



DESIGN & ACCESS STATEMENT

QUEEN'S ROAD, LOWER CAVERSHAM

V1

Figure 1 Aerial view of Application Site,
Queen's Road, Lower Caversham



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1.0 Introduction

Purpose of Document

This Design and Access Statement (DAS) has been prepared by Cookham Design Partnership on behalf of Gravitass Property Group Ltd, to support a Full Planning Application to Reading Borough Council (RBC) to provide 3no new residential units with associated private and share amenity area and car parking facilities on land to the rear of 114 Queens Road and 36-38 Coldicutt Street, Lower Caversham.

This statement has been prepared to be compliant with the Development Management Procedure (England) Order 2015, and the Planning Practice Guidance 2014 (NPPG) and illustrates the design principles and concepts that support the proposals and addresses the requirements set out in the NPPG 'Making an Application'.

It specifically, responds to the NPPG requirements 'What should be included in a DAS', and explains:

- The design principles and concepts;
- The steps taken to appraise the context of the proposed development and how the design has taken them into account; and
- The Applicant's approach to access.

The proposals have been developed in accordance with the policies within the context of the Reading Borough Local Plan 2019 and RBC Supplementary Planning Documents where relevant, together with national guidance in the National Planning Policy Framework (NPPF) and local references.

This statement should be read alongside the following supporting documents which also accompanies this application:-

- Construction Method Statement by Kronen Limited
- Transport Statement by Kronen Limited
- Amenity Impact Assessment (Daylight, Sunlight and Overshadowing) by Syntegra Consulting
- Sustainability and Energy Assessment by Syntegra Consulting
- Flood Risk Assessment including Drainage Strategy by Syntegra Consulting
- Viability Statement by Andrew Golland Associates

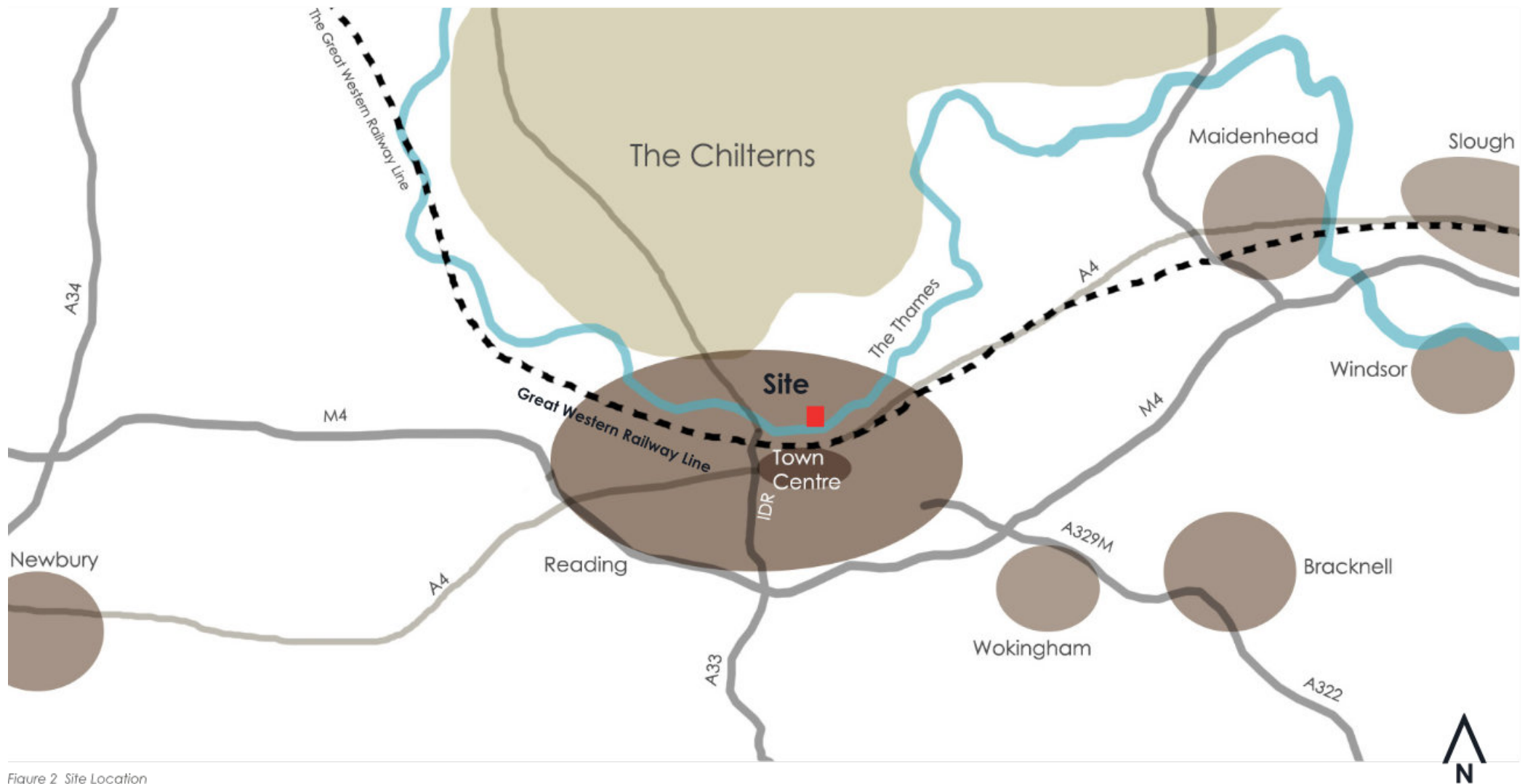


Figure 2 Site Location

2.0 Site Description

Surrounding Context

The area that is the subject of this Application falls within the administration boundary of Reading Borough Council (RBC).

The Site lies just north east of Reading Town Centre, on the northern side of The Thames, and in the Caversham ward.

Reading is a large historic market town on the Thames and Kennet rivers in southern England, around 40 miles due west of London. It is now a major commercial centre serving a large area of the Thames Valley.

The town is on the Great Western Main Line railway and the M4 motorway and in the last few years has become an important transport hub with the development of Cross Rail giving direct access through London and further links to the north with Birmingham, Swindon and Bristol.

Heathrow Airport lies 20 miles to the east and is served both by rail and direct bus routes.

Historically, Caversham was noted in the Domesday Book and remained a relatively small community mostly orientated around barge trading along the river and agriculture until the development of the railways in the 1850's which brought rapid economic growth to Reading and Caversham. As employment opportunities grew, housing was built close to the village centre for workers with more affluent housing uphill and cheaper more closely packed housing closer to the river, known as Lower Caversham.



Figure 3 Site Local Context

Site Context

The 0.0413ha Site lies in the centre of Lower Caversham and sits on the north side of Queens Road, at the junction with Mill Lane and 200m north of the Thames. It consists of land to the rear of a large Victorian property, no 114 Queens Road and the terrace properties of no36-38 Coldicutt Street. It has a medium risk of flooding and is in flood zones 2 and 3.

The remaining properties on the east side of Coldicutt Street terminating at Gosbrook Road all have their site curtilages ending along Mill Lane giving some 40- 45m length to their rear gardens. This is not the prevailing character of the area. Many have garages terminating the garden accessed from Mill Lane.

The Sites southern boundary along Queen's Road consists of a 1.6m high brick wall. The adjacent properties are all typical 2 storey Victorian terraces with bay windows.

The Mill Lane boundary is a 1.8m high timber fence and double gate vehicular access onto the Site: it's only access. Victorian terraces sit opposite.

The north boundary consists of a 1.8 to 2m high timber fence with the rear garden to no 34 Coldicutt Street behind.

To the west sits the rear gardens the residents no114 Queens Road and no36-38 Coldicutt Street. A 1.2m high timber fence defines the boundaries.

The Site is currently used as a private car park with a gravel surface finish.



Figure 4 Existing Site Plan

Site Photographs





Figure 5 Photograph View Location

Physical Site Constraints



3.0 Area Character

Local Architectural Character

Planning policy considerations and design guidance under local character

The National Planning Policy Framework (NPPF) gives design guidance when considering the local character of an area. Item 2. Achieving well-designed places. Paragraphs 124 to 132

The NPPF identifies good design as a key aspect of sustainable development. However, it also recognises that design policies should avoid unnecessary prescription or detail. Paragraph 127 states:-

Planning policies and decisions should ensure that developments:

(a) will function well and add to the overall quality of the area, not just for the short term but over the lifetime of the development;

(b) are visually attractive as a result of good architecture, layout and appropriate and effective landscaping;

(c) are sympathetic to local character and history, including the surrounding built environment and landscape setting, while not preventing or discouraging appropriate innovation or change (such as increased densities);

(d) establish or maintain a strong sense of place, using the arrangement of streets, spaces, building types and materials to create attractive, welcoming and distinctive places to live, work and visit;

(e) optimise the potential of the site to accommodate and sustain an appropriate amount and mix of development (including green and other public space) and support local facilities and transport networks; and

(f) create places that are safe, inclusive and accessible and which promote health and well-being, with a high standard of amenity for existing and future users; and where crime and disorder, and the fear of crime, do not undermine the quality of life or community cohesion and resilience.

Local Architectural Character contin.

The area demonstrates very similar plot widths and forms where properties are often low in height, with the majority being 2 storeys. Larger buildings, often on corners, are three storeys, or contain rooms within the attic. Windows are often white with regular proportions and alignment. The prevalent construction material in Lower Caversham is the local red brick with Welsh blue/black slate. The following explores the key architectural features of this area of Reading.

Urban Grain

The urban grain is the pattern of the arrangement and size of buildings and their plots in a settlement and the size of street blocks and junctions. This area has seen little changed with the pattern of Victorian and Edwardian properties typical narrow plot width and not very deep. The dwellings exist in very long terraces, and enclosed gardens to the rear served by back alleys.



Figure 6 no 114 Queens Road corner plot scale

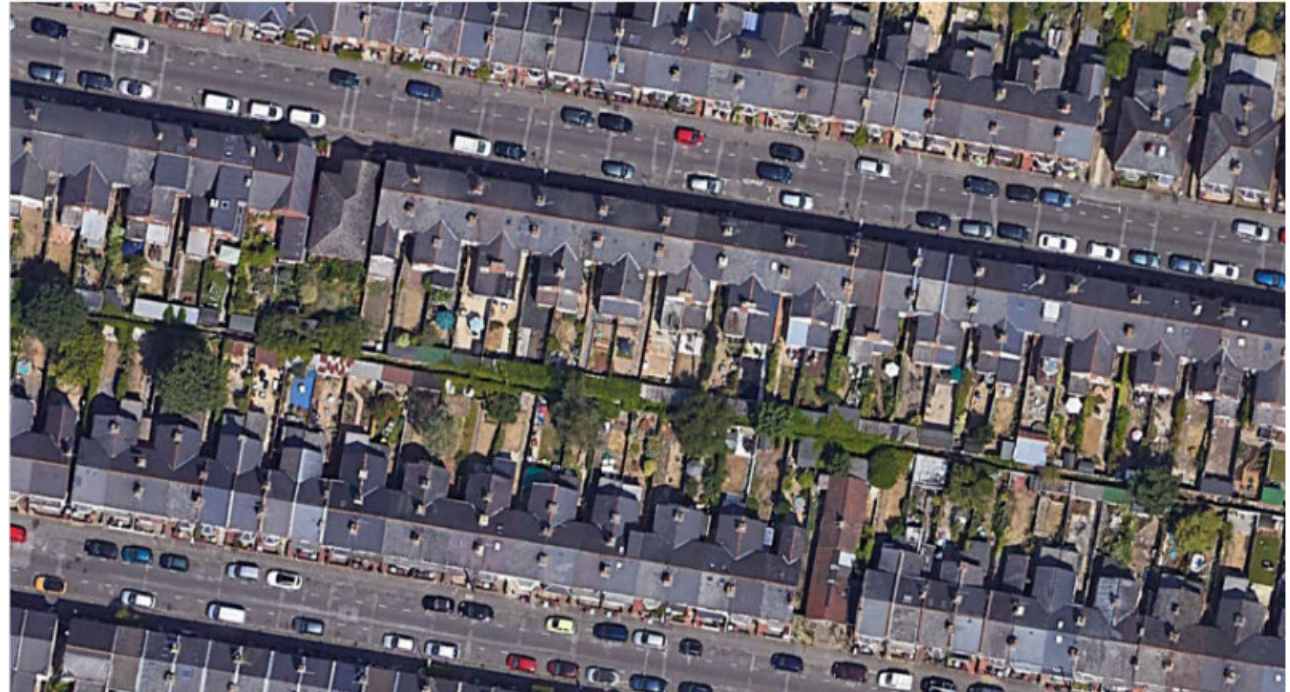


Figure 7 Urban grain of Queens Road and Kings Road

Corners

Corners and ends are often gabled with additional windows. It is important for any new development with prominent side elevations to provide an active frontage along the street scene.

Roofscape

Roof form is gabled and pitched with the eaves on terraced houses parallel to the road. Many feature raised party walls which provides a distinct regularity of form along with chimneys. A number of the roofs show roof space accommodation with the presence of Roof windows and windows on the gables where they terminate the street.



Figure 8 Active corner of Champion Road & Piggots Road



Figure 9 Raised party wall parapets & chimneys along Queens Road

Local Architectural Character contin.

Openings

Generally, window openings are regular and alignment between floors. Larger openings occur on the ground floor with smaller openings to the upper floors. Openings on the Victorian terraces have been featured with low arched brick soldier courses, quoins and thick stone sills. Fenestrations still generally follow the Victorian vertical sliding sash style though nearly all replaced with uPVC.

Ground Floor / Base

Ground floors are often emphasised with the use of projecting angled or square bay windows with projecting porch over the front door.

Contrasting brick string courses separating the ground floors with the upper floors are often present.



Figure 10 Opening treatment along Queens Road



Figure 11 Regular angled bays along Queens Road

Material Palette

Reading is predominantly a red brick town with grey/black Welsh slate roofs. Lower Caversham reflects this. There is a variation in areas of the use of different coloured engineering brick providing banding at floor levels, quoins around windows and headers, diamond patterns in panels. Generally the pale buff brick has been used around this area of Reading with a few examples of the grey engineering brick used as well.



Figure 13 Predominate building materials used in Lower Caversham

Boundary Treatments

The Victorian and Edwardian terrace housing generally have a small strip of front garden providing a defensible space between the dwelling and the back edge of the footpath. These would have originally been finished in a low brick wall with metal railings. During WW2 metal railings were removed to provide iron and steel due to shortages. There is now a mishmash of boundary treatment.



Figure 12 Mishmash of front boundary finishes along Mill Lane

4.0 Design Rational

Relevant Local Area Developments

There is a flatted scheme on the corner of Queens Road and Coldicutt Street which has many design aspects which should not be replicated such as the lack of front doors on the key street elevation.

No 129 Queens Road is a 2 to 3 storey flatted scheme providing 11 no 2 bed units and was built between 2007 and 2010. It has a complex planning history. It had been refused at Reserved Matters and Dismissed at Appeal



Figure 15 Flatted development, Queens Road

Queen's Road, Lower Caversham



Figure 14 Flatted development, no 129 Queens Road

Site Opportunities

- Redevelopment of a brownfield site
- Reinforcing the street enclosure
- Increasing passive surveillance
- Providing much needed family housing
- Enhancement of surrounding area with a high quality design which is sympathetic and reflective of the surrounding architectural character
- Providing it's own car parking provision and hence taking pressure off existing street car parking

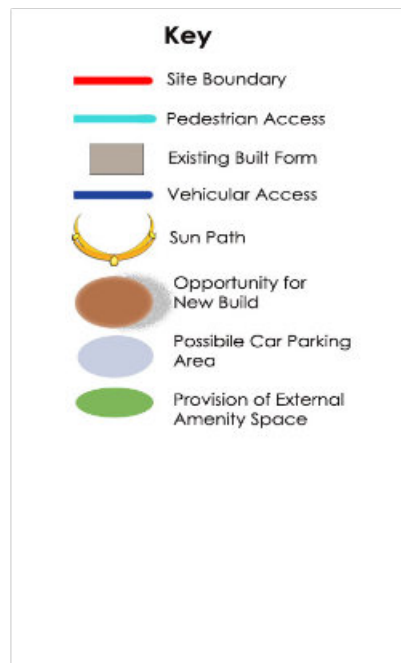


Figure 16 Opportunities Plan

5.0 Design Development

A number of possible site layout options were explored and the various arguments in favour of and against considered for each one.

All the options were designed to Nationally Designed Space Standards (NDSS) as per RBC Local Plan Adopted 2019 Section H5 Area of site 410sqm, 0.041ha which equates to a urban density of 73 dwellings per ha for 3 units occupying the Site. This satisfies RBC Local Plan Policy H2 for urban at 40-75.

Option 1- Layout with 3 bed 5 person two storey, deeper plan with corner plot 3 facing both Queens Road and Mill Road.

Pros-

1. Good urban design principles
2. In keeping with urban character of area
3. Provides 1 parking space per plot
4. Provides private rear gardens
5. Provides private defensible space to front of each plot and in keeping with character of area.

Cons-

1. Depth of private gardens
2. Area of private amenity space

Option 2- Layout with 3 bed 5 person two storey with roofspace accommodation. Shallower plan with all plots facing Queens Road. Plot 3 would have secondary glazing onto Mill Road.

Pros-

1. Good urban design principles
2. In keeping with urban character of area
3. Provides 1 parking space per plot
4. Provides private rear gardens
5. Provides private defensible space to front of each plot and in keeping with character of area

Cons-

1. Car parking not immediately adjacent to each plot

Option 3- Layout with 3 bed 5 person two storey shallow plan with corner plot 3 facing both Queens Road and Mill Road.

Pros-

1. Provides large private amenity space
2. Provides private defensible space to front of each plot and in keeping with character of area

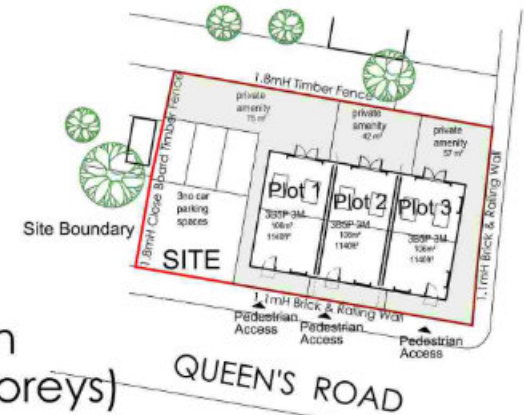
Cons-

1. Urban design principles not as good as width of plots not in keeping with urban grain.
2. No car parking facility

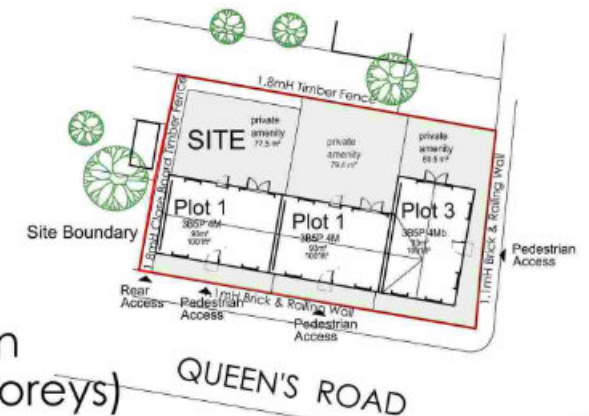


Proposed Block Plan
Option 1 (2 storeys)

Pro' Block Plan
Option 2 (3 storeys)



Pro' Block Plan
Option 3 (2 storeys)



0 5 10 20 30m

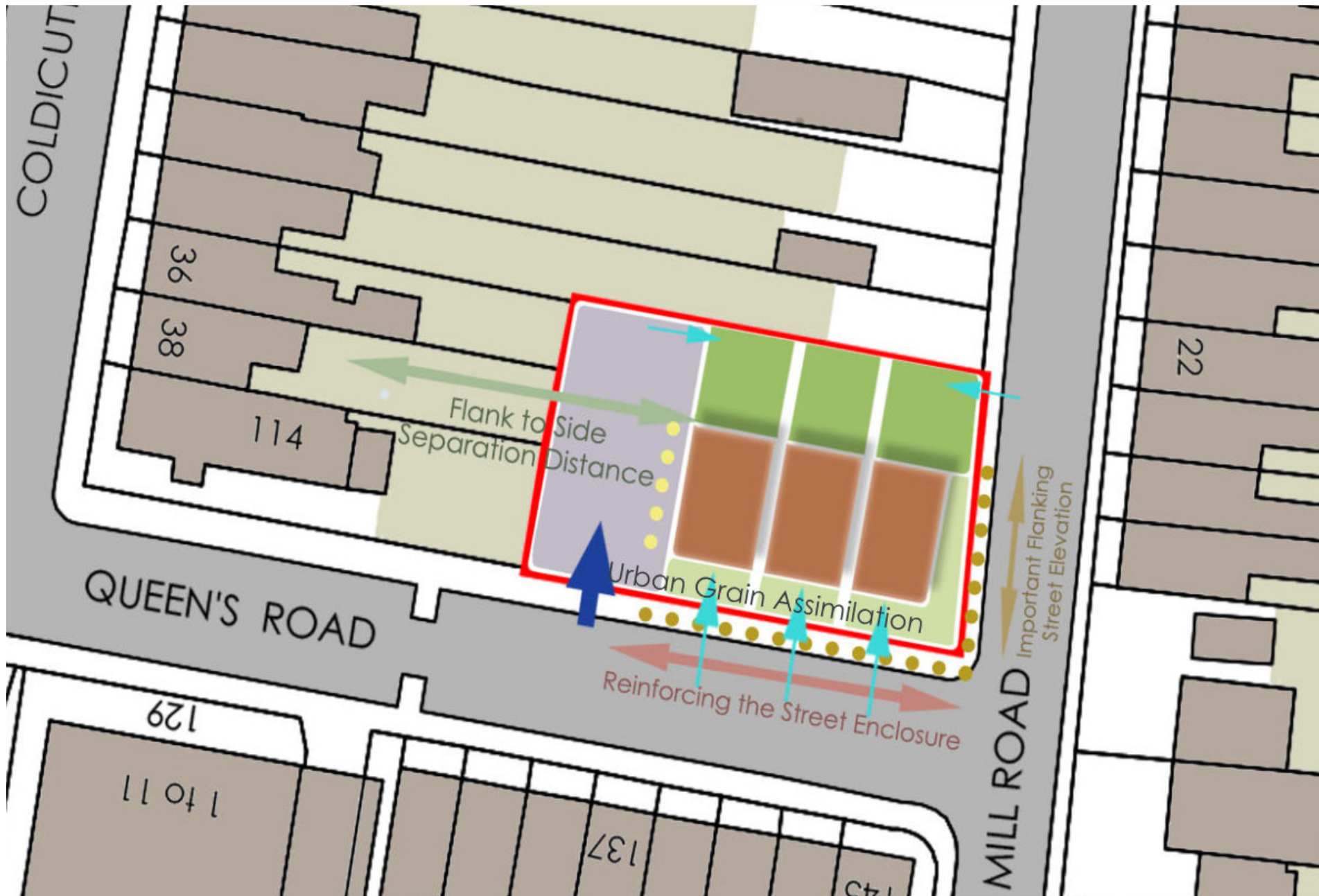


Figure 17 Various Site Layouts Options

Conceptual Layout



Figure 18 Conceptual Layout



Pre-Application

A pre-application was made to RBC in August 2022 for the '*Construction of 3x3bed residential dwelling with associated parking, access, refuse and landscaping*' at land at Queens Road, Reading. LPA REF :221122/PREAPP. Ms Ethne Humphreys, Senior Planning Officer, provided comments in October 2022 . Following is a summary of the comments relating to the overall design of the development:-

Principle of Development

In pure land use terms, a proposal to introduce 3 residential units would comply with the principles of Policy H1 (Provision of Housing) meeting the housing needs within the Borough.

Design Considerations

The proposals would dominate the site visually and appear cramped in relation to the site boundaries particularly to the south east boundary. There would be insufficient space for meaningful amenity areas or landscaping which results in a cramped over development of the site. The resultant plots to accommodate the proposed dwellings would have uncharacteristic plot sizes, with the siting and layout being at odds with the established urban grain.

Flood Risk

As there is an area demand for family and affordable homes it is possible to consider this site to come forward for such use even though it sits within Flood Zones 2 and 3. The proposals would require sequential and exception tests to justify.

Environmental Protection

A noise assessment should be submitted with the new application. The proposed design should prevent noise levels exceeding 45dB within bedrooms at night and as such, sensitive rooms should be designed away from the noisiest facades. Noise mitigation measures in glazing should not rely on non-openable windows which are not considered an acceptable solution due to the impact on living standards. In such a case, alternative ventilation details should be provided.

Quality of accommodation for future occupiers

Even though the proposed design of the residential units met the national space standards in terms of overall size, there was concern that the attic space, specifically the attic bedroom to the central unit, would not have an outlook through a rooflight. It was also considered that the private outdoor space for each unit was inadequate for family units and did not meet Policy H10 requirements.

Transport

The adopted Parking Standards and Design SPD requires 2 off street parking spaces per dwelling and the current arrangement of 1 is inadequate. Cycle storage is required to facilitate 2 spaces per dwelling as per policy. The current arrangement of 1 per dwelling would not be acceptable.

Landscape

Although it has confirmed that there are no trees on site or vegetation of particular merit, any future proposal would need to demonstrate lack of harm to neighbouring trees. As the site is adjacent to the AQMA (EN15) and within Thames Ward the development should provide sufficient greening, including tree planting, to meet the requirements of Policy EN14 and the Council's Tree Strategy objectives.

Sustainability

Any new development would need to demonstrate what measures had been included to respond to the policy requirements of Policies CC2 (Sustainable Design and Construction) and CC3 (Adaption to Climate Change) of the Reading Borough Local Plan (2019).

Design Response to Pre-Application Comments

Design Considerations

LPA comments:-

The proposals would dominate the site visually forming a cramped development with uncharacteristic plot size and layout at odds with the established urban grain.

Design Response:-

An area architectural character assessment was undertaken and summarised within this statement. This also included a study into urban grain. As can be seen from the Figure 20, the proposed layout follows the established urban grain with narrow street frontage and plot widths with street corners emphasised by dual aspect properties. The proposals follow this grain.

Flood Risk

LPA comments:-

As the site sits within Flood Zones 2 and 3 sequential and exception tests are required to justify the site use.

Design Response:-

Further to the sequential and exception tests which accompanies this application, the scheme has been designed with a raised finished floor level and floodable sub-structure to minimise water displacement from the built footprint. Further information is covered in the Supporting Flood Risk Assessment.



Figure 19 Proposed Elevation with Raised Floor Level and Floodable Sub-structure



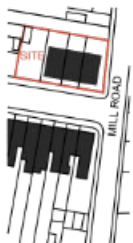
Victorian Urban Grain with narrow plots of terrace housing, small defensive front garden & strips of rear garden



Post WW2 infill development with semi-detached configuration, larger front gardens, shallower rear gardens and parking space at sides mostly infilled with garages



Recent development of flatted schemes which do not follow area character land subdivision (urban grain)



Proposed development follows the Victorian area character in land subdivision with narrow individual plots and set back building line



Figure 20 Area Urban Grain and Street Corner Pattern

Design Response to Pre-Application Comments Contin.

Environmental Protection

LPA comments:-

The proposed design should prevent noise levels exceeding 45dB within bedrooms at night and as such, sensitive rooms should be designed away from the noisiest facades.

Design Response:-

The main bedrooms and lounge have been located overlooking the rear gardens. Balconies have been excluded from the design. Windows shall be fitted with acoustic ventilators to minimise noise transmission into the dwellings. The properties are also set back by 2m from back edge of the highway pavement which forms an important acoustic isolation strip. The proposed detailing of the construction of the dwellings will comply with the recommendations in the accompanying Noise Assessment Statement

Quality of accommodation for future occupiers

LPA comments:-

There was concern that the attic space, specifically the attic bedroom to the central unit, would not have an outlook through a rooflight. It was also considered that the private outdoor space for each unit was inadequate for family units and did not meet Policy H10 requirements.

Design Response:-

The rooflights have been changed to roof windows which tilt at the top edge and allows the occupant to be able to stand within the large opening and look out. The private outdoor space has been increase. The site benefits from the close proximity of a number of large and varied public open spaces such as Hills Meadow, Christchurch Meadow and Thames Park View Island which is a natural, open space with grassy paths and seating near to the weir at Caversham Lock. It contains several wooden, chainsaw-carved sculptures, an education area and a canoe pontoon. Figure 22 shows the proximity of these parks to the site.

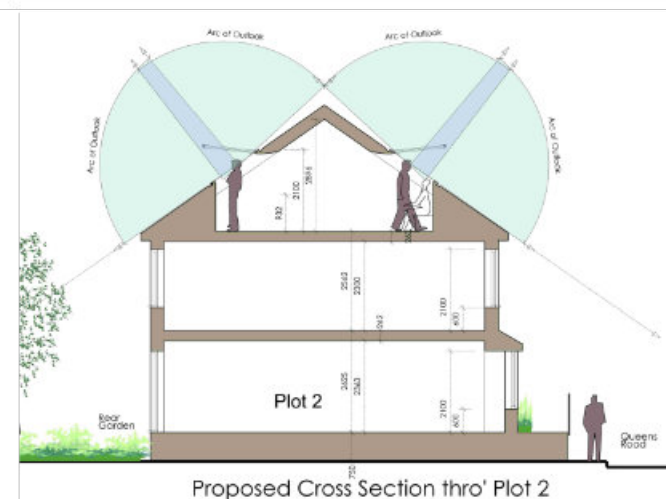


Figure 21 Proposed Roof windows to Attic Bedrooms



Figure 22 Public Open Green Spaces within Walking Distant from Site_

Design Response to Pre-Application Comments Contin.

Transport

LPA comments:-

The adopted Parking Standards and Design SPD requires 2 off street parking spaces per dwelling and cycle storage 2 spaces per dwelling as per policy.

Design Response:-

Each dwelling has been provided with 2 car parking spaces in a tandem arrangement with each set provided with a electrical car parking point. The cycle storage has been enlarged to provide 6 cycle storage spaces around three Sheffield stands set out to policy space requirements.

Landscape

LPA comments:-

The development should provide sufficient greening, including tree planting, to meet the requirements of Policy EN14 and the Council's Tree Strategy objectives.

Design Response:-

Additional trees have been provided within the communal amenity areas and within the private rear gardens. Additional trees have included along the site boundary to Mill Road to ensure that the street would also benefit from the 'greening'.

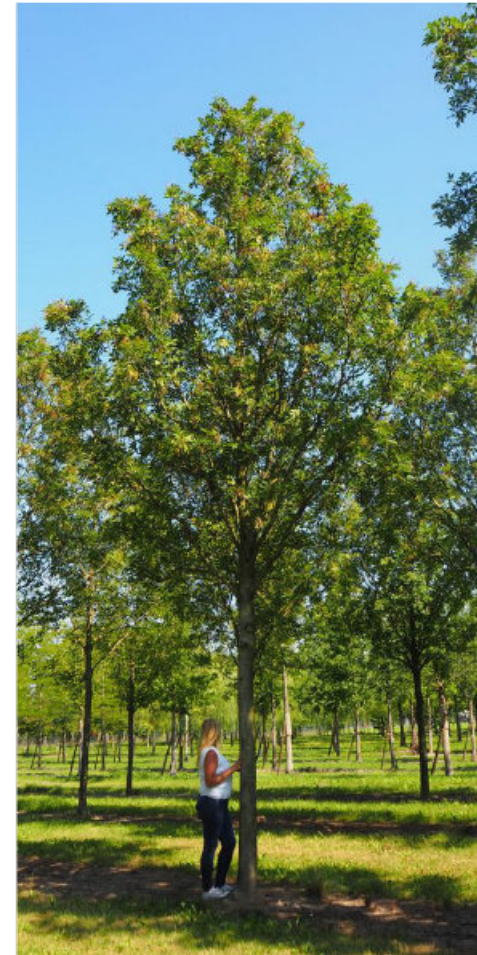


Figure 23 Proposed Small Urban Trees

6.0 Design Proposals

Use and Amount

The application proposes a group of three two storey terrace houses with associated parking, access, refuse and landscaping on land currently used as an informal car park.

The NPPF (2021) states that the LPA should “encourage the effective use of land by reusing land that has been previously developed (brownfield land), provided that it is not of high environmental value”. The pre-application response concluded that the principle of development would need to be satisfied by an exception test for a site with flooding risk.

The proposals are to provide three 3 bed 5 person houses over 3 floors. Each house has a GIA of 100.5sqm and are designed to National Designed Space Standards (NDSS) as per RBC Local Plan (2019) Section H5.

Density

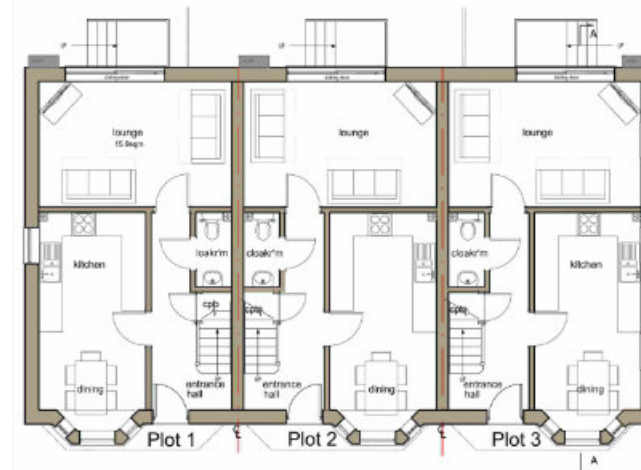
With a site area at 410sqm, (0.041ha) equates to a urban density of 73 dwellings per ha for 3 units occupying the Site. This satisfies RBC Local Plan Policy H2 for urban at 40-75 and similar to the area existing density at 55-95u/ha.



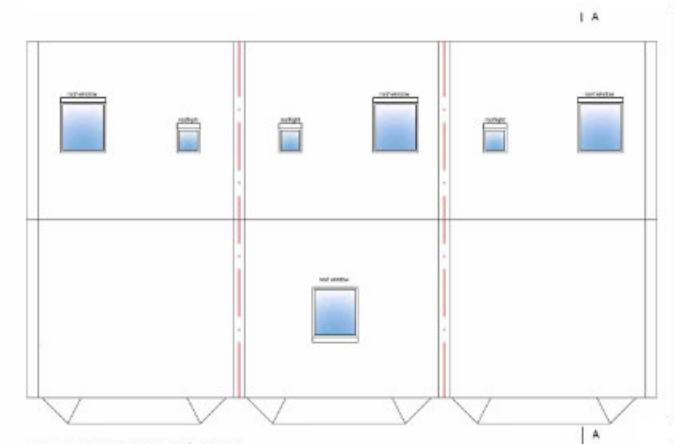
Proposed First Floor Plan



Proposed Attic Plan



Proposed Ground Floor Plan



Proposed Roof Plan

Proposed Floor Plans

Layout

The siting of the proposed residential terrace follows the existing local urban grain of the area with the front and side building line set back from Queen's Road and Mill Road as the existing terrace housing.

A car parking court is located between the gable of Plot 1 and the rear / side of the existing properties no 114 Queen's Road and no 36-38 Coldicutt Street. This provides separation and to preserve private amenity. The cycle and refuse storage is located to the rear of the parking court.

Each plot has a defensible planted front/side garden (for Plot3) and rear private garden in keeping with the area urban character.

Plot 3 has an active frontage facing onto Mill Road with secondary glazing to key habitual rooms within. Plot 1 has secondary glazing on the ground floor providing passive surveillance over the car parking court.

The extent of the depth of the proposed development respects the neighbouring buildings so as not to cause any detrimental impact on their private amenity space. This has been confirmed in the Daylight and Sunlight Assessment which accompanies this planning application. The window positioning proposed also ensures there would not be direct overlooking between the development and existing properties.



Proposed Site Plan

Scale

The proposals are for a terrace of 2 storeys with roof accommodations and is in keeping with scale of the housing in the area.

The local architectural character of the area shows a multitude of existing corner addressing terrace housing which takes on the form of either 2 storey with attic accommodation or 2 ½ storey with a fuller 3 storey as can be seen at 114 Queens Road. All these corner dwellings show windows at 3 storeys as is shown on Plot 1 and 3.



Figure 24 Corner Plot Scales, no 114 Queens Road, Champion Road & Coldicutt Street



Proposed Street Elevation



Proposed Queen's Road Elevation



Proposed Side Elevation (west)



Proposed Mill Road Elevation



Proposed Rear Elevation

Proposed Elevations

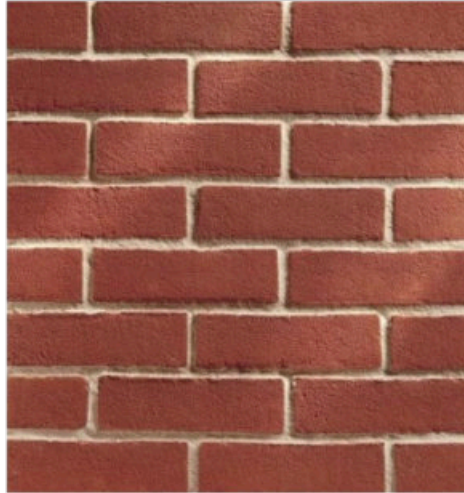
Appearance and Materials

The development have been designed to respect the surrounding buildings and to fit into the street-scene on the corner of Queens Road and Mill Road. It has been introduced as a terrace of 3 identical houses with Plot 1 handed to improved passive surveillance from a strategically located kitchen window overlooking the parking court.

Each terrace has its main entrance facing towards Queens Road, with a ground floor projecting bay and canopy over to reflect the existing properties on the adjacent side. Windows and front doors are all similarity scaled to the local character area with typical Victorian fenestration and sash effect frames.

Materials typical for the area shall be used such as red brick with grey/black slate roofs. Different coloured engineering brick of buff and blue shall be introduced as banding at floor levels and reconstituted buff stone headers and sills to wall openings.

Overall, it is considered that the design and appearance of the building would not have a detrimental impact on the character of the area or the visual amenity of the street scene.



Landscape

The landscape strategy looks to soften and enhance the public realm, improving pedestrian access, mobility and creating a greener, healthier environment. This is consistent with RBC Policy CC7 and EN12 in terms of improvement of biodiversity. The site has been divided into various areas of landscape and their key design principles are listed below:

Private Rear Gardens

- Design the space to be flexible to be able to facilitate seating/ furniture.
- Design an element of privacy along key boundaries
- Create a verdant outdoor space and softening the edges with shrub beds.
- Provide a safe and secure child friendly area.

Design-

A paved terrace with space provided for a small table and chairs shall be located adjacent to the house. The majority of the garden shall be lawned and is ideal for children's play. Planting to the rear boundaries will be in the form of shrubs and small urban trees to improve the site biodiversity and greening of the area.

Green Street Frontage

- Look at opportunities to soften the street, adding to and enhancing existing street trees and planting if possible.
- Improving the experience for the pedestrian and occupiers.
- Maintain good visibility and sight lines to make the public realm feel safe and welcoming.
- To provide an enhanced setting for the building,

ensuring ground floor adjacent rooms have passive defensive planting for privacy.

- Create a legible landscape which is clear, uncluttered and safe both during the day and at night.

Design-

Planted beds of drought tolerant hardy low level planting with bollard lighting to provide the low level lighting required to provide good visibility and to mark the route to the terrace main front doors.

Car Parking Court

- Improve route legibility for public access.
- Create a well lit, safe environment for pedestrians around cars.
- Use hard landscaping for demarcation hence reducing need for signage
- Form green edges both a low and high level for softer edges and natural sun shading
- Improve landscape aesthetic and enhance usability.
- Provide a secure by design area

Design-

The material selection for the car parking court will be a varied palette, ranging from high quality surfacing used in areas of high footfall, to more affordable but hard-wearing materials for vehicular access. High quality permeable block paving will surface the public realm along the pedestrian route bringing a warm feeling to the space, with flush kerbs suggesting a pedestrian priority environment. Permeable herringbone paving to the vehicular areas. Bollard lighting shall provide the low-level lighting required to provide good visibility and safety between

pedestrian and vehicle areas. A deciduous tree suitable for an urban location without fruit will provide shade in summer and improve the streets vertical greening. Low level fruiting shrubs will improve the biodiversity by providing shelter and food for nesting birds.

The secure cycle and refuse storage is located to the rear and is semi-screened from the street with the low shrubs and tree.

In terms of external amenity space, all units are provided with private rear gardens. Further, the site is located within close proximity to a number of designated public open spaces, Hills Meadow, Christchurch Meadow and Thames Park View Island, which can also be utilised.

Addressing the Flood Risk

The finished floor level to the plots has been raised in accordance with EA recommendations within this area of Lower Caversham. The raised level has been extended across the full frontage to Queen's Road and integrated within a boundary wall and metal railing design with defensible soft landscaping. An engineering open structure shall be incorporated into the substructure to maintain existing flood water capacity.

To provide level access compliancy with Part M4(2) of the Building Regulations, a ramp has been provided along Mill Road frontage serving the front entrances to all the plots.

Technical Considerations

Amenity Impact

The proposed developments amenity impact (effects on Daylight, Sunlight and Overshadowing on neighbouring properties) has formed an important role in the design development process. The assessment entails two analysis: firstly, an assessment of the effects to the daylight and sunlight received by the neighbouring properties surrounding the site; and secondly, an assessment of the daylight and sunlight light levels received by the residential units within the proposed development itself. Furthermore, there has been an assessment undertaken to ensure adequate sunlight is received to amenities spaces, this is known as an assessment of 'overshadowing'.

An Amenity Impact Assessment has been prepared by Syntegra Group. Please refer this assessment for more information.

Sustainability and Energy

The sustainability and energy assessment has been prepared following the principles of RBC Local Plan (2019), policies CC2 (Sustainable Design and Construction) and CC3 (Adaption to Climate Change).

The strategy aims to reduce energy demands by first incorporating suitable passive design measures, followed by proposed enhancements to provide a highly efficient building fabric and efficient heating system. The proposed energy conservation measures will reduce the new build Dwellings' Fabric Energy Efficiency (DFEE) below the Target Fabric Energy Efficiency (TFEE) by 10%. The Dwellings Emission Rate (DER) and Building Emission Rate (BER) are marginally higher than the Target Emission Rate (TER) figures dictated by the Building Regulations. These have been calculated based on air source heat pumps (ASHP). This figure will be revised at detailed design stage when building services design is fully developed. The design will be progressed prioritising energy efficiency of the building fabric and services.

Please refer to the supporting assessment prepared by Syntegra Group for more information

Further technical considerations are covered in the relative reports accompanying this planning application and cover:-

- Flood Risk Assessment and Drainage Strategy;
- Transport Statement;
- Viability Statement; and
- Construction Method Statement

7.0 Access

Site Access

Currently the site is accessed through a dropped kerb off Mill Road through a gated entrance. There is no separate pedestrian access.

The vehicular site access will be changed to be from Queens Road, adjacent to a restricted vehicular access point and in a lightly trafficked low speed environment. A new paved parking forecourt will provide 6no car parking spaces providing 2 car parking spaces per dwelling in a tandem arrangement surrounded by soft landscaping. Each set shall be provided with an electrical car charging point.

There is a secure enclosed cycle storage to the rear of the parking court for 6no bikes as per policy requirements.

Within the same building but allocated its own secure and vermin proof area is the bin store which facilities 480 litres capacity for general waste, 720 litres recycling waste and 180 litres of food waste as per the Council's waste management guidelines 2021 for 3 dwellings. Collection distances is less than 15m travel to edge of Highways which is appropriate for 2 wheeled containers.

Sustainable Transport Network

Reading Town Centre is 700m walking distance via the Reading Bridge, less than 10 minutes and is considered as a walkable neighbourhood with easy access for a large range of facilities.

The site has access to the 23, 24, 25, 27, 29 and 800 bus services from stops within 350m from the site which provides local transport around the area.

The site has also access to rail services from Reading Railway Station which is approximately 900m distance and an acceptable commuting walking range. As mentioned earlier, Reading Railway Station is a major regional interchange.

From the above, the site is considered to be a sustainable location with access to services, facilities on foot, with bus and rail services within short walking distances.

Inclusive Design

The aim for inclusive design is to remove barriers which create undue effort, separation or special treatment, and enable everyone to participate equally in mainstream activities independently with choice and dignity. Although the principles of inclusive design have emerged from the disability movement, inclusive design is relevant to all members of society, such as older people. From the outset the design of the development has included the fundamental principles of inclusive design. The design approach has been as follows:

- Provide level access throughout the ground floor
- Provide level access from outside to inside
- Provide suitable external ground finishes to not cause a trip hazard.

To facilitate the raised finished floor levels of the development, pedestrian access is either from steps adjacent to Queens Road or by a ramp next to Mill Road. This provides the level access through each dwellings principle door.

In accordance with Part M4(1) of the Building Regulations Approved Document, Category 1, Visitable Dwellings, access and sanitary provision requirements have been included within the design.