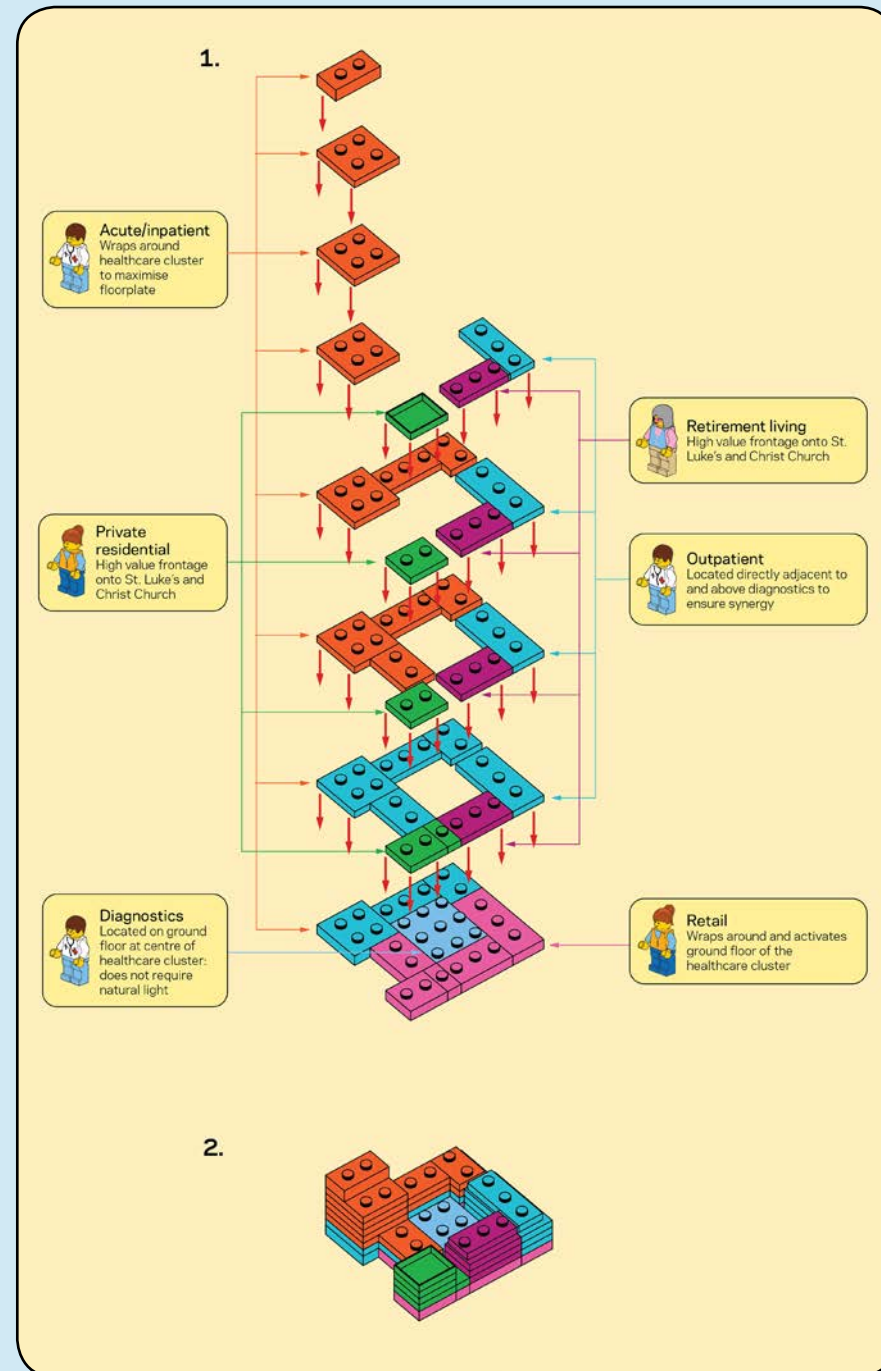
14 New block between Chelsea and Britten Wings to create continuous street frontage along Dovehouse Street (1)



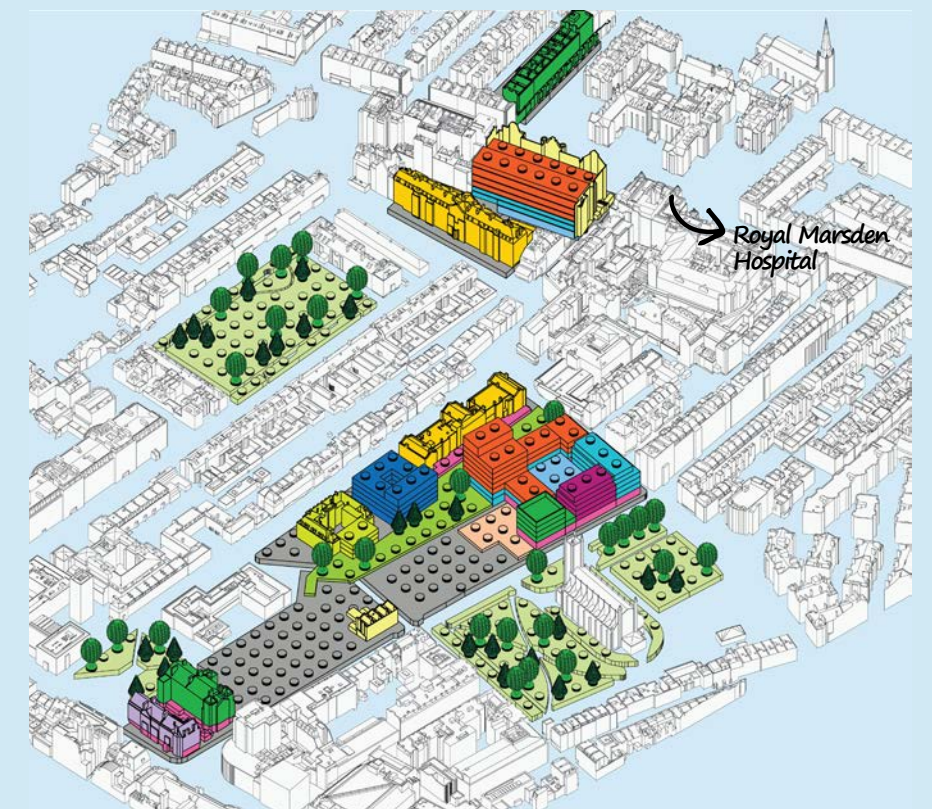
15 New block between Chelsea and Britten Wings to create continuous street frontage along Dovehouse Street (2)



16 "Healthcare cluster" combines complimentary healthcare uses to create a hub adjacent to the Royal Marsden (1)

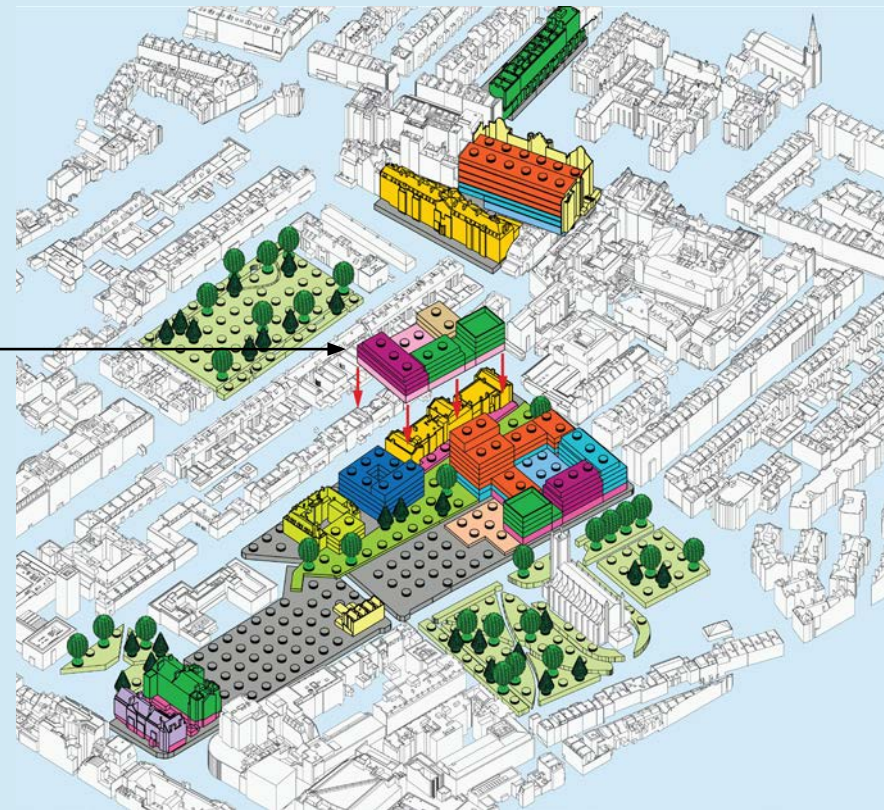
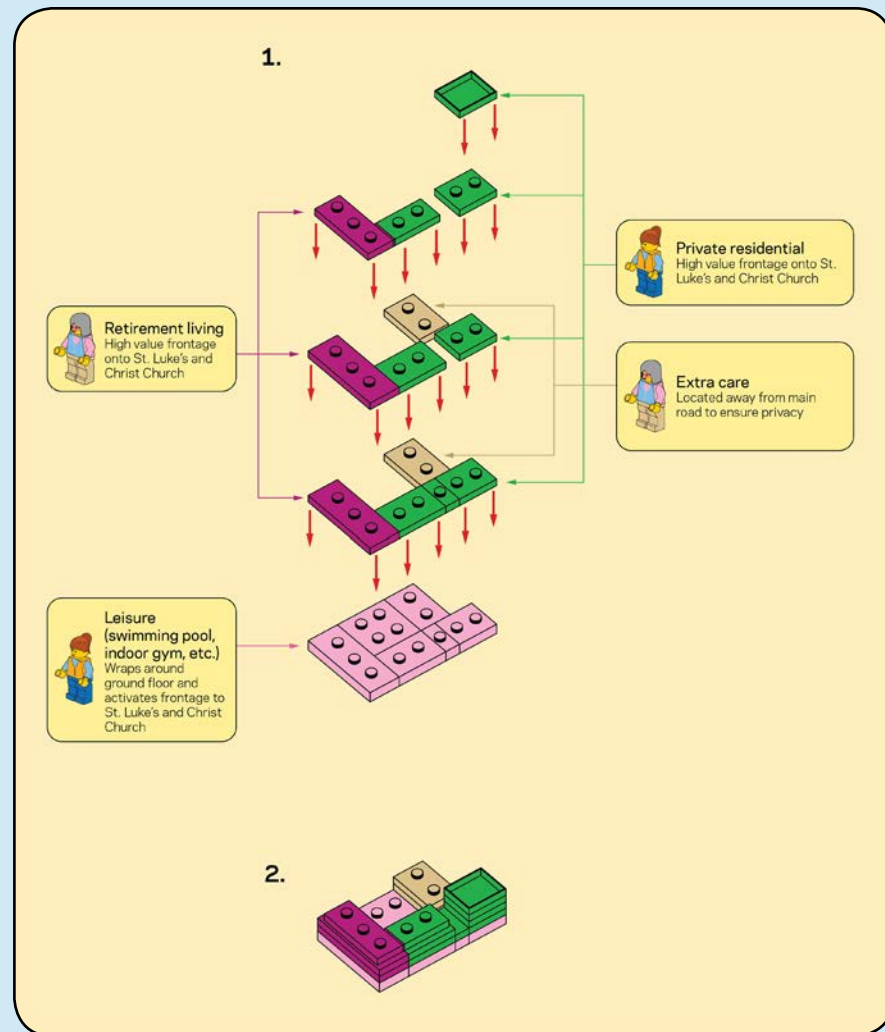


17 "Healthcare cluster" combines complimentary healthcare uses to create a hub adjacent to the Royal Marsden (2)

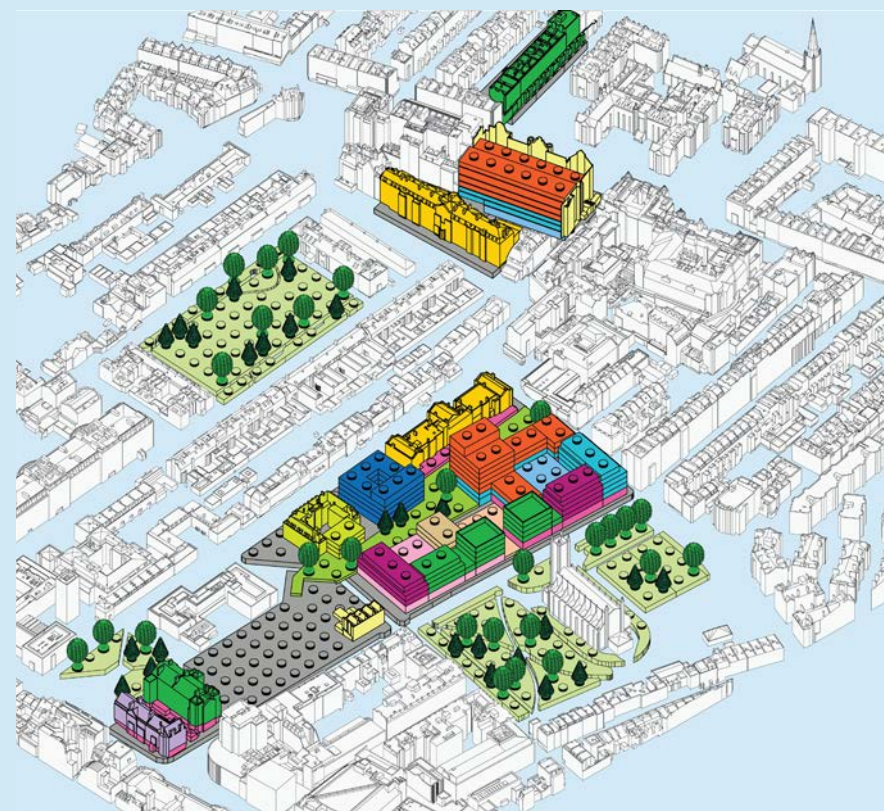


DESIGN NARRATIVE

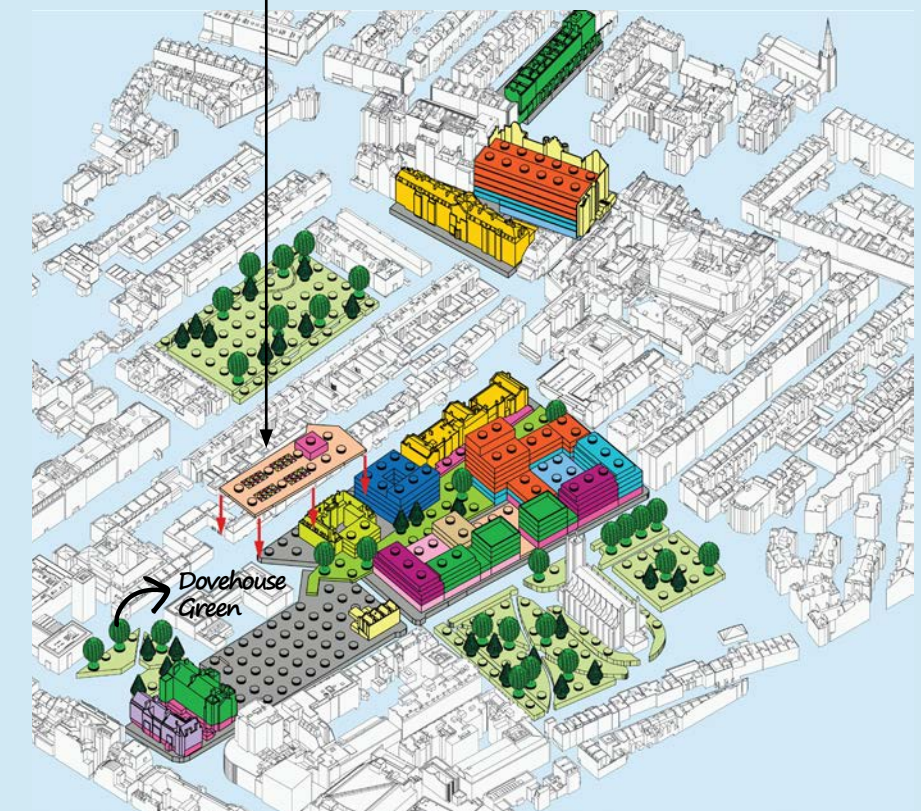
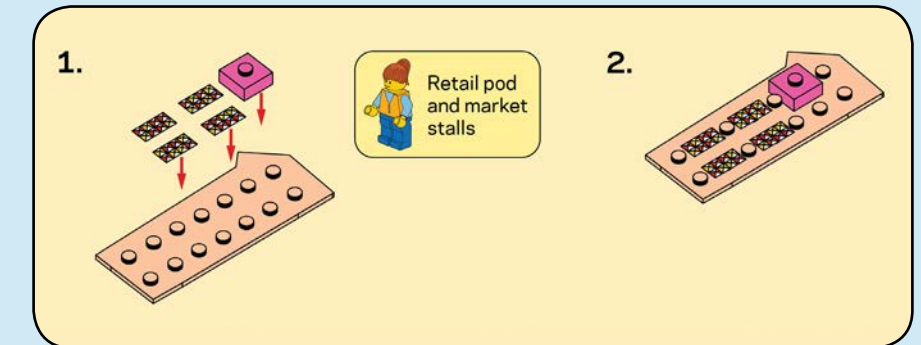
18 "Wellbeing cluster" to include a range of residential and lifestyle uses to support new and existing communities (1)



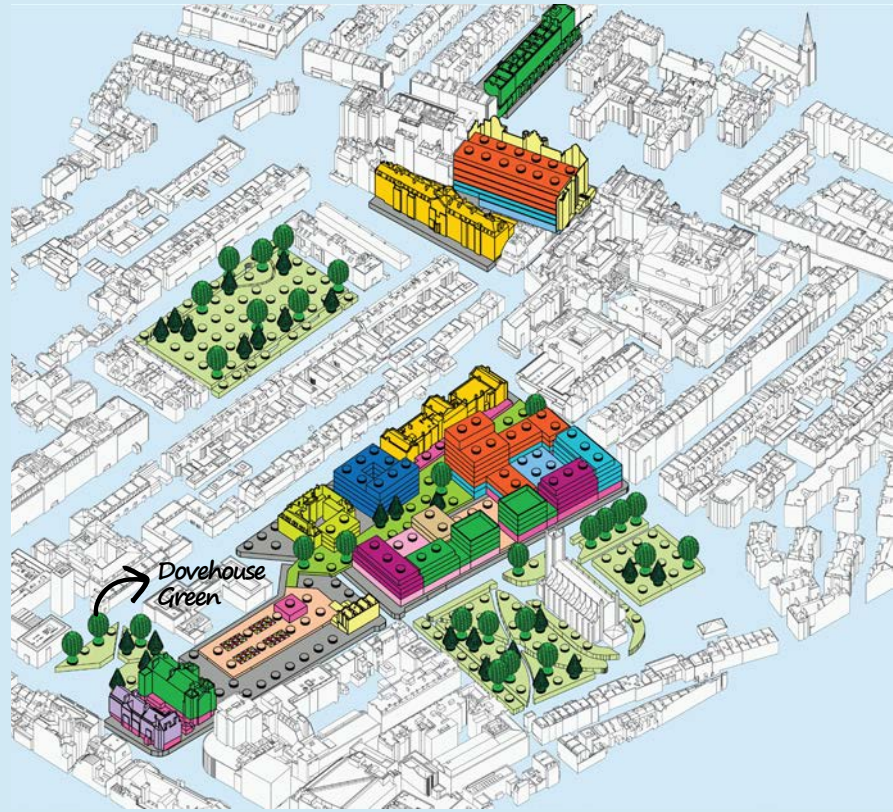
19 "Wellbeing cluster" to include a range of residential and lifestyle uses to support new and existing communities (2)



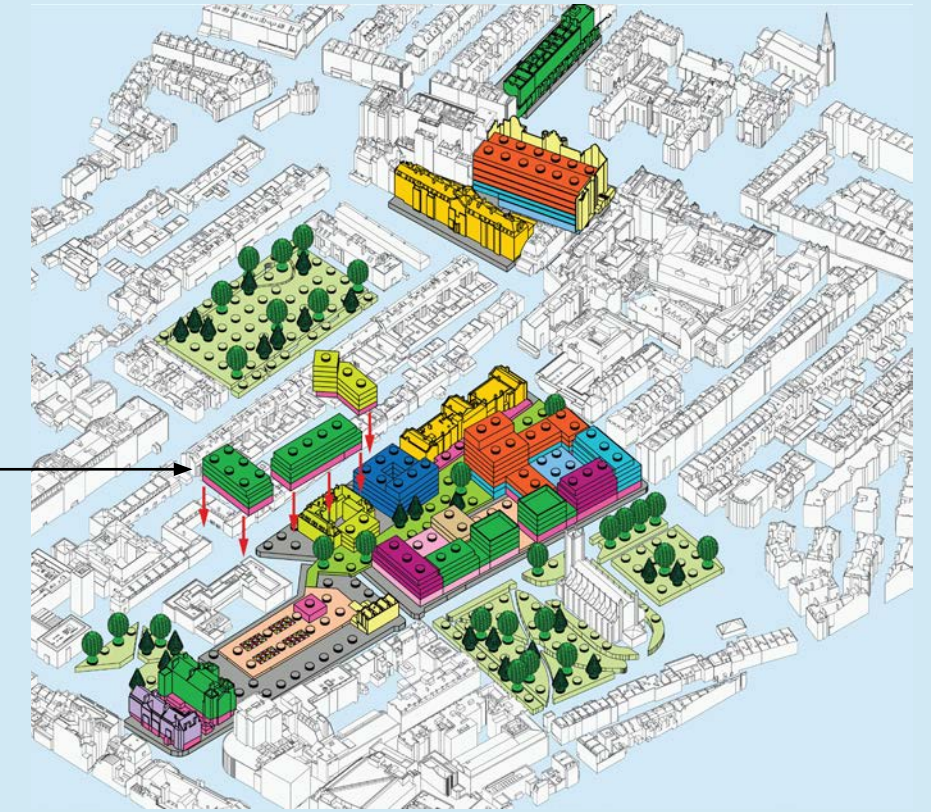
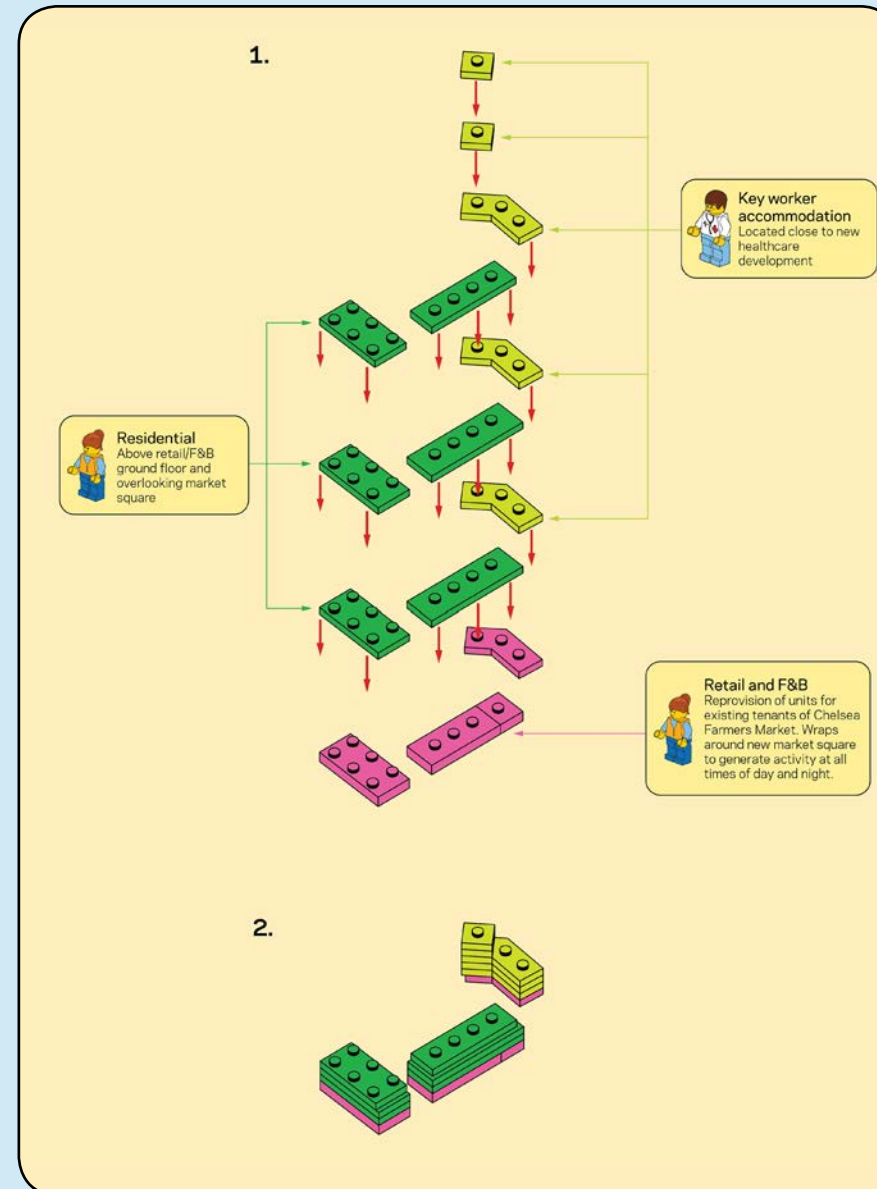
20 New market square in former Chelsea Farmers Market location: larger and more flexible space to support growth (1). Also provides a connection to Dovehouse Green at its southwestern corner.



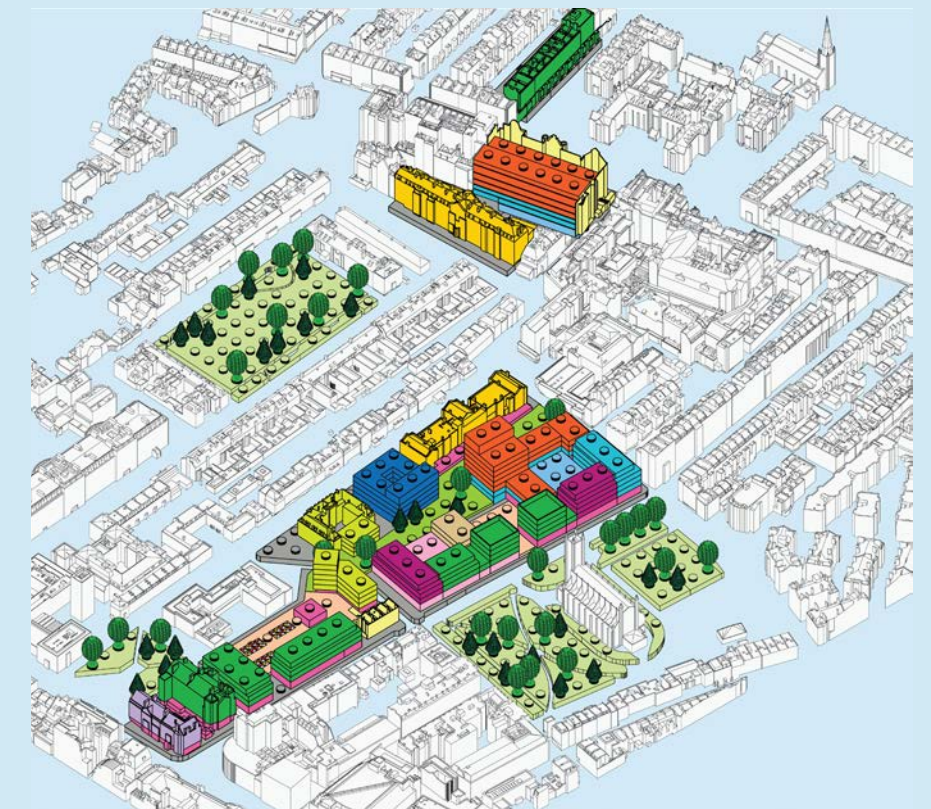
21 New market square in former Chelsea Farmers Market location: larger and more flexible space to support growth (2)



22 Reprovision of retail and F&B units from former Chelsea Farmers Market, with residential on upper floors (1)

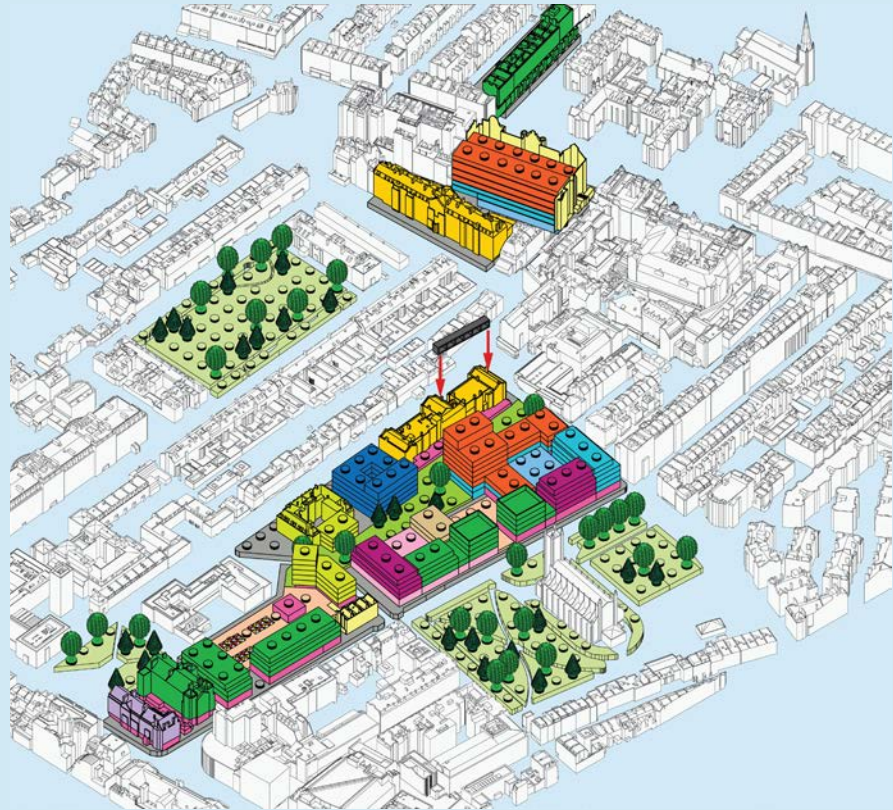


23 Reprovision of retail and F&B units from former Chelsea Farmers Market, with residential on upper floors (2)



DESIGN NARRATIVE

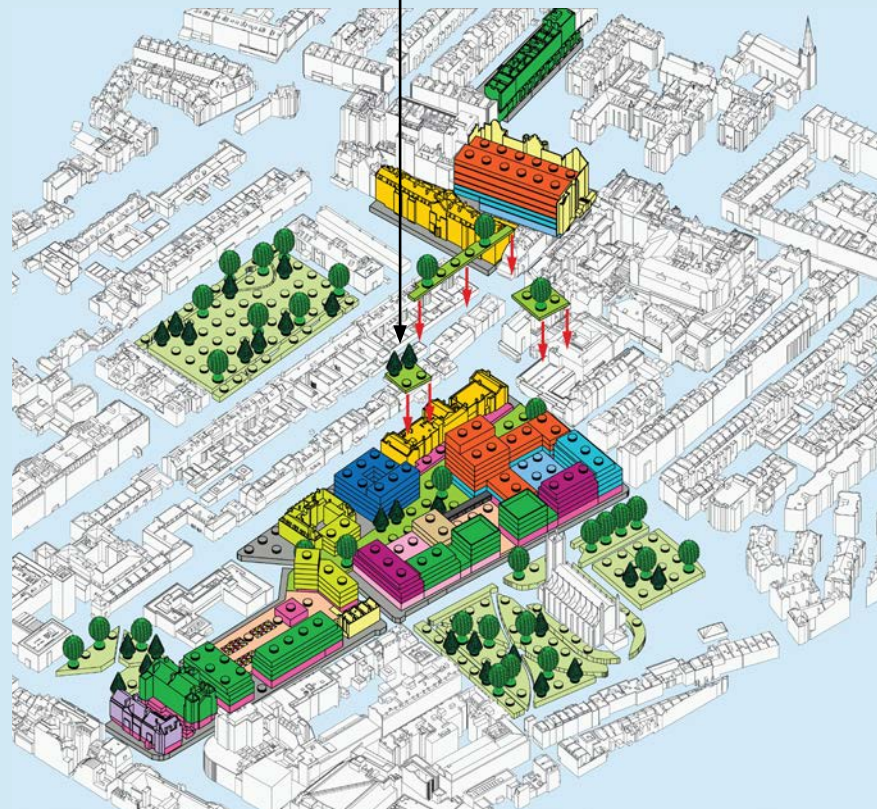
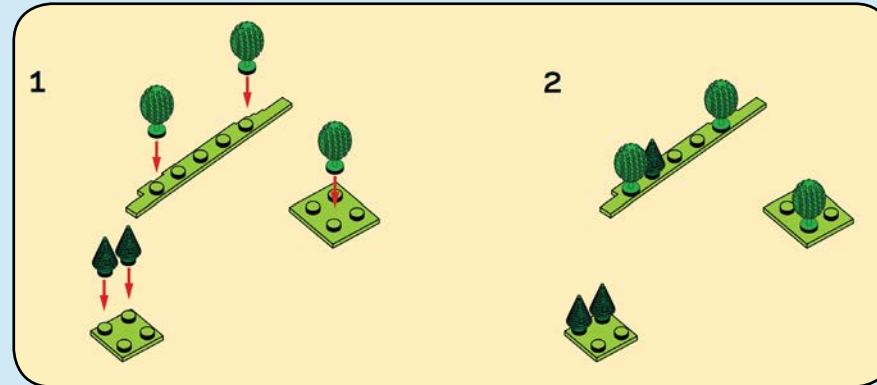
24 Permeable arcade to frame the new church square while allowing for pedestrian through-movement (1)



25 Permeable arcade to frame the new church square while allowing for pedestrian through-movement (2)



26 Communal courtyards on upper levels to create semi-private spaces for healthcare workers and patients to enjoy (1)

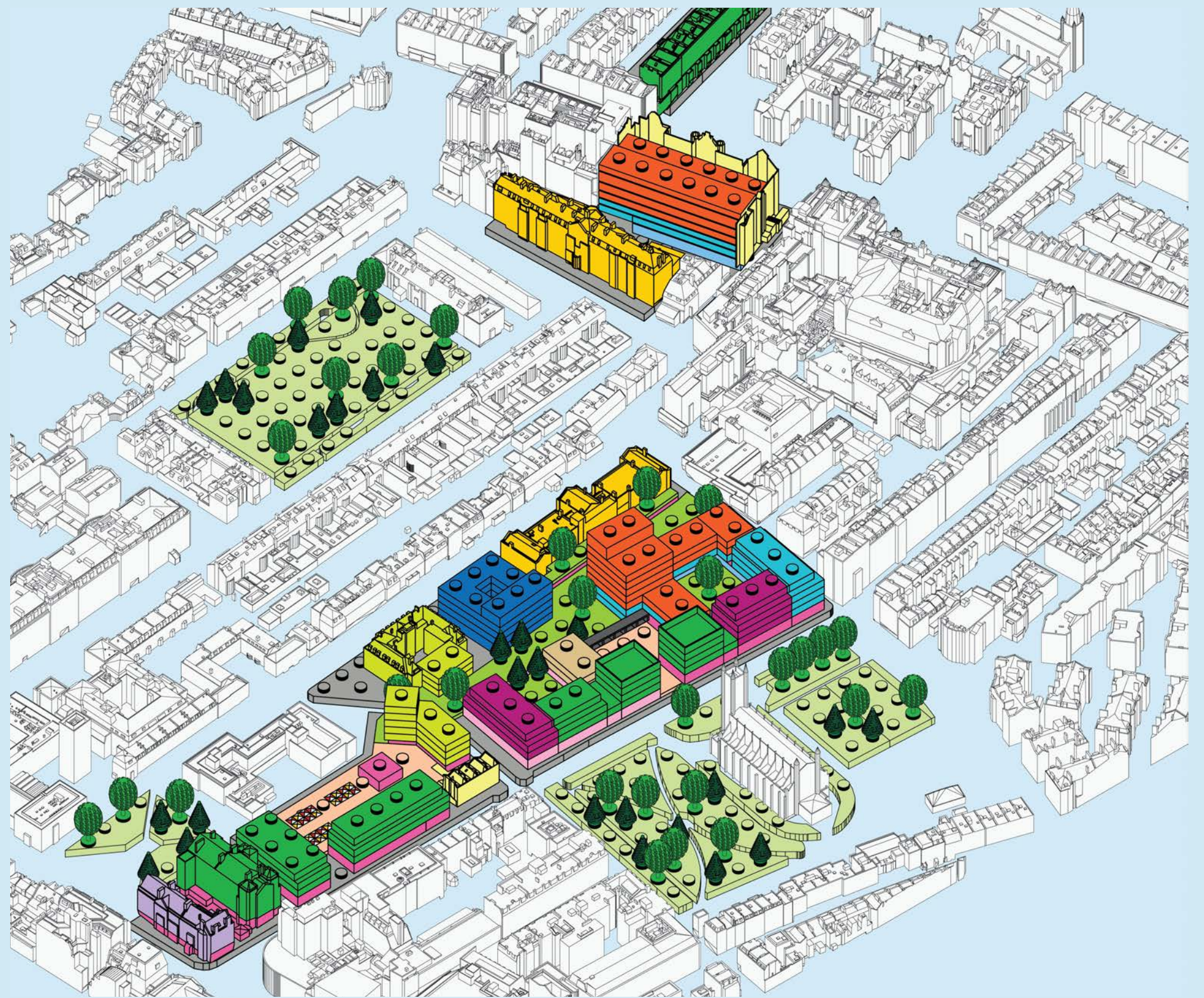


27 Communal courtyards on upper levels to create semi-private spaces for healthcare workers and patients to enjoy (2)



28 Final proposed masterplan. Key proposals are:

- Retention, retrofit and reuse of both listed and non-listed buildings that offer positive contribution to the surrounding conservation areas
- Delivery of social value and wider benefits for the local community in terms of new homes, new open spaces and new retail and leisure facilities
- Demolition of healthcare facilities that are no longer fit for purpose; to be replaced by buildings that have floorplates and floor-to-ceiling heights suitable for modern healthcare requirements
- Creation of a new "healthcare cluster" that combines several complementary healthcare uses to ensure positive synergies between these uses. It is to be located adjacent to the Royal Marsden Hospital to create a new healthcare "hub".
- Provision of a variety of residential typologies to cater to local housing need (particularly accommodation for the elderly and key workers), as well as providing commercial value
- Several new public and semi-private open spaces for both new and existing communities to enjoy. In particular, a new public square is provided for the Chelsea Farmers Market; its greater size allows flexibility for other public events to be held.



4.2 DELIVERING SOCIAL VALUE

Our communities are increasingly asking decision makers, what's in it for us? So long left out of the development narrative, communities have gained a voice and are asking local authorities, institutions and real estate developers how changes in their Borough can benefit them. Those living and working close to the Royal Brompton Hospital will be asking exactly this question. How will the proposals set out in this document add social value and how might it be delivered?

The RBKC's ambition to maintain medical uses on large parts of the Royal Brompton Hospital site establishes an excellent basis from which social value might be maintained and expanded. The proposed uses as set out in this document illustrate that social value will be at the heart of the regenerated area. However, much of what has been proposed is set within the private health sector suggesting that a more inclusive and complimentary offer needs to be developed in parallel. There is therefore the need for RBKC to employ its statutory powers such as S106 Agreements through which these complimentary used should be delivered. Embedding social value within legal mechanisms such as planning obligations will further ensure their delivery. These are best framed within the Local Plan and then in more detail via the Supplementary Planning Document (SPD). The RBKC will no doubt have a Social Value Policy in which its requirements will be further articulated.

The current Royal Brompton Hospital estate is inward looking offering little environmental benefit to the communities living and working in the area. Our proposals bring opportunities for the estate to become more outward looking inviting people into the heart of the estate. For example, Site C - which currently includes the Chelsea Wing, Britten Wing and Sydney Wing - will be opened with new public retail and leisure uses along an active route. Through the careful curation of space, the design of open and inviting streets and places, all communities are welcome to benefit from an inclusive, green and active environment. The health and wellbeing advantages of democratic space in which people are encouraged to meet and exchange conversations will bring communities together.

As stated in 1.2.9 Summary: Limitations and Social Needs (page 28), there is a significant opportunity to deliver uses that are currently in short supply in RBKC that would serve the wider community. In this proposed masterplan, these uses are focused around accommodation for elderly people and key workers, as well as more conventional healthcare-related uses.

Proposed uses that would deliver critical social benefit are as follows, and are also highlighted on the plan opposite:

Residential

- Elderly care
- Extra care
- Retirement living
- Key worker accommodation

Healthcare

- Acute / inpatient
- Diagnostics
- Outpatient
- Post-acute rehabilitation

Other uses


- Food & beverage
- Leisure
- Retail



4.3 ACCOMMODATION SCHEDULES

4.3.1 SITE A



 Private residential

Use type	GFA (m ²)	Notes
Private residential	3,830.89	Buildings retrofitted
TOTAL AREA	3,830.89	

ACCOMMODATION SCHEDULES

4.3.2 SITE B



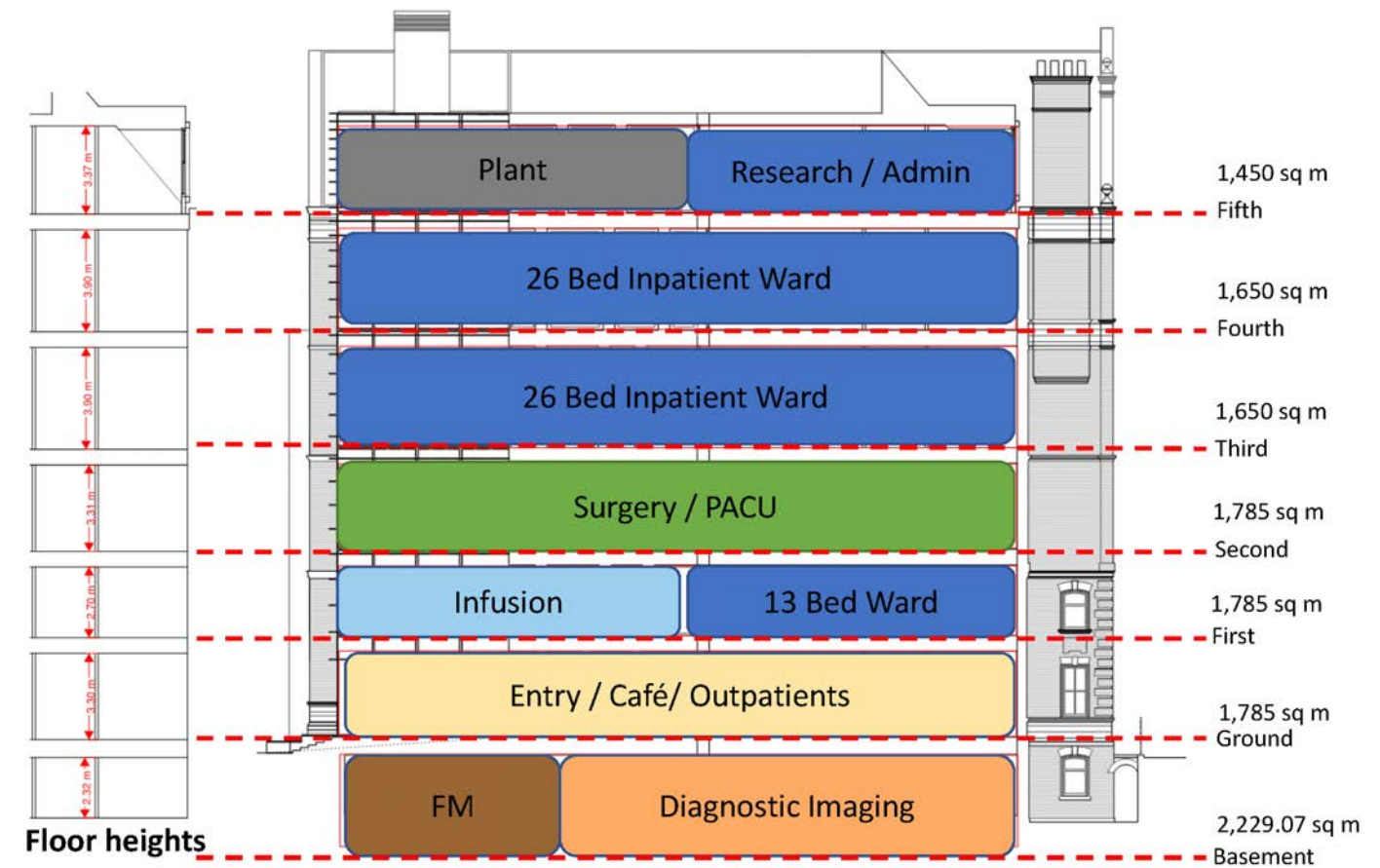
ACCOMMODATION SCHEDULES

4.3.2.1 SITE B: FULHAM WING OPTIONS

Original Planning Application (September 2014): façade retention with new building

- Clinical content as per 2014 application
- Façade retention with new building incorporating plant as required
- The MEP strategy renders this option **unfeasible**

Area schedule	
Fourth floor	1,650m ²
Second floor	1,785m ²
Ground floor	1,785m ²

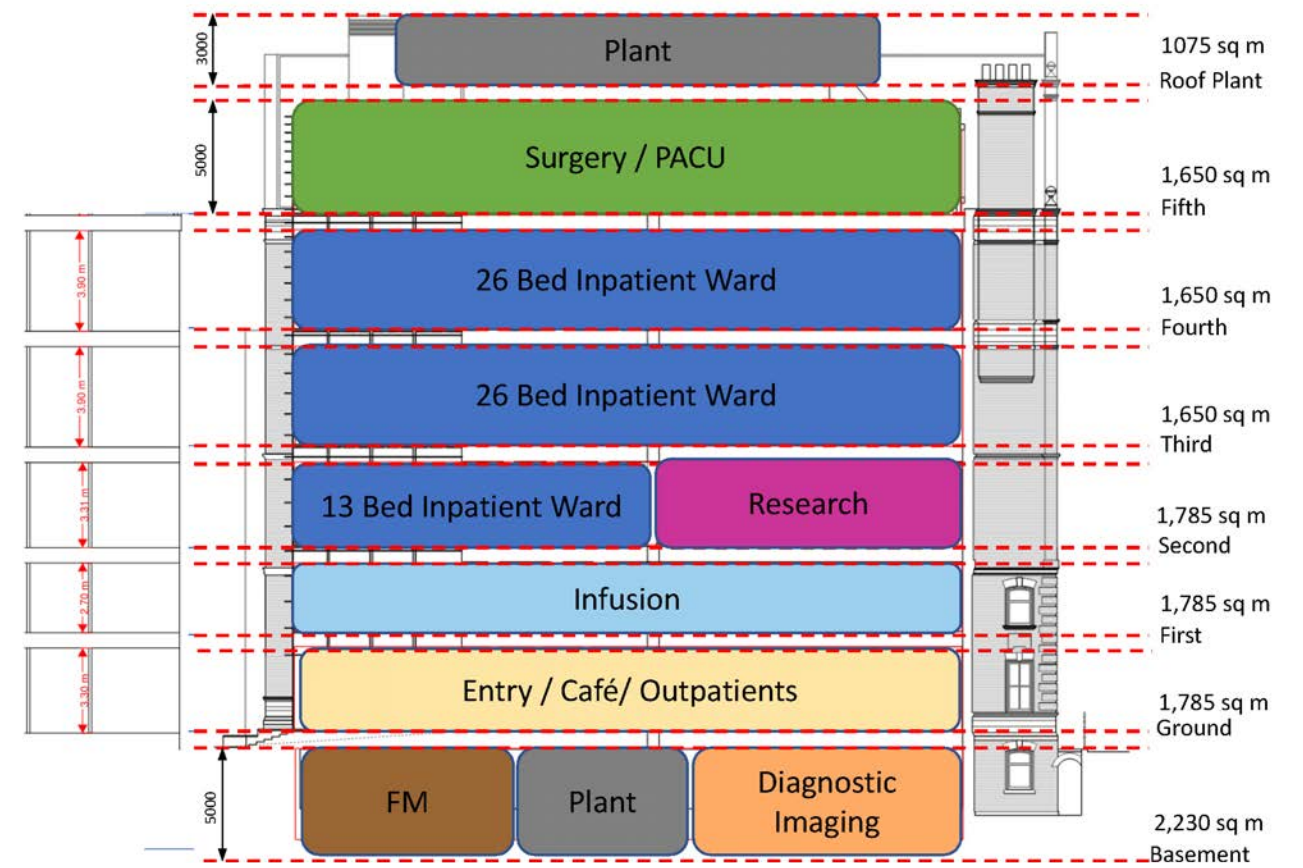


Southwest sectional elevation

Option 1: façade retention

Façade retention with a new fit-for-purpose healthcare building renders this option one of two preferred options (please see Option 3); it will require further testing to determine feasibility.

- Clinical content as per 2014 planning application rearranged
- Moves the surgical floor to the top of building, enables taller floor to floor height for high tech function & direct servicing from plant above
- Remains within original site footprint
- Similar building footprint as existing building
- Façade retention with new building incorporating plant as required
- New building height exceeds existing facade height



Southwest clinical stacking and blocking elevation

Area schedule

Fourth floor	1,650m ²
Second floor	1,650m ²
Mezzanine	1,785m ²
Basement	2,230m ²

Notes:

Clinical: 11,635m²
 Plant area: 700m²

Total plant area required for 11,635m² = 1,745 - 700 = 1,045m

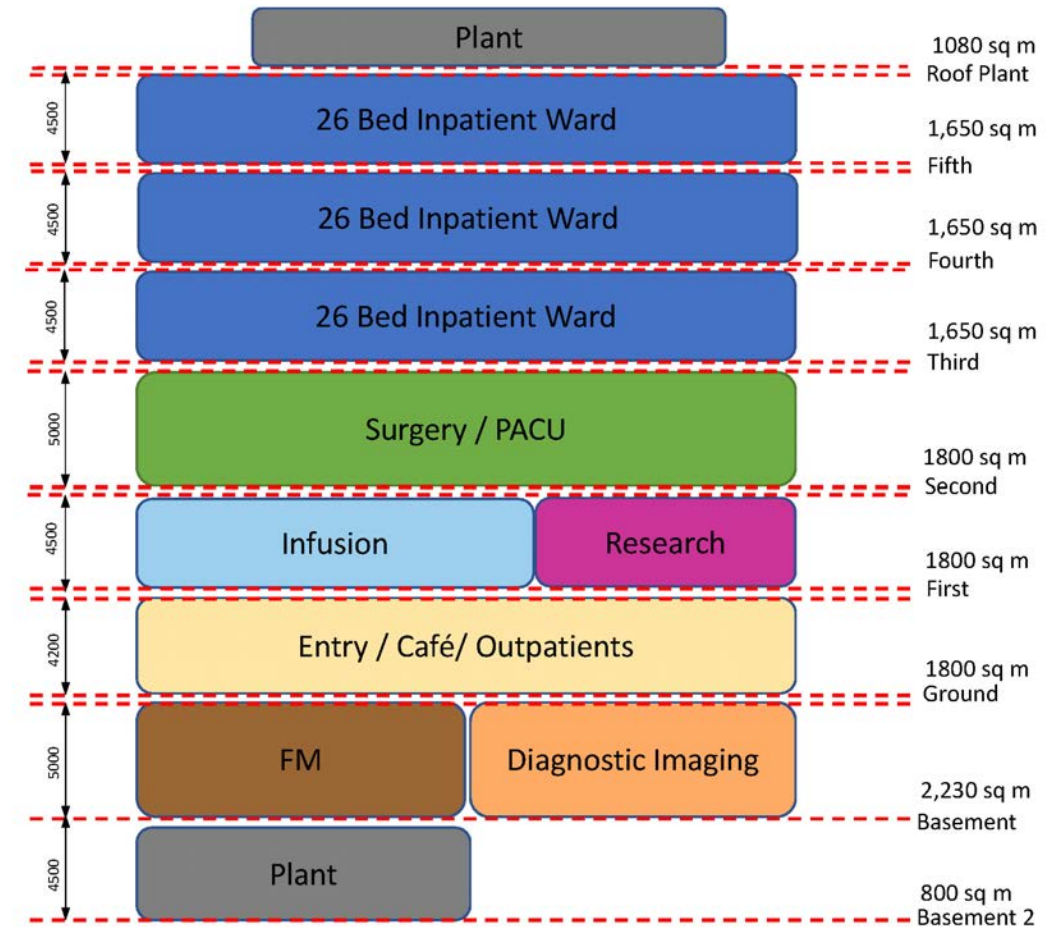


Indicative clinical blocking plans per level

Option 2: no façade retention

No façade retention will likely render this option **unfeasible**.

- Similar content as 2014 planning application: increased bed numbers from 65 to 78
- Full site demolition - no façade retention
- New build within the footprint of the existing site
- Similar building footprint as existing building
- Higher floor to floor heights increase the overall height of the building



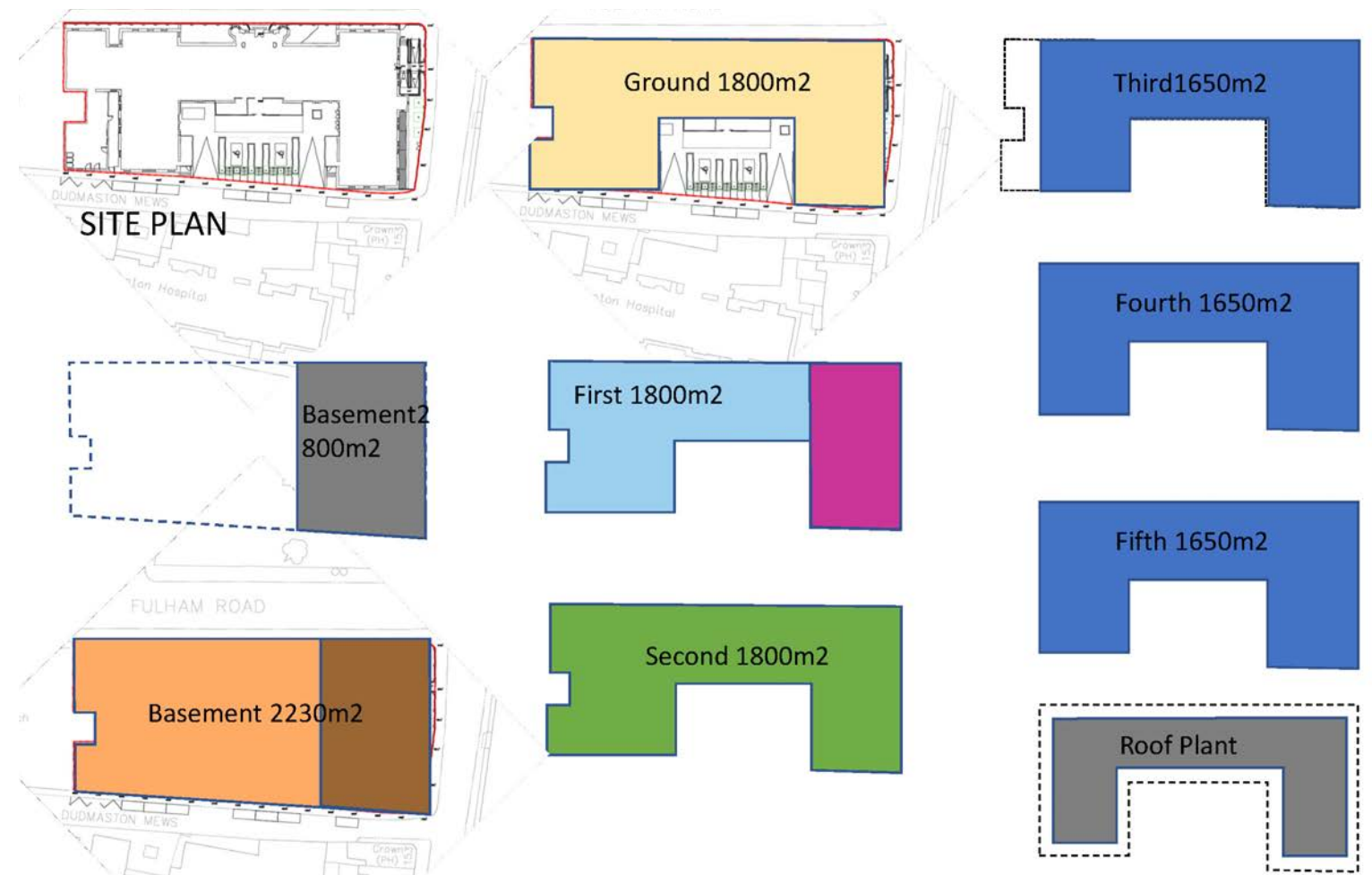
Southwest clinical stacking and blocking elevation

Area schedule

Fifth floor	1,650m ²
Third floor	1,650m ²
First floor	1,800m ²
Basement	2,230m ²

Notes:

Plant area: 1,880m²
15% of 12,580m² clinical area



Indicative clinical blocking plans per level

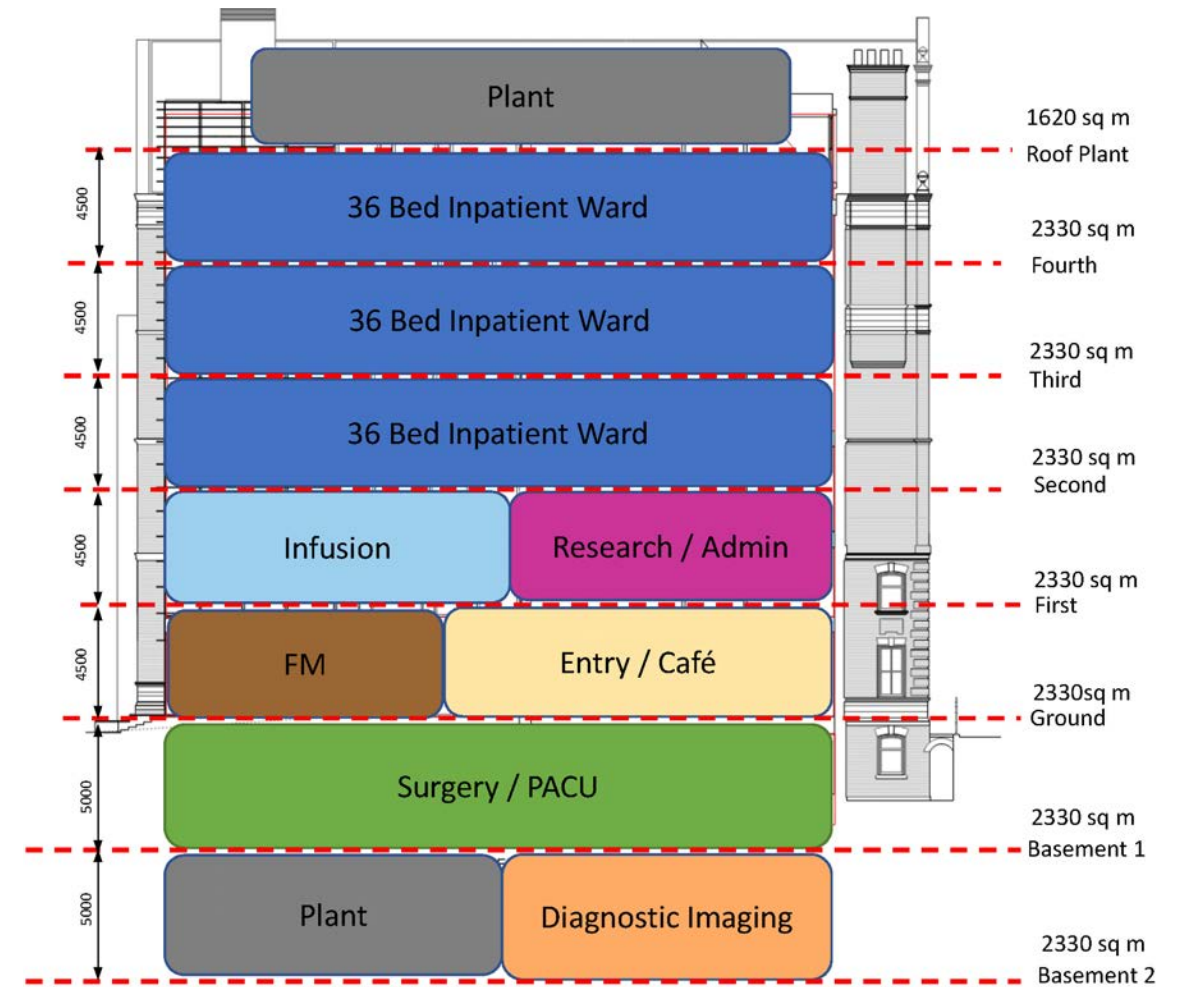
Option 3: full footprint

Façade retention with a new fit-for-purpose healthcare building renders this option one of two preferred options (please see Option 1); it will require further testing to determine feasibility.

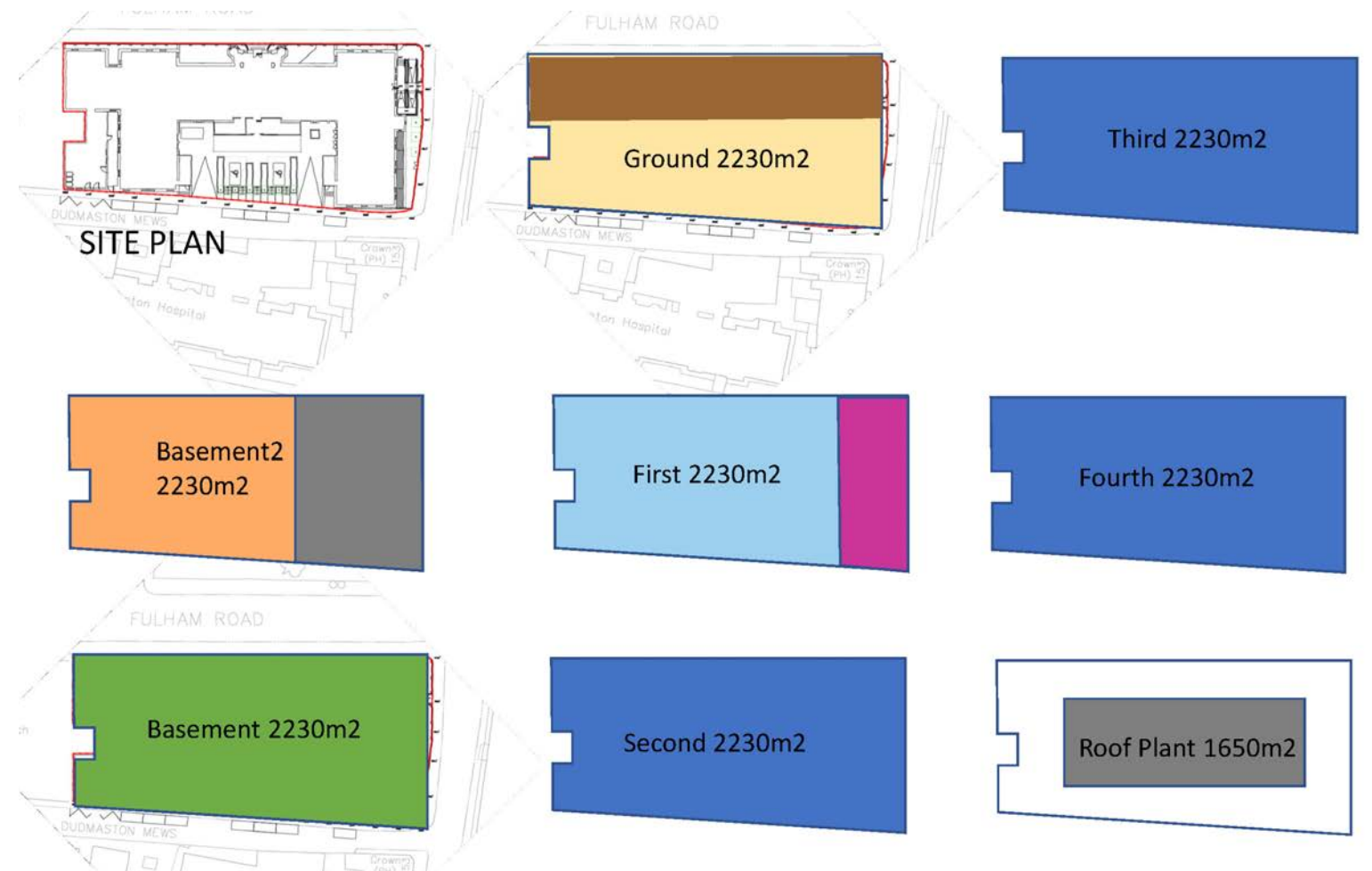
- Increased clinical content based on the same service lines as the planning application scheme
- Moves the surgical floor to the bottom of the building, enables taller floor to floor height for high tech function & direct servicing from plant below
- Moves tall high tech floors below ground to reduce the overall increase in building height
- Provides FM at ground level with direct access from Dudmaston Mews
- Remains within original site
- Increases the footprint to take up the whole site providing an increase in net useable area
- Façade retention; however, the new building is not integrated with the façade due to differing floor-to-ceiling requirements

Area schedule

Fourth floor	2,230m ²
Second floor	2,230m ²
Ground floor	2,230m ²
Basement 2	2,230m ²



Southwest clinical stacking and blocking elevation



Indicative clinical blocking plans per level

ACCOMMODATION SCHEDULES

4.3.2.2 SITE B: ACCOMMODATION SCHEDULE

1 Fulham Wing, Option 1: façade retention

Use type	GFA (m ²)	Notes
Clinical (inc. acute / inpatient, diagnostics and outpatient)	11,635	Fulham Wing façade retained with new building
Servicing	1,975	Fulham Wing façade retained with new building
TOTAL AREA	13,610	

1 Fulham Wing, Option 2: no façade retention

Use type	GFA (m ²)	Notes
Clinical (inc. acute / inpatient, diagnostics and outpatient)	12,580	Fulham Wing fully redeveloped
Servicing	1,880	Fulham Wing fully redeveloped
TOTAL AREA	14,460	

1 Fulham Wing, Option 3: full footprint

Use type	GFA (m ²)	Notes
Clinical (inc. acute / inpatient, diagnostics and outpatient) and servicing	17,260	Fulham Wing façade retained with new building
TOTAL AREA	17,260	

2 Clinical Skills and Simulation Centre

Use type	GFA (m ²)	Notes
Elderly care	5,844.03	Clinical Skills & Simulation Centre retrofitted
TOTAL AREA	5,844.03	

Total Site B (with Fulham Wing, Option 1)

Use type	GFA (m ²)	Notes
Clinical (inc. acute / inpatient, diagnostics and outpatient)	11,635	Fulham Wing façade retained with new building
Servicing	1,975	Fulham Wing façade retained with new building
Elderly care	5,844.03	Clinical Skills & Simulation Centre retrofitted
TOTAL AREA	19,454.03	

Total Site B (with Fulham Wing, Option 2)

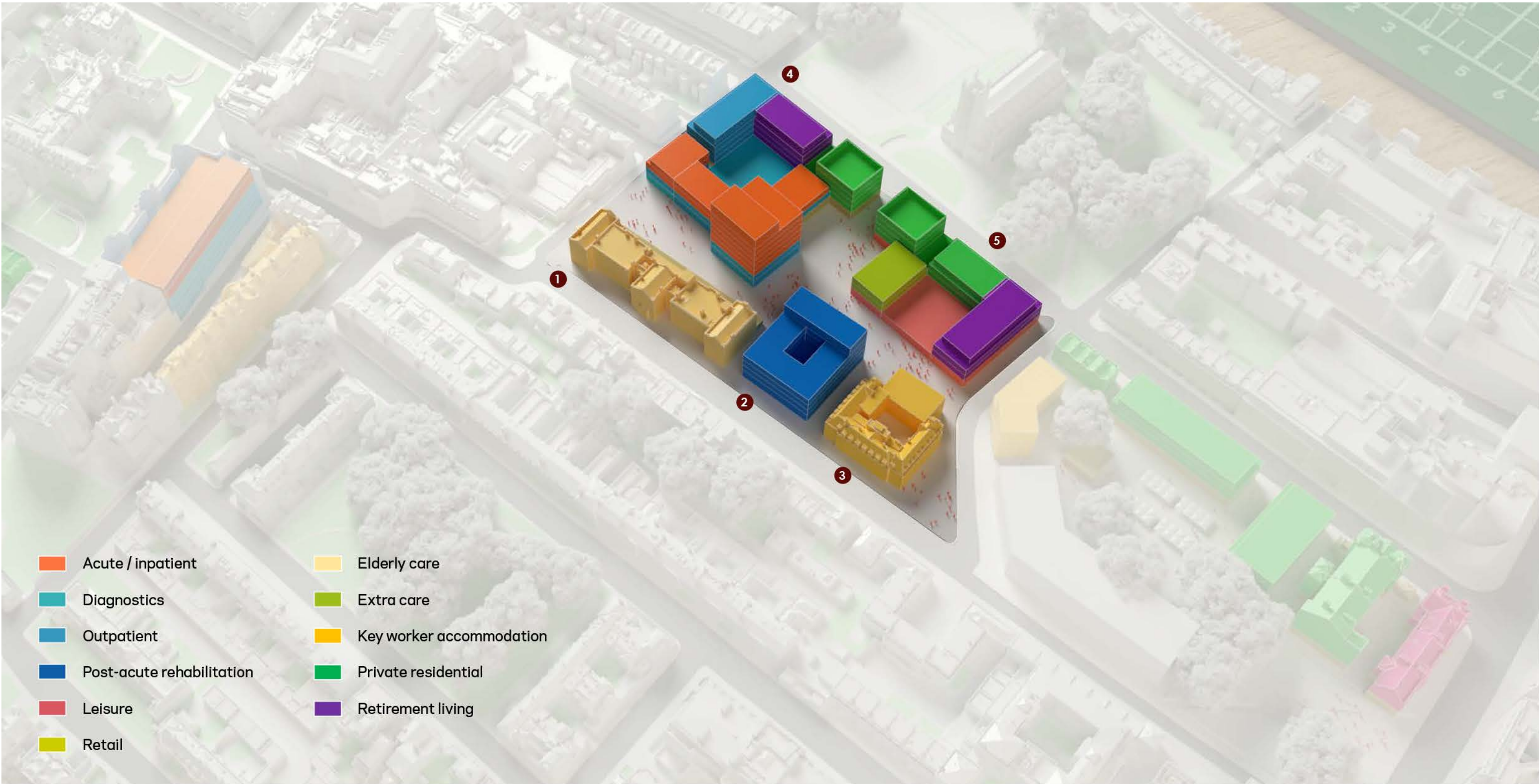
Use type	GFA (m ²)	Notes
Clinical (inc. acute / inpatient, diagnostics and outpatient)	12,580	Fulham Wing fully redeveloped
Servicing	1,880	Fulham Wing fully redeveloped
Elderly care	5,844.03	Clinical Skills & Simulation Centre retrofitted
TOTAL AREA	20,304.03	

Total Site B (with Fulham Wing, Option 3)

Use type	GFA (m ²)	Notes
Clinical (inc. acute / inpatient, diagnostics and outpatient) and servicing	17,260	Fulham Wing façade retained with new building
Elderly care	5,844.03	Clinical Skills & Simulation Centre retrofitted
TOTAL AREA	23,104.03	

ACCOMMODATION SCHEDULES

4.3.3 SITE C



1 Chelsea Wing

Use type	GFA (m²)	Notes
Elderly care	4,556	Chelsea Wing retrofitted
Retail	466.90	New build integrated to rear of Chelsea Wing
TOTAL AREA	5,022.90	

2 Post-acute rehabilitation block

Use type	GFA (m²)	Notes
Post-acute rehabilitation	3,743.66	New build
TOTAL AREA	3,743.66	

3 Britten Wing

Use type	GFA (m²)	Notes
Key worker accommodation	3,978.10	Britten Wing retrofitted with new block added to rear
TOTAL AREA	3,978.10	

4 Healthcare cluster

Use type	GFA (m²)	Notes
Acute / inpatient	4,574.39	New build
Outpatient	4,869.08	New build
Diagnostics	784.11	New build
Retirement living	1,580.91	New build
Private residential	1,328	New build
Retail	1,824.56	New build
TOTAL AREA	14,961.05	

5 Wellbeing cluster

Use type	GFA (m²)	Notes
Extra care	694.47	New build
Retirement living	1,639.35	New build
Private residential	2,377.54	New build
Leisure	2,317.05	New build
TOTAL AREA	7,028.41	

Total Site C

Use type	GFA (m²)	Notes
Acute / inpatient	4,574.39	New build
Outpatient	4,869.08	New build
Diagnostics	784.11	New build
Post-acute rehabilitation	3,743.66	New build
Key worker accommodation	3,978.10	Britten Wing retrofitted with new block added to rear
Elderly care	4,556	Chelsea Wing retrofitted
Extra care	694.47	New build
Retirement living	3,220.26	New build
Private residential	3,705.54	New build
Leisure	2,317.05	New build
Retail	2,291.45	New build
TOTAL AREA	34,734.11	

ACCOMMODATION SCHEDULES

4.3.4 SITE D



1 Key worker accommodation / retail block

Use type	GFA (m ²)	Notes
Key worker accommodation	1,416.59	New build
Retail	404.26	New build
TOTAL AREA	1,820.85	

2 117-123 Sydney Street

Use type	GFA (m ²)	Notes
Private residential	448.63	Existing use
Retail	250.44	Existing use
TOTAL AREA	699.07	

3 Residential / retail block 1 + retail pod in market square

Use type	GFA (m ²)	Notes
Private residential	2,056.87	New build
Retail	878.66	New build
TOTAL AREA	2,935.53	

4 Residential / retail block 2

Use type	GFA (m ²)	Notes
Private residential	1,742.09	New build
Retail	591.76	New build
TOTAL AREA	2,333.85	

5 151 Sydney Street

Use type	GFA (m ²)	Notes
Private residential	2,019.60	Retrofitted upper floors
Food & beverage	579.12	Retrofitted ground floor
TOTAL AREA	2,598.72	

6 250 King's Road

Use type	GFA (m ²)	Notes
Office	766.57	Retrofitted upper floors
Food & beverage	404.87	Retrofitted ground floor
TOTAL AREA	1,171.44	

Total Site D

Use type	GFA (m ²)	Notes
Key worker accommodation	1,416.59	New build
Retail	2,125.12	New build and existing retail on ground floor of 117-123 Sydney Street
Private residential	6,267.19	New build, existing residential on upper floors of 117-123 Sydney Street, and retrofitted upper floors of 151 Sydney street
Office	766.57	Retrofitted upper floors of 250 King's Road
Food & beverage	983.99	Retrofitted ground floor
TOTAL AREA	11,559.45	

ACCOMMODATION SCHEDULES

4.3.5 COMBINED TOTAL

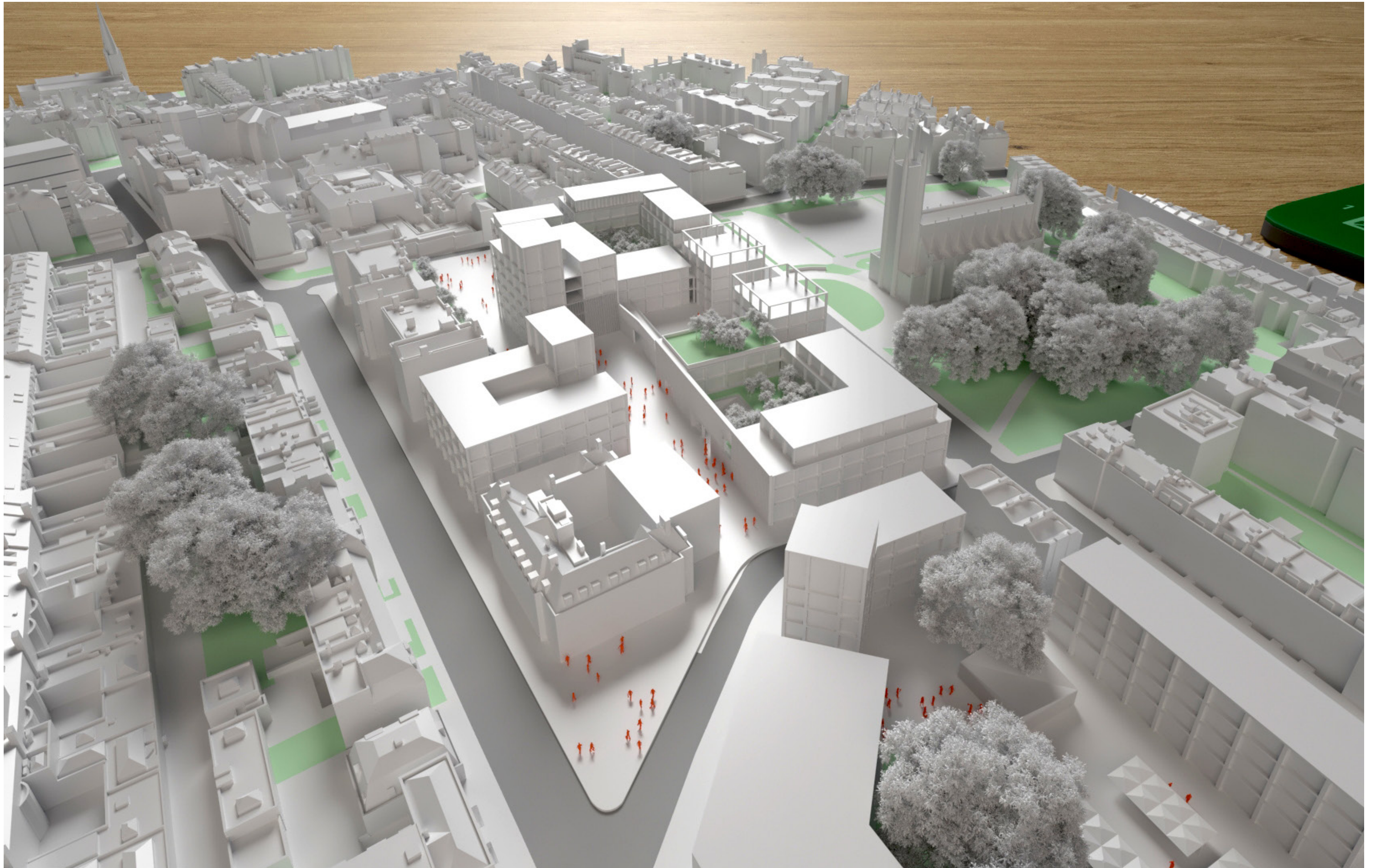


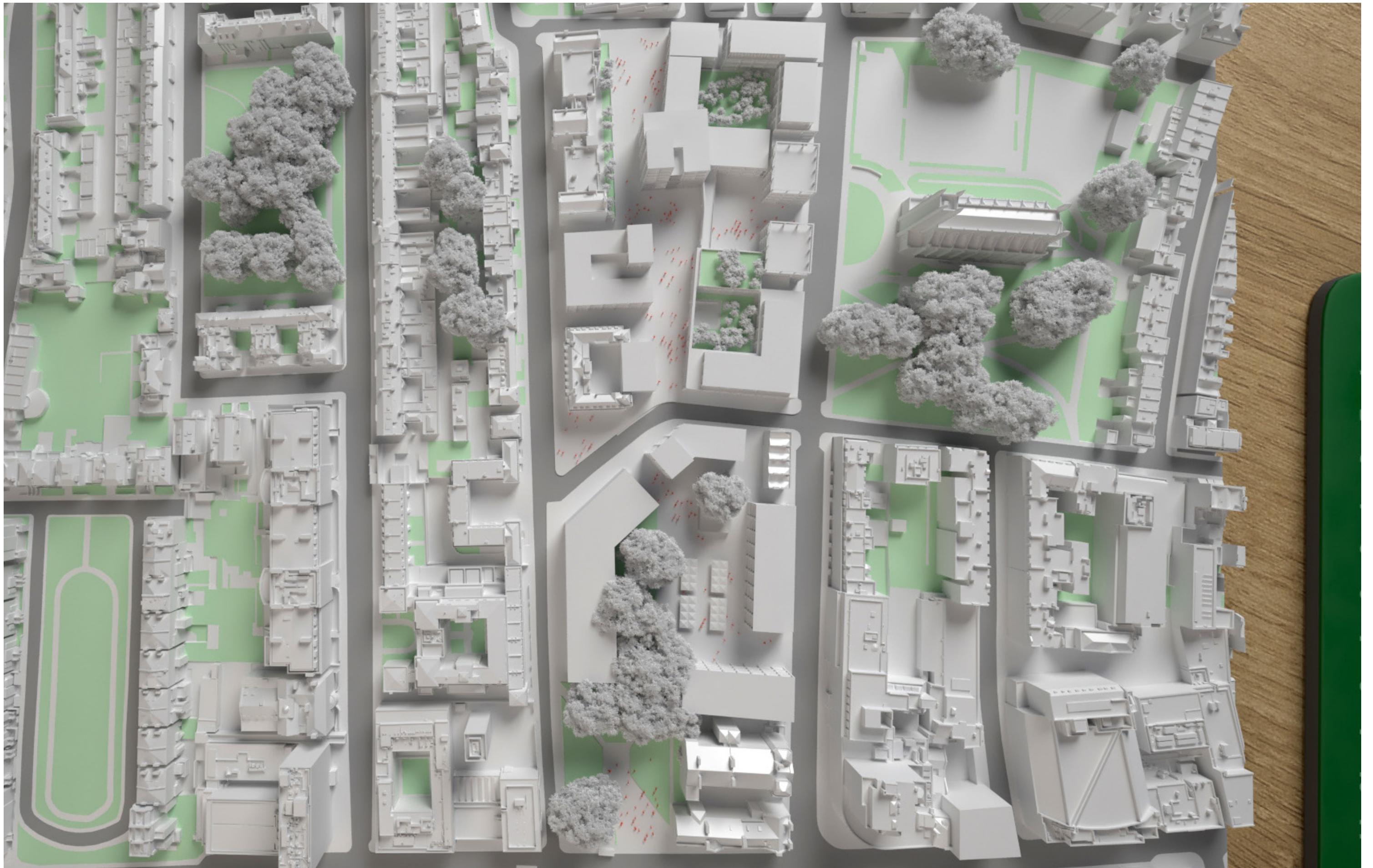
4.4 ILLUSTRATIVE RENDERS AND SKETCHES





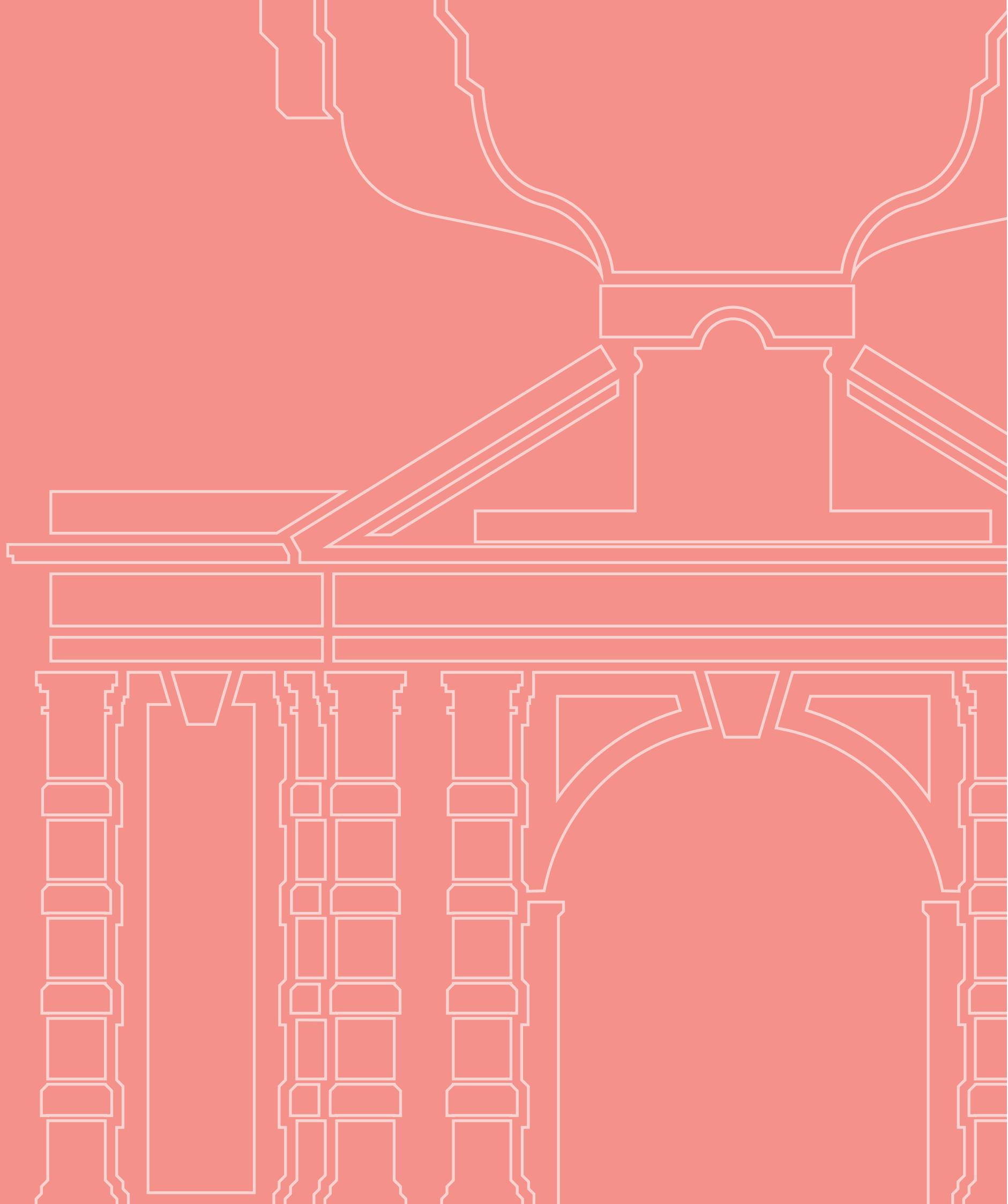
ILLUSTRATIVE RENDERS AND SKETCHES





ILLUSTRATIVE RENDERS AND SKETCHES





THE ROYAL BOROUGH OF
KENSINGTON
AND CHELSEA

CBRE

