

DESIGN , SUSTAINABILITY & ACCESS STATEMENT

BLACKSMITHS LANE, REED



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1.0 INTRODUCTION

This Design and Access Statement accompanies the full plans application for the construction of 21 new dwellings at Blacksmiths Lane, Reed. The proposal entails the creation of two new access points, attenuation pond, landscaping and associated works. It is our objective to present a design that respects the existing context, complies with current Planning Policies, Highways Standards, and emphasises environmental sustainability.

The proposed development aims to address the pressing need for housing. This project seeks to provide a positive contribution to the area and thoughtfully designed whilst aligning with contemporary construction standards. Furthermore, the project prioritises sustainability by incorporating environmentally responsible features.

This Design and Access Statement provides an overview of the project's background, design principles, and key considerations. It is essential to consider this document in conjunction with the accompanying plans and reports, which provide additional details regarding the proposed development.

1.1 PHYSICAL CONTEXT AND THE SITE

Positioned on the north western edge of Reed, the site boasts a strategic location, offering easy access to the village centre and local amenities and local public transport infrastructure. Notably, the site is situated to the west of the conservation area but on the main road from the A10, making it a prominent feature within the village.

The site lies wholly within the defined settlement boundary of the village and has been allocated under Policy RD1 of the adopted North Hertfordshire Local Plan. The application site is bound by existing residential development to the south and east, the A10 to the west and open countryside to the north. To the south, properties are predominately semi-detached and set in long, narrow plots. To the east are mainly semi-detached and terrace single storey dwellings. Whilst the site is located outside the Conservation Area, to the south lies The Woolpack, which is a Grade II Listed timber frame house and views from this listed building are partially obscured.



Aerial View

Reed is a historic village situated midway between the towns of Royston to the north and Buntingford to the south, connected by the former major Roman road, Ermine Street, which largely follows the current A10. Positioned approximately 300m west of Reed Village, the A10 runs north to south. Roads within the Conservation Area lead either to the A10, the village of Barkway to the east, or connect with nearby tracks and isolated farms.

The village boasts a first school, a village hall, the Saxon parish church of St. Mary, a now privately owned small chapel, a cricket club, and a 16th-century coaching inn serving as a village pub and restaurant. Further to this there is a café to the west of the site on the A10. Additionally, a converted windmill stands proudly in the village. Reed has a large recreational ground with extensively equipped play area which is located centrally to the village.

With a settlement history spanning 2,000 years, Reed was mentioned in the Domesday Book of 1086 as Retth. Several houses in the village display remnants of ancient moats, and Reed was designated as a conservation area in 1974. The Church of St Mary, with its Late Saxon work in the nave dating back to the early 11th century, stands as a testament to the village's enduring history. The village's medieval village plan, featuring buildings scattered around Fiddler's Green and Reed Green, contributes to its distinctive character. The village is characterised by roads without designated footways.

Reed's medieval moated sites, including Queenbury's double moat and fish pond, as well as the moat and spoil banks surrounding the mid-15th century Reed Hall, add to its historical richness. The village's proximity to Ermine Street, a crucial routeway during the medieval period, may explain the prevalence of these moated sites. Reed's location near the thriving market town of Royston, at the crossroads of Ermine Street and Icknield Street, further underscores its historical significance.

During the 17th century, timber-framed houses and farmhouses began to appear along the current High Street and Crow Lane, as reflected in late 19th-century OS mapping. The village's layout gradually shifted north eastward by the mid-20th century, with modern development limited to specific areas in the northern part of the Conservation Area, such as land off Brickyard Lane and Jackson's Lane.

Beyond its historical and architectural significance, Reed boasts an area of high biodiversity characterized by chalky boulder clay woodland and species-rich neutral grasslands. The presence of neutral grasslands and ancient semi-natural woodlands, like Reed Wood, enhances the village's environmental profile.

The site's southern and northern boundaries are defined by substantial planting, including unmanaged hedgerows, shrubs, and large trees. Along the boundary with Blacksmiths Lane there are a small number of trees present. The existing buildings along the road are set back from the highway, with a general linear development pattern along the road. While individual trees may not have significant standalone value, when considered as a collective cluster, they contribute to the overall open ambiance of the site.

1.2 SITE CONTEXT PHOTOS



Application site frontage viewed from Blacksmiths Lane looking West



Application site frontage viewed from Blacksmiths Lane looking West



Application site frontage viewed from Blacksmiths Lane looking East showing Willow Close entrance



Application site viewed from junction with Blacksmiths Lane showing A10



Application site viewed from A10 looking East



Application site looking East

1.2 SITE CONTEXT PHOTOS



Application site viewed from A10 looking East



Application site viewed from within the site looking East



Neighbouring listed building adjacent to application site on the A10



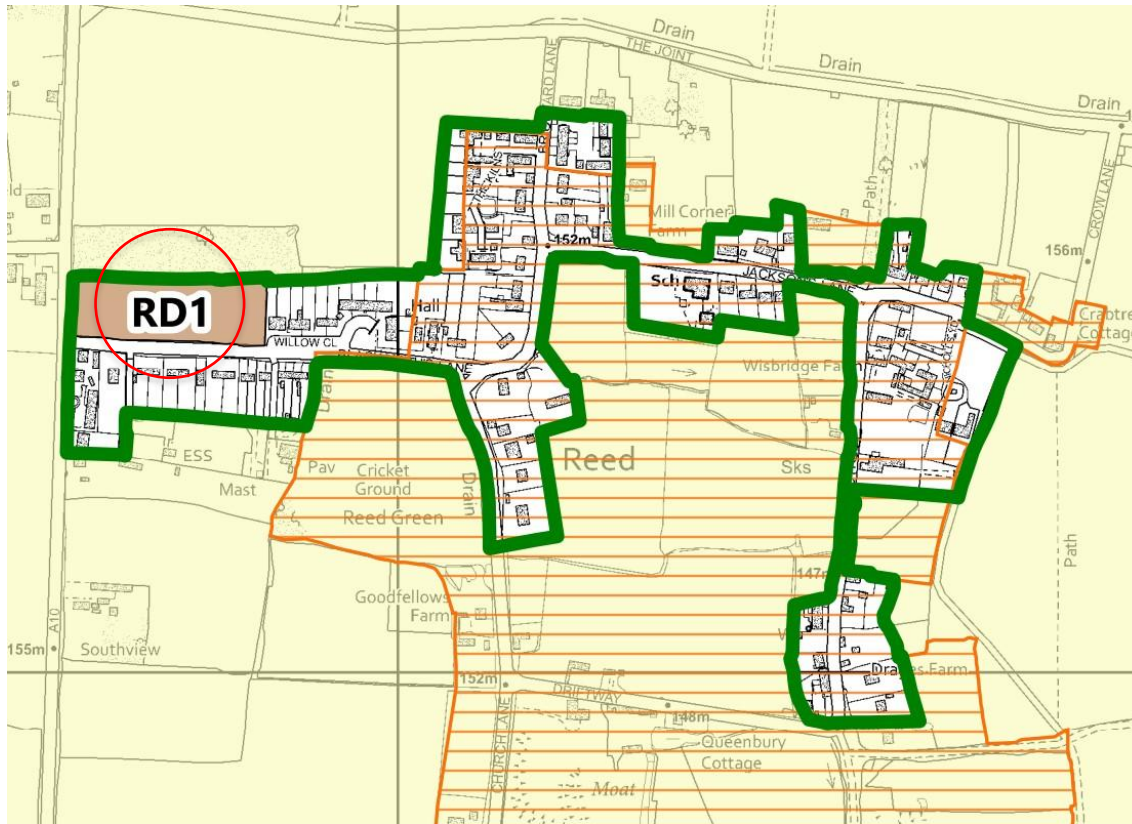
Recently built application at The Kilns with varying material palette



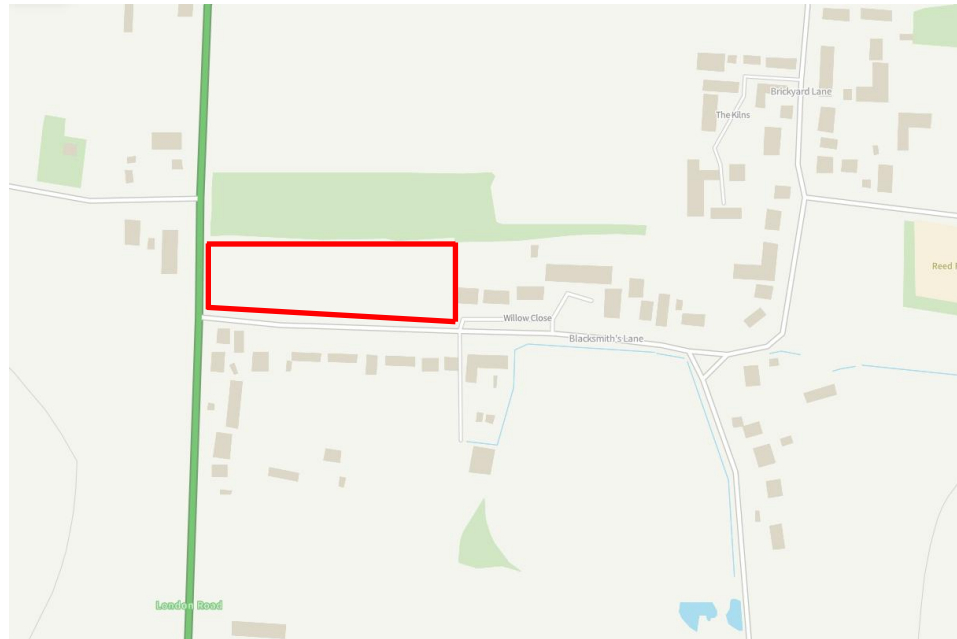
Semi-detached properties adjacent to site along Blacksmiths Lane with render and gables



Semi-detached properties adjacent to site along Blacksmiths Lane with render, gables and hipped roof



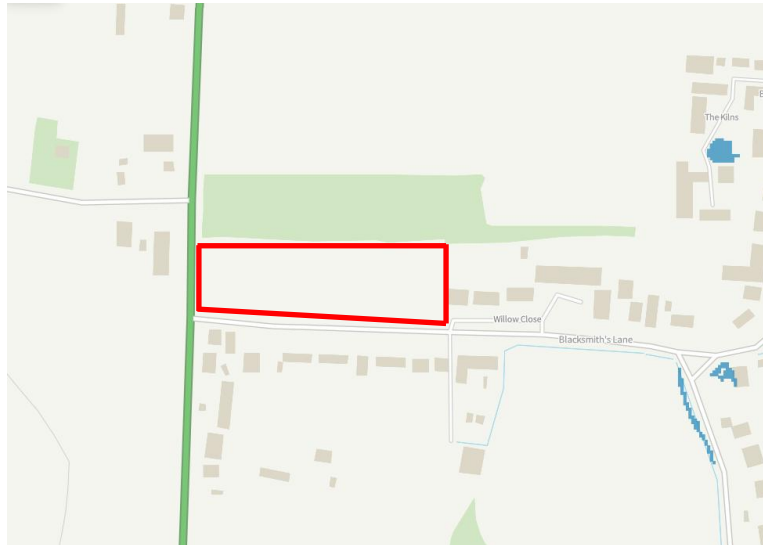
1.4 ENVIRONMENT AGENCY LONG TERM FLOOD RISK INFORMATION FOR RIVERS AND SEAS (2025)



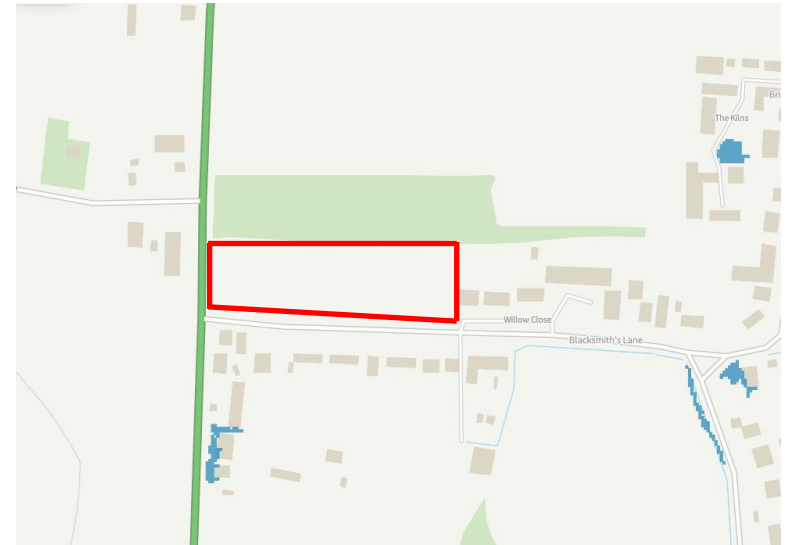
Key

 Flood zone 2
 Flood zone 3

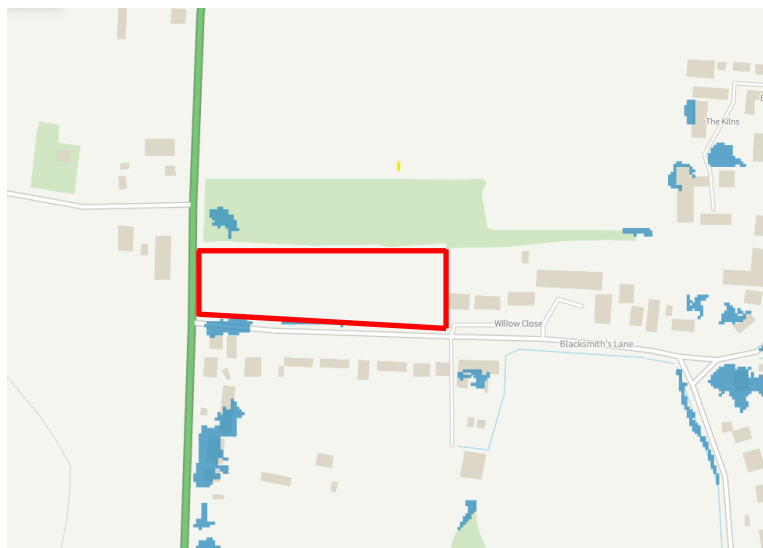
1.5 ENVIRONMENT AGENCY LONG TERM FLOOD RISK INFORMATION FOR SURFACE WATER (2025)



1 in 30 Year Flood Event



1 in 100 Year Flood Event

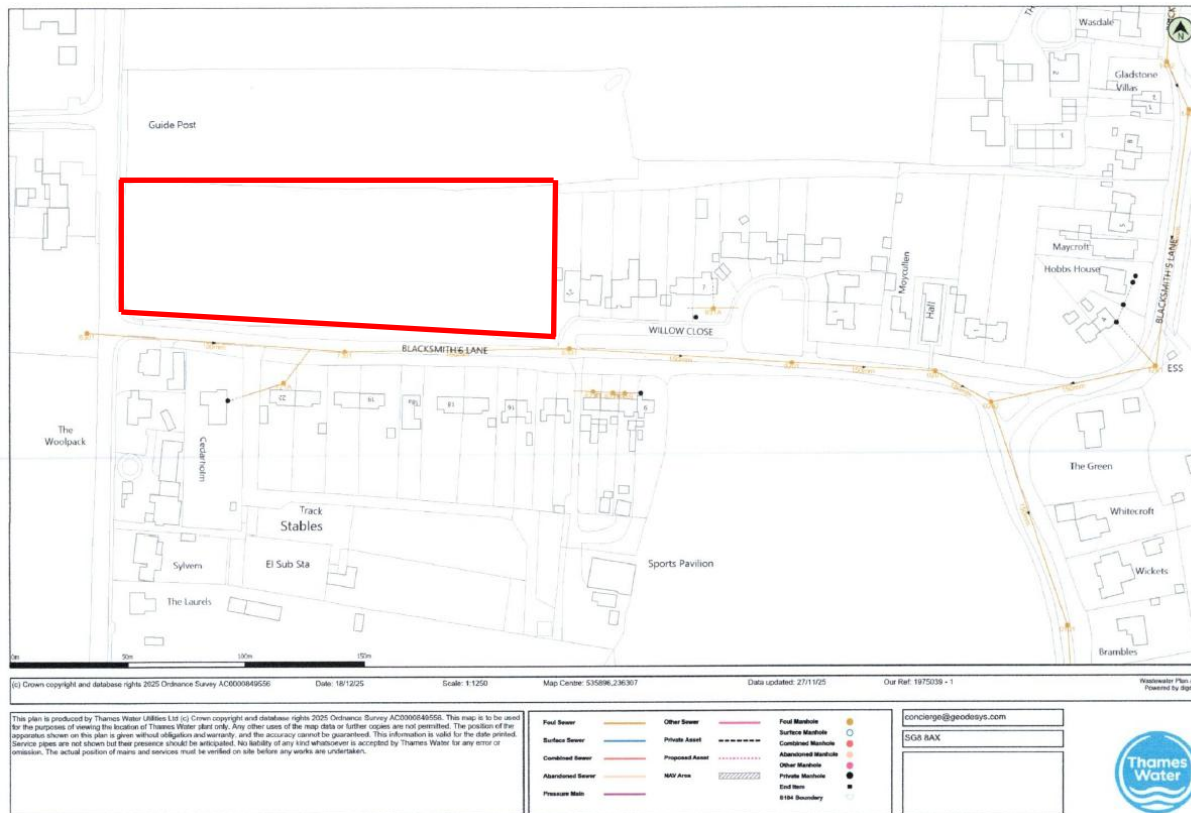


1 in 1000 Year Flood Event

Key

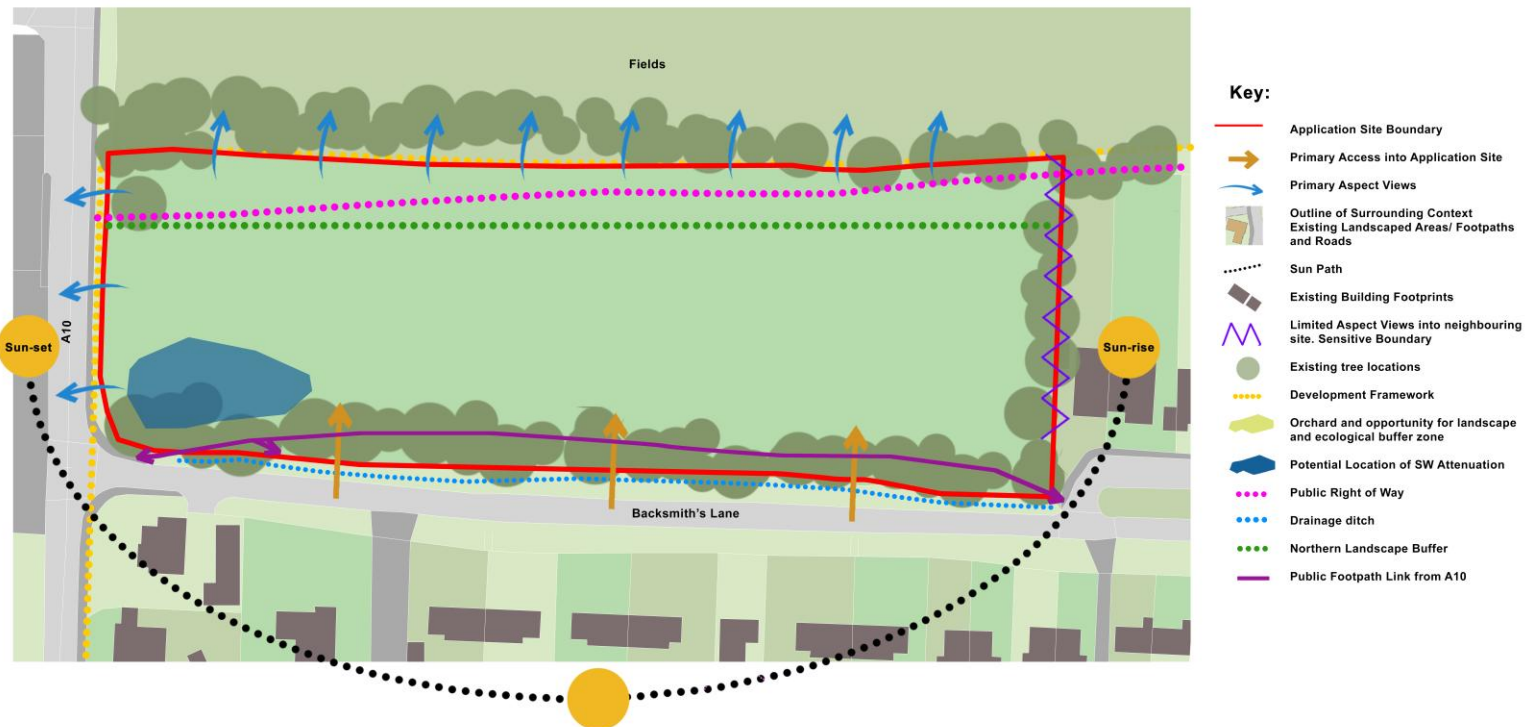


Flood extent



Blacksmiths Lane is currently served by a Foul Water mains drain as shown above. Subject to available capacity in the used water network and water recycling centre serving Reed at present then foul drainage will be to the mains system.

The final detailed design will only take place once planning permission has been granted and will be based upon the Sustainable Drainage Strategy accompanying this application with the design to accommodate all rainfall during a 1 in 100 year plus 40% climate change rainfall event without having any adverse impact upon the downstream system or flood risk.



Constraints

- Existing trees hedgerows and ditches, particularly those of value to wildlife habitat. These are to be retained wherever possible and reinforced with suitable new planting.
- The visual impact on the wider development and Conservation Area
- The shape of the site (long and narrow).
- The nature of the site topography.
- The location of the existing public right of way running east to west along the northern boundary which is to be incorporated into the design.
- The proximity of the existing settlement in relation to the proposals.
- The need to access the site solely from Blacksmiths Lane
- The existing location of mature trees and hedges.
- Restricted potential for connectivity beyond the site with constraining ownership issued to the north, south and west.
- The location of the open countryside to the north
- The nature of the site existing topography in relation to SUDs strategies.

Opportunities

- The provision of a quality housing development with 21 new homes and associated infrastructure to provide the area with much needed family housing in line with government and local policy.
- The identification of the site as appropriate for residential development in the Local Plan.
- The location of the site in relation to existing road and bus services.
- The location of the A10 which provides the opportunity for direct access to the amenities of Royston
- The potential positive impact on the local economy.
- The provision of 7 new affordable dwellings
- New landscape planting and habitat creation to improve the existing landscape quality and biodiversity.
- Retention of existing mature trees along boundaries which will contribute to a sense of enclosure and which will also act as a screen protecting longer views.
- Footpath links through site from Blacksmiths Lane to Public Right of Way

This is a detailed map of the Mill Corner Farm area in New York. The map shows property boundaries, buildings, and surrounding features. Key labels include 'Mill Corner Farm', 'Reed Green', 'Sch Wisbridge', and 'Fide Gr'. A red circle highlights a specific area on the left side of the map, near the 'S14' label. The map also shows various other labels like 'GP', 'PH', 'FP', and 'S10'.



**TWENTY
NINE.**
ARCHITECTURE
+ PLANNING

1.9 PRE-APPLICATION

A formal pre-application request was submitted to the LPA for the erection of 24 new dwellings along with three new access points and associated works on the 19th March 2024. A formal meeting and site visit took place to discuss the proposals and the Planning Authority formally responded to this on the 25th April 2024 under reference 24/00489/PRE.

The new proposals have taken on board the officers comments provided below for reference;

- The principle of development was considered acceptable but concerns were raised over the layout of the proposals and the number of dwellings due to the site being allocated for 22 homes under Local Plan Policy RD1
- The Housing Officer objected to the parking courts due to vandalism and natural surveillance as well as three access points served from the highway. The proposals have been amended to reduce/ remove parking courts along with the introduction of two access points only
- Officers had concern with the urban nature of the scheme but multiple iterations were reviewed including a scheme which solely faced Blacksmiths Lane which was considered unconventional. The revised layout was considered as a suitable mix with increased landscaping and reflecting the village character more suitably
- There was no concern with the aesthetics of the proposals and chimneys and traditional materials were supported.
- The footpath and belt of trees to the north retention was supported
- Cycle parking provision to the rear was supported and the scheme incorporates further visitor parking provision in line with the comments raised. A total of 16 visitor bays are now shown



Previously submitted site plan

2.0 THE PROPOSAL

The project involves constructing 21 dwellings, including detached and semi-detached units to capture the diverse architectural styles in Reed. Additionally, two new vehicular access points will be created, along with an improved landscape buffer and a partial extension of the public footpath to the Blacksmiths Lane frontage as requested by the Local Planning Authority.

From the project's inception, a deliberate focus was placed on adopting a traditional architectural approach that complements the local surroundings and reflects the character of the area. As a result, the design of these units has been meticulously curated to seamlessly blend with the neighbouring properties and contribute to a cohesive built form reminiscent of the traditional village architecture. The proposal is grounded in a conscientious consideration of the local architectural context, addressing aspects such as scale, massing, and density to deliver a high-quality development that harmonizes effortlessly with the area's aesthetic. It became evident early in the design process that the development needed to embody utmost quality to maintain its synergy with the surrounding environment.

Use and Amount

The proposal aims to erect a mix of housing types, sizes and tenure. The below provides an indication of the proposed housing mix and types;

Plot No.	Bedrooms/Number of Persons	Type	House Type	Tenure	Gross Internal Area (m2)	Minimum Space Standards Requirement	Area above Min. Space Standards
Plot 1	3Bedrooms, 5 Persons	Semi-detached	Type A	Affordable	94.8	93.0	1.8
Plot 2	3Bedrooms, 5 Persons	Semi-detached	Type A	Affordable	94.8	93.0	1.8
Plot 3	3Bedrooms, 5 Persons	Semi-detached	Type A	Affordable	94.8	93.0	1.8
Plot 4	3Bedrooms, 5 Persons	Semi-detached	Type A	Affordable	94.8	93.0	1.8
Plot 5	2Bedrooms, 3 Persons	Semi-detached	Type B	Affordable	76.5	70.0	6.5
Plot 6	2Bedrooms, 3 Persons	Semi-detached	Type B	Affordable	71.0	70.0	1.0
Plot 7	3Bedrooms, 5 Persons	Detached	Type C	Affordable	139.0	93.0	46.0
Plot 8	3Bedrooms, 5 Persons	Semi-detached	Type D	Private (Market)	102.5	93.0	9.5
Plot 9	3Bedrooms, 5 Persons	Semi-detached	Type D	Private (Market)	102.5	93.0	9.5
Plot 10	3Bedrooms, 5 Persons	Semi-detached	Type D	Private (Market)	102.5	93.0	9.5
Plot 11	3Bedrooms, 5 Persons	Semi-detached	Type D	Private (Market)	102.5	93.0	9.5
Plot 12	3Bedrooms, 5 Persons	Detached	Type C	Private (Market)	139.0	93.0	46.0
Plot 13	4Bedrooms, 7 Persons	Detached	Type E	Private (Market)	165.2	115.0	50.2
Plot 14	4Bedrooms, 7 Persons	Detached	Type F	Private (Market)	135.9	115.0	20.9
Plot 15	3Bedrooms, 5 Persons	Detached	Type C	Private (Market)	139.0	93.0	46.0
Plot 16	4Bedrooms, 7 Persons	Detached	Type E	Private (Market)	165.2	115.0	50.2
Plot 17	4Bedrooms, 7 Persons	Detached	Type F	Private (Market)	135.9	115.0	20.9
Plot 18	3Bedrooms, 5 Persons	Semi-detached	Type G	Private (Market)	102.5	93.0	9.5
Plot 19	3Bedrooms, 5 Persons	Semi-detached	Type G	Private (Market)	102.5	93.0	9.5
Plot 20	3Bedrooms, 5 Persons	Semi-detached	Type G	Private (Market)	102.5	93.0	9.5
Plot 21	3Bedrooms, 5 Persons	Semi-detached	Type G	Private (Market)	102.5	93.0	9.5

Total GIA	2365.9
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The application scheme is considered as being demonstrably capable of providing residential accommodation in a sustainable location and therefore is fully compliant with the provisions set out in NPPF, and the development plan.

Design and Appearance

The design of the proposed dwellings has been meticulously crafted to align with the client's specific requirements, all the while responding thoughtfully to the unique challenges and opportunities presented by the site. Key features of this design include:

Modern Living: Our primary goal is to create new dwellings that meet the modern living requirements and standards of the clients.

Heritage Sensitivity: Given the site's location close to a Listed Building, we have given careful consideration to the new buildings footprint and their placement to respect the surrounding environment.

Height of Buildings: To minimize its impact on the local surroundings, we have paid particular attention to the building heights. This has been achieved through strategic adjustments to ground levels, effectively reducing ridge and eave heights as far as practicable and stepping down from west to east.

Traditional Integration: Our design seamlessly integrates traditional elements while respecting the existing context, materials, and architectural forms.

Consultative Approach: The design has evolved through continuous consultation with both the client, various consultants. Parish Council and extensive Pre-Applications ensuring that all stakeholders' inputs are considered and integrated.

The placement of the development demonstrates a conscious effort to align with the scale, massing, and volume of existing surrounding context. The dwellings have been designed with varying heights to minimize their visual impact from the street.

The aesthetic of the proposed development adheres to solid design principles commonly found in high-quality projects. To create a strong frontage and a sense of enclosure, higher densities of building typologies like semi-detached housing are employed at specific locations. Additionally, double-fronted dwellings are strategically designed. While the architectural language draws inspiration from the village, the proposed buildings avoid mere imitation or pastiche. Instead, they focus on referencing fenestration styles, porch features, and a complementary palette of materials.

Elevation designs are influenced by vernacular architecture, incorporating elements such as traditional lean-tos, pitched roof canopies, and fenestration styles. Key buildings are adorned with chimneys, and a diverse palette of materials, including various brick tones, renders, and slate and clay-coloured roof coverings, introduces visual variety.

Contemporary elements, when introduced, serve functional purposes like patio doors or aim to faithfully replicate original forms and materials. The characteristic gable-ended approach, prevalent in the local area, is evident with open fronts for shelter and storage, often featuring brick or timber-clad walls, expansive front openings, and bay windows.

Through a process of deconstruction and reinterpretation, the design distils essential elements of traditional architecture and references the village's layout, materials, and rhythm. These elements are thoughtfully reimaged, resulting in proposals that evoke a sense of familiarity and belonging to the locale while remaining well-suited for modern living. The proposals are cohesive in its design approach with no differences between the affordable and market housing in terms of quality and materiality.

Form and Layout

The proposed layout has undergone a thorough evolution through a process of assessment, evaluation, and collaboration with stakeholders. At the core of the design is the commitment to delivering a high-quality housing development in a traditional style that pays homage to and complements the existing housing stock.

Primarily consisting of houses, the development introduces a variety by incorporating semi-detached housing and a small number of detached properties. The connectivity and landscaping have been carefully designed to impart a distinctive character to the development. Each access point ensures a sense of arrival, visible from the tree-lined Blacksmiths Lane. The housing layout strategically integrates rear gardens with existing landscaping features, such as mature trees and hedgerows along the site's boundaries. A 10-metre wide landscape strip along the northern boundary is allocated for landscape enhancements with new orchard tree planting. Existing mature tree screening along the highway will be preserved as far as practicably possible, with minimal foliage removal necessary for the new vehicular and pedestrian accesses.

A key principle of the proposed design is the preservation and fortification of the north and south boundaries to protect the existing ecology and habitat. The built form is concentrated away from the site boundaries, allowing for private gardens and the introduction of new trees and hedging to enhance biodiversity and ecological value.

Sustainable drainage methods are integral to mitigating potential flooding, with detailed design specifications included in the application. Existing habitat areas, such as trees and hedgerows, will be retained and seamlessly integrated into the overall design. The combined use of landscaping and ecological strategies aims to significantly improve biodiversity and create new and enhanced wildlife habitats.

Vehicular access will be maintained through Blacksmiths Lane, incorporating two new access points. Each dwelling will have two parking spaces, meeting council requirements, and additional visitor bays will be provided.

The scheme's design embraces a "traditional" layout, with meticulous attention given to shaping individual units. Traditional materials, known for durability and low maintenance, will be used in construction. Brick and block construction with high thermal mass will regulate temperature fluctuations and store solar energy. Timber sourced from renewable, sustainable sources will be used, and habitable rooms will be naturally lit to conserve energy, aligning with a commitment to sustainability and environmental responsibility.

Landscaping and Boundary Treatments

The development approach for the site has been firmly grounded in landscape considerations, making a robust landscape structure an integral component of the overall design strategy. Our goal is to seamlessly integrate existing landscape features while introducing new elements to enhance the overall environment.

Planting assumes a pivotal role in elevating the site's boundaries, creating a well-defined framework that effortlessly blends with the development. The tree selection prioritizes predominantly native species or cultivars of native origin. An approximate 10-metre landscape buffer along the northern boundary has been preserved, reinforcing the separation between the built form and the surrounding countryside and new Orchard tree planting is incorporated into the design proposals to enhance the Biodiversity of the site.

Particular attention has been dedicated to enhancing the boundary along Blacksmiths Lane. We've preserved the soft landscaped buffer along this edge, introducing two access points. Parking has been strategically designed to minimize visibility from the public domain, with large parking areas kept to a minimum. The proposal introduces enhanced planting throughout, aligning with the architectural character of the area, incorporating soft vegetation to visually enhance the boundary edge.

The orientation and setback of buildings have been meticulously planned to reduce perceived massing, contributing to the site's openness. By employing natural materials that resonate with Reed's architectural style, we aim to ensure seamless integration with the surroundings, harmonizing with the natural environment while respecting the architectural character.

Landscaping is interspersed with the built form, creating an attractive setting that retains and enhances existing green features such as trees and hedges. New tree and hedge planting will partially screen the built form, complementing the existing mature trees and hedging. Vehicular and pedestrian routes will be lined with new tree and hedge planting to aid biodiversity and soften the landscape.

Inclusive Access to Proposed Dwellings and Secured by Design

The internal arrangements of all dwellings are designed to be fully compliant with the requirements for accessible and adaptable dwellings (Part M 4 Category 2 of the Building Regulations).

All ramps and footways shall comply with the requirements of the DDA act. New dwellings will be required to have level access thresholds to front doors. All housing is designed to meet the councils' requirements relating to part M4(2) of the building regulations.

The layout of dwellings has been fully informed by secured by design philosophy. The principles of passive surveillance are a fundamental design feature. Dwellings are provided with windows in flanking walls to maximise the use of passive surveillance. Dwellings lining streets provide active frontages to help create vibrant neighbourhoods. Lighting to parking areas and footpaths will follow Secured by design Principles. Shrub and hedge planting will be used to define defensible space in front of windows at ground level.

2.1 MATERIALS

Materials have been chosen to ensure the dwellings integrate well with the existing vernacular of Reed, as well as each other, while also creating an interesting and varied street scene.

Walls and Roofs

Brick: Red brick is found all around the existing and surrounding context and allows for experimenting with brick details such as brick arching and the use of it on plinths. The brick is used on main primary façades. Red and yellow tones of mixed stock are encouraged to create interest within each façade. Brick is the most prominent material used in Reed as well as timber cladding and render.

Timber Cladding: Traditional black boarding and natural timber boarding of any style is deemed appropriate within the proposed street scene.

Render: White and pastel tones to principal facades, brighter tones may be used along other facades.

Roof Materials: Roof materials including slate, clay plain tiles and sedum are used to provide variation in built forms



Red brick



Buff brick



Timber cladding



Render



Natural slate



Clay tiles



Sedum roof
(Cycle stores only)



Brick detailing

Doors: High performance timber doors are used throughout to reference the local vernacular.

Windows: Timber painted finish with Low UValues are encouraged and should be in natural tones UPVC windows are not deemed acceptable given the proximity to the Conservation Area

Rainwater goods: White UPVC is not an acceptable material and as such the proposed gutters and downpipes preferred are shown as black UPVC. Rainwater recycling has also been encouraged by incorporating rainwater pipes on the rear elevations which will enable future occupants to connect water butts at their will.

Paving: It is proposed that the main roads into the site are a shared surface, creating a reduced separation between pedestrians and vehicles. The access roads will not have a high level of traffic creating a safer environment for pedestrians.

All hard landscaping, to both the public and private realm, will be permeable and allow surface water to sustainably drain into the water table and SUDS. The proposal therefore utilises a mix of block paving and tarmac.

Shared Surface Maintenance: A management company will be responsible for the maintenance of the shared surface and hedgerows.



Timber windows
Casement



Timber doors



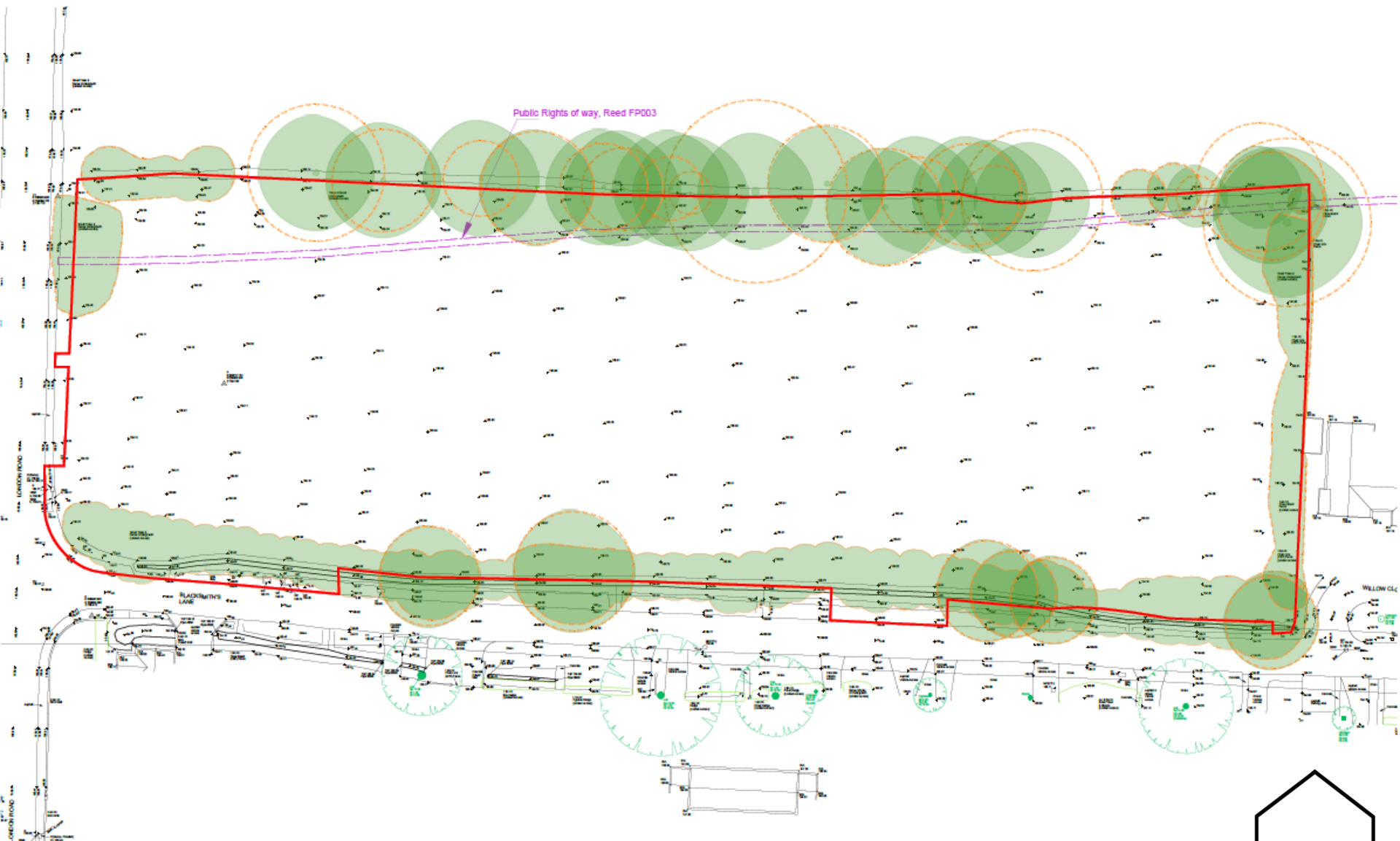
Timber windows
Sliding Sash



Galvanised gutters



Permeable paving







GROUND FLOOR
GIA- 94.8m² (1,020sq.ft) 3Bedroom, 5Persons



FIRST FLOOR



FRONT ELEVATION



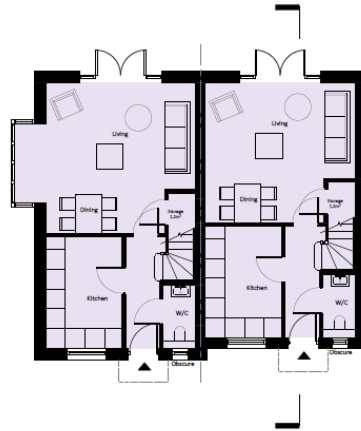
SIDE ELEVATION



SIDE ELEVATION

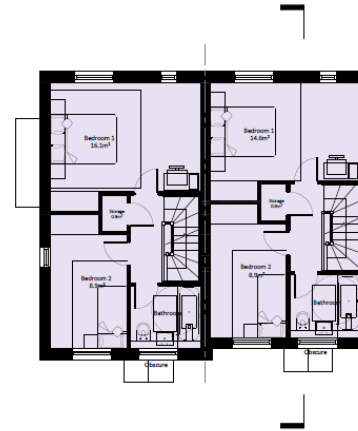


REAR ELEVATION



GROUND FLOOR

PLOT 5 GIA- 76.5m² (823sq.ft) 2Bedroom, 3Persons
PLOT 6 GIA- 71.0m² (764sq.ft) 2Bedroom, 3Persons



FIRST FLOOR



FRONT ELEVATION



SIDE ELEVATION



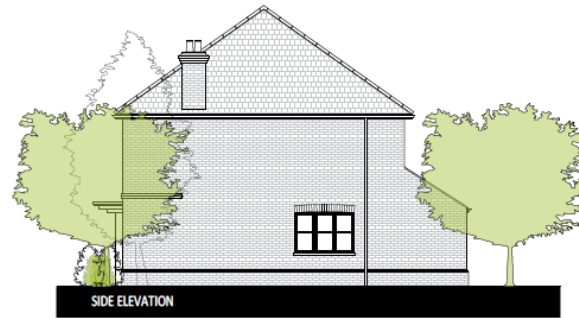
REAR ELEVATION



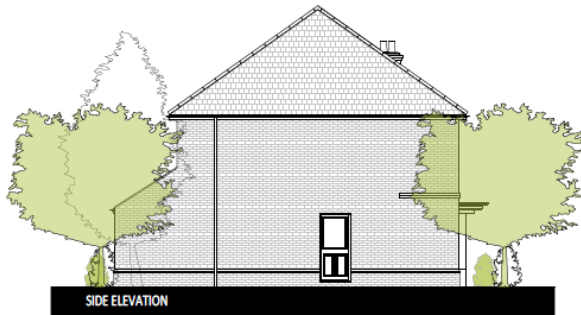
SIDE ELEVATION

GROUND FLOOR
(Plot 15 Handed)GIA- 139.0m² (1,496sq.ft) 3Bedroom, 5PersonsFIRST FLOOR
(Plot 15 Handed)

FRONT ELEVATION



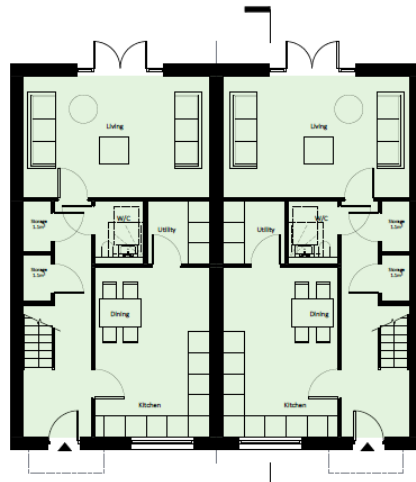
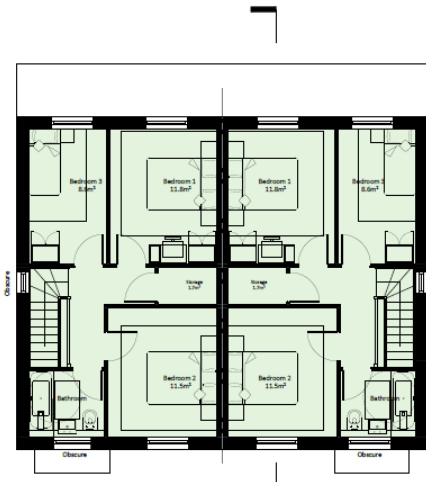
SIDE ELEVATION



SIDE ELEVATION



REAR ELEVATION

**GROUND FLOOR**GIA- 102.5m² (1,103sq.ft) 3Bedroom, 5Persons**FIRST FLOOR****FRONT ELEVATION****SIDE ELEVATION****SIDE ELEVATION****REAR ELEVATION**



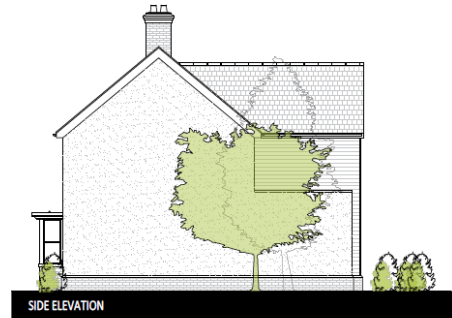
GROUND FLOOR
(Plot 16 Handed)
GIA- 165.2m² (1,778sq.ft) 4Bedroom, 7Persons



FIRST FLOOR
(Plot 16 Handed)



FRONT ELEVATION



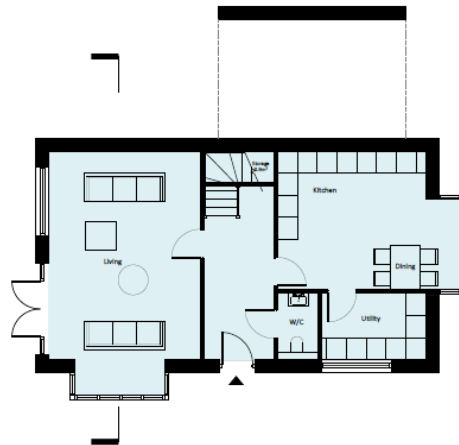
SIDE ELEVATION



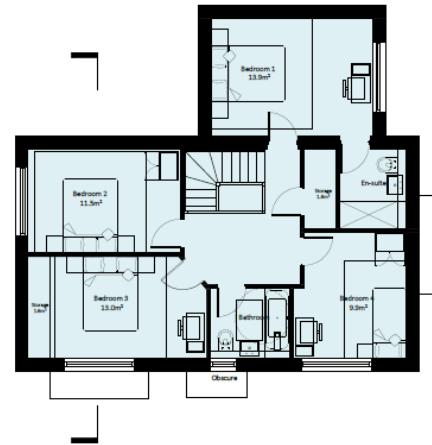
SIDE ELEVATION



REAR ELEVATION



GROUND FLOOR
(Plot 17 Handed)
GIA- 135.9m² (1,462sq.ft) 4Bedroom, 7Persons



FIRST FLOOR
(Plot 17 Handed)



FRONT ELEVATION



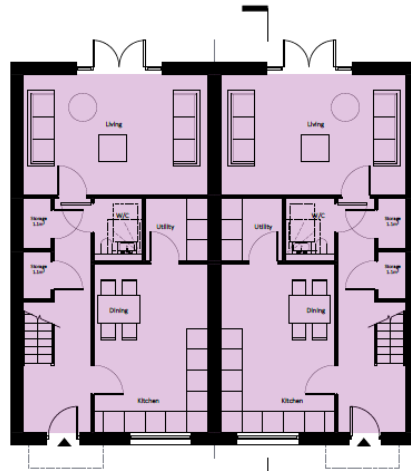
SIDE ELEVATION



REAR ELEVATION



SIDE ELEVATION



GROUND FLOOR
GIA- 102.5m² (1,103sq.ft) 3Bedroom, 5Persons



FIRST FLOOR



FRONT ELEVATION



SIDE ELEVATION



SIDE ELEVATION



REAR ELEVATION



PLOTS 1-4 VIEWED FROM LONDON ROAD LOOKING NORTH-EAST



PLOTS 5-7 VIEWED FROM ACCESS ROAD LOOKING NORTH-EAST



PLOTS 8-11 VIEWED FROM ACCESS ROAD LOOKING NORTH-EAST



PLOTS 15-7 VIEWED FROM PUBLIC FOOTPATH LOOKING SOUTH-EAST



PLOT 17 VIEWED FROM ACCESS ONTO BLACKSMITHS LANE LOOKING SOUTH-EAST

3.0 VEHICULAR/ CYCLE PARKING AND ACCESS

The proposed development will include 2 off-street parking spaces for each dwelling, in alignment with the parking standards established in the Local Plan along with 10 visitor parking bays. Planning Policies, which mandate an adequate level of parking is provided for houses. The site's strategic location in proximity to local amenities and transportation options in Reed reinforces its sustainable nature.

To cater to the site's needs, we intend to create two independent access points from Blacksmiths Lane in compliance with the Highways Authority's standards. Adequate visibility splays have been achieved, and the road surface will consist of a bound material to prevent debris from spilling onto the highway. The parking, areas fronting Blacksmiths Lane have been kept to a minimum providing additional landscape features and ensuring landscaped natures of the frontage is retained. We therefore consider the access and egress arrangements fully adhere to the guidelines set forth by the Highways Authority, rendering the access road suitable for residential use.

Cycle parking has been meticulously designed in accordance with the Council's current standards providing a minimum of 2 cycle spaces for each 2-3 bedroom dwelling and 3 cycle spaces for every 4 bedroom dwelling. The properties will feature covered and secure storage areas for bicycles within the curtilages of each unit.

4.0 WASTE STORAGE AND RECYCLING

The proposal incorporates a designated bin storage area within each unit, as illustrated on the site plan. This area is allocated for blue lid, black lid, purple lid and separate area for 3No. food caddies with stepped areas avoided to ensure easy access.

The design of the proposal is such that refuse vehicles will be able to enter each access point and manoeuvre so they can leave the site in forward gear. Residents are expected to bring their bins to the access road frontages on designated collection days. We believe this is acceptable, given the site's nature and current refuse collection arrangements. Internally, kitchens will be equipped with integral waste containers to encourage recycling..

5.0 DISABILITY DESIGN AND ACCESS

The proposed development incorporates features to facilitate easy access for all individuals, including those using wheelchairs and prams. By designing streets and spaces to accommodate low vehicle speeds, we ensure that all users can confidently navigate the routes within the site.

Disabled access, compliant with the current Approved Document Part M4(2) of the Building Regulations, has been provided. External surfaces and parking areas will be paved with smooth, hard materials suitable for wheelchair use. All doors will have level thresholds, with widths sufficient for wheelchair access. Double doors will have one leaf of a minimum width of 900mm.

Within each unit, WC accommodations have been designed to accommodate disabled visitors. Light switches, electrical socket outlets, and intercom door entry systems will be positioned at heights suitable for disabled use, ensuring inclusivity and ease of access for all residents and visitors.

Sustainable design principles are at the core of the developments ethos, and they have been diligently integrated across every aspect of the project to deliver a low-impact design that harmonizes with the site's demands and setting. A holistic approach has been adopted to reduce reliance on external sources of energy, not only during construction but also throughout the lifetime of the project.

The design places a strong emphasis on four key sustainability areas:

- 1. Energy and Carbon Dioxide Emissions**
- 2. Water**
- 3. Waste**
- 4. Pollution**

We have developed a comprehensive list of available technologies, assessing their viability and suitability for the site. The most suitable systems have been chosen to form the sustainability strategy for the project. To maximize efficiency, our site-wide strategy is grounded in an energy hierarchy: "Mean," focusing on energy efficiency in building design; "Lean," emphasizing energy-efficient supply and conversion of energy; and "Green," centered around renewable energy provision.

All recommendations align with the National Planning Policy Statement: Sustainable Development in Rural Areas. Our focus has been on achieving exceptional quality and innovative design while preserving the site's natural surroundings.

ENERGY AND CARBON – MEAN

BUILDING FABRIC

The proposal targets a high level of fabric efficiency, aiming for a betterment against the baseline figures within Building Regulations Part L. To achieve this goal, we've assessed heat loss across the buildings and made recommendations for improvements in various building elements, including floor, roof, windows, wall heat loss, air permeability, and thermal bridging..

PASSIVE SYSTEMS

Passive systems have been incorporated into the building design to minimize the need for active mechanical heating or cooling systems. Several passive systems have been specified for Clay Close Lane:

- High Thermal Mass:** Thick masonry walls with a high thermal mass provide insulation against temperature fluctuations by absorbing excess heat during the day and releasing it at night.
- Natural Ventilation:** The ventilation strategy maximizes the cross flow of air, with high windows allowing hot air to escape while drawing in cooler air from windows below.
- Site Orientation:** Large windows on the south-facing facade maximise daylight penetration, reducing the need for artificial lighting and further enhancing the dwelling's energy efficiency.

These sustainable design principles not only contribute to a greener and more energy-efficient dwellings but also align with our commitment to preserving and enhancing the natural environment of the site.

ENERGY AND CARBON – GREEN

LOW or ZERO CARBON TECHNOLOGIES

Low or zero carbon technologies reduce carbon dioxide emissions by offsetting the emissions associated with conventional fuels such as oil and gas. As well as reducing greenhouse gas emissions, the provision of such technologies also helps conserve finite fossil fuel resources and over the lifetime of the systems, reduces the cost of energy used.

SOLAR PHOTOVOLTAIC PANELS

Each unit will be provided with solar PV Panels to increase renewable energy use and reduce the need for reliance on the electrical grid. These panels will be linked to each unit's meter for their sole use.

ENERGY AND CARBON – LEAN

'Lean' energy efficiency relates to the energy efficient supply, conversion and control of energy. The following systems and measures will be deployed to enhance the energy efficiency of the mechanical and electrical systems.

AIR SOURCE HEAT PUMPS

Air Source Heat Pumps create a healthy indoor environment for its occupants whilst optimising energy efficiency. It works on the principle of absorbing heat from the air and transferring this heat to water for space heating. The layout of the dwellings are well suited to in situ ASHP units.

ENERGY DISPLAY DEVICES

Occupant behaviour and awareness of systems is key to achieving the energy targets that have been set. A home user guide will be provided to enable the occupants to understand and operate their home efficiently. In addition, electricity and primary heating fuel consumption data will be displayed to users via an energy display device (this may comprise an online measurement platform accessible by devices such as a tablet or computer)

WATER

A comprehensive water strategy will be developed to mitigate the demand for both potable (drinking) and non-potable (non-drinking) water. Given the increasing scarcity of water as a resource, our site has set a stringent target to minimize water consumption and avoid any increase in demand on the local water network. To reduce the demand for non-potable water, we conducted a demand assessment for the development. Based on local requirements, we will meet the target of 110 litres/person/day through the following measures:

SURFACE WATER

To ensure that the peak runoff rate over the development's lifetime does not exceed that of the pre-development site, we employ two key strategies:

1. Rainwater Harvesting: Extensive use of rainwater harvesting reduces surface water runoff.

2. Sustainable Drainage Systems (SuDS): These systems, such as permeable paving and slotted French drains, enhance stormwater infiltration, offsetting the increase in impermeable surfaces.

7.0 CONCLUSION

The submitted application represents the culmination of many months of close collaboration and consultation with the Planning Authority and presentations to the Parish Council with the aim of realising this unique site's exciting potential for the delivery of a development of the highest quality.

The development must be capable of satisfying the aspirations of the various stakeholders along with the requirements of the local planning authority. The proposals have developed over time with comments and suggestions from a detailed consultation process sought, tested and assimilated into the design process to galvanise the final design into a carefully considered set of proposals.

The proposed design promotes safe and active street frontages whilst retaining landscape features. The carefully designed relationship between the landscape and built form creates the underpinning design rationale. Green spaces frame and complement the built form and a central green creates the centre piece at the heart of the design. Landscaping treatments work in conjunction with subtle variations of building details to create a unique development with its own sense of identity.

The architectural aesthetic has been informed by traditional building forms with reference to the architecture of the existing village to enable the development to become a fully integrated and successful addition to the area. The designs refrain from historical pastiche choosing to reference features and fenestration styles with a palette of materials that blend subtly together. The submitted proposals provide the opportunity to deliver a quantum of high quality and much needed housing to the area, set within the context of a unique and attractive landscaped setting that will prove to be an asset to the existing village.

Our proposal presents a meticulously designed scheme that effectively addresses the existing limitations and opportunities presented by the site while adhering to the planning policy outlined in the National Planning Policy Framework (NPPF). Situated within the development framework but close to the Conservation Area, our design takes careful consideration of the scale, massing and volume of the existing buildings while delivering significant visual improvements that enhance the overall setting within the broader context.