

## Site Surveys and Supporting Documents

### 2.13 Topographical Survey

The topographical survey shows that there are no significant level changes across the site in either the north-south or the east-west direction.

### 2.14 Ecological Surveys

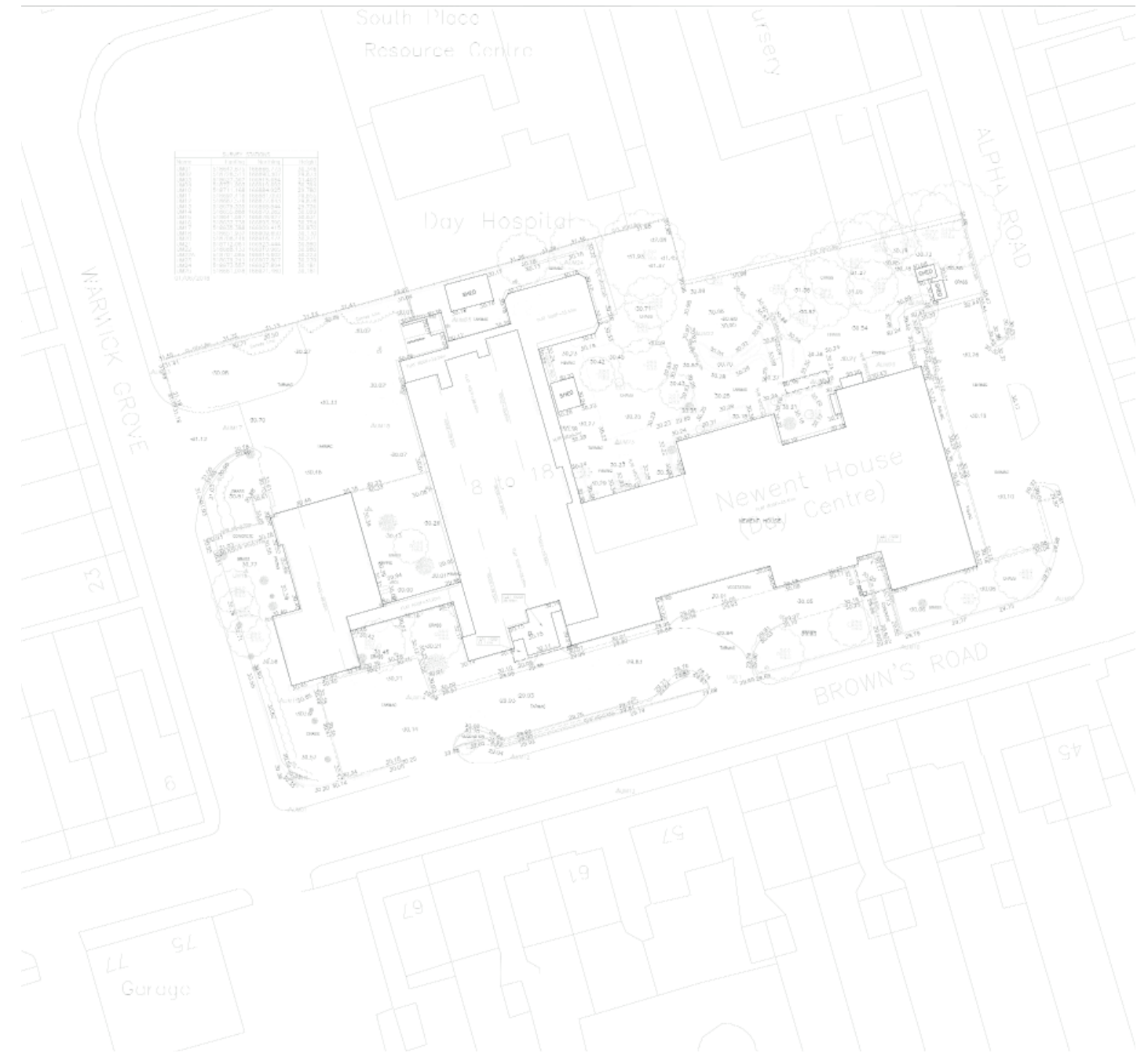
The Ecology Consultancy was commissioned to carry out a Preliminary Ecological Appraisal (PEA), comprising a Phase 1 habitat survey, protected species assessment and ecological evaluation of the existing building and land at Kingston Dementia Nursing Home, Surbiton.

The main findings of the PEA are as follows:

- The site comprised a residential care home property formed of two main buildings, with a garden and outbuildings. The main habitats present include amenity grassland, species-poor semi improved grassland, scattered trees, introduced shrub and horticultural planting.
- The site is not subject to any statutory or non-statutory nature conservation designations. The nearest statutory designated site is The Wood and Richard Jeffries Bird Sanctuary Local Nature Reserve located approximately 0.44 kilometres north-west

of the site. The nearest non-statutory designated site is Fishponds Site of Borough Importance for Nature Conservation (SBINC), located 35m to the south of the site.

- Bats – The two main buildings (B1 and B2) with moderate potential and a single building with low potential (B3) to support roosting bats were identified within the site boundary and will be affected by the development. In order to comply with legislation, further survey is required to determine if any bats are using these buildings for roosting. Two trees with ivy covering offering low bat potential were also noted on site. No further survey work for bats will be required on the trees on site.
- Great crested newt – habitats on site have potential to support great crested newt and will be affected by the development. The site is considered to have low potential to support great crested newt. Precautionary working practices are provided to ensure legal compliance for this species. A precautionary check for great crested newt should be undertaken ahead of any vegetation clearance, which should take place outside of the hibernation period.



- Breeding birds – buildings, scrub, introduced shrub, hedgerows and scattered trees on site have potential to support breeding birds. These features should be removed outside of the breeding bird season or checked by an ecologist immediately prior to removal.

- Reptiles – habitats with low potential to support reptiles were present at the site. In order to comply with legislation, it is recommended the vegetation on site is managed to dissuade reptiles from using the site. A precautionary check for reptiles should be undertaken ahead of any vegetation clearance, which should take place outside of the hibernation period.

- Other mammals – Fox and hedgehog are considered likely to be present on site. To avoid possible contravention of the Wild Animals (Protection) Act 1996, due care and attention The Ecology Consultancy Kingston Dementia Nursing Home, Surbiton / Preliminary Ecological Appraisal / Report for Integrated Health Projects 2 should be taken when carrying out works that will impact on the potential fox den, which should be carefully dug out using hand tools, avoiding the breeding season (March – July).

Vegetation clearance should be undertaken outside

of the hibernation period (November– March inclusively).

- Mature trees on site should be retained where possible.
- Recommendations to enhance the biodiversity value of the site in accordance with national and local planning policies comprise native scrub and tree planting, good horticultural practice, wildflower grassland creation, and the provision of bat roosting opportunities.

Proposed Nursing Home development has taken into account the recommendations from the report and the landscape design proposals aim to enhance the biodiversity on site.

## 2.15 Energy Statement

The client and design team are committed to achieving the carbon savings set out in the energy strategy for the proposed development.

The proposed strategy minimises energy loss and consumption by improving the building fabric and installing high efficiency equipment. This will provide improvements of 17% for the new Kingston Dementia Nursing Home against Approved Document L 2013 notional targets.

According to our analysis, the proposed solar thermal panels, PV panels and heat pumps will also generate renewable energy and provide the new building with a further 18% improvement.

Overall the new dementia unit will achieve a 35% improvement on Approved Document L 2013 requirements, thus exceeding the 35% London Plan target.

The development as a whole will achieve CO2 savings of 80.4 tonnes per annum.

Further details can be found in the Energy Statement by Hulley & Kirkwood, submitted as part of the planning application.

## 2.16 BREEAM

The BREEAM Pre-assessment for the proposed building has been conducted by Hulley & Kirkwood, and the designs currently achieve a Very Good grade.

Further details of the criteria and the assessment can be obtained by referring to BREEAM Pre-Assessment by Hulley & Kirkwood, submitted as part of this application.

## 2.17 Transport Statement

The Transport Statement has been prepared by WSP for the redevelopment of the 39-bed Newent House Care Home into an 80-bed Dementia Nursing Home at Brown's Road, Surbiton. The reports concludes that the site is situated in a sustainable location with excellent access to rail, bus, cycle and pedestrian routes, as well as being located in close proximity to facilities on the A240.

An analysis of PIA data indicates that seven incidents occurred in the vicinity of the site (all of which were on the A240) over the last three years. Whilst this frequency of accidents is not ideal, the volume of traffic and level of other highway activity (buses, cycles, pedestrians) on the A240 is very high, and as such the number of recorded accidents is not considered to represent an anomalous accident trend that would be exacerbated by the proposed development when taken in the context of its highway environment.

The development proposes 80 bedrooms, with access achieved from both Warwick Grove and Alpha Road. Vehicles can safely access and egress from both bellmouth junctions, and visibility - whilst constrained by parked vehicles - is considered to be suitable, with no personal injury accidents recorded

in the vicinity of the site which currently has similar visibility constraints.

The site is to be serviced internally with a loading / ambulance bay adjacent to the entrance. A refuse store is located on the spine road to allow refuse collection off the highway. Bin drag distances are less than the 10m requirement set out in Manual for Streets. 18 parking spaces are proposed accessed via Warwick Grove.

TRICS assessments have been undertaken for both existing and proposed uses. The proposed development results in an additional six trips in the AM peak period and three trips in the PM peak period. This is unlikely to result in a significant impact due to the arterial nature of the A240, and whilst it is acknowledged that the Brown's Road is constrained by on-street parking, the proposed development would not have a significant impact on the operation or safety of the highway.

The Transport Statement has demonstrated that the proposed development will not have a severe impact on the operation or safety of the highway network, and as a result does not conflict with paragraph 109 of the NPPF.

## 2.17 Noise Assessment

Red Twin Acoustic Consultants were appointed to carry out a noise survey to establish the pre-development external noise levels during daytime and night time hours on the application site, and an outline assessment of noise impact of proposed roof top plant, which is currently not selected.

Prior to the detailed design and equipment selection, Red Twin have assessed the situation in reverse, and set a maximum sound level for the proposed equipment which can be expected to achieve the local authority requirements.

Achievement of the assumed local authority requirements would conclude that the proposed mechanical plant to be of a low impact during the day, and would not give rise to complaints or adverse impacts on the neighbouring noise sensitive uses..

In the context of the existing ambient noise, Red Twin concluded that the context of the site is a low noise environment that is dominated by road traffic and city noise, which is constant and continuous during the day and aircraft noise.

The proposed mechanical plant is industrial in nature, and would operate in a continuous manner,

much like the road traffic noise currently affecting the site. The new sources would not be noticeable as out of character with the ambient noise in this type of area.

## 2.17 Archaeological Survey

An Archaeological Desktop Survey has been undertaken as part of the suite of surveys used to inform the design. The key findings from this report are:

- No features of archaeological or historic landscape significance were identified within the site. None of the buildings or structures are of any historical, archaeological or architectural value.
- There is no cartographical evidence of occupation of the site prior to 1868. Past use of the site was as common land with no evident archaeological features.
- The site has been truncated by development during the late Victorian period and the subsequent Newent House development. This is likely to have disturbed any archaeological deposits (if present) under the site of the existing building.
- The site is not in a Conservation Area, but is located adjacent to the Fishponds Conservation

Area. Oakhill Conservation area is located nearby, but the site is not visible from the Oakhill Conservation Area. The design has taken the location of the conservation areas into account, and has been designed to be sensitive and sympathetic to the surrounding environment and buildings.

-The site is within the proximity of 18 listed buildings. However all of these are situated at a distance greater than 300m, and lie beyond either dense intervening development and / or the vegetation and landscape of Fishponds Park. As such they have no inter-visibility with the site, and it is considered that there are no settings issues for any Listed Buildings.

## 2.14 Flood Risk Assessment

The Flood Risk Assessment has been prepared for the proposed Dementia Nursing Home by Curtins Consulting Ltd. in accordance with the requirements of the NPPF as part of the application. The assessment concludes that the online Environment Agency flood map and the Local Flood Risk Strategy for the Royal Borough of Kingston upon Thames show the development site in Flood Zone 1, with an annual probability of flooding of 0.1% from rivers or sea.

While there is no historic flooding recorded at the site, there may be a low risk of flooding from groundwater, and some areas are at surface water flood risk, which will require mitigation both before and after construction. As per the SUDS and Drainage Strategy also prepared by Curtins, SUDS techniques utilised to ensure existing runoff rates do not increase.

The surface water drainage network will be designed to accommodate all storm events up to the 1 in 100 year event (plus 40% climate change).

The report concludes that the site can be considered to have a suitably managed risk of suffering from any form of flooding, and to be proven as not increasing the probability of flood risk to the local catchment area.

## 2.18 Drainage and SUDS

Curtins Consulting Ltd was also appointed to prepare a Drainage Strategy to aid the proposed re-development of a Dementia Nursing Home in the Royal Borough of Kingston Upon Thames.

The conclusions to be drawn from this report are as follows:

- The Environment Agency Flood Risk Map indicates

the site is located in Flood Zone 1, which is compatible for a 'less vulnerable' development, as per the National Planning Policy Framework Flood Risk Vulnerability Classification. However, it is also specified that the site is at risk of surface water flooding to the north of the site, which is to be mitigated by inclusion of surface water storage and reducing surface water overflow.

- Connection consents will be required for the discharge of surface and foul water networks from relevant authorities. A CCTV survey is required to confirm the levels of the connections to the Thames Water public sewers in Brown's Road and Alpha Road.

- The proposed foul water network will discharge into the foul water public sewer in Alpha Road.
- The proposed surface water network will discharge into an existing manhole to the south of the site.

- A pre-development enquiry has been submitted to Thames Water to obtain an official agreement on the discharge rate and connections. Thames Water have yet to respond at the time of submitting this report. Once confirmed, confirmation from the Lead Local Flood Authority (LLFA) on the proposed discharge rates will be sought.

- Surface water runoff will be restricted to 5 l/s,

approximately 218m<sup>3</sup> of attenuation volume will be required to achieve this.

- The attenuation volume of 218m<sup>3</sup> will be provided within permeable sub-base drained via perforated pipes and geocellular units.

Further details can be obtained by referring to Drainage and SUDS Strategy by Curtins Consulting Ltd.

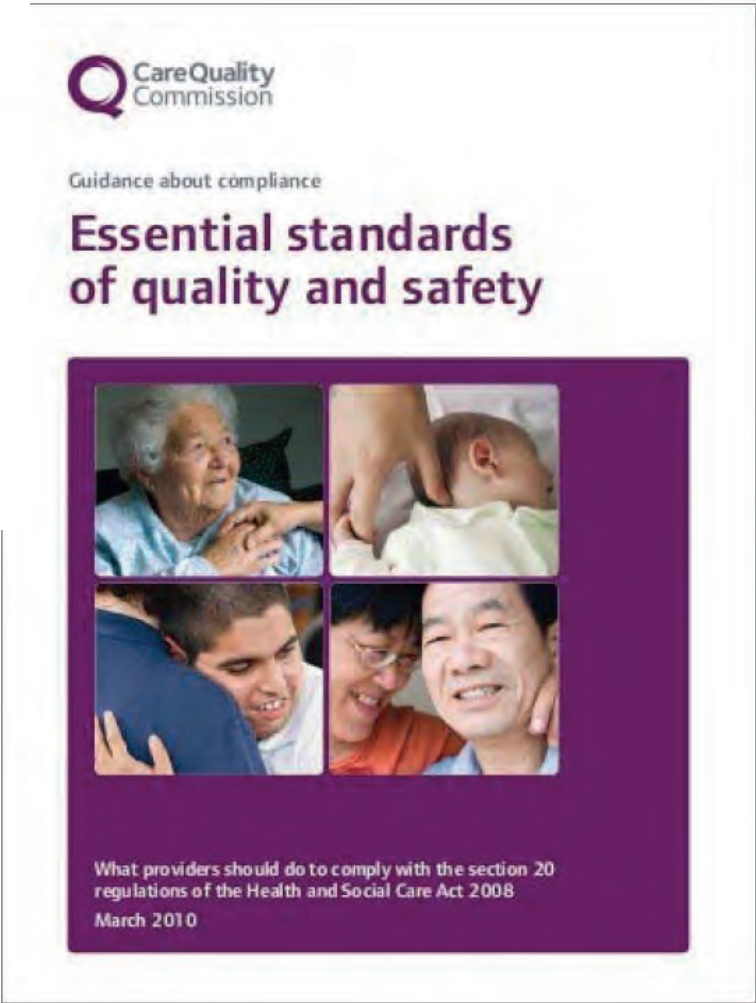






### 3. Design Proposals

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3.1 Design Standards

The proposals have been designed to comply with the following design standards:

- Health & Social Care Act 2008
- Care Standards Act 2000 (Revised) – revisions pending
- CQC (registration) Regulations 2009 – Essential Standards of Quality & Safety – March 2010-09-03
- Health & Social Care Act 2008 (Regulated Activities) Regulations 2010
- Care Homes Regulations 2001
- Domiciliary Care regulations 2002
- Building Regulations
- Care Quality Commission—Essential Standards of Quality and Safety—March 2010.

Other Standards

Stirling University DSDC Gold Award

BREEAM 2018: Level to be confirmed by RBK

### 3.2 Design Approach - Design for Dementia

The designs for Dementia Nursing Home are being assessed against Dementia Design Gold Standard by Stirling University Dementia Services Development Centre. To assist achieving the standard, the designers are using Dementia Design Audit Tool developed by the centre. This tool does not cover any requirements of the Equality Act 2010, Building Regulations, or the inspection and regulation bodies. It refers only to design features that are important for people with dementia, mainly compensating for inter-related sensory & cognitive impairments, e.g.

- Sight – need for greater lighting levels to assist with visual acuity; diminishing ability to differentiate colours (good contrast is important); Being unable to see in 3D
- Hearing – need for a quieter environment in order to hear & comprehend; deteriorating ability to hear high pitched sounds & increasingly aware of low pitched sounds; certain sounds appear annoying or overly loud. Excessive noise can increase cognitive impairment
- Basic Impairments of Dementia – impaired memory, learning & reasoning; high levels of stress & difficulty adjusting to age-related sensory/mobility problems; long term memory is better than short term, so design relating to the person's memories of their past is helpful

In order to achieve certification, DSDC auditors will visit the building a minimum of 6 months post-occupancy and carry out a detailed audit of all areas used by people with dementia and rate the design of the building accordingly. Following the audit, if the building receives one of the above ratings a certificate from the University of Stirling Dementia Services Development Centre will be issued, which would be valid to display for 3 years. To attain Gold Standard the scheme would require a min. of all 110 Essential points + 201 Recommended points.

These requirements have been used as a basis for the overall design approach for the building, including siting and orientation.

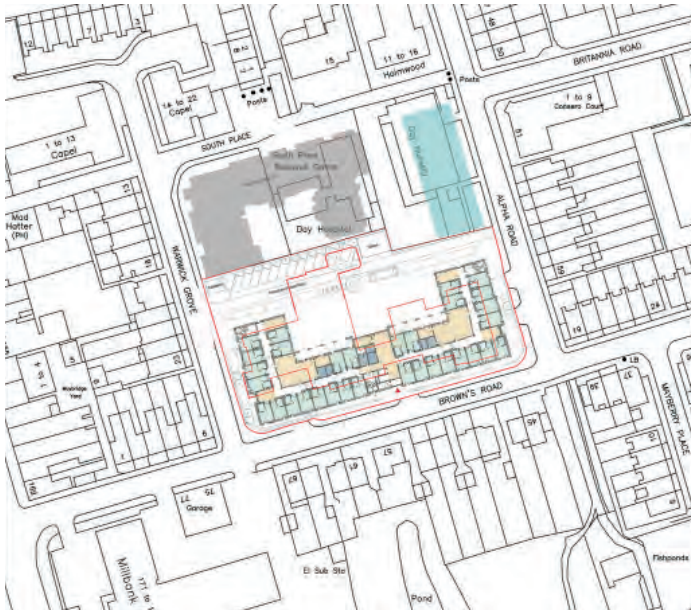
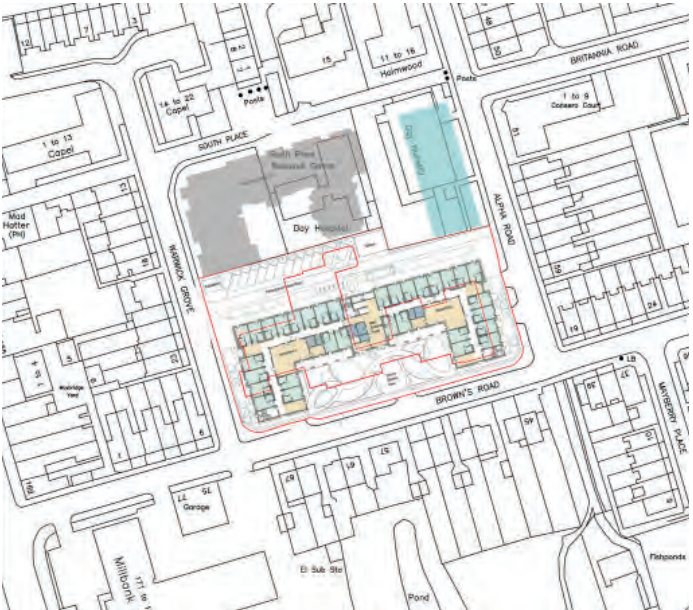




3.3 Concept Development for the site

In order to find the best possible architectural response to RBK’s social model of care, various architectural approaches have been tested on site and assessed both in terms of urban design and whether the form and organisation delivers the best response to client brief.

These conceptual studies have also been assessed in terms of how they respond to assessment in “Kingston - Towards a Sense of Place : A Borough Character Study to support the Kingston Local Development Framework”



Courtyard Design | Site Analysis



rites Design | Site Analysis



## Design Approach 1:

- Building form aligned along Brown's Road, three storeys towards the Warwick Grove, dropping down to two towards Alpha Road
- Building form organised as a central core with the main access from the car park to the north of the site and as two wings with two secure north facing courtyards
- 1800mm brick boundary wall is proposed to both Warwick Grove and Alpha Road as well as car park area, effectively creating a back lane and an area which is not overlooked from anywhere in the building
- Building frontage to Brown's Road creates a meaningless green verge with no residents access. If residents were allowed access to these areas, 1800mm secure boundary would be required along Brown's Road
- Building form creates canyon like massing along Brown's Road and risks reducing daylight access from the properties on Brown's Road
- Entrance area is hidden both from the car park and from all surrounding roads. Because of the north facing orientation and the narrow depth, it would be constantly in the shade
- There are several care bedrooms facing this area,

with their outlook, amenity and access to daylight compromised due to the narrow width of between two wings

- All resident's amenity areas face north and are therefore constantly in the shade, reducing the usability of the amenity and consequently the quality of their life. In the addition, courtyard to Alpha Road is compromised by the access road

Masterplanning and future development potential of adjacent sites:

- Proposed layout of the care home would overshadow the garden areas of the consented redevelopment of South Place
- It also has rather disjointed and awkward relationship to both development sites to the north as this approach does not really take them into consideration

Due to the concerns expressed above, this design approach was deemed as unsuitable for the site as it did not fulfill the client's brief or offer the best urban response to the site.

## Design Approach 1:





## Design Approach 2:

- Building form is aligned as a perimeter development along Brown's Road, Warwick Grove and Alpha Road.
- Organised as three storeys towards the Warwick Grove, dropping down to two towards Alpha Road
- Building consists of a central core with the main access from the car park to the north of the site and two wings with two secure north facing courtyards
- Due to residents access being proposed to all garden areas, 1800mm high boundary wall is required to Brown's Road, Warwick Grove and Alpha Road as well as to the car park area, effectively creating a back lane
- Building form creates canyon like massing along Brown's Road and risks reducing daylight access from the properties on Brown's Road
- Main entrance from Brown's Road, far removed from the parking area at the back
- If the entrance is accessed from the car park, resident's garden area is cut in half, creating a need for yet more 1800mm high walls. Residents living in the building are extremely vulnerable and all access must be via one entrance area, manned 24 hours a day. Visitors, staff, deliveries, maintenance will all gain access to the building through this point. Due to safety concerns, people visiting or accessing the building cannot gain access to gardens first and then proceed to the main entrance. Main entrance controls all access into building and it's grounds.

- In addition to main amenity areas facing north, all communal areas are facing north as well. If the communal areas are moved into the part of the building facing Brown's Road, the link between the gardens and the communal areas is severed, reducing the likelihood that the gardens are being used.

- Residents and the staff are more likely to use the gardens if they are attractive. North facing garden will reduce the types of plants that can survive in the garden. Perimeter development that faces South will by nature create a shady garden as part of the garden will always be in the shade.

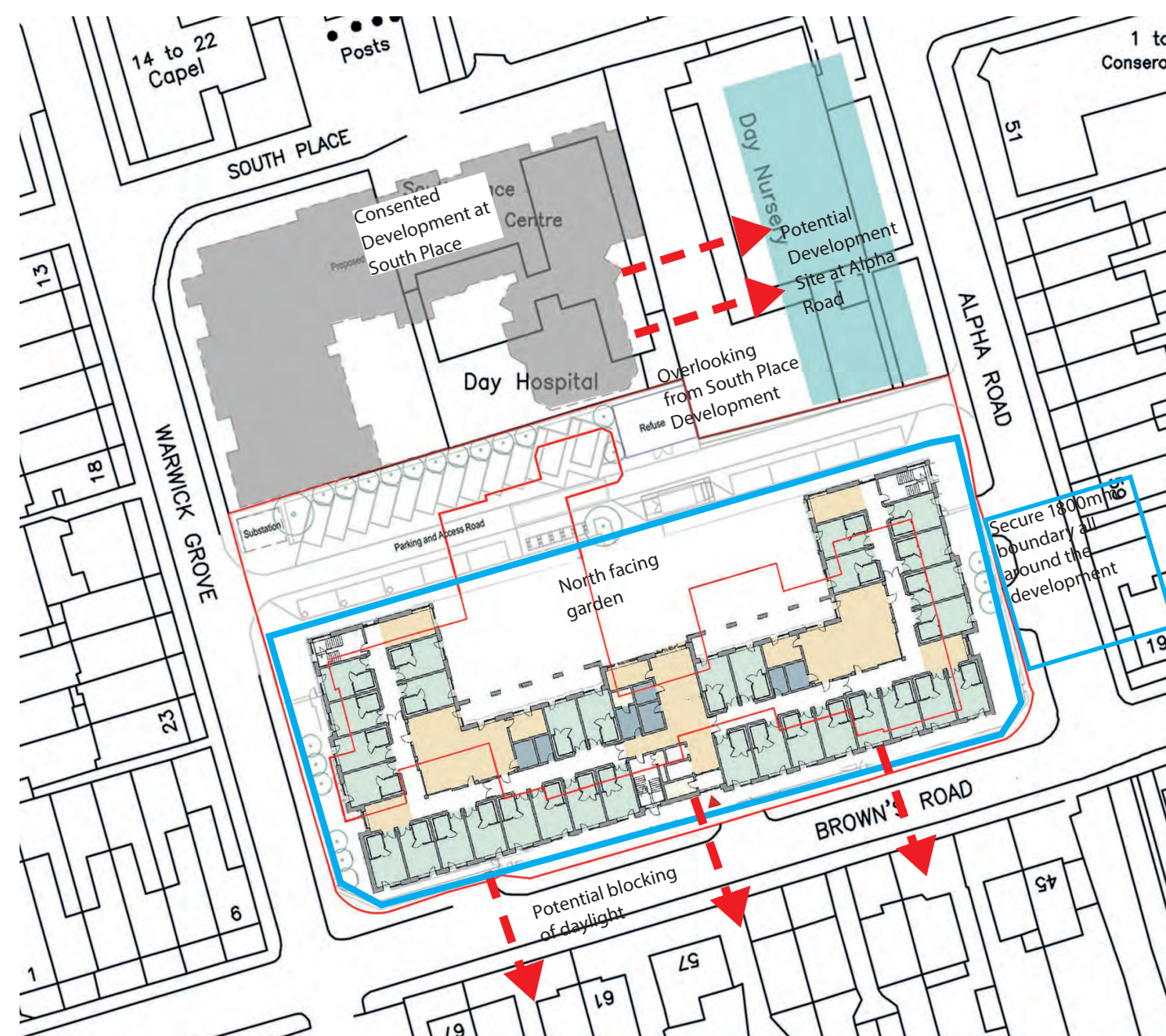
- Masterplanning and future development potential of adjacent sites:

Site Plan shows the consented development on South Place. Whilst Design Approach 2 does not effect this development, residents of the care home would be looking at a blank gable wall facing their north facing garden, reducing the quality of their amenity even further.

Current Children's Centre site on Alpha Road could be developed as a linear block organised against Alpha Road. Proposed care home is not really affecting this site, but the South Place development has several habitable rooms facing the Children's Centre Site, reducing the redevelopment potential.

Due to the concerns expressed above, this design approach was deemed as unsuitable for the site as it did not fulfill the client's brief or offer the best urban response to the site.

## Design Approach 2:





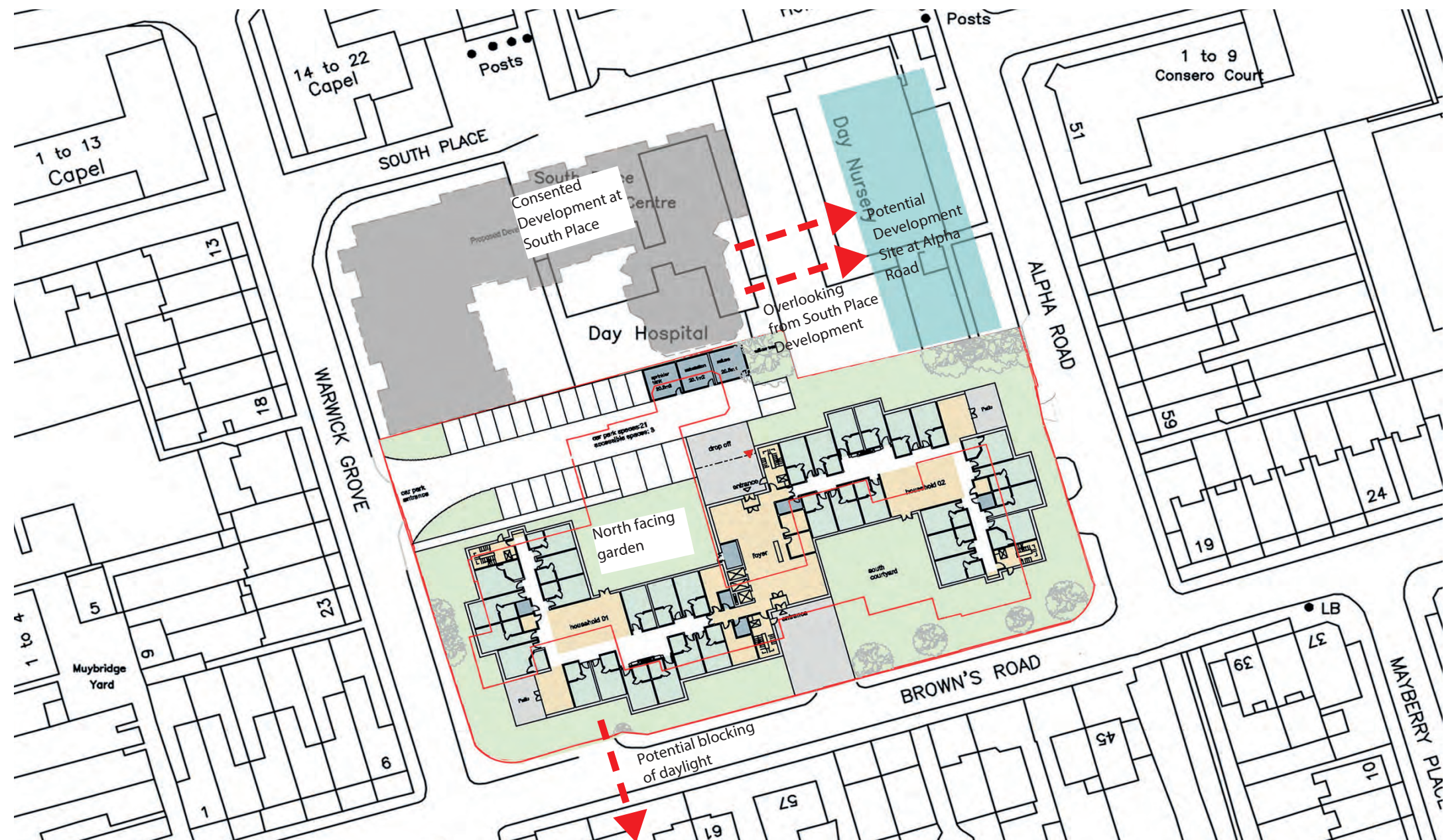
### Design Approach 3:

- Building form is aligned as a perimeter development along Brown's Road and Warwick Grove and responds to Alpha Road.
- There is a parking court, but no through road through the site
- Organised as three storeys towards the Warwick Grove, dropping down to two towards Alpha Road
- Building consists of a central core with the main access from the car park to the north of the site as well as from Brown's Road
- There are two wings: one with secure north facing courtyard and another with south facing secure courtyard
- 1800mm high secure boundary fence is required to all surrounding roads as all garden areas are proposed to be accessed by the residents

Masterplanning and future development potential of adjacent sites:

- Design approach 3 does not prejudice developments of the adjacent sites, especially consented scheme to South Place.
- The approach was abandoned due to concerns regarding the quality of residents' amenity in the north facing garden, as discussed in the previous options

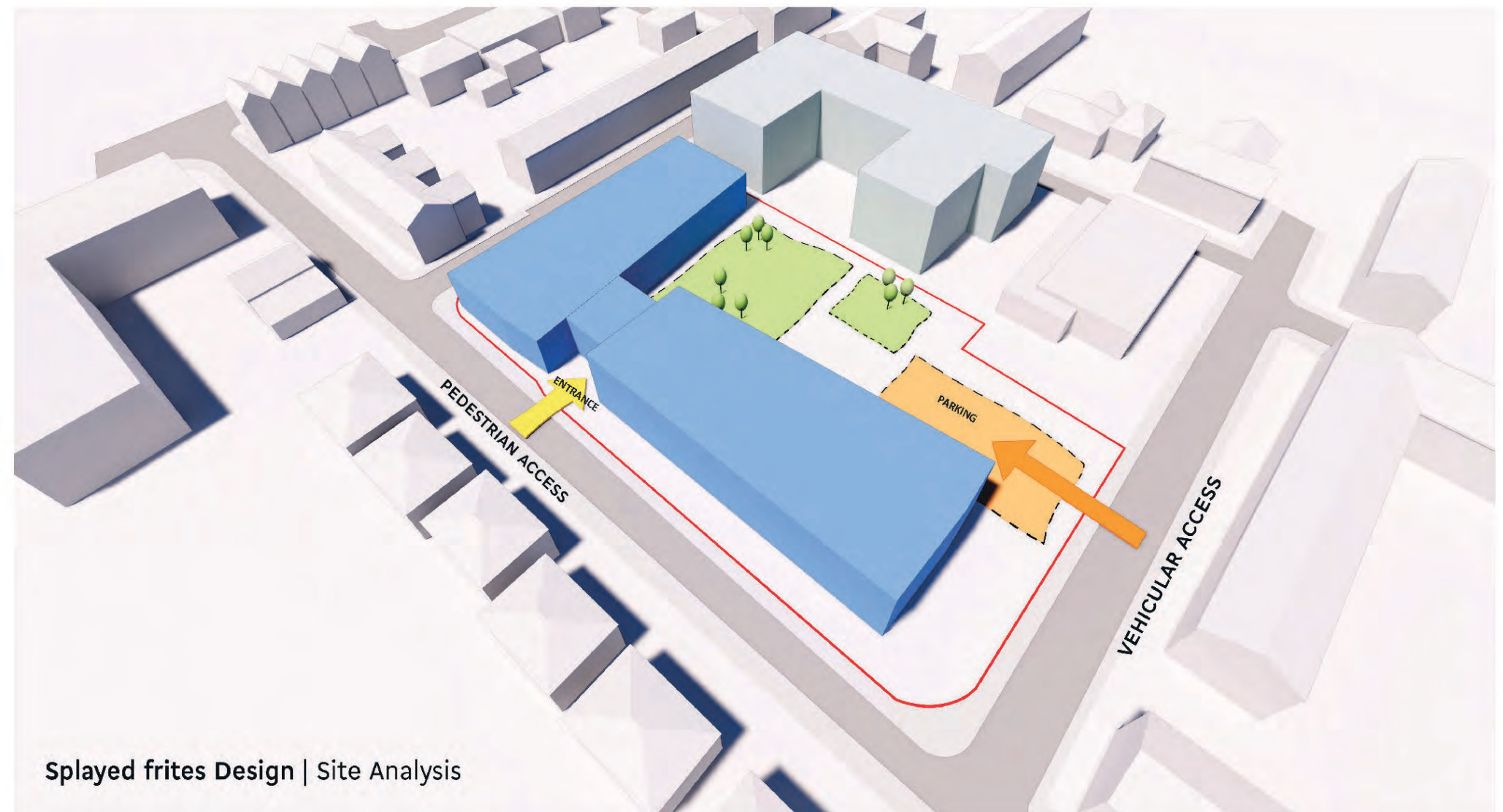
### Design Approach 3:





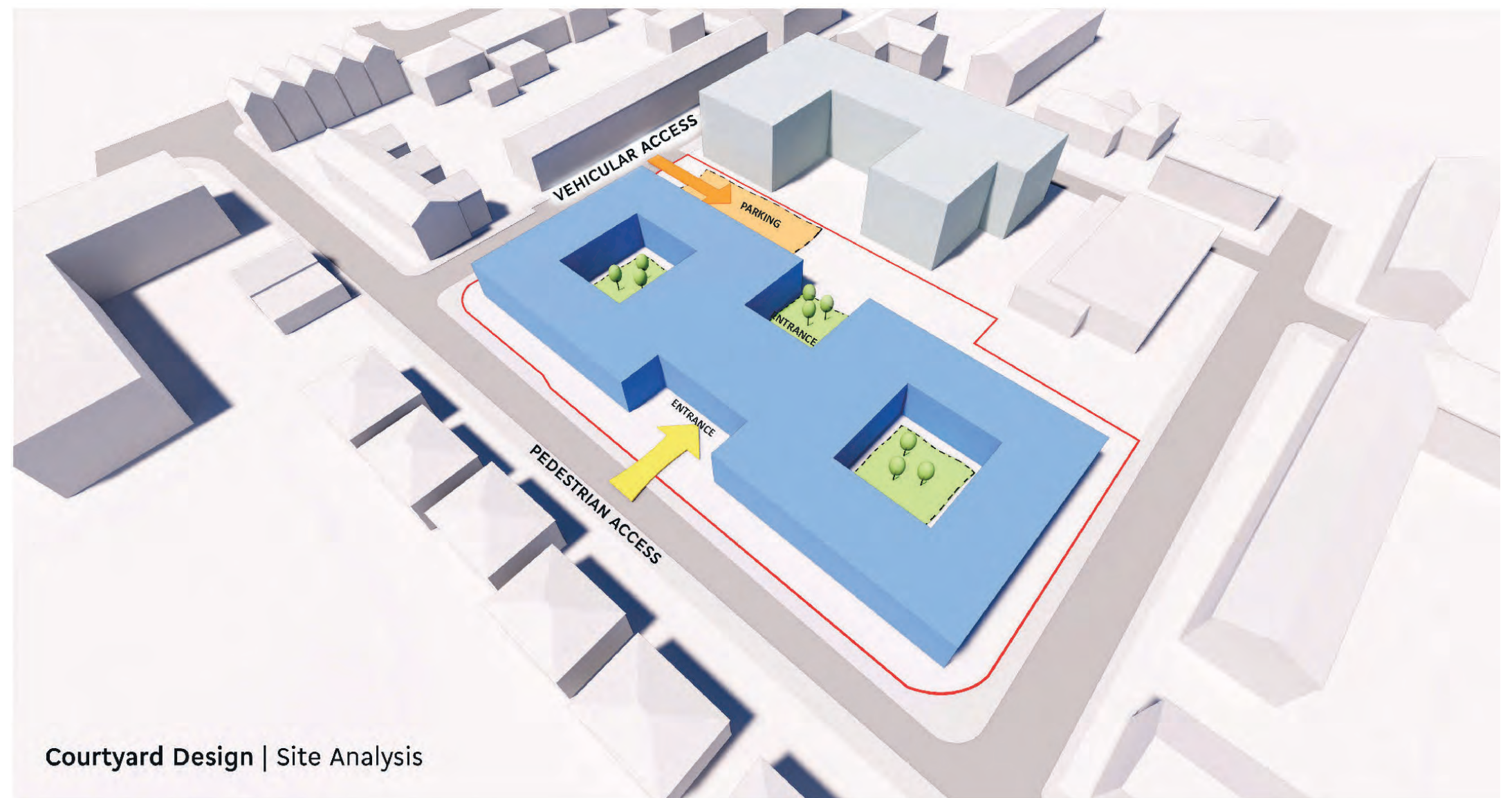
#### Design Approach 4:

- Building organisation was based on open plan households and was abandoned purely on the basis that it would not pass Building Regulations Part B - Fire
- The concept was tested by organising the care bedroom and communal areas in a more traditional way, but the building would not fit on site
- North facing gardens remained a problem



#### Design Approach 5:

- Building organised around two courtyard gardens
- The gardens are too small and would be permanently shaded
- Parking area too small and separated from the main entrance





### 3.4 Design Approach 6 - The chosen approach

- The building has been organised around south facing courtyard, creating the best possible aspect for care home residents
- The garden along the Brown's Road has the benefit of creating a green frontage to Brown's Road as hedge and low wall is proposed to boundaries
- Security of the residents is ensured by perforated screen which allows the boundary hedge to grow through it, but prevents unwanted entry or residents wandering off site
- Building form responds to Warwick Grove and Alpha Road by following established building lines
- Car park is attractively landscaped with high quality hard landscaping materials and screened by low hedges
- Combined with 'home zone' access road there is a generous area between the care home and consented development at South Place
- Massing drops from three stories to Warwick Grove to two storeys towards Alpha Road, responding to the Fishponds conservation area
- Two gable ends respond to the scale of semi detached houses opposite and ensure that the new development does not dominate Brown's Road

- Materials for the proposed care home have been carefully chosen by reviewing local materials
- Windows on the proposed elevations have been grouped to respond to the rhythm of the terraced houses prominent in the areas
- As can be seen in the site plan, the proposed development does not prejudice the development of the adjacent South Place or Alpha Road sites. In fact, the recently consented residential development at South Place has more impact on the potential site at Alpha Road

After careful consideration by the design team, it was felt that this design approach provided the best response to RBK's brief, creating the best possible setting and orientation for the proposed care home and responding to the needs of the residents.

It also provides a best possible way responding to the urban context and enhancing the area with a high quality building.













### 3.5 Proposed Site Plan

The proposed Dementia Nursing Home has been designed to respond to the surrounding context by respecting established building lines - the building is set back from the surrounding roads by 5 metres. Site boundaries will consist of 1100mm brick wall and piers with perforated screens between the piers. The fencing system will make the site secure, but allows planting to grow through, creating an attractive, soft boundary to the neighbouring streets.

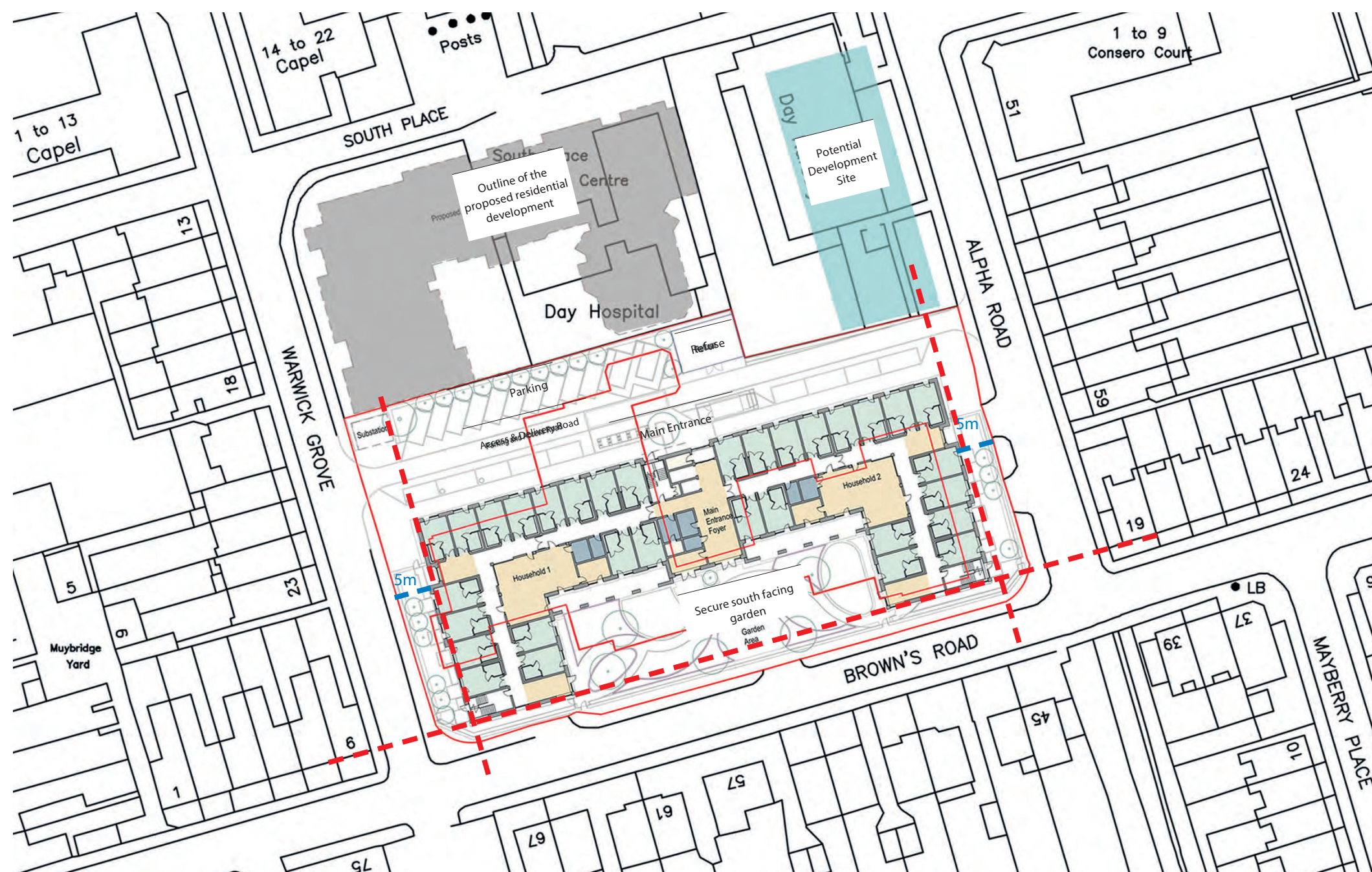
Setting the building back from the surrounding roads has the added benefit of ensuring that the proposed new building is not overshadowing the surrounding properties or blocking daylight access. The development has been assessed for daylight/sunlight - please refer to the report for further details.

South facing garden will create a green break between buildings and improve the streetscape of Brown's Road.

Discreet and attractively landscaped parking court and access road to the north of the building will have a welcoming appearance and will be well lit and maintained.

Key to Design principle diagram:

- Building outline to follow established building lines
- 5 metres to the site boundary





### 3.6 Internal Organisation

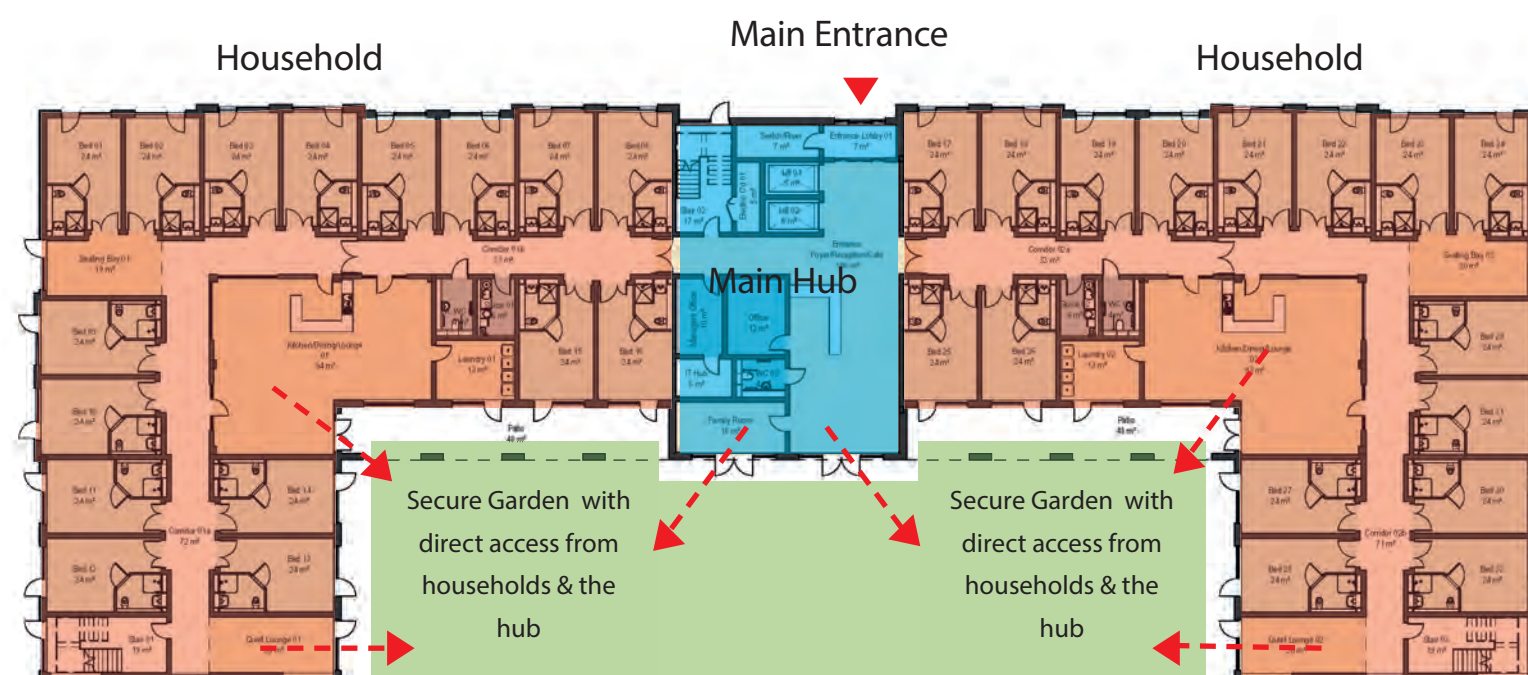
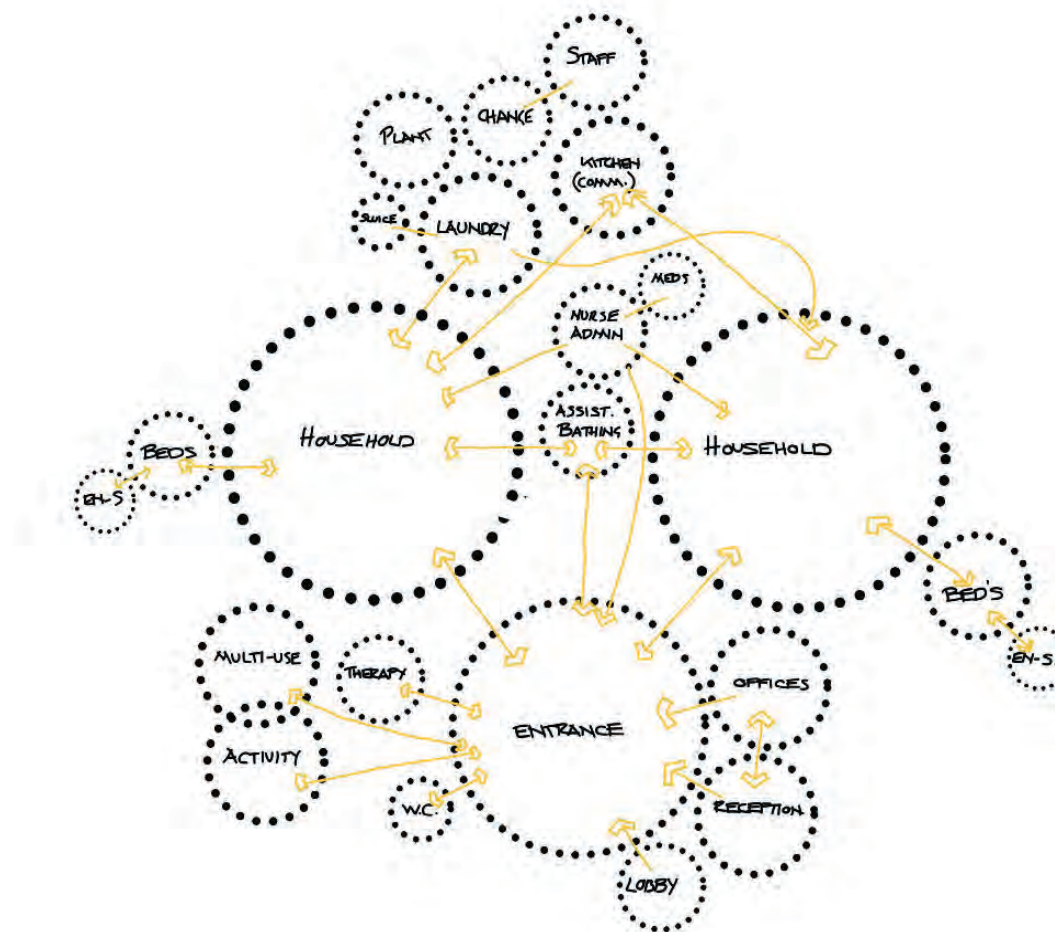
Our proposals for the new Kingston Dementia Nursing Home comprise of a building with a 3 storey and 2 storey element of 80 bedrooms with day and support services for residents and ancillary staff accommodation.

The bedrooms are split into five household units, which enables each section to cater for different categories of resident needs. This helps to optimise staff numbers as well as creating a homely place in which to reside.

Each household is accessed via the shared social spaces in the centre of the building that form the physical and social heart of the building. Equally every household has its own dedicated social and support areas for residents and staff.

The layout, through its use of open plan day spaces maximises the usable areas available to residents. The kitchen and laundry are currently located on the second floor easily accessible from the central core to the other floors. The plantroom is also located on the second floor

The design draws on our past experience from previous projects as well as that of published best practice from such renowned sources as Stirling University and the Housing LIN.





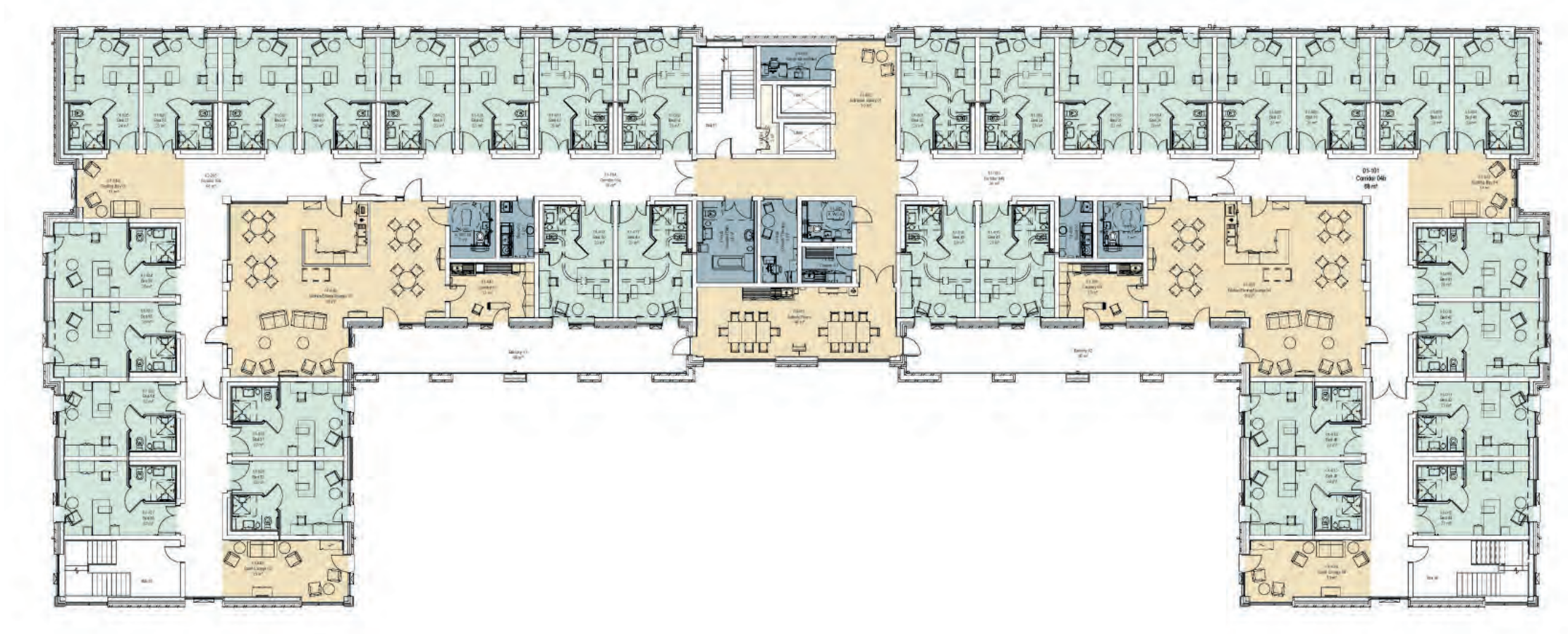
Ground Floor Plan

3.7 Proposed Building Layouts





First Floor Plan



## Second Floor Plan



Roof Plan

