KIVESBOROUGH, LITTLEHAMPTON ROAD

DESIGN AND ACCESS STATEMENT

ECE Architecture

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Revisions

Revision	Notes	Issue Date	By	Checked By
/	Draft Issue	12.01.24	IM	JB
A	Planning Issue	31.01.24	IM	JB
B	Planning Issue	20.03.24	IM	JB

Contents

1.0 INTRODUCTION

1.01 INTRODUCTION

Introduction

This Design and Access Statement has been prepared in support of a full planning application relating to the proposed development on Littlehampton Road comprising the residential curtilage of Kivesborogh.

The document demonstrates how the initial design concept has been approached and taken forward. The document contains a series of studies that examine both the existing site context and the potential development of the site.

This Full Planning Application is for the construction of 3no. dwellings on the site along Littlehampton Road.

This application proposes 2no. three-bedroom semi-detached houses and 1no. three-bedroom detached house adjacent to Kivesborough, Littlehampton Road. The dwelling is appropriately scaled to relate successfully to the setting of the site.

Drawings submitted with this application include a Location Plan, Site Plan, Floor Plans, Elevations, Sections and Street Scenes showing the proposed dwelling within its surrounding context.

Project Overview

ECE Architecture has been instructed by Mr and Mrs Dichello to prepare a small residential scheme on a site in Ferring.

The design process demonstraies how the new build dwellings and associated parking spaces could be accommodated on the site.

This development will provide:

- Provide a scheme that is appropriate to its context and responds to the site characterisitics, constraints and opportunities;
- Biodiversity net gain;
- Provide high-quality new homes with access to private amenity space through a considered landscaped strategy;
- Sustainable housing, for the client's family.

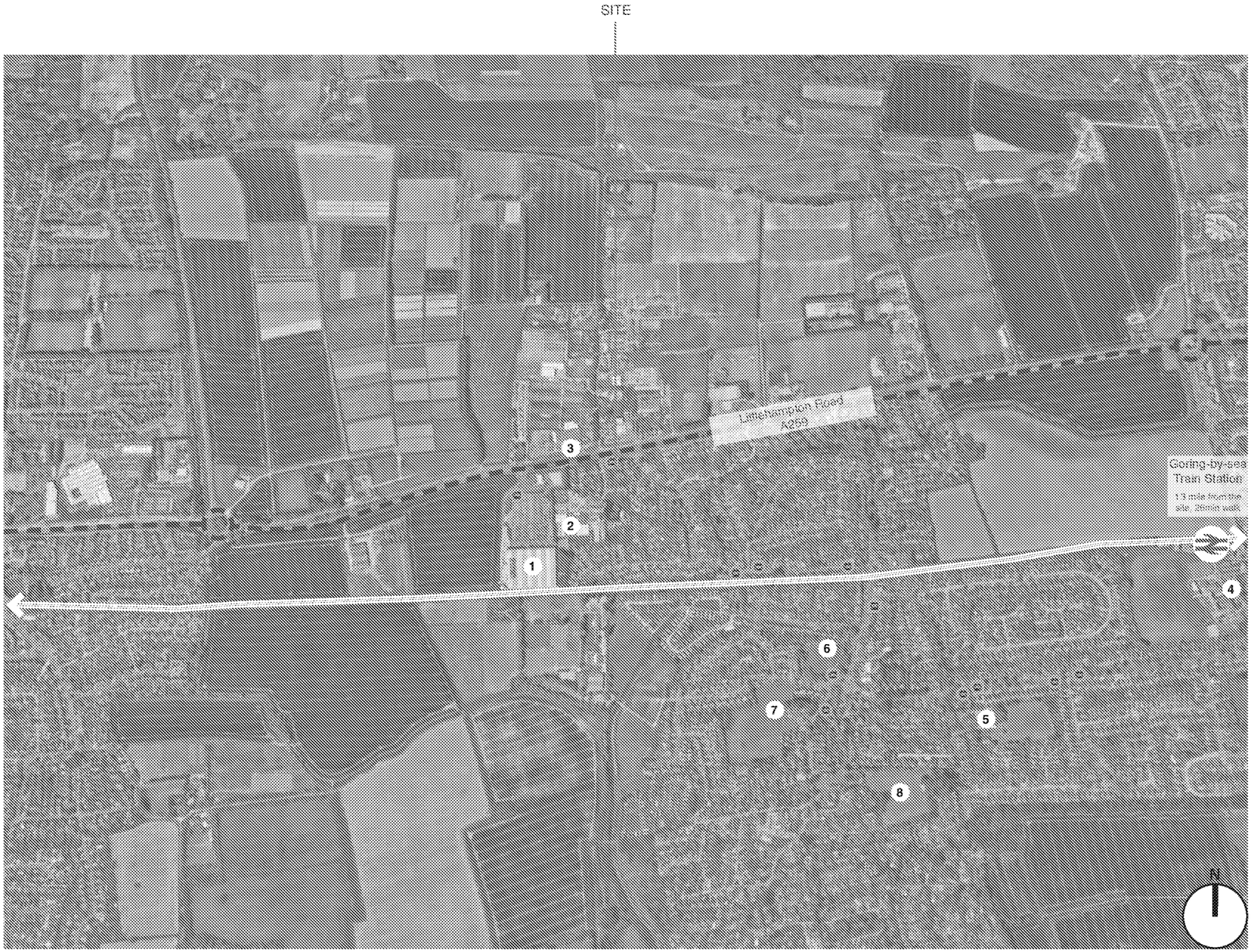
Client	Mr and Mrs Dichello
Architect	ECE Architecture
Planning	ECE Planning
Highways	Reeves Transport
Arboriculture	PJC Consultancy
Biodiversity & Ecology	Lizard
Drainage & Flood Risk	Motion
Noise Assessment	Acoustic South East
Ecology	PJC Consultancy
Land Contamination	Ashdown Site Investigation

2.0 SITE DESCRIPTION

2.01 SITE LOCATION

The site is located in Ferring, along the south coast of West Sussex. The site is approximately 1.3 miles from Goring-by-Sea Train station, providing links to Brighton and the east, along with Southampton to the west and London to the north.

The site sits between the residential and commercial area of Ferring. The area immediately to the north, west and south of the site predominantly consists of residential buildings. To the west there are commercial buildings including a superstore and a tree nursery with the site abutting the car park. Beyond the houses to the north of the site are additional commercial buildings including a garden centre and a car dealership.



1. Asda Superstore
2. Ferring Nurseries
3. Highdown Garden Centre
4. St. Oscar Romero Catholic School
5. Ferring C of E Primary School
6. Ferring Playpark
7. Glebelands Recreation Ground & Community Centre
8. Ferring Cricket Club

Bus Stops

2.02 LOCAL CONTEXT

The surrounding local context predominantly consists of 1-1.5 storey detached houses to the immediate east, and 2 storey dwellings across the new developments to the north and south of the site.

The majority of the houses are finished in brick, predominantly in multi-red with some presence of buff in the wider area.

There are also instances where render and tile hanging is used, and the occasional flint stone boundary wall detailing.

Key architectural features within the area include:

- Gable frontages with steep pitches
- Different materiality to first floor
- Large windows to ground floor
- Rich perimeter landscaping

There are also several examples of more contemporary dwellings which also utilise the contextual materials.

Local Context


1. Single storey dwelling in render with brick corbelling at eaves


2. Steep pitch roof with tile hanging, flint stont and brick


3. Two storey dwelling in tile hanging and brick


4. Single storey dwelling in brick and render


5. Single store dwelling in brick and render

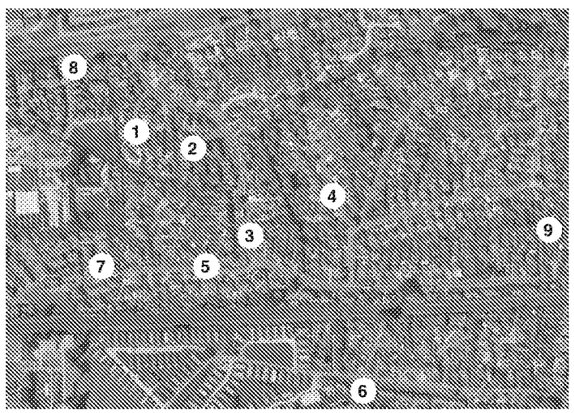

6. Two storey semi-detached dwelling with tile hanging detail to bay window

Contemporary Dwellings


7. Two storey semi-detached dwelling in brick and render

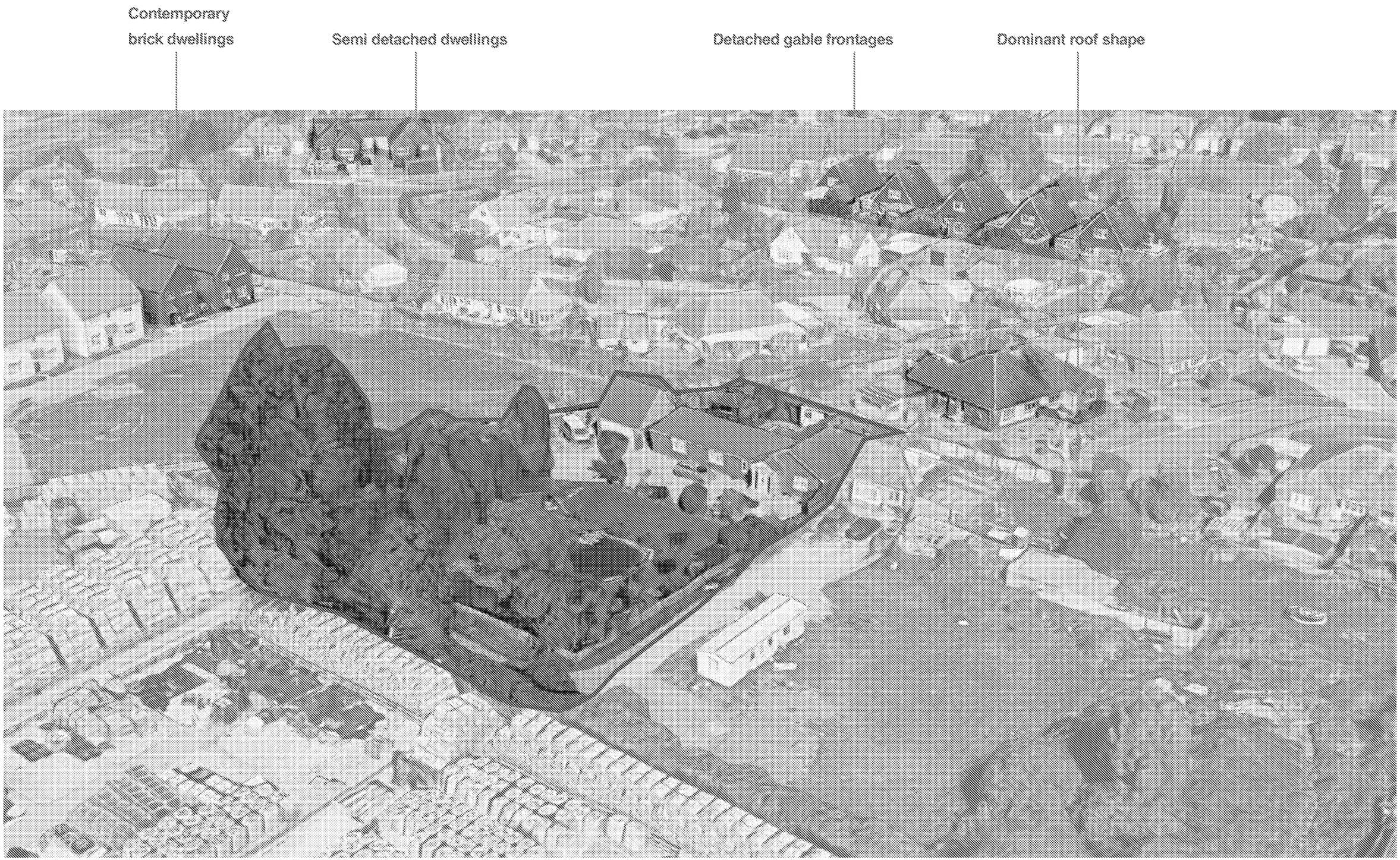

8. Two storey dwelling in brick


9. Single storey dwelling in brick with tile hanging and flint stone detail to bay windows



Key Plan

2.02 LOCAL CONTEXT



2.03 CONTEXTUAL ANALYSIS

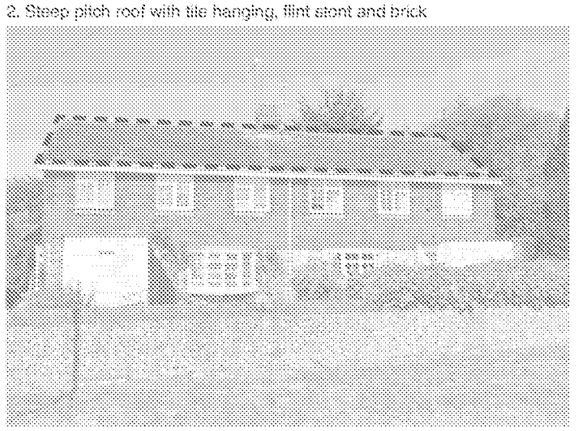
The local context predominantly adopts pitched roofs in a variety of forms such as; steep gables, dormers and bays with the roof often housing additional rooms and meeting the ground floor elements.

The adjacent diagrams highlight these key elements which have been carefully considered and informed the proposed design approach.

Local Context

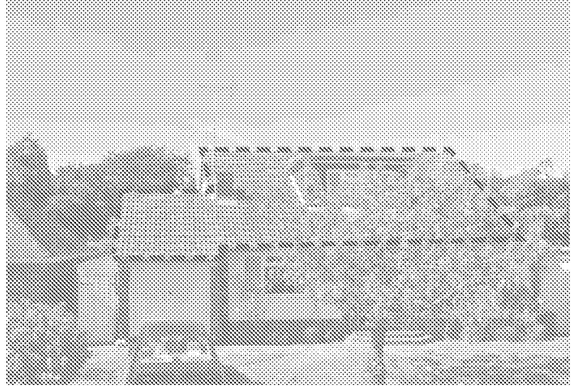
1. Single storey dwelling in render with brick corbelling at eaves

2. Steep pitch roof with tile hanging, flint stont and brick

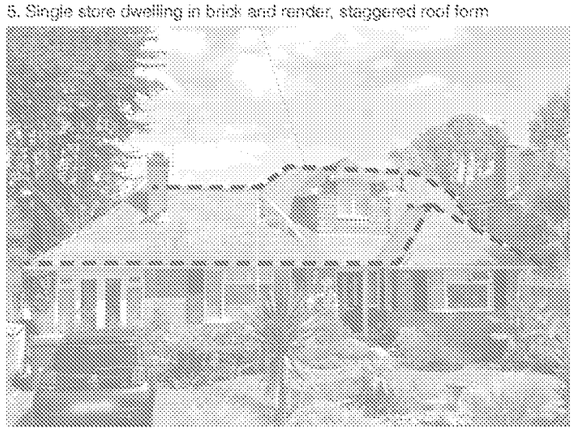


3. Two storey dwelling in tile hanging and brick

4. Single storey dwelling in brick and render



5. Single store dwelling in brick and render, staggered roof form



6. 1.5 storeys detached dwelling with catslide roof

Contemporary Dwellings

7. Two storey semi-detached dwelling in brick and render

8. Two storey dwelling in brick

9. Single storey dwelling in brick with tile hanging and flint stone detail to bay windows

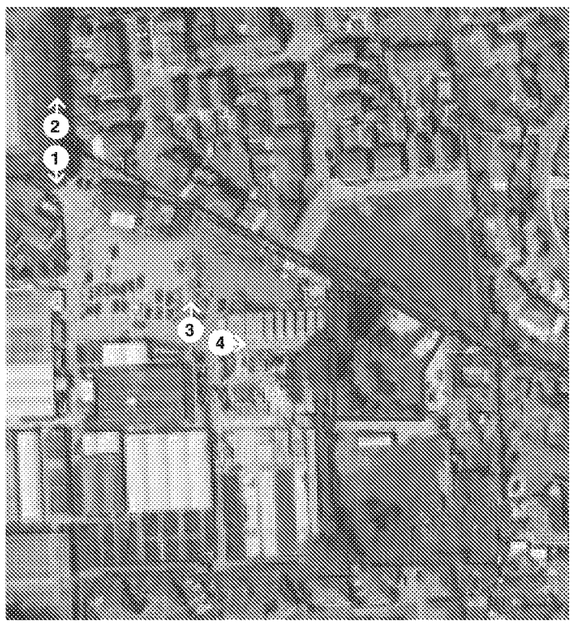
2.04 SITE CONTEXT

The site currenily is accessed off Littlehampton Road via Ferring Nurseries car park to the western boundary. The boundary consists of a tree and hedge line, creating a buffer between the site and Ferring Nurseries car park. The eastern boundary abuts the access drive and parking for Kivesborough.

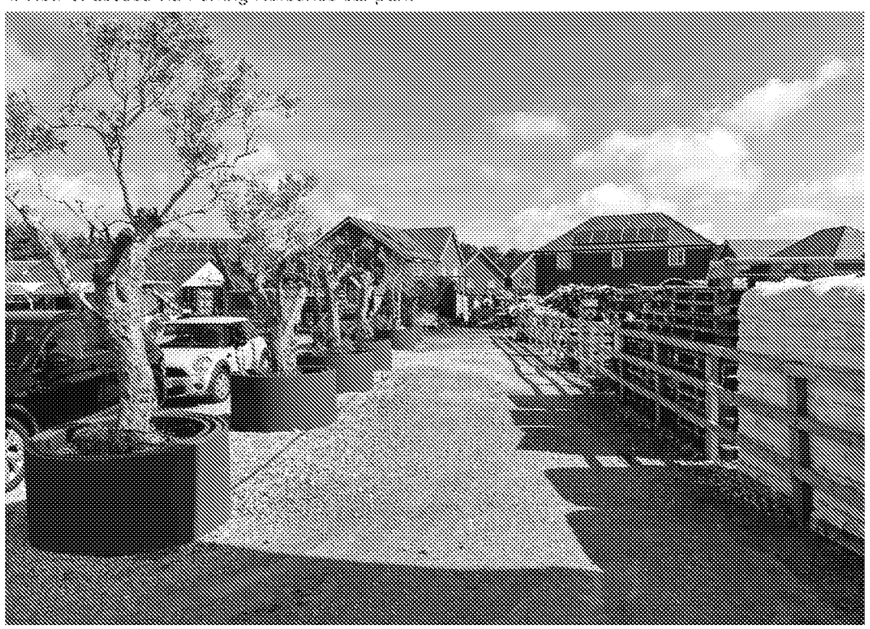
The northern boundary is formed of a fence line which borders an existing public footpath running from Langbury Lane to Littlehampton Road. The southern boundary abuts an open green space.

1. View of access via Ferring Nurseries car park

2. View of access road looking north



Key Plan



3. View looking north of Ferring Nurseries car park and new development beyond

4. View looking east of approach towards the site

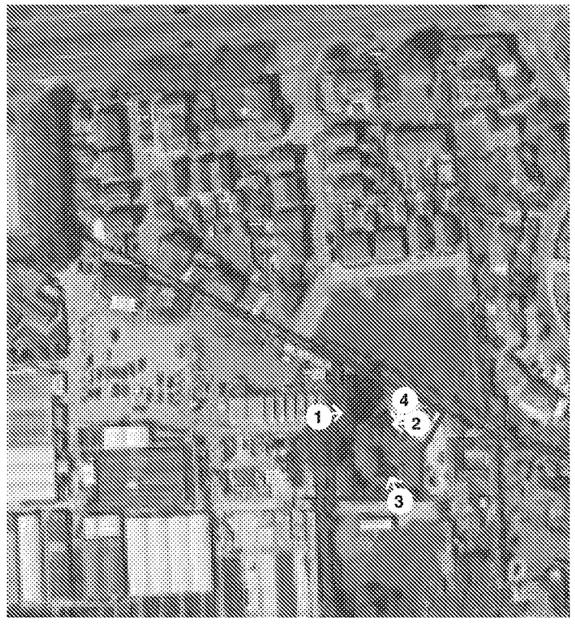
2.05 SITE PHOTOS

The site comprises an eastern corner plot within the residential curtilage of Kivesborough, which is an L-shaped single storey dwelling fronting the site.

The site consists of an existing single storey dwelling along the western boundary in timber cladding and metal roofing. Predominantly consisting of two areas of green space, to the north and south, the site is divided in two by a gravel drive providing access to Kivesborough. Towards the southern area sits a shed with a central pond and trees along the boundary.

1. View of existing site entrance

2. View looking west towards the access drive and existing dwelling



Key Plan

3. View looking north towards the site

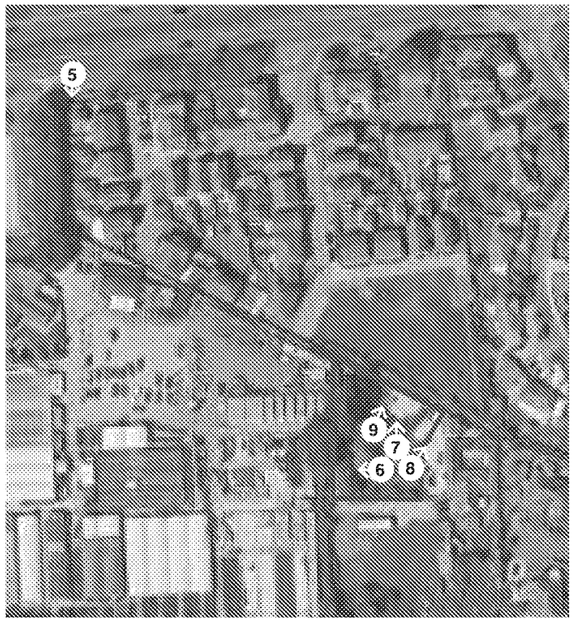
4. View looking south of the site

2.05 SITE PHOTOS

5. View of site entrance from Littlehampton Road

6. View to the western boundary of the site

7 View looking onto existing pond on site



Key Plan

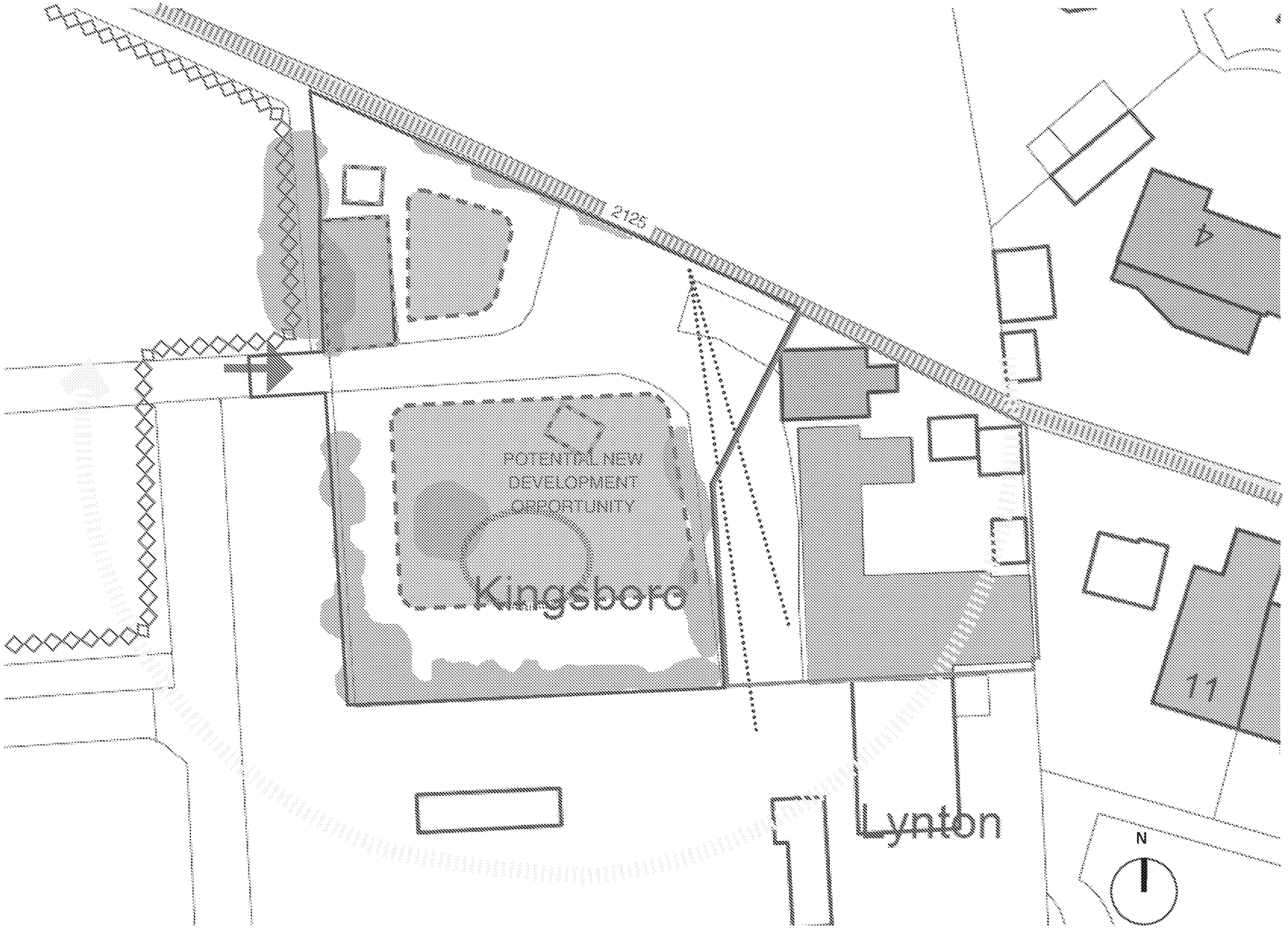
8. View looking north east towards the existing dwelling

9. View looking north of the site

2.06 OPPORTUNITIES AND CONSTRAINTS

There are site-specific opportunities and constraints which have been carefully considered during the design process. A site analysis has been completed to understand these limitations fully:

- The site position and north/ south orientation is beneficial for promoting sustainable principles
- Potential pedestrian access via the public footpath along the northern boundary
- Given the neighbouring commercial use and car park to the west, sufficient buffer will need to be provided to ensure noise and overlooking is mitigated
- Potential ecological enhancement to green space



KEY:

- Site Boundary
- Same Ownership Boundary
- Primary Site Entrance
- Potential Noise Source
- 1 Storey Dwelling
- 1.5 Storey Dwelling
- Public Footpath
- Existing Vegetation
- Overhead Cables
- Existing Pond
- Existing Outbuildings
- Sun Path

2.07 SUSTAINABILITY CONSIDERATIONS

ORIENTATION OF RESIDENTIAL UNITS

- Optimise building form for solar gain
- Minimise the number of north facing habitable rooms
- Increase exposure to daylight to reduce use of artificial lighting
- Opportunity to create a variety of spaces with differing qualities for sunlight
- South facing amenity spaces

VARIETY OF PLANTED SPACES

- Improves air quality
- Helps buffer sound pollution
- Improves biodiversity
- Biophilic design

SOLAR PANELS

- Provides clean energy
- Energy supply for lifetime of the building
- Energy bills can be reduced, increasing the affordability

SOLAR SHADING - TREES

- Reduces radiation of heat off of surfaces
- Provides comfortable amenity spaces
- Tree shading reduces urban heat island effect

BUILDING FABRIC

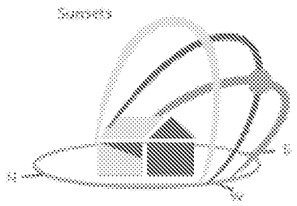
- Renewable materials
- Reduced embodied carbon
- Building life time
- Impact of construction
- Reusable materials

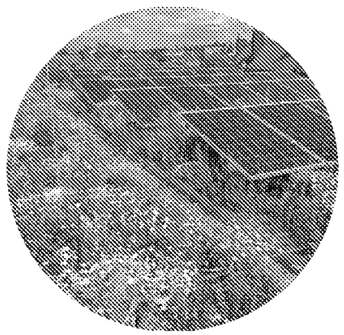
RAIN WATER COLLECTION / RAIN GARDENS

- Retention of water to ease load on sewers
- Pond feature
- Collection of rainwater from impermeable surfaces to be used to irrigate cultivated areas
- Sustainable drainage system

RENEWABLE RESOURCES

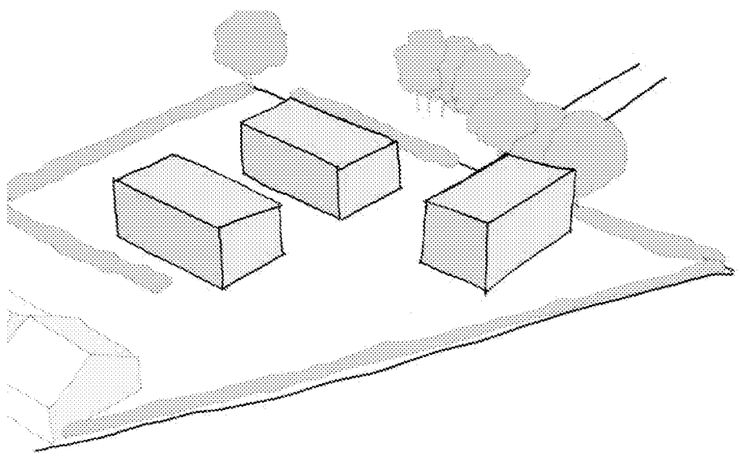
- Renewable energy sources
- Solar Panels
- Rain water collection
- Low energy appliances
- Heat recovery systems





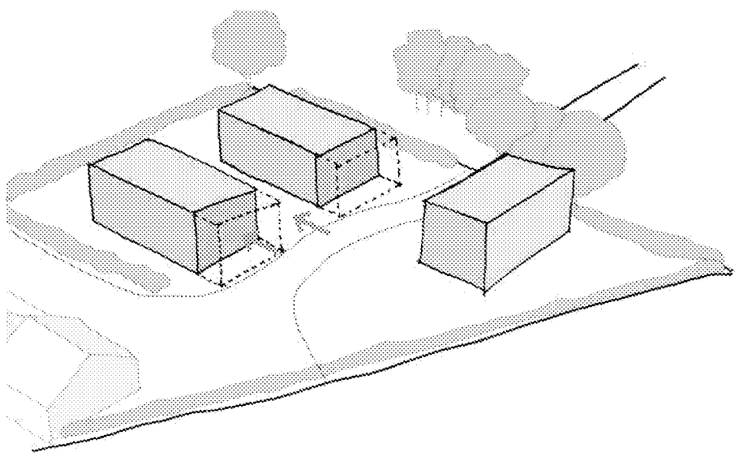
3.0 DESIGN DEVELOPMENT

3.02 CONCEPT DEVELOPMENT



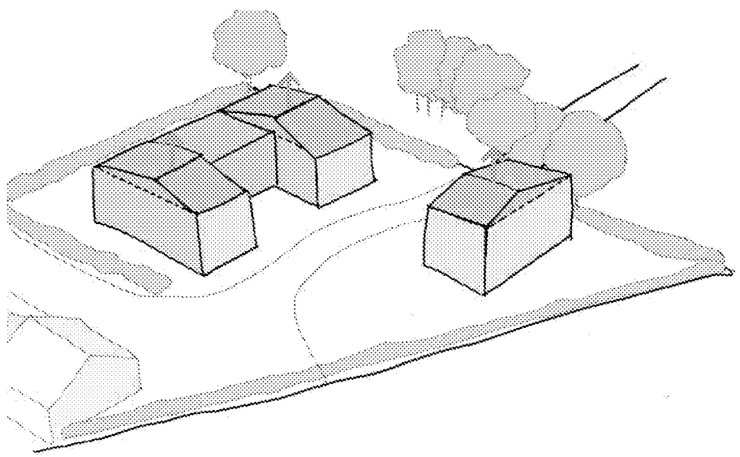
1. FORM

Two-storey dwellings as a baseline for development



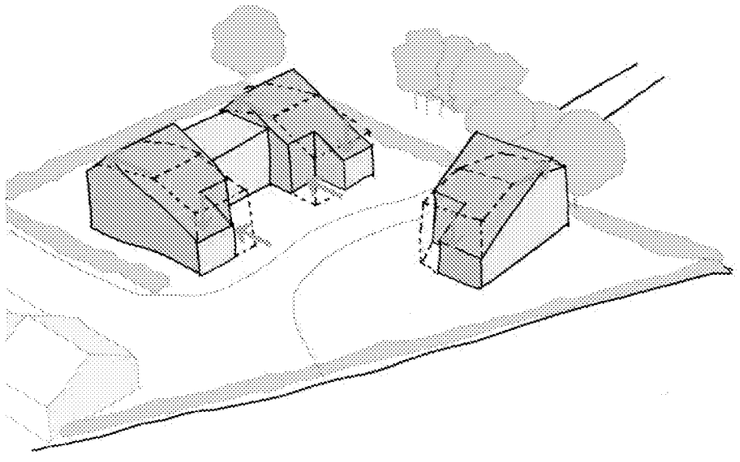
2. ACCESS

Units adjusted to improve separation distances and site access



3. ROOF SHAPE

Addition of pitched roofs to reflect the context
Provision of garage



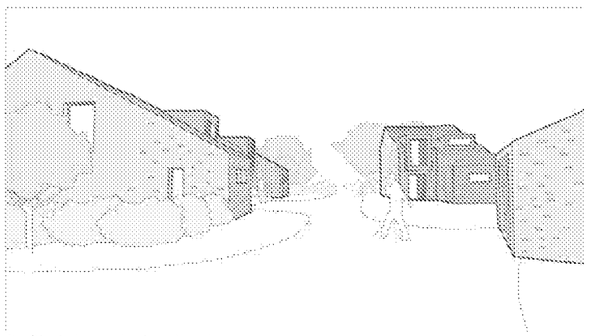
4. ROOF ARTICULATION

Ridge and eaves lines adjusted to reduce the scale
and further reflect the site's surroundings

3.01 DEVELOPMENT SKETCHES

As part of the design process we explored a number of material, scale and landscape approaches which we tested rigorously from several points of view as shown in the sketches below.

1. Sketch exploring materiality



2. Sketch exploring landscaping

3. Sketch exploring scale

4. Sketch exploring scale and appearance from the site entrance

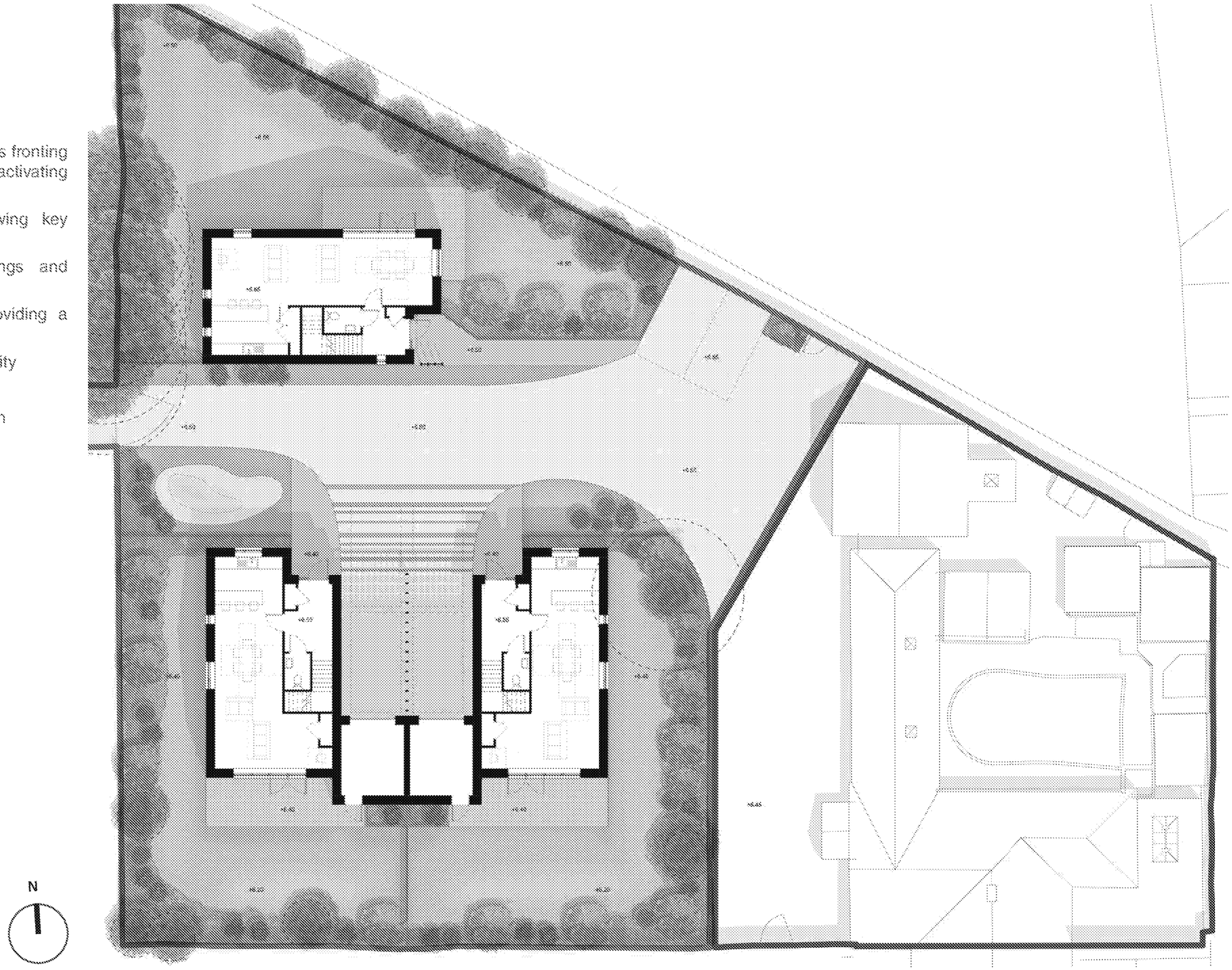
4.0 PROPOSAL

4.01 SITE LAYOUT

The proposed site layout offers dwellings fronting onto the access road of Kievsborough activating the street scene.

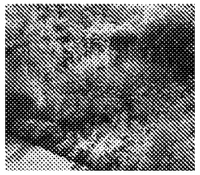
The Site Layout provides the following key elements:

- The provision of 3 new dwellings and associated parking
- Appropriate landscaped edges providing a landscape buffer
- A water feature to enhance biodiversity
- Generous private gardens
- New pedestrian link to public footpath



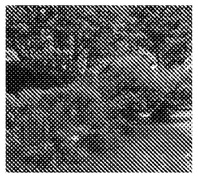
Site Layout

4.02 LANDSCAPE



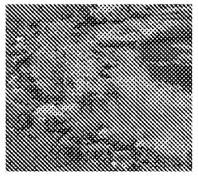
Landscape Buffer

Enhanced existing landscape buffer to the perimeter of the dwellings' gardens.



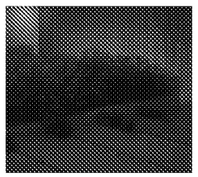
Retained Trees

Existing trees and vegetation retained and enhanced where possible around the site



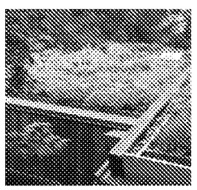
Water Feature

New pond to enhance biodiversity and provide passive cooling



Permeable Drive

Grass strips increase permeability and add visual interest

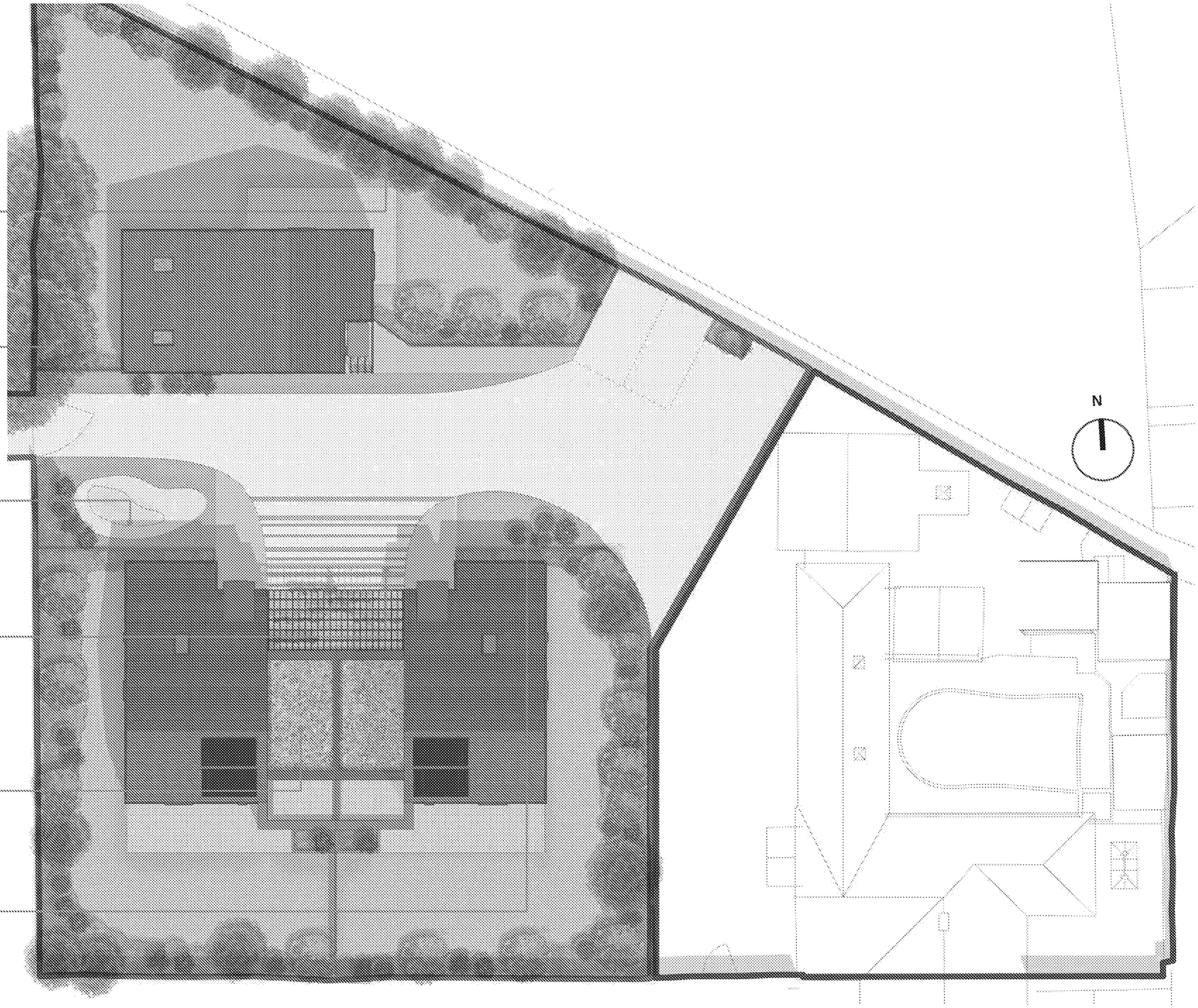


Green Roof

Air source heat pumps for increased energy efficiency

Species Variety

A wide range of local plant spieces will enrichen the proposed scheme.



Site Layout

4.03 SITE ACCESS

The principal access to the site is facilitated by the existing access along the western boundary which can be used by pedestrians and vehicle movements.

The shared surface road is 3m wide with a turning head located at the heart of the site.

Refuse and Emergency Access

Access for emergency vehicles will be via the main access drive with a turning head integrated into the road configuration to ensure vehicles can enter and leave in a forward gear.
The existing refuse collection arrangements will be extended to accommodate the new dwellings.

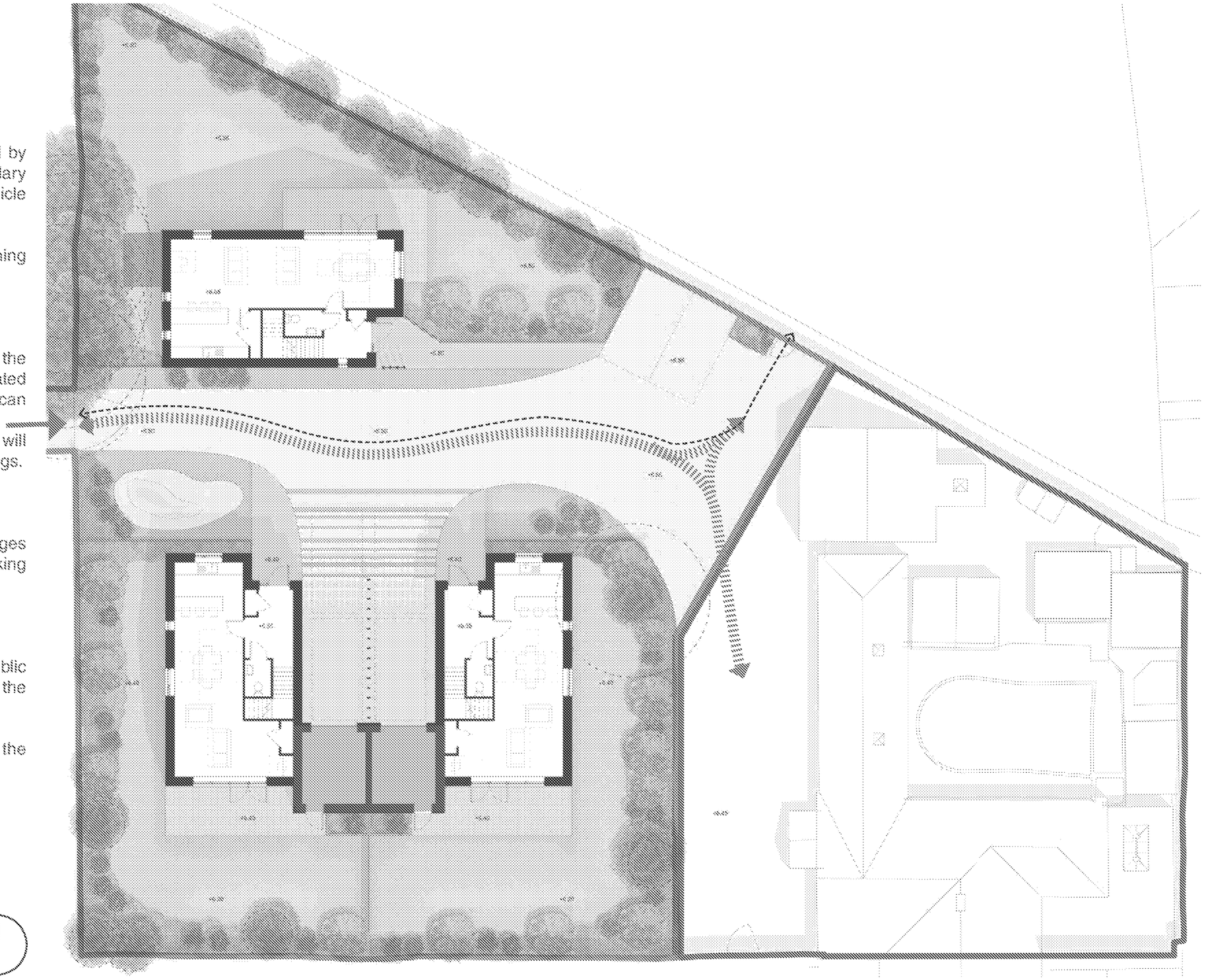
Cycle and Car Parking Spaces

Secure cycle storage is provided within garages and shed, with each dwelling having two parking spaces.

Pedestrian movement

A new pedestrian link to the existing public footpath is proposed to reduce foot traffic to the existing access.

For further information on access please see the accompanying transport statement.



Site Layout

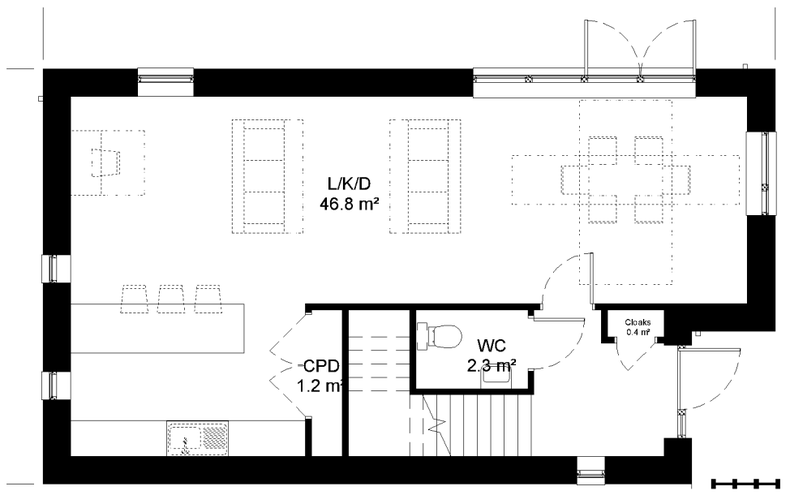
4.04 USE AND AMOUNT

The proposal maintains the site's current residential use and introduces 3 no. new family dwellings with generous amenity and garden spaces.

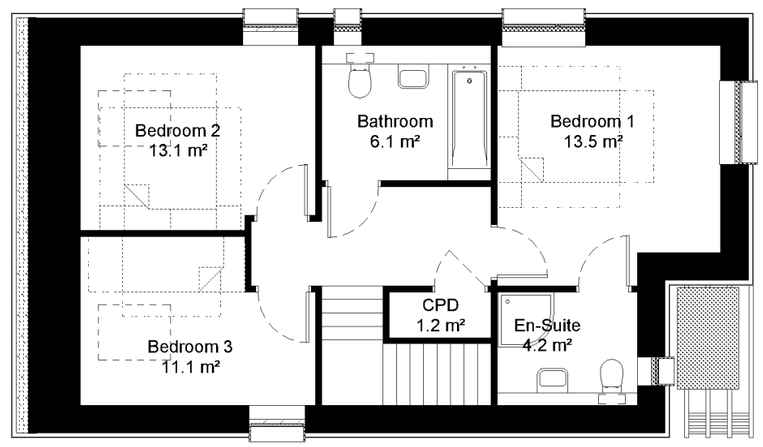
The site consist of two house designs, both offering 3 bedrooms.

The houses are presented in bespoke layouts that have been designed to address the open space around them. Furthermore, the generous spaces within the dwellings are orientated to offer a variety of sunlight quality throughout the day and year.

House Design A 3BED

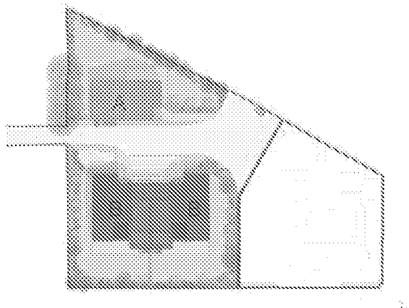


Ground Floor Plan

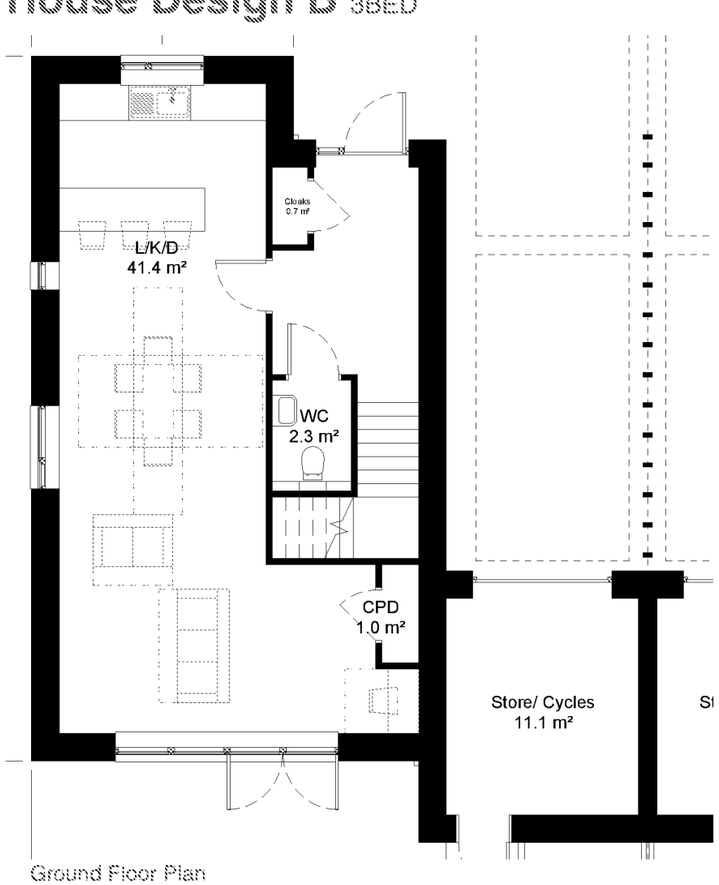


First Floor Plan

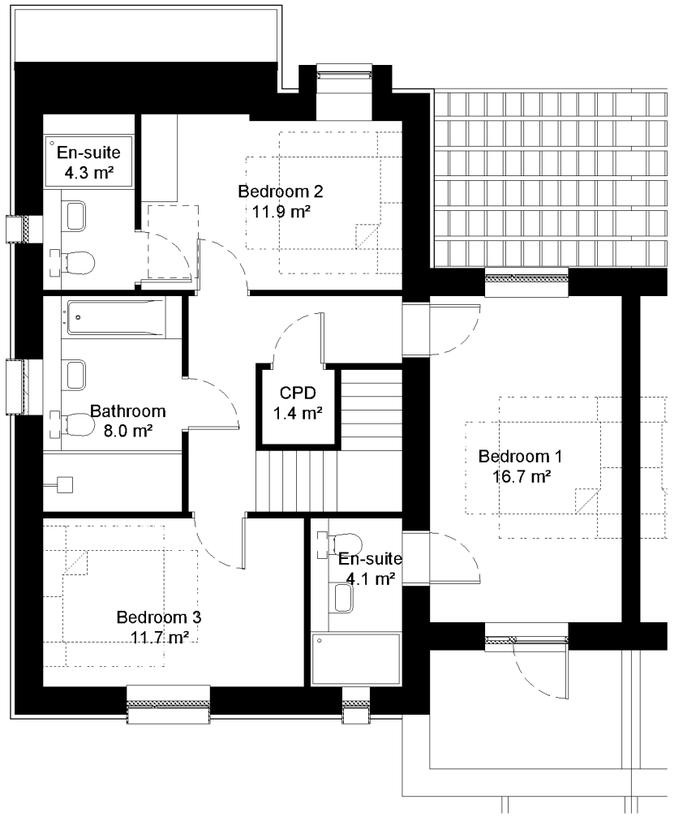
House Design B 3BED



Key Plan



Ground Floor Plan

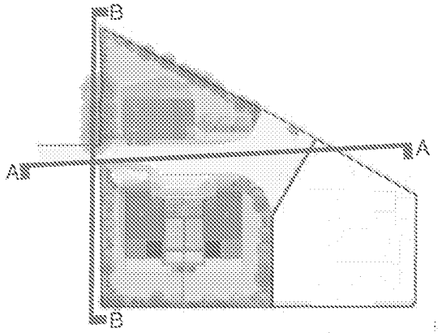


First Floor Plan

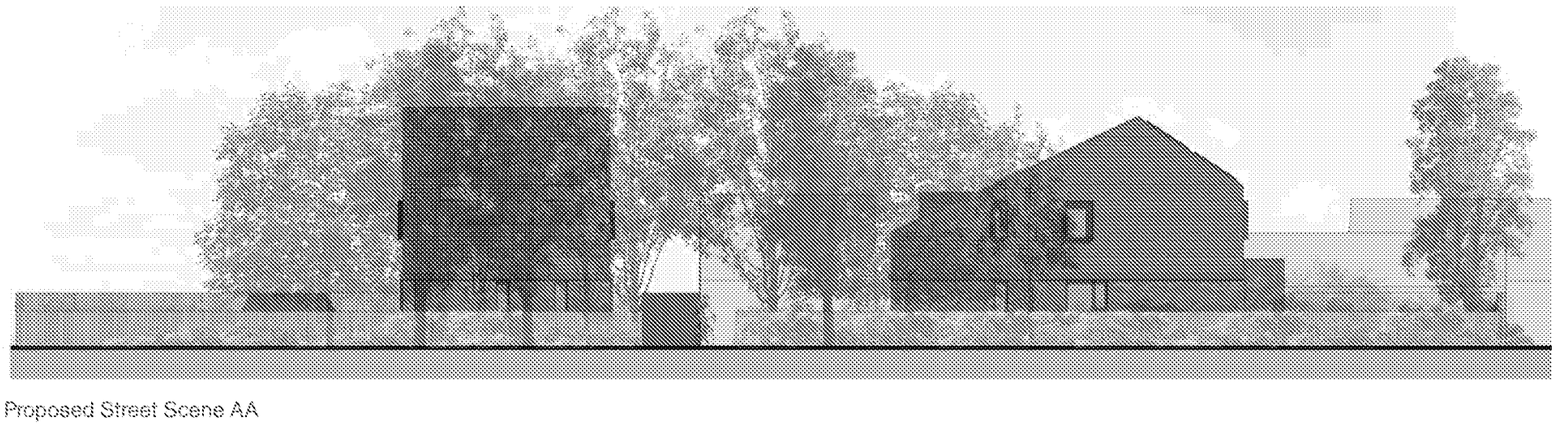
4.05 APPEARANCE AND SCALE

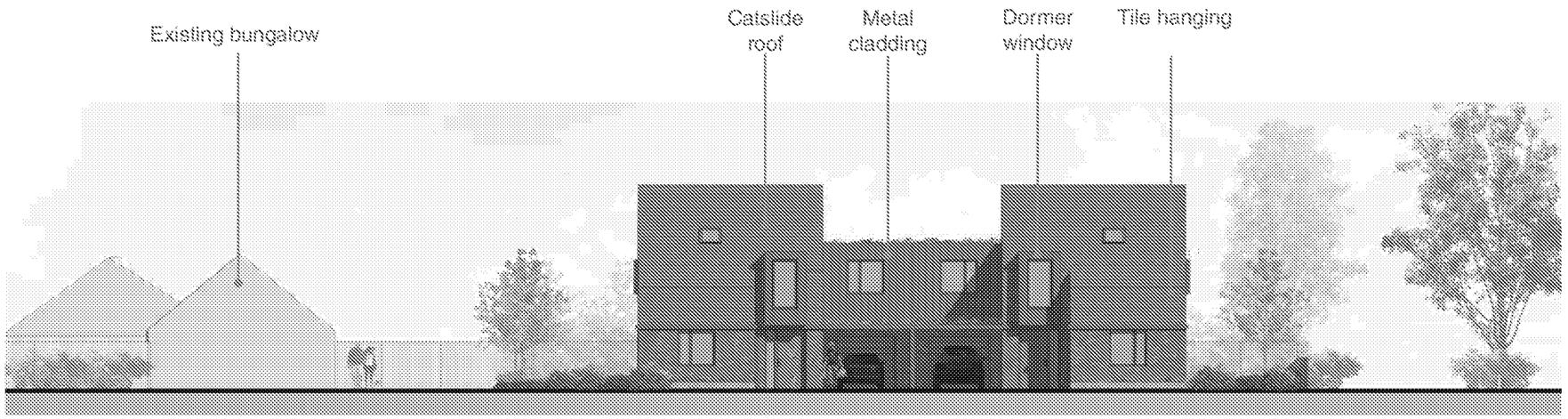
The proposal utilises a local material palette that complements the existing bungalow and the wider site surroundings.

The dwellings have been carefully designed with asymmetrical roofs that along with materiality are respectful to the scale of the context.



Key Plan


Proposed Street Scene AA



Proposed Street Scene BB

4.06 MATERIAL PALETTE & PRECEDENTS

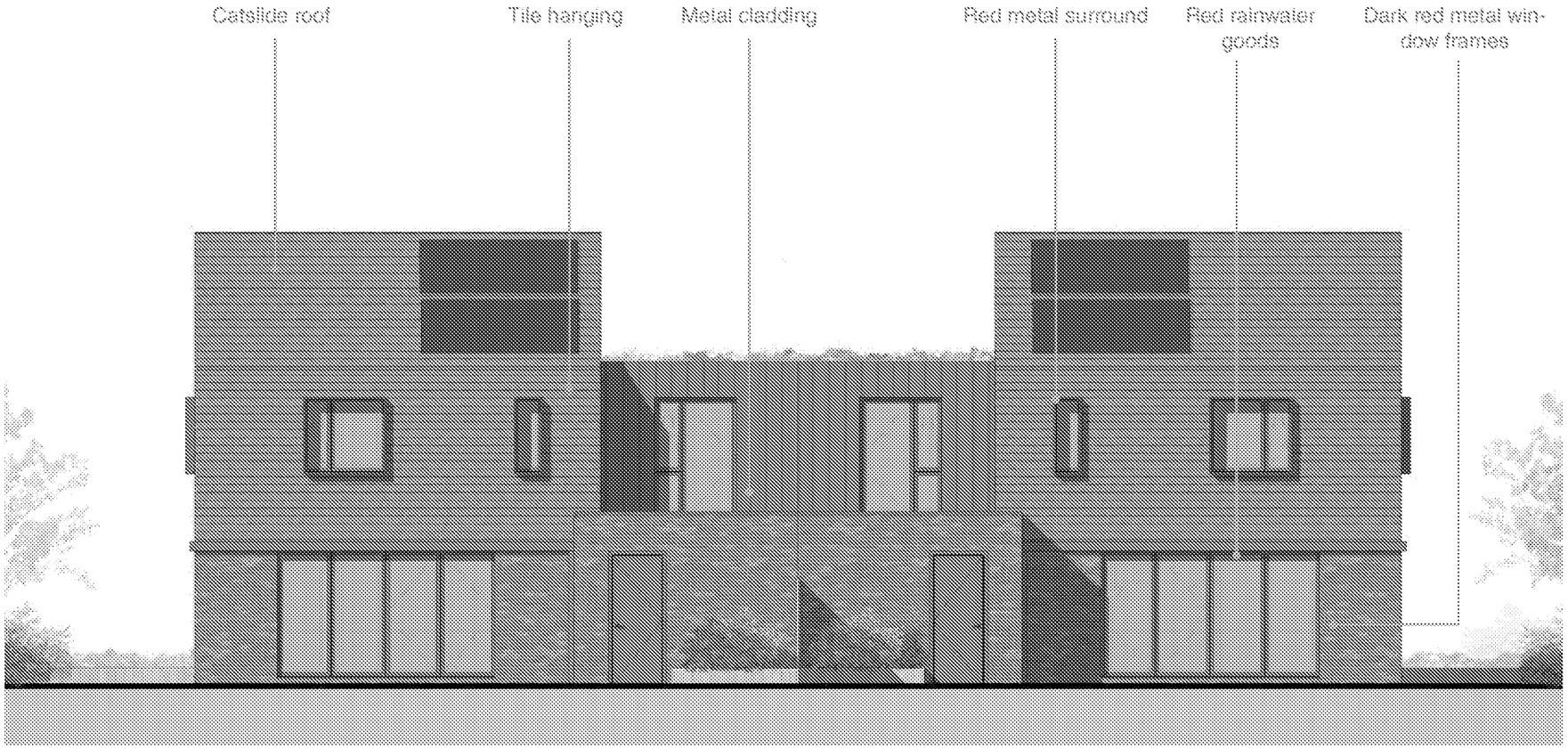
The proposed material palette reflects a contemporary approach to the site's context, and is carefully selected to blend in with the proposal's surroundings.

Tile Hanging

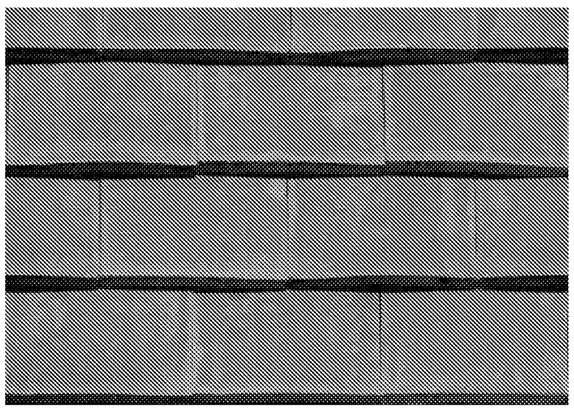
Tile hanging represents the visual appearance of the existing bungalows on site and its surroundings. The large roof-to-wall ratio present on the majority of the existing bungalows are referenced through roof tiles wrapping around the first floor of the proposed properties, creating an extended roof visual effect.

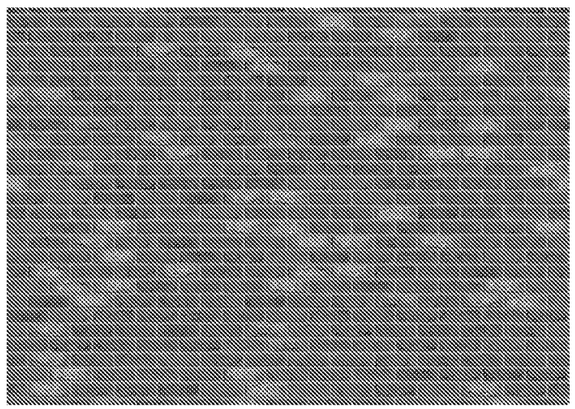
Brickwork

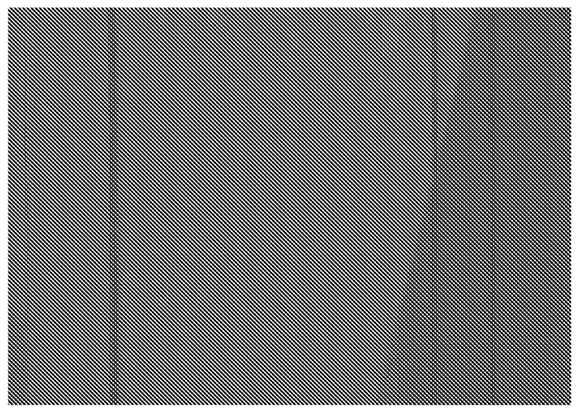
The proposed brickwork is a further reflection to the contextual materiality in a multi-red brick to complement the surrounding context.
The colour variation in the chosen brickwork is referencing the plethora of materials and colours present in the wider area of Ferring.



MATERIAL PALETTE


Tile-hanging

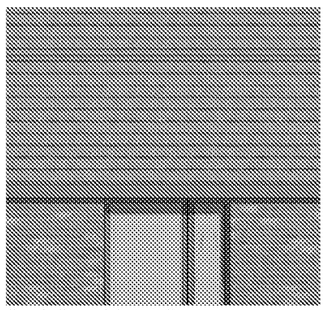

Red Multi Brick

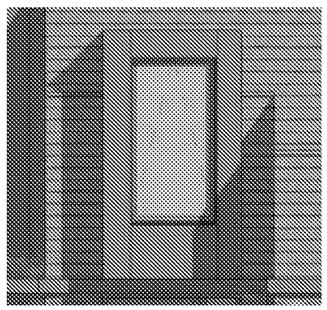

Dark Red Metal Cladding

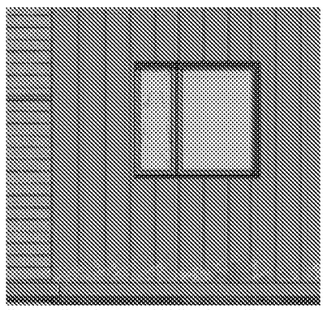
4.07 DESIGN AND DETAILING PRECEDENTS

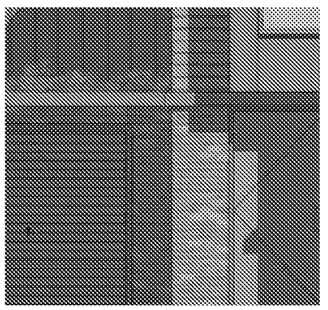
The proposal utilises dark red tones which are commonly present in the site's context.
The contemporary approach is complemented by the local material and colour palette which ensure the new dwellings will sit comfortably in their setting whilst providing high quality new homes for the family.
Careful consideration has been given to the detailing which further enhances the overall appearance and the quality of the scheme.

MATERIAL DETAILING

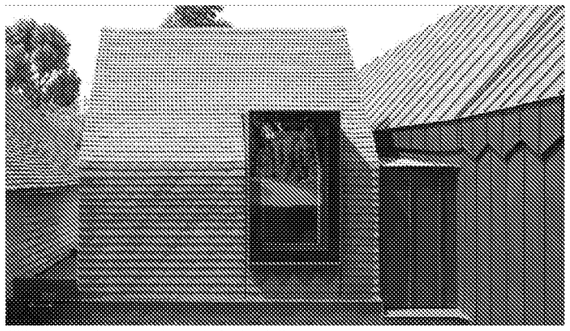

Dark Red Metal Gutter

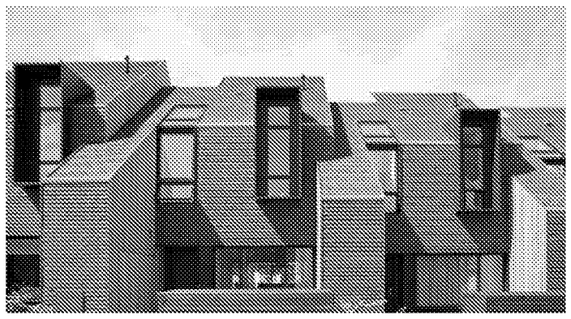

Dark Red Dormer


Dark Red Metal Window Frame


Dark Red Metal Car Port

MATERIAL PRECEDENTS


Tile hanging and metal cladding


Catslide roof

4.08 SUSTAINABILITY PRINCIPLES

The proposal considers the need to address climate change, ensuring lower water use and efficiency, creating energy efficient design and layouts. This is achieved through:

- Adopting a fabric first approach providing 450mm external wall thickness for sufficient insulation in order to mitigate heat loss and minimise energy consumption;
- Provision of PV panels to allow electricity generated from renewable sources.
- Soft landscaping, planting and water feature to enhance biodiversity;
- Reduced depth of the internal plan to assist day lighting levels and reduce energy consumption and dual-aspect living spaces;
- Optimised glazing sizes (not at detriment to light levels), and provide cross ventilation in order to reduce overheating;
- Provision of electric vehicle charging points for car parking spaces;
- Air Source Heat Pumps to provide heating and hot water strategy;
- Water consumption in all dwellings will be reduced through the use of practical and hygienic water saving measures such as flow restrictors, reduced bath volumes, water efficient white goods and duals flush toilets.

Operational energy

Implement the following indicative design measures:

Fabric U-values ($W/m^2.K$)

Walls	0.13 - 0.15
Floor	0.08 - 0.10
Roof	0.10 - 0.12
Exposed ceilings/floors	0.13 - 0.18
Windows	0.80 (triple glazing)
Doors	1.00

Efficiency measures

Air tightness	<1 ($m^3/h.\ m^2@50Pa$)
Thermal bridging	0.04 (y-value)
G-value of glass	0.6 - 0.5
MVHR	90% (efficiency) ≤2m (duct length from unit to external wall)

Window areas guide (% of wall area)

North	10-15%
East	10-15%
South	20-25%
West	10-15%

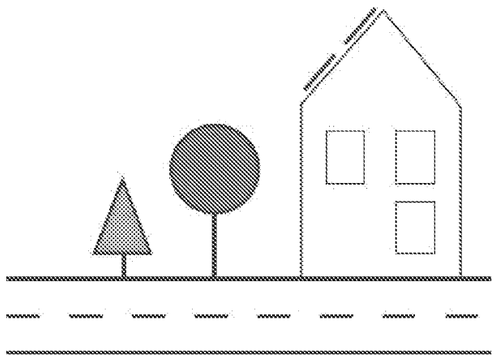
Balance daylight and overheating

Include external shading

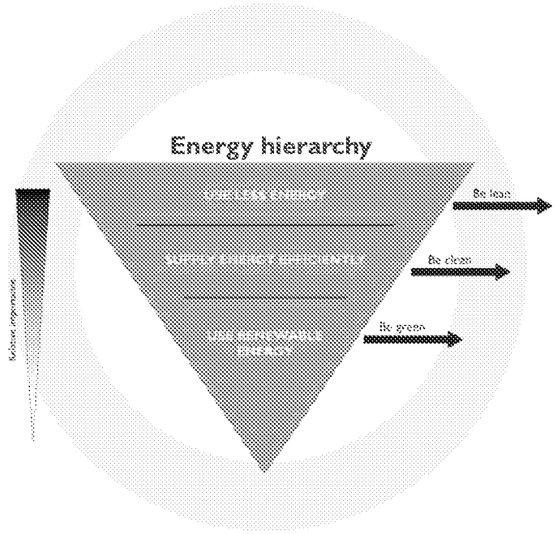
Include openable windows and cross ventilation

Maximise renewables so that 100% of annual energy requirement is generated on-site

Form factor of 1.7 - 2.5



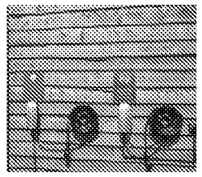
LETI Design Guide



Energy Hierarchy

Ecological Enhancement through additional planting

4.09 SUSTAINABILITY OPPORTUNITIES

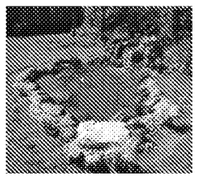


EV Charging Points

Electric charging points to support sustainable transport methods

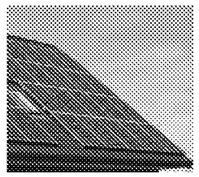
Retained Trees

Existing trees retained where possible around the site



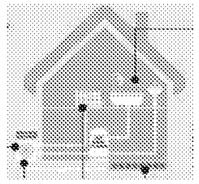
Biodiversity

Provision of additional planing and pond for enhanced biodiversity



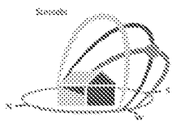
PV Panels

Photovoltaic panels for sustainable electricity production



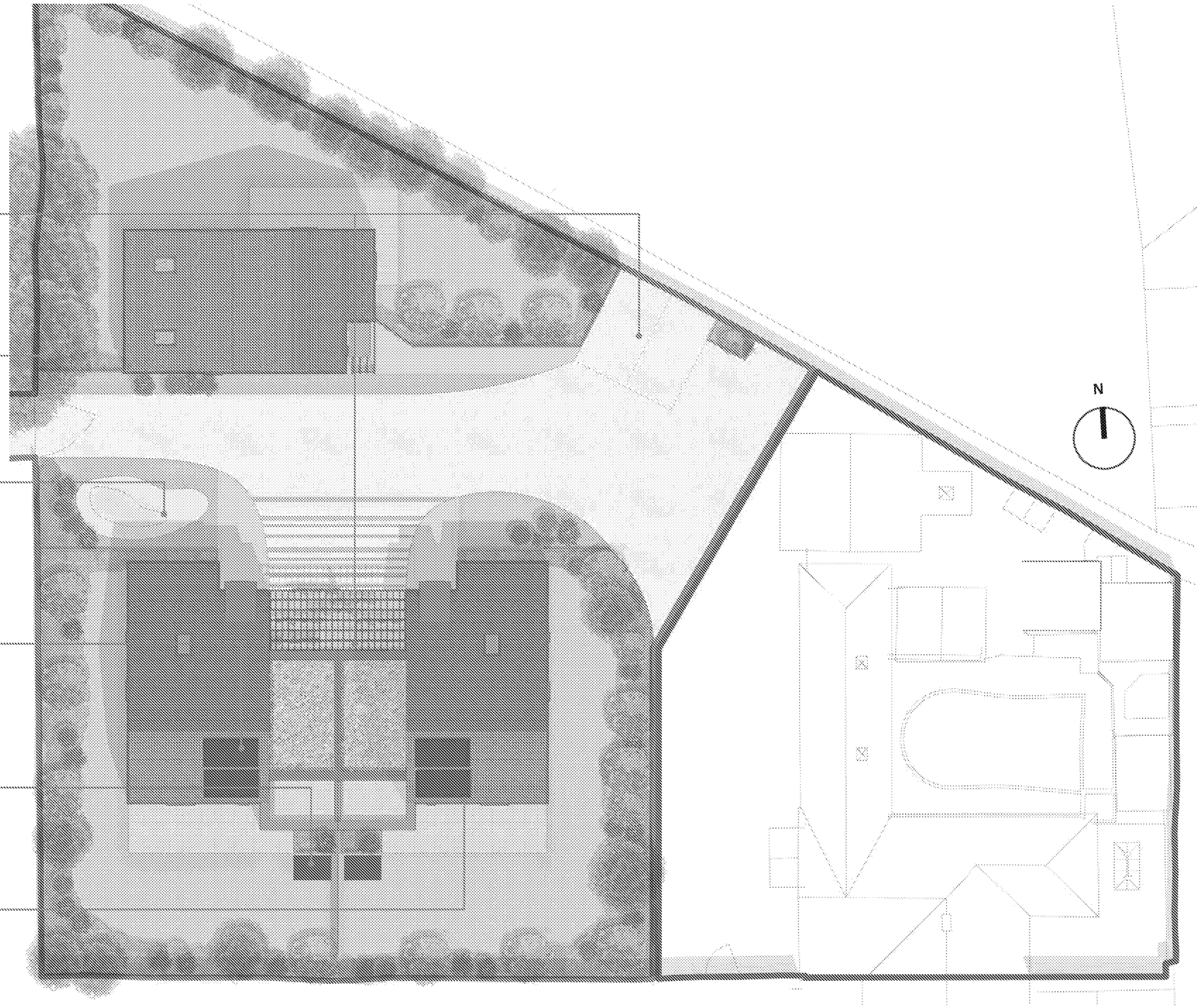
Air Source Heat Pump

Air source heat pumps for increased energy efficiency

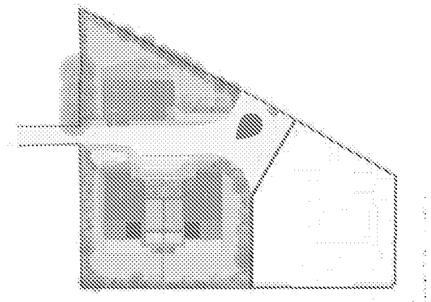


Orientation

Building orientation considered for optimised solar gain



4.10 3D VIEW



4.11 CONCLUSION

This Design and Access Statement identifies the design influences that have informed the development of this Full Planning Application for Kievsborough, Littlehampton Road. The design process resulting in this application has been carefully considered to create a high-quality design solution that respects the character of the surrounding area.

In summary, the application provides 3no. dwellings designed to meet national space standards and local parking standards with supporting landscaping.

The scheme offers a bespoke design sensitive in scale and appearance to the local character, creating an aesthetically pleasing and sustainable residential development within a well landscaped setting.

It is considered that the proposal integrates well with the surrounding context, and provides new green infrastructure and associated ecological benefits.