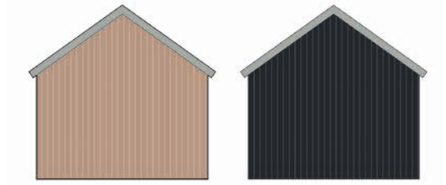
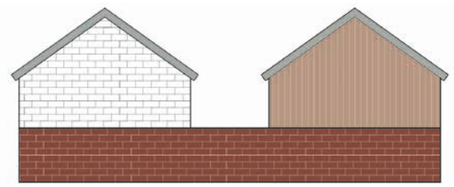
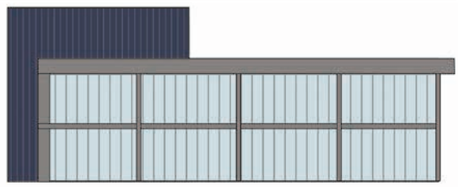
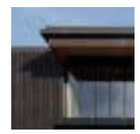
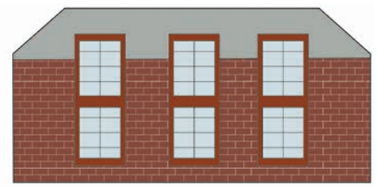
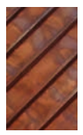
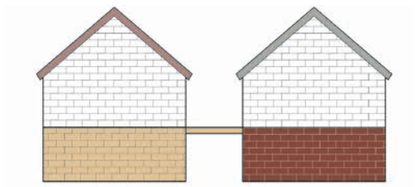
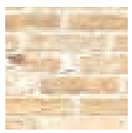
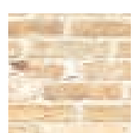
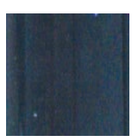
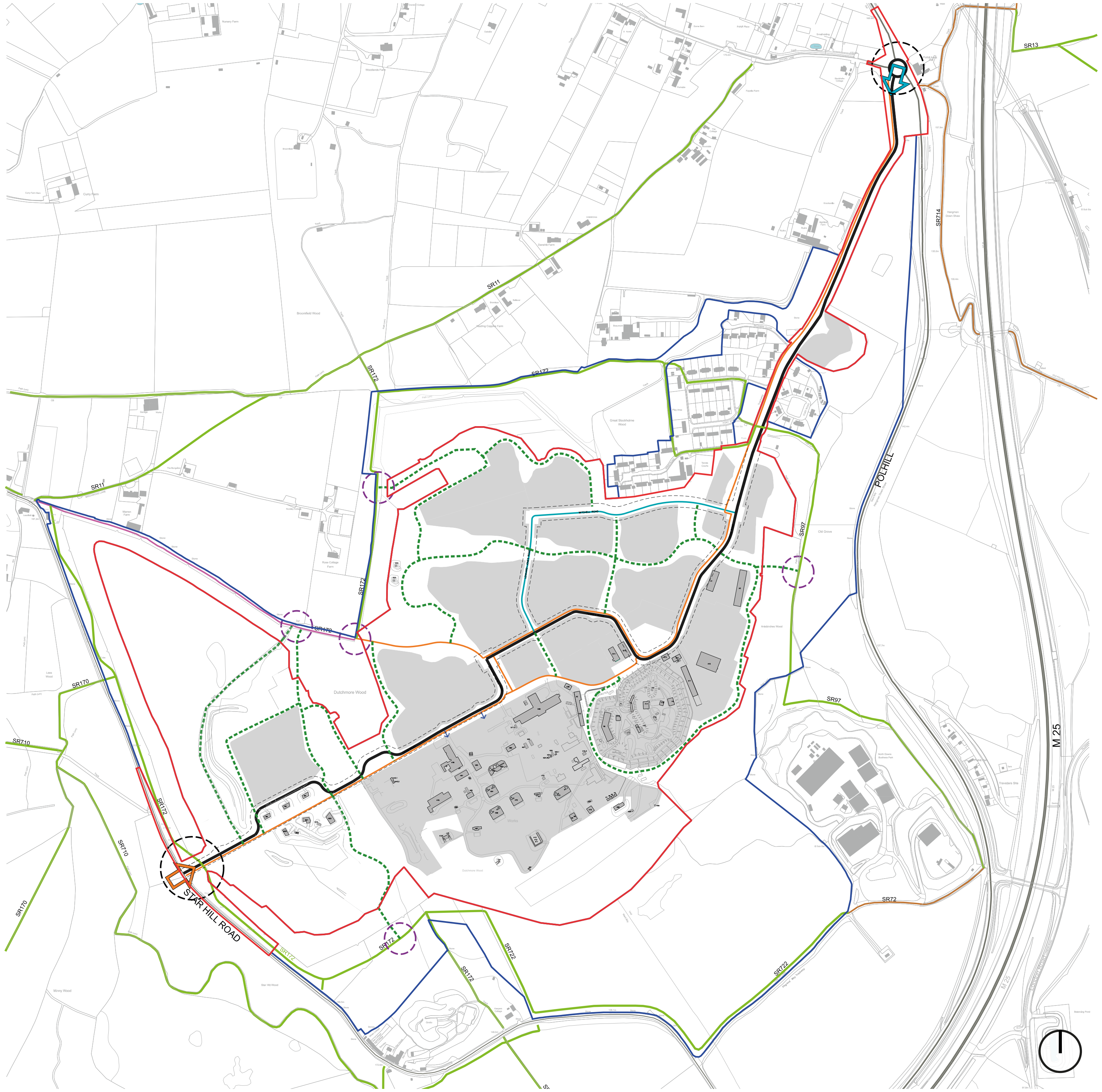
HAMLETS			TOP	BASE	FEATURE	ROOF
Gateway Hamlets		• Dark stained timber cladding – Western Gateway • Natural coloured timber cladding – Eastern Gateway	 Dark stained timber Western Gateway  Natural coloured timber Eastern Gateway		 Red-multi brick  Dark grey or black metal cladding	 Red tiles  Grey slate tiles
Old Grove Place	 Floating wall	TOP • Natural coloured timber cladding • White brick BASE • Red-multi brick	 White brick  Natural coloured timber cladding	 Red-multi brick	 Pale buff brick  Dark stained timber cladding	 Red tiles  Dark grey tiles
Innovation & Education Hub		• Predominantly dark coloured metal cladding and large glazed areas, particularly at building entrances	 Dark grey or black metal cladding  Large areas of glazing		 Timber cladding  Dark stained timber cladding	 Flat roofs  Solar PV tiles or panels
Village Centre		• Primary use of red brick and red multi-brick, secondary use of white painted bricks and timber cladding. Red clay tiles and greys tiles to be used for pitched roofs.	 Red brick  Red-multi brick		 White brick  Timber cladding  Metal: Brown-red cladding	 Red tiles  Dark grey tiles  Crittall
Village Mews		TOP • White brick BASE • Pale buff brick • Red-multi brick	 White brick	 Red-multi brick  Pale buff brick		 Red tiles  Grey slate tiles
Anisbirches Walk		TOP • Dark stained timber cladding • Naturally stained or white painted weatherboard BASE • Red-multi brick	 Dark stained timber cladding  Naturally stained or white painted weatherboard	 Red-multi brick		 Red tiles  Dark grey tiles
Beamount Glade & Dutchmore Wood		TOP • Pale buff brick • Dark stained timber cladding BASE • Pale buff brick • Blue brick	 Pale buff brick	 Dark stained timber cladding  Blue brick	 Red-multi brick	 Red tiles  Dark grey tiles

4. ACCESS & MOVEMENT

4.1 ACCESS & MOVEMENT STRATEGY

A network of different types of proposed routes contributes to the permeability of the development. It is designed to encourage walking through the development by creating routes that are attractive, direct and overlooked. Less rigid, more organic character of the street network responds to the existing landscape and surrounding woodlands and highlights countryside character of the development.

The proposed hierarchy of routes will deliver a comprehensive network of high quality pedestrian and cycle routes across the site providing convenient, accessible, safe, comfortable and attractive facilities for all users.



Key

- Application boundary
- Applicant's Land ownership Boundary
- Development Parcels
- Existing building for potential retention
- Existing public rights of way (PROW)
- Existing bridleway
- Existing road
- Main access – all modes
- Secondary access – all modes
- QinetiQ Ltd. access point
- Junction improvement
- Crow Road/Primary Road
- Corridor for primary road*
- Secondary road
- Indicative strategic shared footway cycleway
- Indicative secondary shared footway cycleway
- Connection to existing footway network

4.2 INDICATIVE STREET HIERARCHY

Indicative street hierarchy plan

The street network serving the new homes will be based on interconnected streets, shared surfaces and courtyards. The distinctive street hierarchy is designed to provide legibility and easy navigation through the site for residents and visitors. It includes the main road, secondary, tertiary and edge streets each with different layouts and dimensions. Easy access for service and emergency vehicles is ensured by providing several accesses to each development parcel.

Key

- Primary street
- Secondary street
- Tertiary street
- Edge street
- Shared courtyard
- Mews street
- Employment & education parcel access
- School drop-off

4.3 WALKING & CYCLING ACCESS

The masterplan prioritises the movement of pedestrians and cycles through the site. This is achieved by the following interventions:

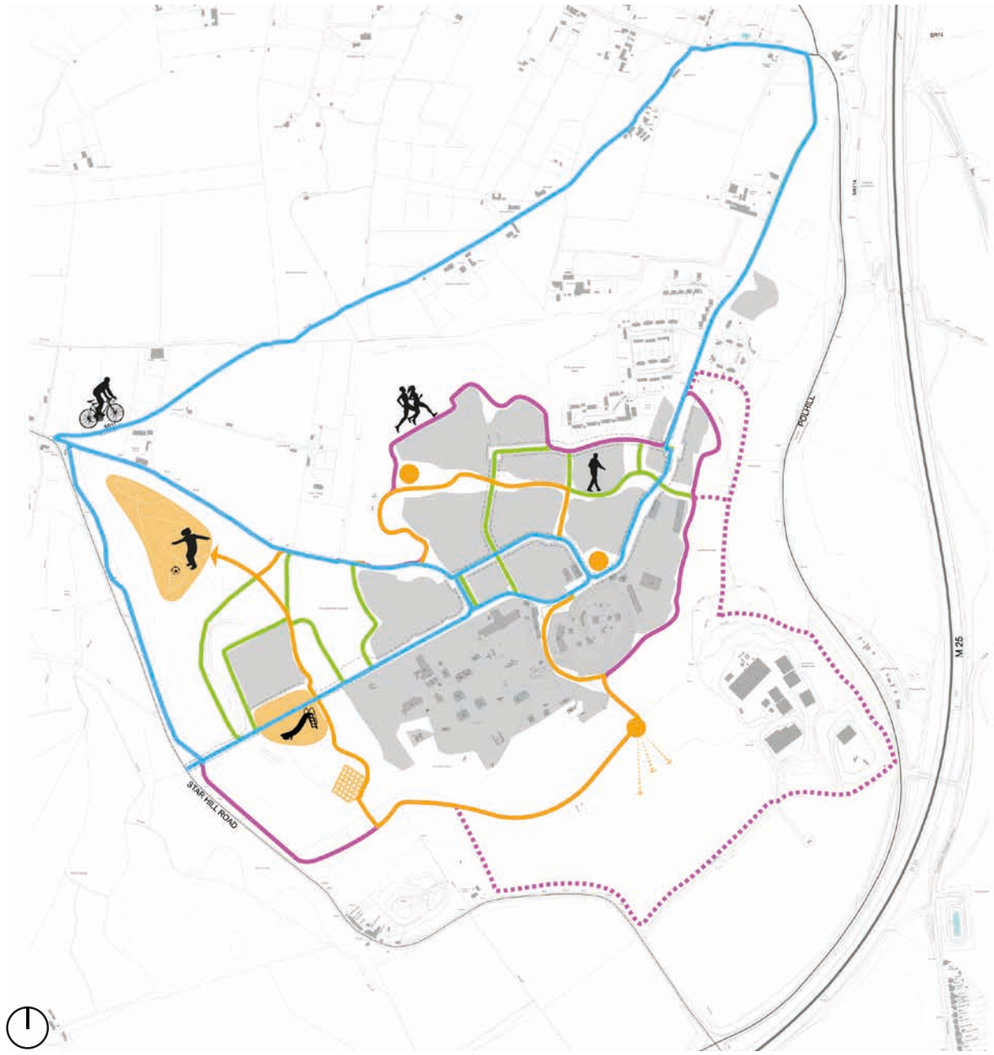
- Reduce traffic speeds – design of streets in accordance with requirements for a 20 mph zone;
- Provide a new off-road cycle route through the site between the Polhill access to the Site access and Knockholt Pound;
- A series of "green links" provide other safe shared use pedestrian/cycle links through the site.

Off-Site Enhancements

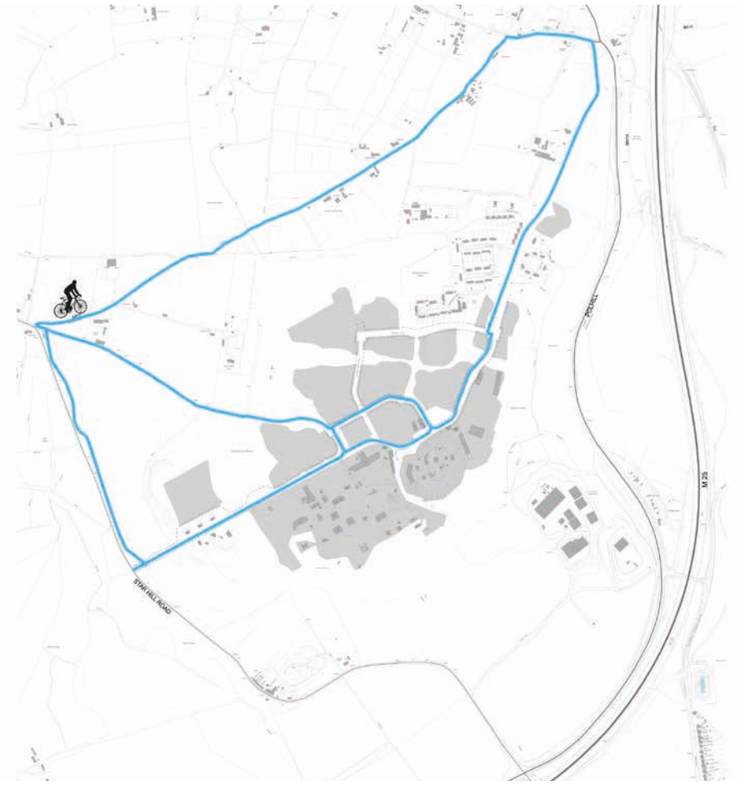
As with the approved scheme, the village, as well as the wider community, will benefit from the following enhancements:

- New on-road cycle lanes between Polhill and Shanklands Roundabout as well as cycle facilities at the upgraded site access junction. In particular, these enhancements will provide safer access to Knockholt Station;
- Proposed 40 mph speed limit on Star Hill;
- Lighting of the M25 underpass on the bridleway linking Polhill and Filston Way.

ALL ROUTES



CYCLING



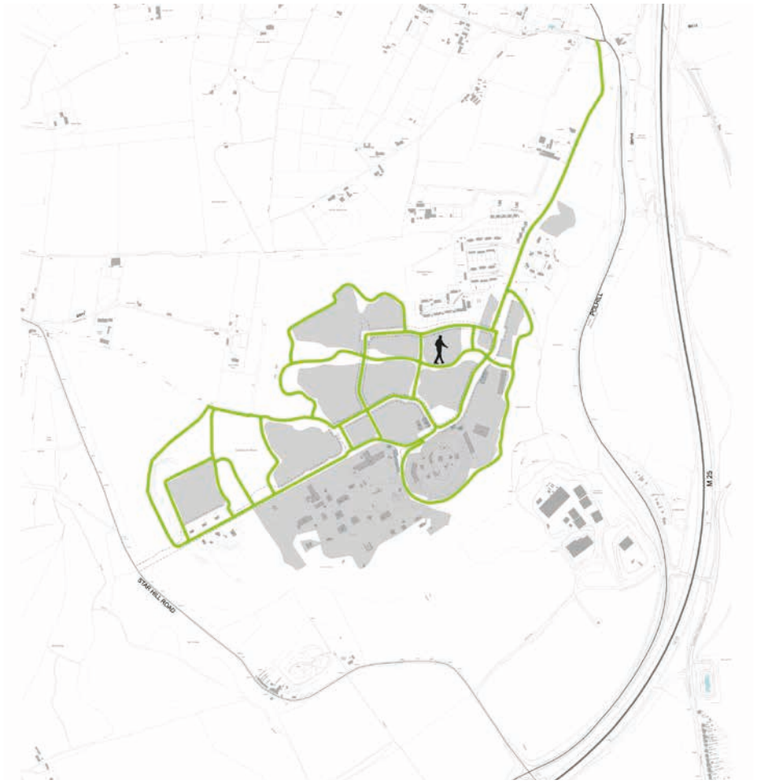
5.6km of cycling route

Key

- Indicative cycling route
- Indicative pedestrian routes
- Indicative running route
- Indicative extended running route
- Indicative recreation route

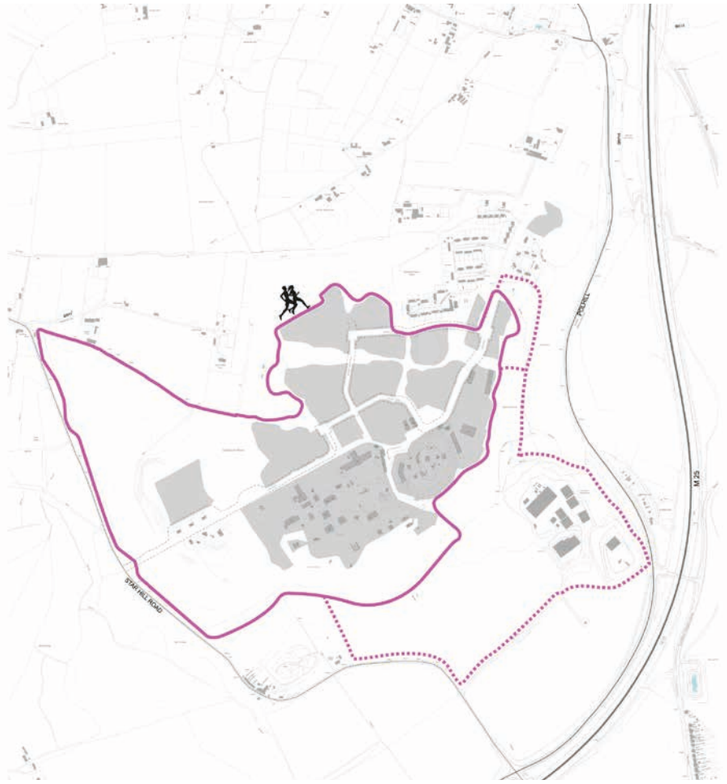
4.3 WALKING & CYCLING ACCESS

FOOTPATH NETWORK



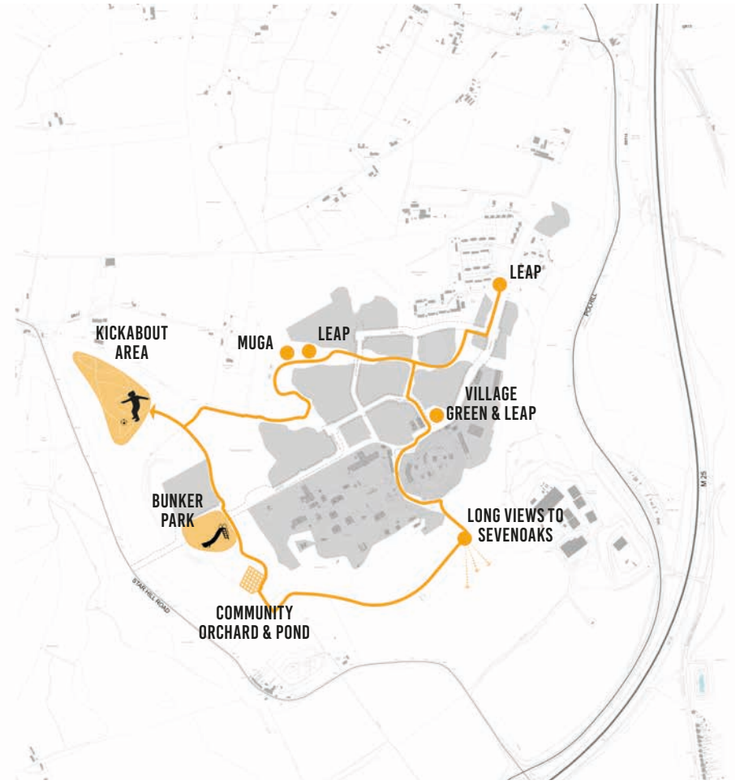
7km of walking routes within the neighbourhood

RUNNING ROUTE



5km of primary route +2.7km of extended route

RECREATION NETWORK



3.6km route connecting all recreational activities in the neighbourhood together

4.4 GENERAL DESIGN GUIDANCE

A LEGIBLE AND PERMEABLE* STREET NETWORK

Fort Halstead has been designed to be a walkable neighbourhood—a place where a range of useful facilities are within a short walking distance of all homes. This encourages people to walk and cycle rather than use the private car for short trips, but in order for this to happen, it is important that the street network is legible and permeable.

The illustrative street hierarchy plan shows a connected network of streets within the site. These form a clear hierarchy, each serving a particular function, from Crow Drive, the primary route running through the site, to the tertiary and edge streets, which are principally designed to accommodate the residents of the adjacent homes. The aim of this hierarchy is both to define a clear pattern of movement within the site and create a variety of attractive, characterful streets.

The location and alignment of Crow Drive and the secondary route is fixed and predominately follows the existing and historic alignment, with the exception of a few locations where deviation has been introduced to incorporate traffic calming measure and encourage slower vehicular movements. The location and alignment of all other street types are shown illustratively. While there is scope for some deviation from the illustrative layout, detailed proposals should follow the principles set out in this chapter, particularly in respect of the hierarchy between different street typologies.

The following detailed principles should be adhered to.

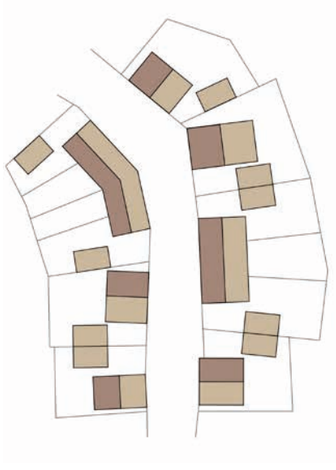
- Streets should interconnect—many cul-de-sac, gated and one-way streets will not be acceptable. The only exception may be at edge streets serving a small number of homes, but only if it can be designed to adequately accommodate the servicing of dwellings and does not sever pedestrian and cycle movements through the wider area;
- Each street should be designed to encourage the particular activities intended to take place within it.

STREET ALIGNMENT

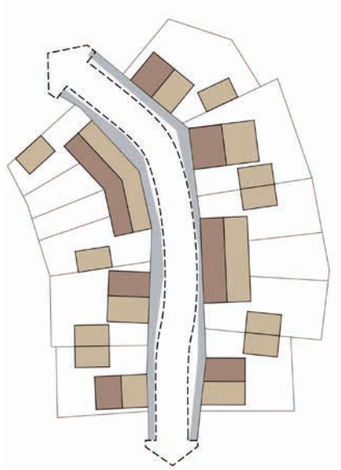
The detailed alignment of streets should be determined by the arrangement of buildings along them and the desire to create varied, interesting places.

- All streets should be designed to naturally slow traffic by visual cues such as built frontage, on street parking, horizontal deflections, landscape and surface materials
- Long straight sections of street should generally be avoided. Where this is not practical, additional measures such as those set out above will be required to limit speeds

*In urban design terminology, a 'permeable' street network is one which has a variety of pleasant, convenient and safe routes through it. It encourages walking and cycling and makes places easier to navigate through. Conversely, urban forms which lack permeability, e.g. those severed by arterial roads, or with many long culs-de-sac, are considered to discourage movement on foot and necessitate longer journeys by car.



Buildings and gardens are placed to define the preferred urban form.



The space left between is available to form the carriageway and is tracked for movement and for the provision of places where people may park their vehicles.

4.4 GENERAL DESIGN GUIDANCE

JUNCTION DESIGN

Cross roads and T-junctions will be the most common forms of junctions within the street network. In order to allow pedestrians to follow straight desire lines when crossing streets, it is important that junction radii are kept as small as possible.

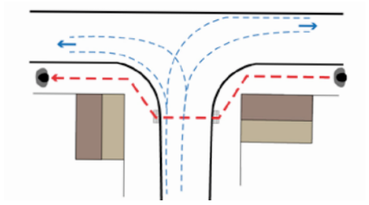
- Vehicle tracking should be undertaken to test designs and achieve tight radii at junctions.
- Radii should generally be less than 6m (to be determined by swept path analysis) with the less trafficked streets achieving a minimum of 4m. Exceptions to this may be made for junctions with the primary road where 6m radii may be required.
- It is acceptable for large vehicles to use the opposite carriageway when turning in areas where traffic is moving at 20mph.
- Widening the street near the junction can help achieve tighter radii.
- Where on-street parking is provided near junctions, wider car parking bays may be used to allow visibility splays to be maintained.
- Street trees can also be located within these visibility splays to allow continuity of street trees.

The adjacent diagrams illustrate this approach, which is also explained in Manual for Streets 1.

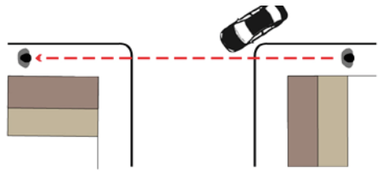
CONSTRUCTION DETAILS

- At the corners of all junctions or other vulnerable areas, footways or other hard-standings should be constructed to the same quality as the carriageway to avoid being damaged by vehicles overrunning the footways or parking.
- The placement of trees, tree pits and utilities should be carefully considered at design stage to ensure a holistic design of the sub base and surfaces to ensure longevity.

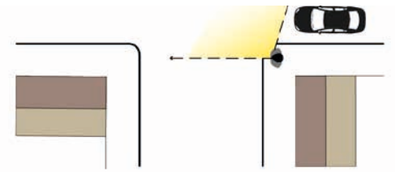
KEY STREET GEOMETRY PRINCIPLES



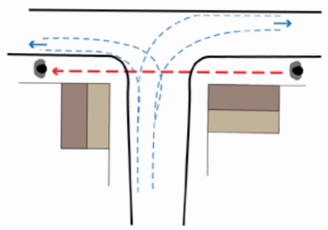
Larger radii force pedestrians to deviate.



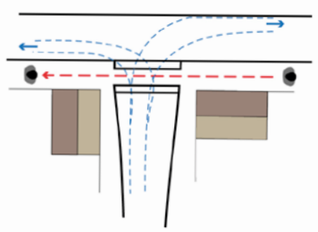
Tighter radii allows pedestrian desire line to be maintained and vehicles turn slowly (10–15 mph)



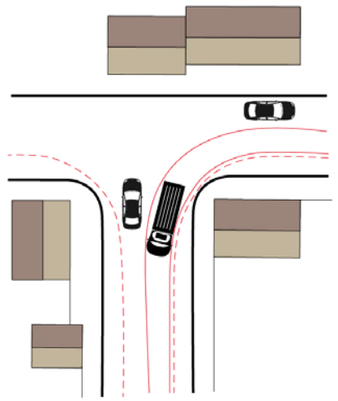
- Pedestrian does not have to look further behind to check for turning vehicles
- Pedestrian can easily establish priority because vehicles turn slowly.



Side street widens at junction & narrows further back to allow smaller radii. Smaller radii allow pedestrians to cross more easily.



Best solution includes raised surface for easier pedestrian crossing.



- Tighter kerb radii can be used with a wider carriageway. The refuse vehicle turning requirement is still contained within the space, yet vehicles do not dominate.
- By using the same concept of tracking, wider carriageways can be set out to generate tighter junctions. These have much better calming effect on traffic speed.

5. CROW DRIVE CHARACTER AREAS

5.1 CROW DRIVE

INTRODUCTION

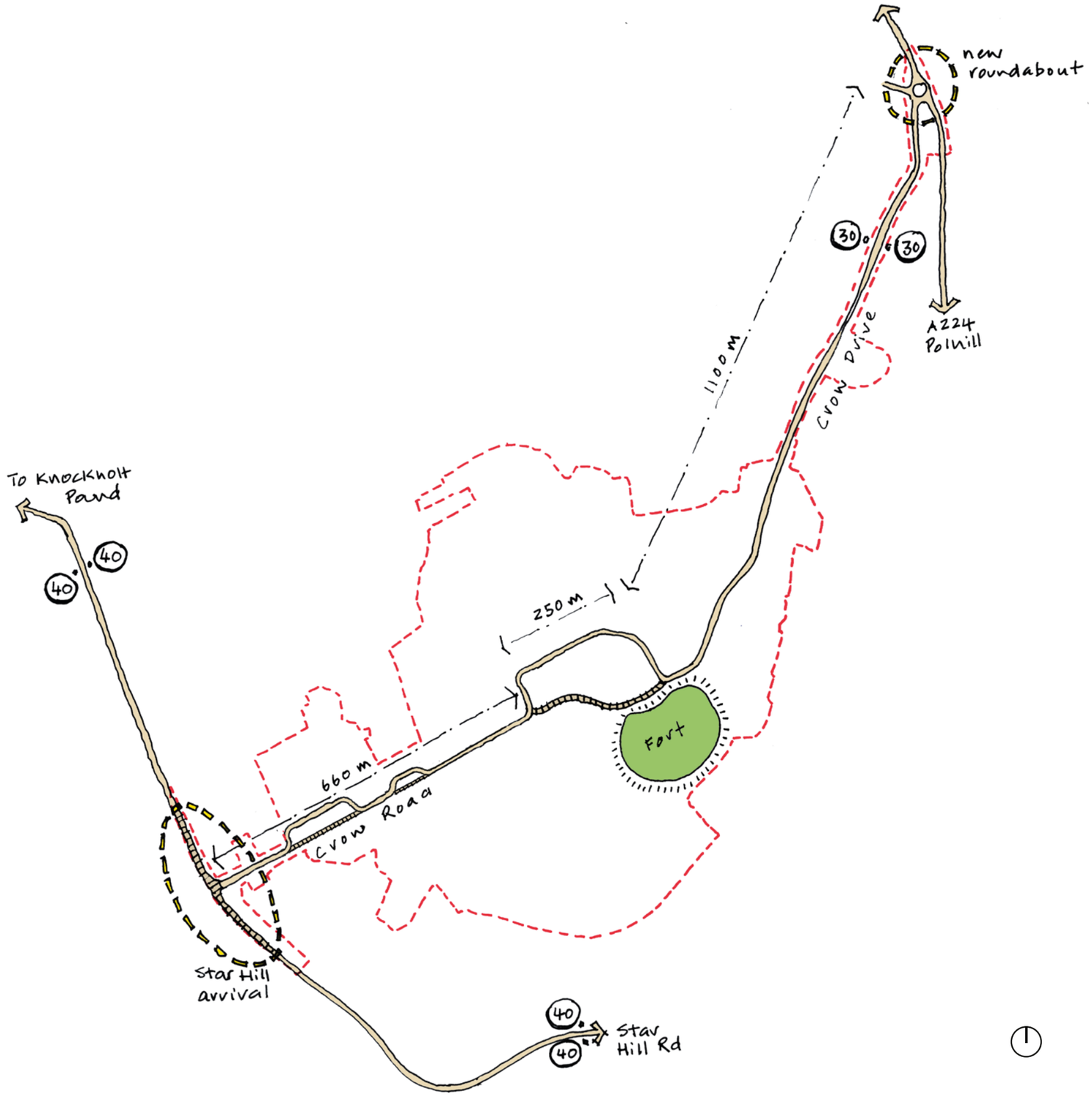
Streets make up the majority of the public realm within Fort Halstead and the detailed design of these streets will play a key role in establishing the character of the place as a whole and the different character of the neighbourhoods within it.

The proposal combines best practice in design, embracing *Manual for Streets* and the adopted *Kent Design Guide*, to deliver a new exemplary residential environment for all to enjoy.

Crow Drive is the main route into Fort Halstead from both Polhill and Star Hill. Crow Drive will vary in character and respond to its surrounding built character. The following chapter sets out guiding design principles for future reserved matter applications to ensure the quality and delivery of these different characters.

Text and diagrams set within an orange box are used to indicate mandatory design principles that *must be followed* to ensure the development will be of a high quality.

Mandatory Design Principles



GENERAL PRINCIPLES

Throughout Crow Drive vehicular speeds will be restricted to 20mph or less. The exception to this is the short stretch of the Crow Drive connecting to the Polhill where a 30 mph limit will be applied in order to allow drivers to adjust their speed from leaving the nearby highway network.

The width of the carriageway is 6.2m which will accommodate a bus route. On the northern side of the Crow Drive there will be on a minimum of 2m footway and on the southern side a 3m minimum shared cycle and footway.

Kerbs with a high upstand should be used on the boundary between verge and carriageway to prevent unwanted parking on the green verge. On street parking should be only provided within parallel parking bays and where possible inset between the trees.

LIGHTING ON CROW DRIVE

The lighting along Crow Drive and across the development should aim to reduce sky low, luminaire intensity and light intrusion and thus limit visual impact at night. These issues can be addressed by the careful selection of luminaries that would neither project light upwards nor throw too much light directly onto objects (thereby reflecting back upwards). Whilst reduced levels of illumination is encouraged, no compromise should be made in respect of safety in health, safety and welfare of operatives and visitors.

Key light design measures should include:

- Lighting should be to the minimum level necessary to provide the required level of illumination;
- LED lights are recommended that enable increased control, improve colour definition, and save on energy;
- Luminaires should be designed and oriented to restrict light directionality only to the areas necessary. This should include double asymmetrical luminaires and full horizontal cut-off designs to prevent light spill;
- Lighting should be zoned to provide higher lighting levels along main routes (albeit whilst aiming for minimum standards of illumination); lower lighting levels on minor roads; and no light at all on out outward facing private drives;
- If security lights are to be provided on houses these should be of a full horizontal cut-off design with appropriate accessories to prevent light spill. They should also be fitted with motion sensors with timers set to the minimum value;
- The design to be as uniform as possible.

For more detail on the lighting strategy please refer to the Lighting Assessment Report.

CROW DRIVE

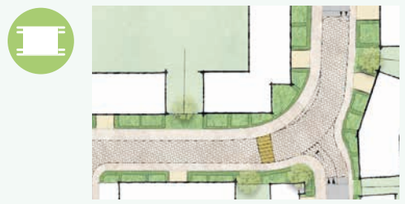
GENERAL HIGHWAY FEATURES

Speed limit	20 to 30
Min. carriageway width	6.2 m
Footway/cycleway	2m footway on one side; 3m 3m shared footway/cycleway on the other side or in the green space
Cycleway forward visibility	20m
Longitudinal gradient	<10%
Cross fall	<10%
Bus access	Yes
Street lighting	Yes outside of 20mph zone and within 20mph zone at locations to be determined
Distance between speed restraints features	60m - 80m within 20mph Speed Limit Zone
Junction visibility x	2.4m
Junction visibility y	>25m within 20mph zone, 43m outside
Max longitudinal gradient	8% (gradients may only be increased if unavoidable due to local topography)
Cross section gradient	1.0% to 5.0%

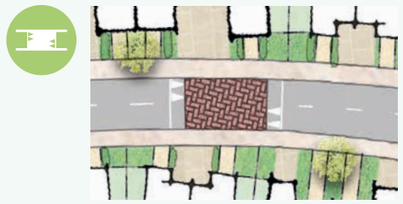
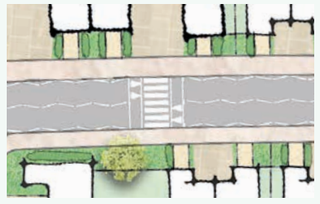
5.2 TRAFFIC CALMING MEASURES

Traffic calming measures aim to encourage safer, more responsible driving and reduce traffic speeds. Traffic calming measures to be designed into Fort Halstead include mini-roundabouts, square-abouts, shared surfaces, table tops, road humps, speed cushions and eyots.

In the Kent Design Guide Chapter 'Making it happen-highways', the maximum length of straight road between speed control features within 20 mph zones is generally 60 to 80 metres.

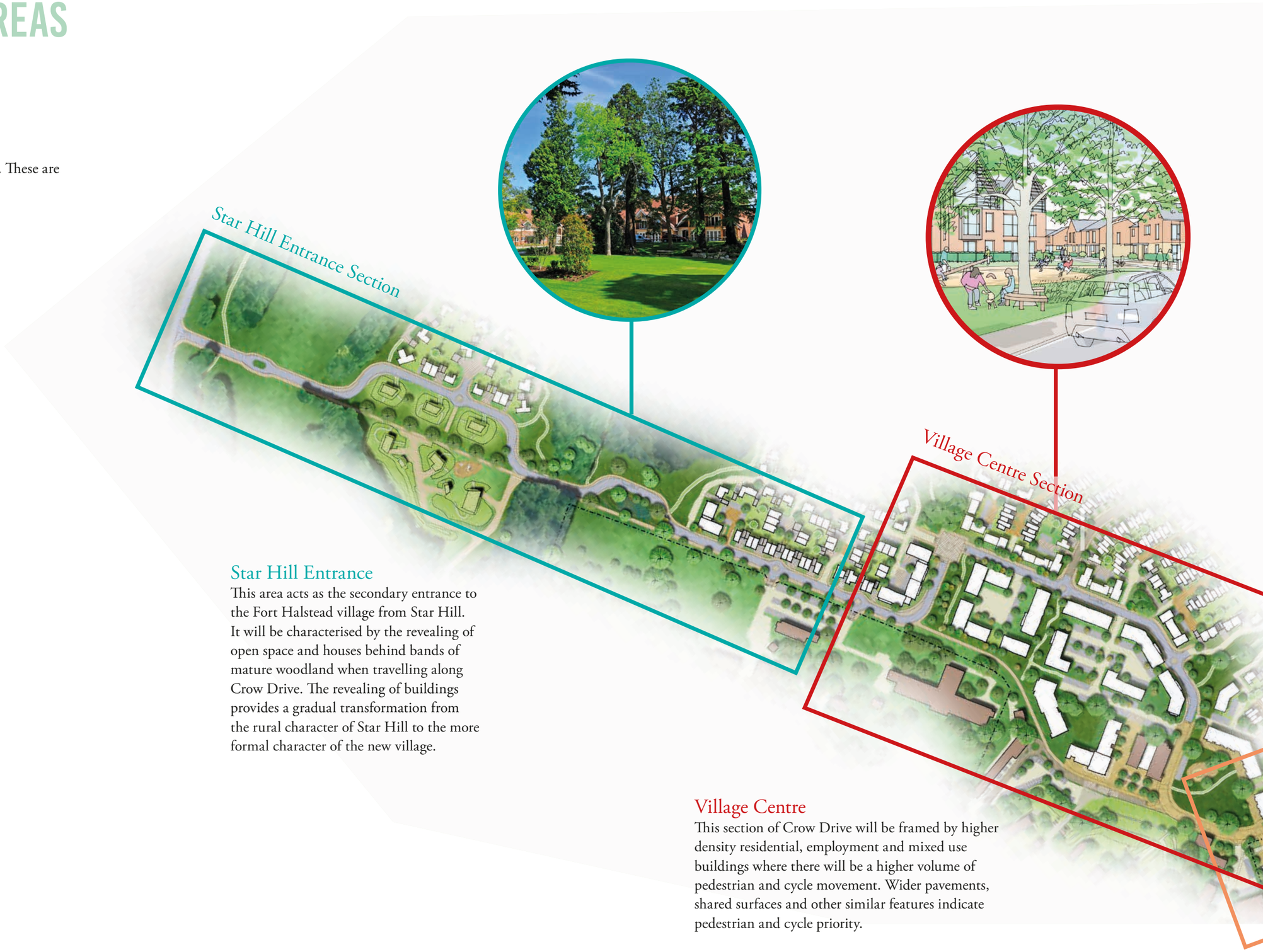
TYPOLOGIES	DESCRIPTION	PRECEDENT
Mini-roundabout 	• The central dome may be up to 6 metres in diameter and raised to a maximum of 75mm in the centre. The dome height should be in proportion to the roundabout diameter, i.e. for a 2m central island the dome should be raised to a maximum of 50mm in the centre. This should be lowered if buses or frequent HGVs need to cross it. • The edge should be flush within a tolerance of 6mm above the adjacent road surface and the dome can be finished in cobbled or similar material.	
Squareabout	• Squareabouts will take the form of a village square type arrangement, including a raised square central dome similar to the mini-roundabouts above.	
Shared surface 	• Shared space is an urban design approach that minimises the segregation between modes of road user. This is done by removing features such as kerbs, road surface markings, traffic signs, and traffic lights. • Use of contrasting materials allows legibility and understanding between pedestrians and vehicle drivers.	
Overrun strips 	• Overrun strips allow larger vehicles to negotiate bends and narrowings without significant visual widening of the main carriageway surface. • Overrun strips can be formed of a raised shoulder, the edge no greater than 25mm above the carriageway channel line, and can be formed of an edge kerb and cobbled or other similar material differentiating from the carriageway material type.	

5.2 TRAFFIC CALMING MEASURES

TYPOLOGIES	DESCRIPTION	PRECEDENT
Table tops 	• Ramps at the commencement of table junctions and speed tables shall be 1.125 metres long, laid at a gradient of 1 in 15 (6.7%). The maximum height of any vertical deflection in Kent is 75mm. • For adoptable roads KCC require humps and tabletops to be formed of tegular type blocks, of a standard colour palate to be agreed with KCC. Ramps can be formed of a contrasting colour material, to the specification dictated by KCC.	
Road humps and cushions 	• Hump spacing of 60–80 metres is required for 20 mph zones when used in a series	
Eyots 	• Eyots are traffic islands in the centre of the carriageway taking the form of an over-runnable edge strip and a solid central island planter. • The edge of the overrun strip should be flush within a tolerance of 6mm above the adjacent road surface. Eyot geometry will be dictated by vehicle swept path analysis.	

5.3 CHARACTER AREAS

There are 4 key character area along Crow Drive. These are illustrated here.



Star Hill Entrance

This area acts as the secondary entrance to the Fort Halstead village from Star Hill. It will be characterised by the revealing of open space and houses behind bands of mature woodland when travelling along Crow Drive. The revealing of buildings provides a gradual transformation from the rural character of Star Hill to the more formal character of the new village.

Village Centre

This section of Crow Drive will be framed by higher density residential, employment and mixed use buildings where there will be a higher volume of pedestrian and cycle movement. Wider pavements, shared surfaces and other similar features indicate pedestrian and cycle priority.

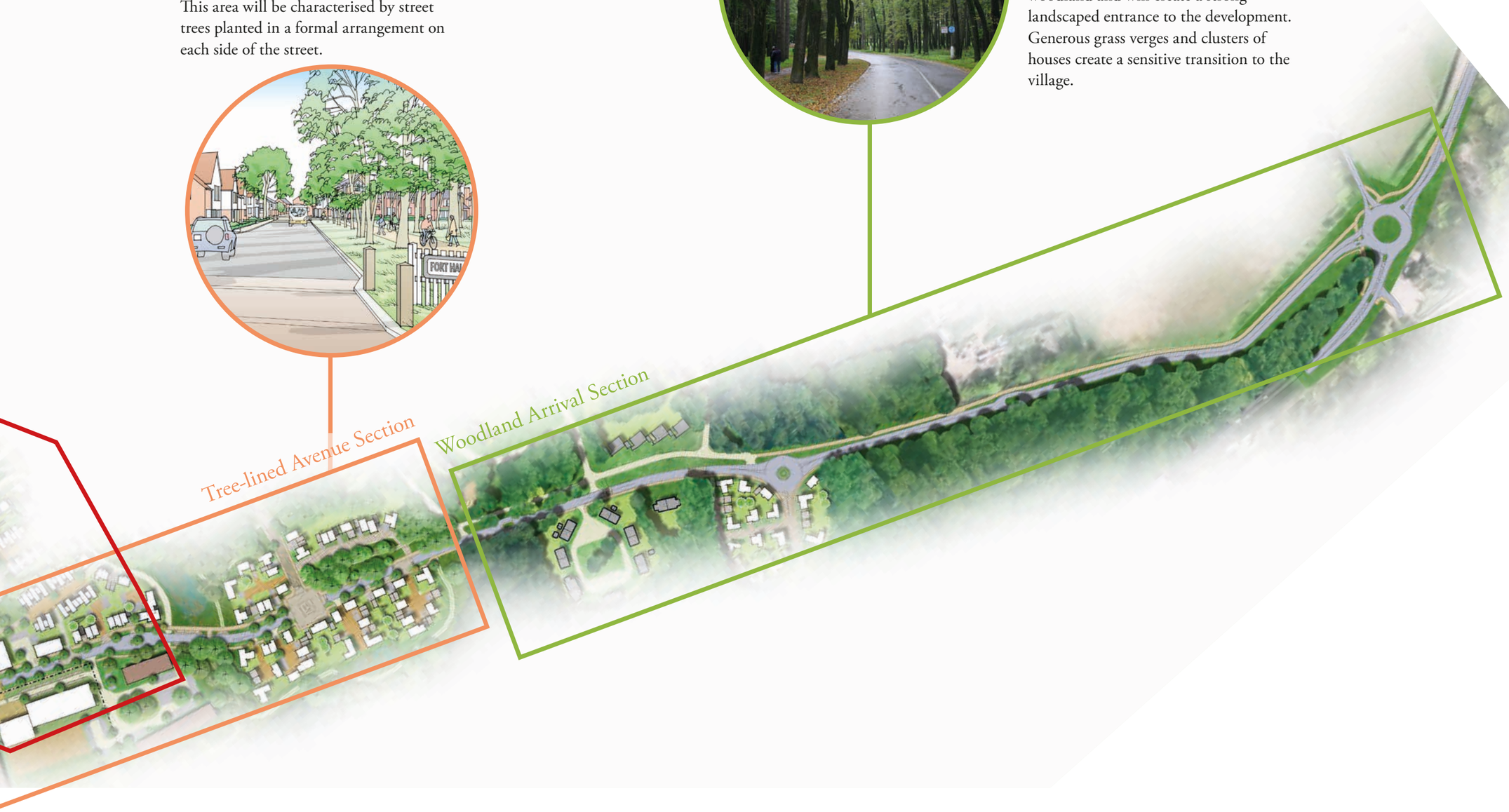
5.3 CHARACTER AREAS

Tree-lined Avenue

This area will be characterised by street trees planted in a formal arrangement on each side of the street.

Woodland Arrival

The Woodland Arrival will be characterised by the surrounding mature woodland and will create a strong landscaped entrance to the development. Generous grass verges and clusters of houses create a sensitive transition to the village.



5.4 WOODLAND ARRIVAL

The Woodland Arrival forms an informal edge to the residential neighbourhoods, with a woodland character. Generous grass verges and soft, open frontages create a transition to the village.

This section connects Fort Halstead to Polhill (A224). The street will be framed by green space on both sides providing a rural character within existing woodland. Vehicular movements will be calmed naturally by eyots, humps, mini-roundabouts and pedestrian crossings. The main entry point to the 20mph zone will be calmed by a 28m ICD (inscribed circle diameter) compact roundabout with a solid/landscaped central island.

The transition from the Woodland Arrival to the Tree-Lined Avenue and from Star Hill Entrance to the Village Centre should be marked by a feature such as a raised courtesy crossing and a welcome signage.

Location of Woodland Arrival

WOODLAND ARRIVAL

HIGHWAY

Speed limit	20 to 30
Width of adopted highway	Varies
Minimum carriage width	6.2 m
Footway/ cycleway provision	min. 2m footway on one side, 3m shared footway/ cycleway on the other side
Highway verge	max. 8m wide

HIGHWAY FEATURES

Bus route	Yes
On-street parking	No
Traffic-calming features	Yes – raised table top, eyot, road hump, mini-roundabout, compact roundabout
Road markings	100mm if required
Centre line radii	Varies

WOODLAND ARRIVAL

ACCESS

Junction spacing	60m min for adjacent roads, 15m for opposite
Minimum junction visibility	2.4 x 43m within 30mph, 2.4m x 25m within 25mph zone
Kerb Radius	Determined by swept path analysis, although a starting point should be 4m or less
Direct vehicular access to properties	No

PAVING MATERIALS

Carriageway	Asphalt
Kerbs and Edging	To be agreed with KCC
Footway	Asphalt or block paving

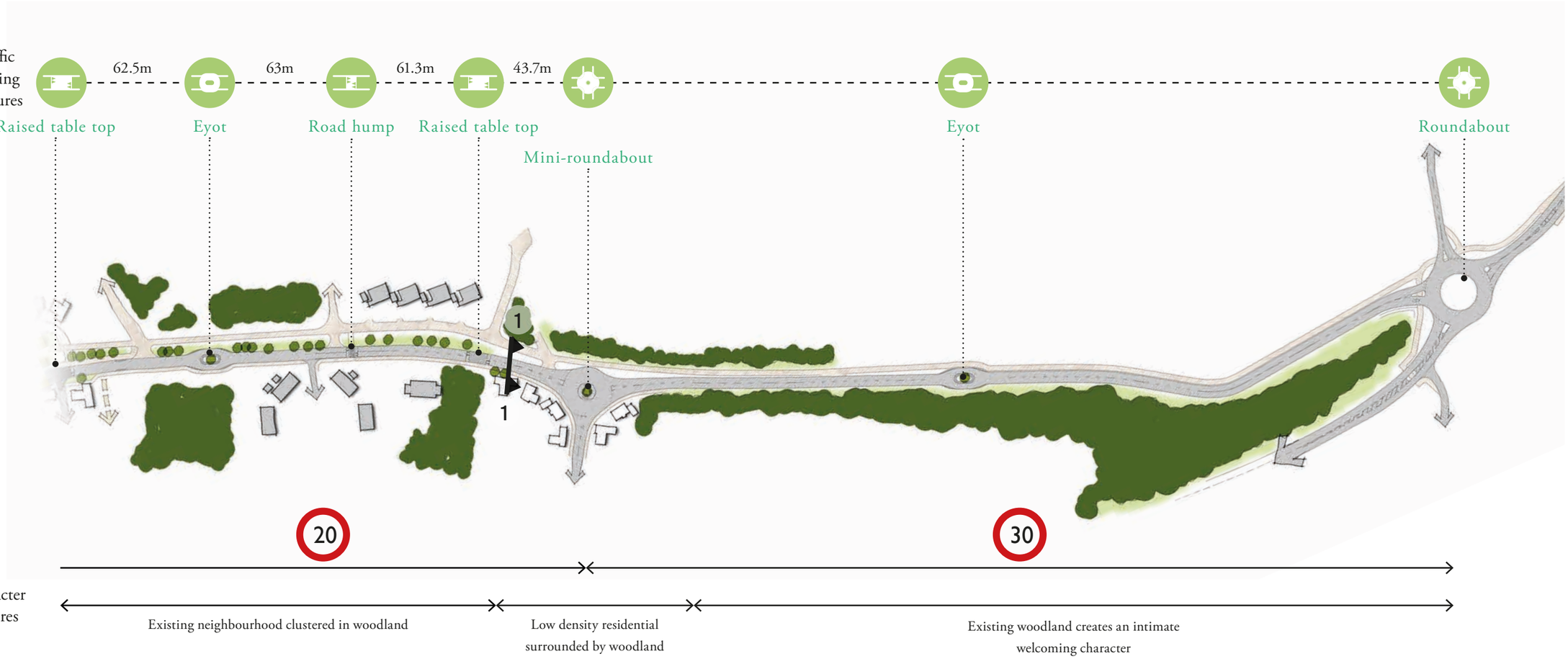
LIGHTING

Carriageway	To be agreed with KCC depending on tree coverage

Precedent image of woodland arrival, Moscow

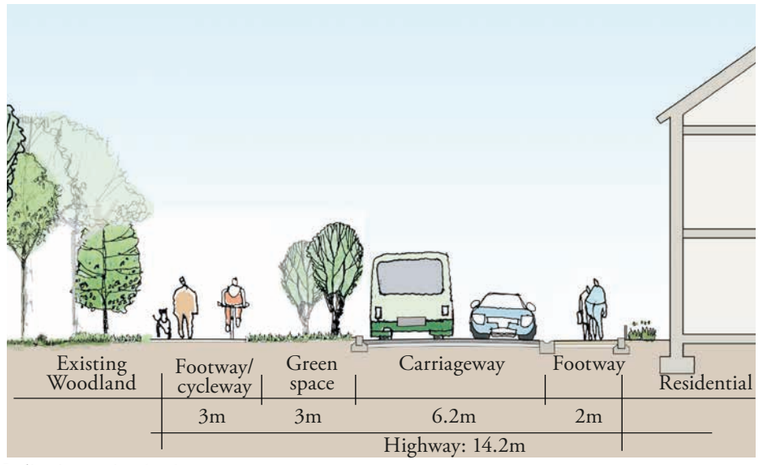
Precedent image of glimpsed views through mature trees, Boxgrove Gardens, Guildford

5.4 WOODLAND ARRIVAL




Existing housing along Crow Drive


Precedent image of informal green space within woodland setting, Boxgrove Gardens



Indicative section 1 – 1

5.5 TREE-LINED AVENUE

This area will be characterised by large street tree species planted in a formal arrangement on each side of the street. A shared surface pedestrian cycle route runs parallel to the north of the avenue adjacent to the green space.

There will be on-street parking and a pedestrian crossing in the Anisbirches Walk section.

TREE-LINED AVENUE	
HIGHWAY	
Speed limit	20
Width of adopted highway	Varies
Minimum carriage width	6.2 m
Footway/ cycleway provision	2m footway on one side, 3m shared footway/ cycleway on the other side
Highway verge	min. 3m on both sides
HIGHWAY FEATURES	
Bus route	Yes
On-street parking	Yes – parallel
Traffic-calming features	Shared surface, raised table top, Eyot, road hump, squareabout
Centre line radii	In accordance with Kent Design Guide

TREE-LINED AVENUE	
ACCESS	
Junction spacing	To be agreed with KCC
Minimum junction visibility	2.4 x 25m
Kerb Radius	Determined by swept path analysis, although a starting point should be less than 4m
Direct vehicular access to properties	Yes – restricted at junctions
PAVING MATERIALS	
Carriageway	Asphalt, tegular block
Kerbs and Edging	To be agreed with KCC
Footway	Asphalt, tegular block
LIGHTING	
Carriageway	To be agreed with KCC depending on tree coverage

Location of Star Hill Entrance Section

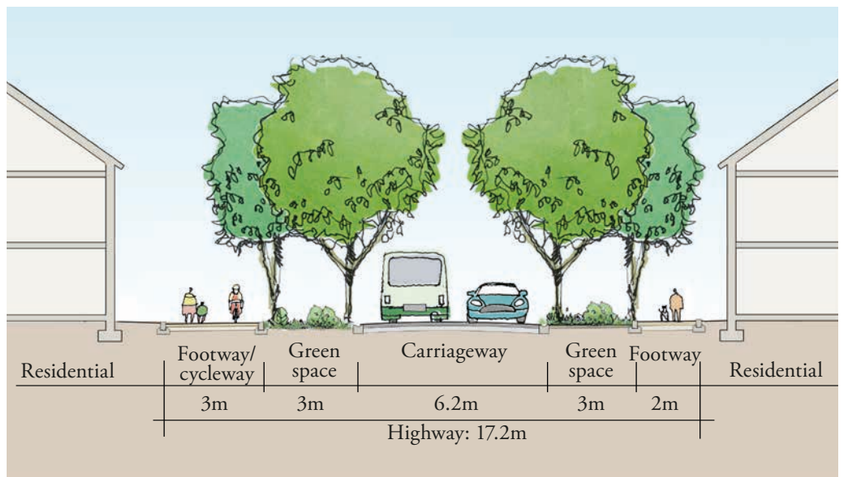
Artist impression of the Tree-Lined Avenue

Precedent image of The Avenue, Saffron Walden

5.5 TREE-LINED AVENUE

Example of footway/cycleway through entrance green – The Avenue, Saffron Walden

Existing treed area at the approach of Fort Halstead



Indicative section 2 – 2

5.6 VILLAGE CENTRE

The Village Centre section will have a higher volume of pedestrian movement than the typical sections of the Avenue and therefore requires wider pavements and other features that signify pedestrian priority.

The pavement will run up to property boundaries to allow shop fronts in a traditional high street design. Special paving will mark pedestrian crossing points on desire lines and the design of street furniture, lighting, public art and soft landscaping will emphasise the civic importance of the place.

Where Crow Drive runs along the edge of the Village Square and Village Green, it will form an integral part of the square with the carriageway and adjoining pedestrian space at the same level. Changes in material rather than standard kerbs should be used to demarcate pedestrian priority and parking areas.

Bus stops will include raised platforms to allow easy boarding. Tactile paving must be used to indicate safe crossing places for blind and partially-sighted pedestrians.

VILLAGE CENTRE	
HIGHWAY	
Speed limit	20
Width of adopted highway	Varies
Minimum carriage width	6.2 m
Footway/ cycleway provision	2m footway on one side, 3m shared footway/ cycleway on the other side
Highway verge	No verges
HIGHWAY FEATURES	
Bus route	Yes
On-street parking	Only permitted around the village green
Traffic-calming features	Yes – mini-roundabouts, squareabouts, shared surface, overrun strip
Road markings	If required
Centre line radii	In accordance with Kent Design Guide

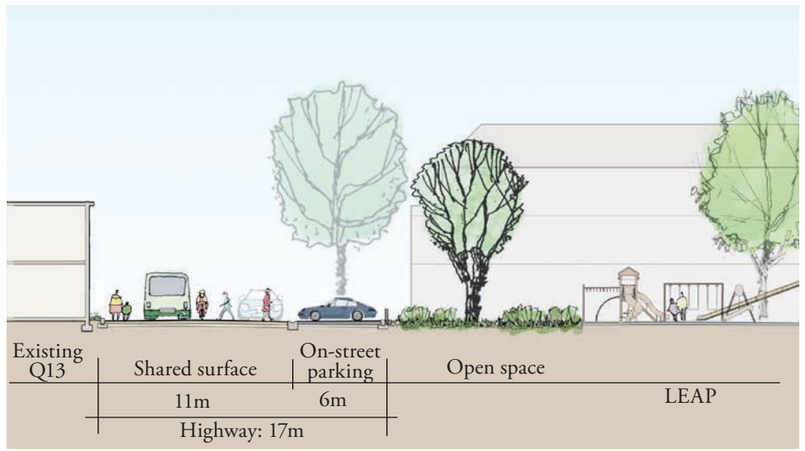
VILLAGE CENTRE	
ACCESS	
Junction spacing	To be agreed with KCC
Minimum junction visibility	2.4 x 25m
Kerb Radius	Determined by swept path analysis, although a starting point should be less than 4m
Direct vehicular access to properties	No
PAVING MATERIALS	
Carriageway	Asphalt, tegular block
Kerbs and Edging	To be agreed with KCC
Footway	Asphalt, tegular block
LIGHTING	
Carriageway	To be agreed with KCC
QINETIQ	
Security fence line	3m (max) high fenceline with a service strip clear of vegetation, to be located 1m (min) from QinetiQ's demise (for details of fenceline refer to diagrams in the Star Hill Entrance character area)

Location of Village Centre Section

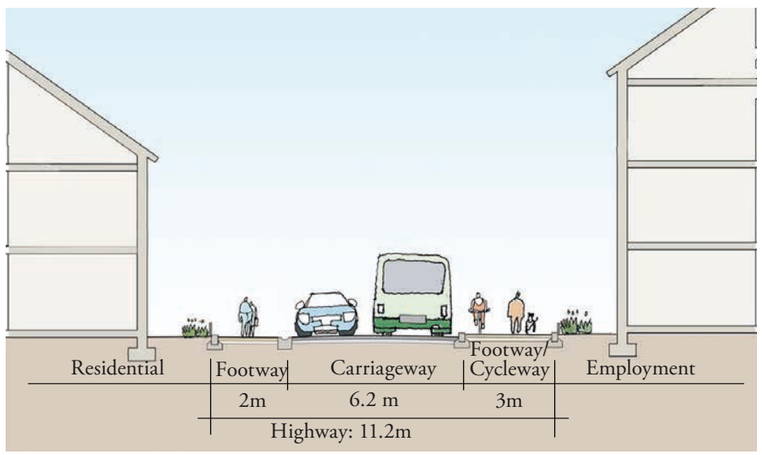
Artist impression of the Village Green

Precedent image of streetscape framed by higher density housing – Newhall, Essex

5.6 VILLAGE CENTRE



Indicative section 3 – 3



Indicative section 4 – 4

5.7 STAR HILL ENTRANCE

This section is the secondary route into Fort Halstead from Star Hill to gradually introduce the Fort Halstead village by going through open space within woodland and catching a glimpse of high quality housing at the entrance.

The design of the route incorporates an eyot with formal mature trees at the entrance and zigzag turns to create points of interests, reduce speed and provide a pedestrian-friendly environment with the green space and play area.

STAR HILL ENTRANCE	
HIGHWAY	
Speed limit	20
Width of adopted highway	11.2 m
Minimum carriage width	6.2 m
Footway/ cycleway provision	2m footway on one side, 3m shared footway/ cycleway on the other side
Highway verge	N/A
HIGHWAY FEATURES	
Bus route	Yes
On-street parking	No
Traffic-calming features	Yes – eyots, table tops, overrun strips and mini-roundabouts
Road markings	100mm
Centre line radii	Varies

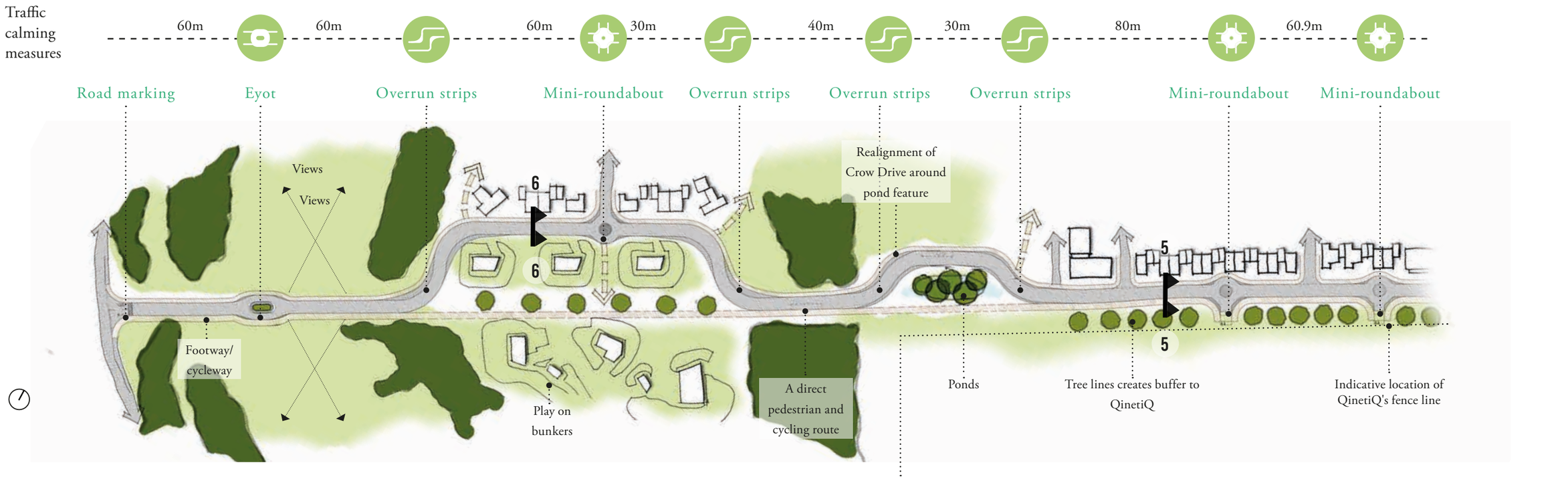
STAR HILL ENTRANCE	
ACCESS	
Junction spacing	60m min for adjacent roads, 15m for opposite
Minimum junction visibility	2.4 x 43m
Kerb radius	Determined by swept path analysis, although a starting point should be less than 4m
Direct vehicular access to properties	Yes – restricted at junctions
PAVING MATERIALS	
Carriageway	Asphalt
Kerbs and Edging	To be agreed with KCC
Footway	Asphalt/block paving
LIGHTING	
Carriageway	To be agreed with KCC depending on tree coverage
QINETIQ	
Security fence line	3m (max) high fenceline with a service strip clear of vegetation, to be located 1m (min) from QinetiQ's demise

Location of Star Hill Entrance Section

Artist's impression

Shared footpath cycleway through landscape – Graylingwell Park, Chichester

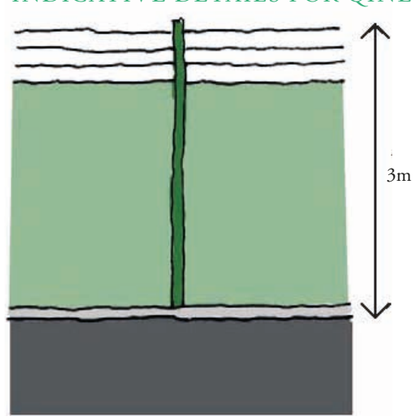
5.7 STAR HILL ENTRANCE



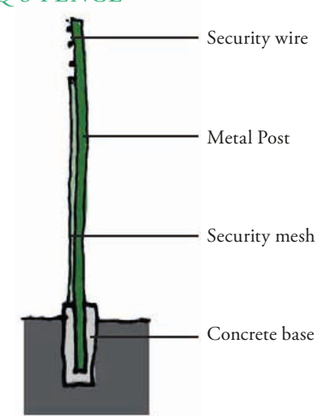
Character features

- Open space with cluster of trees
- Low density residential area and play area integrated with old bunkers
- Open space with cluster of trees
- Medium density residential area and line of trees screens QinetiQ employment area

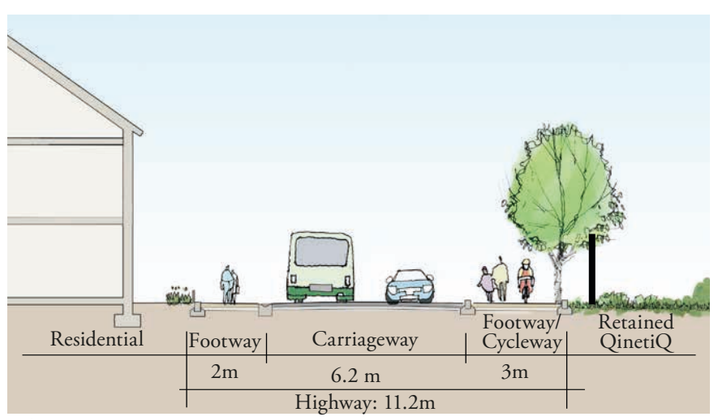
INDICATIVE DETAILS FOR QINETIQ'S FENCE



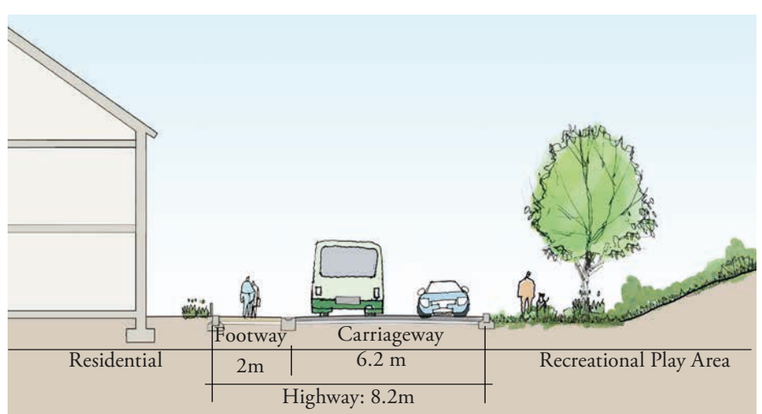
Elevation



Section



Indicative section 5 – 5



Indicative section 6 – 6

5.8 SURFACE MATERIALS

The following materials represent a preferred palette for the public realm and open spaces at Fort Halstead.

The adjacent table provides a matrix of streetscape materials, which sets out the typical standard required with specific products to be agreed at a later stage.

More bespoke materials for key public spaces should also be agreed at detailed stage. The landscape and public realm materials must be selected to uphold the highest standards of ethical and sustainable procurement.

Consideration should be given to the materials supply, durability, longevity and ease of replacement or replication.

PRINCIPLES:

- Material colours must be muted and of natural tones to complement rather than detract from the buildings and landscape setting.
- A range of appropriate adoptable materials should be used in order to reinforce the street hierarchy and create a safe, comfortable neighbourhood identity.
- The materials palette must also adapt to accommodate the evolving sustainable drainage strategy, for example, by using pervious paving or permeable bound surfacing systems.
- Unnecessary road markings should be avoided as much as possible to reduce road clutter and maintenance costs.
- Avoid white and yellow lining, except on Crow Drive and the Secondary Street.
- Where street lining are deemed absolutely necessary 50mm white centre lines and 50mm wide primrose or yellow lines should be used, not 100mm lines.
- The use of different coloured paving is encouraged to demarcate carriageways, footway/cycleways and parking spaces (particularly on shared surface streets).

STREET TYPE:	CARRIAGEWAY	KERBS/EDGING	SHARED FOOTWAY/ CYCLEWAY	CROSSING POINTS	RAISED JUNCTIONS
Primary roads	Asphalt 	Natural stone or textured concrete 	Asphalt or block paving 	Tactile blister paving or tactile corduroy paving or conservation tactile paving	Concrete road hump or block paving for raised table
Shared surfaces	Block paving 	Flush natural stone or textured concrete or conservation style kerbs 	Block paving 	N/A	Block paving
Parking	Asphalt or block paving 	Natural stone or textured concrete or conservation style kerbs 	N/A	N/A	N/A
Footpaths in public open spaces	Formal open space: surface course resin bound gravel or natural stone paving Informal open space: self binding gravel 	Aluminium edge restraint, concrete, pressure treated timber edging boards. 	Block paving or resin bound paving 	N/A	N/A
Community hub/ Civic spaces	Surface course resin bound gravel or concrete block paving	Aluminium edge restraint	N/A	N/A	N/A

5.8 SURFACE MATERIALS

HARD LANDSCAPE MATERIALS MATRIX

An example of primary roads in asphalt surface

An example of crossing points with tactile blister paving

An example of shared surface concrete block paving

An example of defined parking areas with concrete kerbs and block paving

An example of formal open space footway/cycleway – buff resin bound gravel with aluminium edge restraint

An example of informal open space footway – buff self binding gravel with timber edging

An example of village centre/square spill out areas featuring natural stone or concrete block paving

An example of carriageway/shared surface in resin bound gravel and block paving

6. VILLAGE CENTRE DESIGN GUIDANCE

6.1 ILLUSTRATIVE MASTERPLAN

The Village Centre forms the heart of the village as both an employment area and a community hub for the new residents.

The Village Centre incorporates the restoration of two existing buildings; Penney (Q14) which is Grade II Listed and The Q (Q13); both part of the original Q-Building enclave used for the Atomic Bomb Development Programme. These buildings will include employment and community uses. A new mixed-use building (Block B) is proposed alongside Penney (Q14) terminating a new vista toward the Village Centre. The building's architecture will celebrate innovation and reflect the enclave's military history.

A sequence of spaces each with a distinct character complement the uses within the Village Centre. The Village Green is framed by the Fort, the existing cottages and new mixed use buildings. Its design facilitates preservation of existing trees but also includes new spaces; an area of play and an open lawn, each encouraging activity. The Square is a new public space that connects the Village Green with the refurbished buildings; its design is simple and elegant and creates an appropriate setting to the Fort. The Garden Street and Residential Gardens are natural in character and support the residential uses nearby.

KEY

- Design Guidance boundary
- Detailed planning application boundary
- 1 The Fort
- 2 The Penney (Q14) (Grade II* Listed)
- 3 The Q (Q13)
- 4 Proposed atrium
- 5 Garden Street
- 6 The Square
- 7 Residential gardens
- 8 Village Green
- 9 Locally Equipped Area of Play (LEAP)
- 10 The Cottages (A13 and A14)

6.2 ILLUSTRATIVE AERIAL

6.3 ILLUSTRATIVE MIX OF USES

NAME	CLASS	INDICATIVE USE	INDICATIVE GROSS EXTERNAL AREA SQ.M
The Q (Q13)	B1a/B1b	Employment	724
Penney (Q14)	B1a/B1b	Employment	282
	D1/D2	Gym/Community	282
Atrium		Employment	196
Block A	C3	Residential	2110
Block B	C3	Residential	2560
	D1	Community	270
Block C	C3	Residential	1538
	D1	Nursery	240
	A1	Food Store	230
	A3	Café	290
Block D	B1a/B1b	Employment	276
	C3	Residential	554

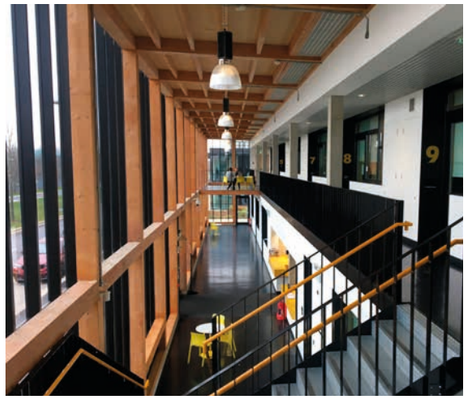
* Please refer to the Design and Access Statement (Outline Planning) for indicative residential mix.

Illustrative uses at ground level

Illustrative uses at upper level

6.3 ILLUSTRATIVE MIX OF USES

THE SQUARE



PENNEY AND THE Q

The restoration of Q13–14 will provide flexible accommodation. The proposed new atrium will bring the two buildings together as a modern hub for social, employment and meeting space. There is also an opportunity provide additional community uses within the Penney building such as a gym.

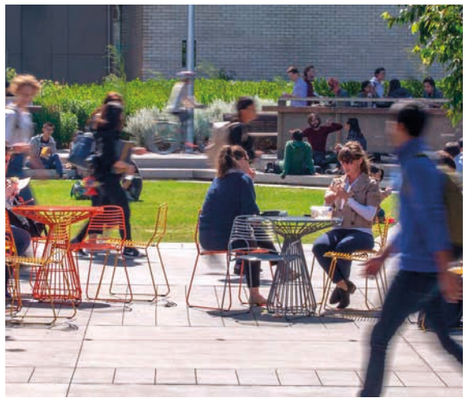
COMMUNITY BUILDING (BLOCK B)

The community building is located on the Square. The building entrance addresses the square providing active frontage. Potential uses within the community building include a drop-in GP, pharmacy, flexible space for classes, meetings and community events. Community events such as weekend markets have the potential to spill out onto the Square.

VILLAGE GREEN

FOOD STORE

A small shop is located within the mixed use building (Block C) overlooking the Village Green. Its visible location will support its commercial viability.



CAFE

The cafe is located within the mixed use building (Block C) overlooking the green. There is space for south-facing outdoor seating in this location. The cafe creates natural surveillance over the play areas and a convenient meeting place for the nearby nursery.

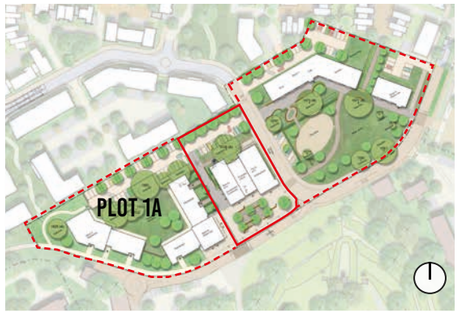
NURSERY

A small nursery is located within the mixed use building (Block C) overlooking the green. The nursery has a private play space to the rear, however the close proximity of the village green is an additional benefit of further usable open space.

6.4 KEY COMPONENT – PLOT 1A

Plot 1A will be in close proximity to the following buildings:

Penney (Q14) – *Grade II listed*
The Q (Q13)
The Fort (Scheduled Monument)



The architectural form and character should reflect the military heritage of the existing Q13/14 buildings by creating an architectural interpretation.

A series of clearly defined, mandatory design principles, as highlighted by the blue box outlines, will ensure a successful design outcome for this parcel.

LAYOUT PRINCIPLES:

- Vehicle access onto development parcel
- Formal frontage with consistent building line addressing public realm
- Building zone with associated landscaping
- Parking zone provided to the rear of buildings with areas of landscape
- Feature corner (1) to address the approach along Crow Drive
- Feature corner (2) to address the square and the Fort
- Building line must not extend over former Q11 building line (as per survey)
- Pedestrian crossing points
- Trees to be retained wherever possible (Refer to British Standards 5837:2012 / Tree Survey))

KEY DIMENSIONS:

1. Distance between Penney (Q14) and proposed feature buildings is 14m (ground floor).
2. Distance between Penney (Q14) and less prominent elevations of Block B is 15m.
3. There is a minimum distance of 5m between proposed buildings and the road infrastructure.
4. There is a minimum distance of 10m and a maximum distance of 20m between Block A and B.

There are no dimension tolerances for points 1–2 to ensure views discussed with SDC from the Fort towards the Penney (Q14) are maintained.

BLOCK A

- Feature corner (1) should be 4 storeys; the top storey must be set back by a minimum of 1.5m forming a terrace.
- The building should be designed with a flat roof, both in order to relate to the existing buildings' architectural language and to limit the overall height as is considered appropriate in this location.
- Building depth is a maximum of 16m.
- The less prominent elevations to Block A facing the Fort should be 2 storeys in height (see architectural design principles on adjacent page).
- Brick 'grid frame' and aligned fenestration must be established throughout Block A.
- Only inset balconies are acceptable.

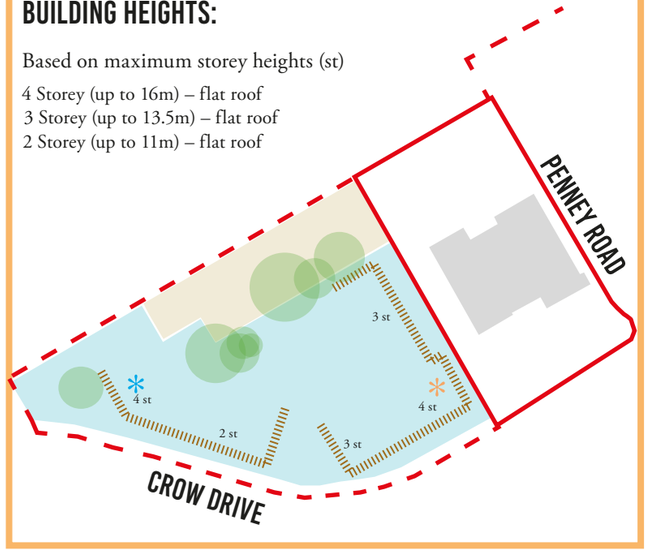
BLOCK B

- Feature corner (2) should be 4 storeys; the top storey must be set back by a minimum of 1.5m forming a terrace. Ground floor height should not be less than 3.6m floor-to-floor. Ground floor must form a colonnade to ensure 'through views' from the Fort toward Q14.
- The Building should be designed with a flat roof as per Block A.
- Building depth is a maximum of 12m.
- The less prominent elevations to Block B are 3 storeys in height (see architectural design principles on adjacent page).
- Elevational treatment of feature building (2) should focus on the use of visible and robust metal structural elements in order to capture a particular, military-inspired architectural aesthetic approach.
- Only inset balconies are acceptable.

BUILDING HEIGHTS:

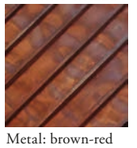
Based on maximum storey heights (st)

4 Storey (up to 16m) – flat roof
3 Storey (up to 13.5m) – flat roof
2 Storey (up to 11m) – flat roof



MATERIAL PALETTE

PRIMARY WALLS



Metal: brown-red standing seam to match brickwork

SECONDARY WALLS

Brick: brown-red hues

Brick colour to complement autumnal brick colours of Q13–14.

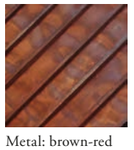
WINDOWS

Black Crittall style

RAINWATER GOODS

Black aluminium or steel rainwater goods including guttering

FEATURES



Metal: brown-red standing seam to match brickwork

Brick: black

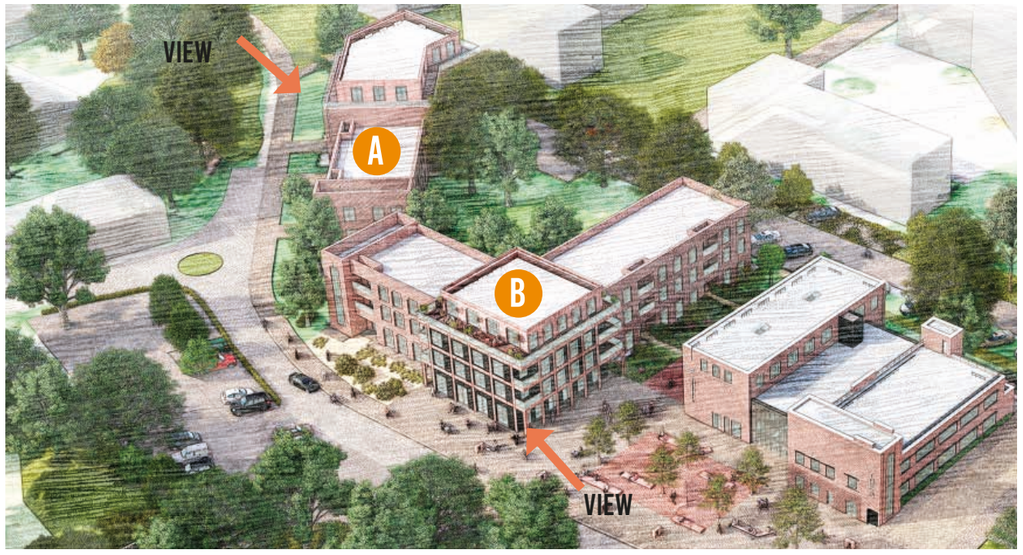
Metal: black cladding

BALCONIES

Metal: black

Glazed: black frame

6.4 KEY COMPONENT – PLOT 1A

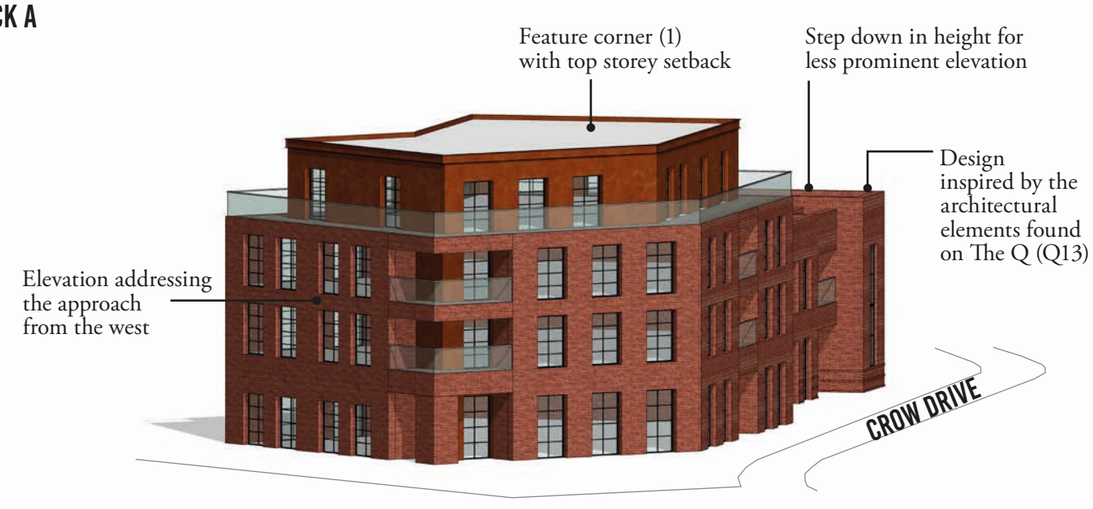


Key plan

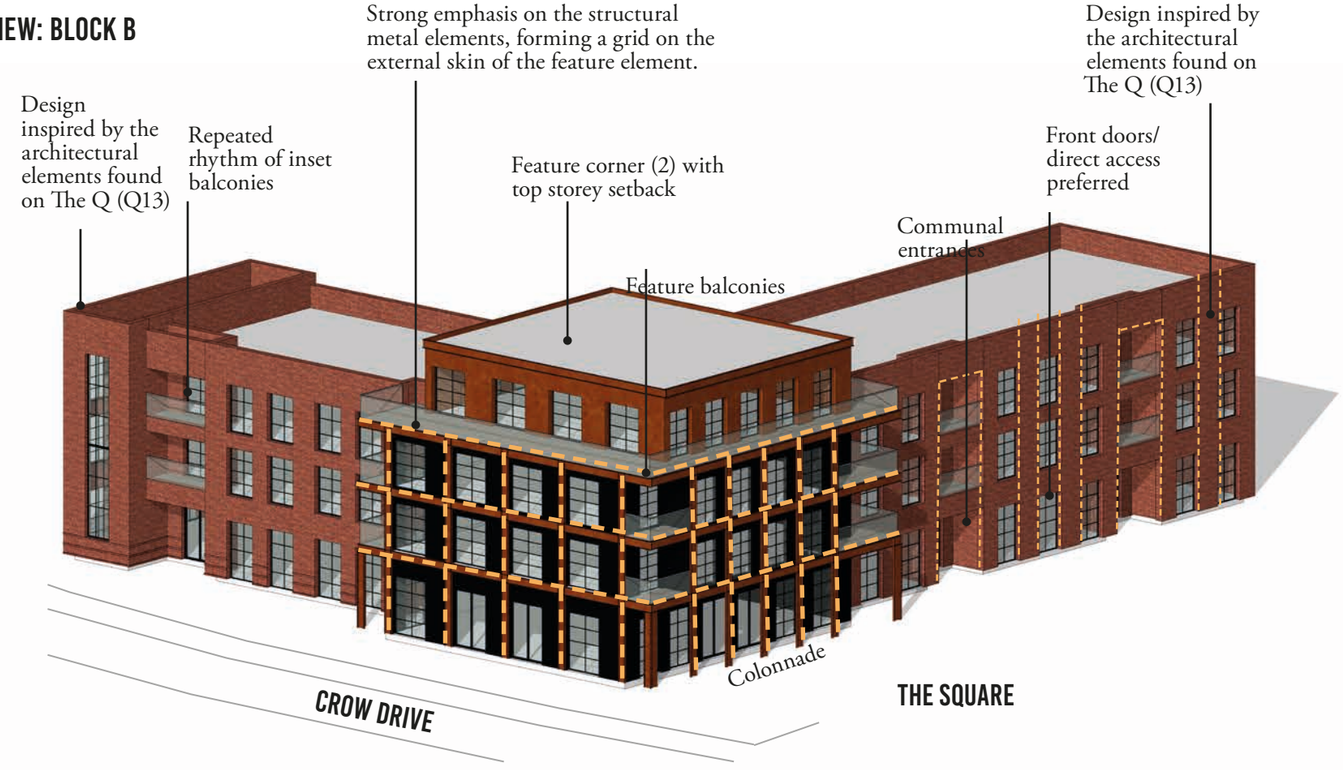
Illustrative view of feature corner (2) of Block B adjacent to the Penney (Q14)

ARCHITECTURAL DESIGN PRINCIPLES

VIEW: BLOCK A



VIEW: BLOCK B



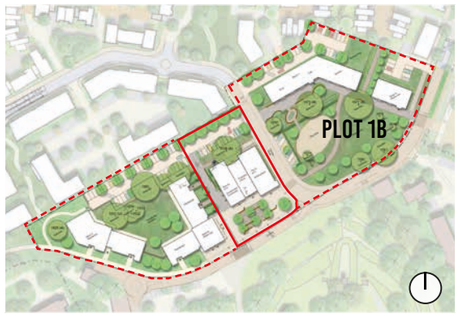
6.5 KEY COMPONENT – PLOT 1B

The Village Green marks the heart of the Village Centre.

The space will be defined by mixed use frontage opening onto the Village Green.

The architectural form and character should reflect the military heritage of the existing Q13/14 buildings by creating an architectural interpretation.

A series of clearly defined, mandatory design principles, as highlighted by the blue box outlines, will ensure a successful design outcome for this parcel.



LAYOUT PRINCIPLES:

- Vehicle access onto development parcel
- Formal frontage with consistent building line addressing public realm
- Building zone with associated landscaping
- Parking zone provided to the rear of buildings with associated landscape
- Pedestrian zone in front of the buildings
- Village Green and green space
- Feature corners addressing vistas
- Pedestrian crossing points
- Local Equipped Area of Play (LEAP)
- Trees to be retained wherever possible (refer to British Standards 5837:2012 / Tree Survey)

KEY DIMENSIONS:

1. Minimum dimension of 7m and maximum of 10m between Block C/D. Active building frontage to both side elevations in between Block C/D.
2. Minimum of 7m between building frontage and the Village Green ensuring sufficient public realm circulation zone for mixed uses at ground level.
3. The Village Green includes a LEAP.

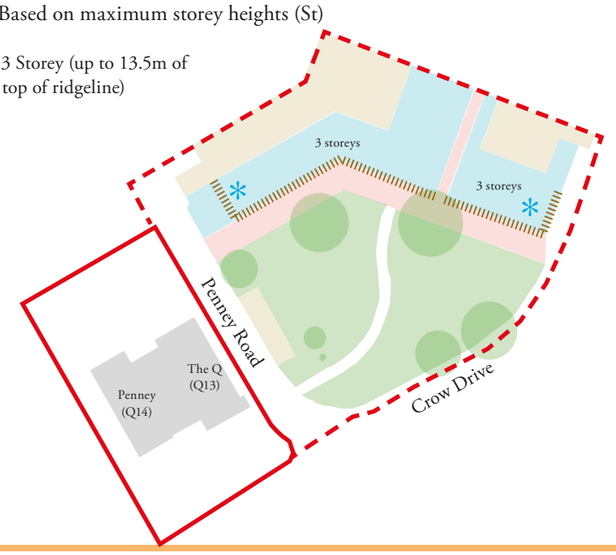
ARCHITECTURAL DESIGN PRINCIPLES BLOCK C & D

- Buildings should be a maximum of 3 storeys.
- Building depth is a maximum of 12m.
- Ground floor height to be no less than 3.6m (floor-to-floor).
- Feature corners to address Penney Road and Crow Drive.
- Blank facades are not permitted
- Mansard roof; eaves line broken at regular intervals by double height bay features.
- Only inset balconies are acceptable.

BUILDING HEIGHTS:

Based on maximum storey heights (St)

3 Storey (up to 13.5m of top of ridgeline)



MATERIAL PALETTE

PRIMARY WALLS

Brick colour to complement autumnal brick colours of Q13–14.

Brick: brown-red hues

ROOF

Metal: grey standing seam

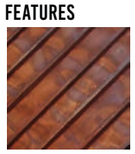
WINDOWS

Black Crittall style

RAINWATER GOODS

Black aluminium or steel rainwater goods including guttering

FEATURES



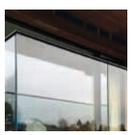
Metal: brown-red standing seam to match brickwork

Brick: black

Metal: black cladding

BALCONIES

Metal: black

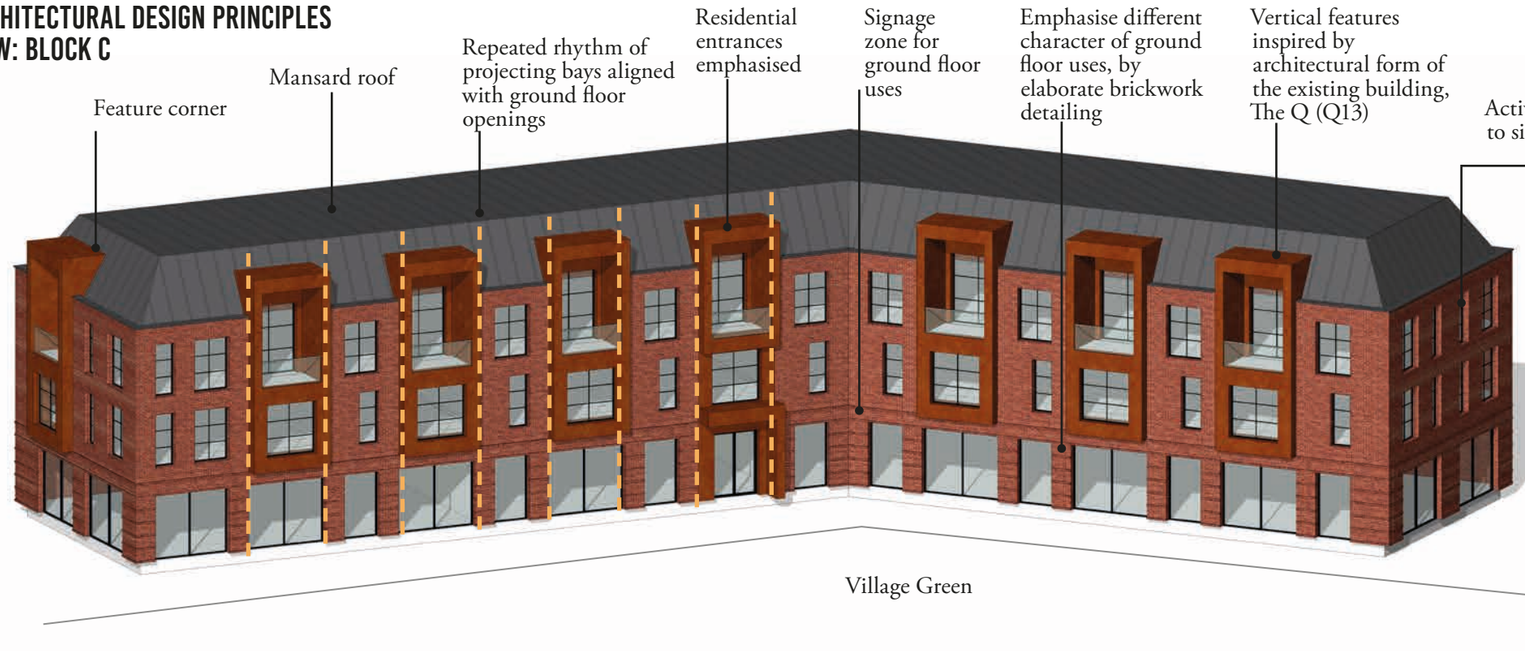


Glazed: black frame

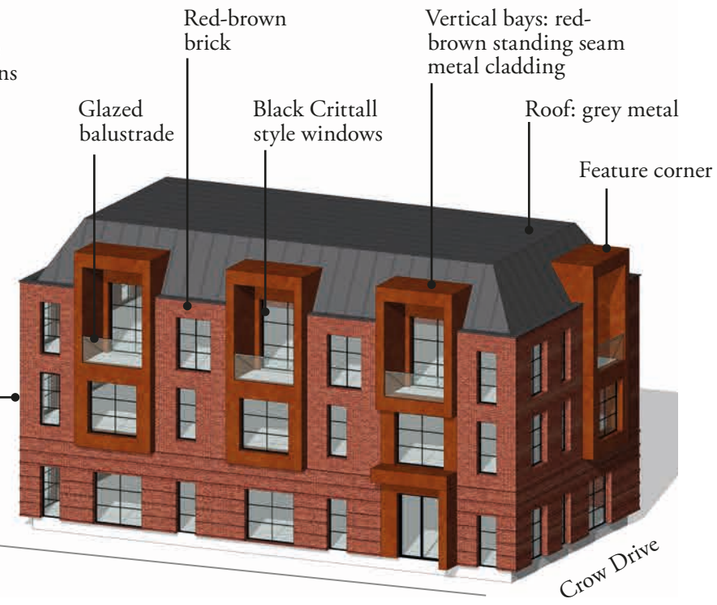
6.5 KEY COMPONENT – PLOT 1B

Illustrative view: buildings frame the Village Green

ARCHITECTURAL DESIGN PRINCIPLES
VIEW: BLOCK C



VIEW: BLOCK D



6.6 KEY COMPONENT – LANDSCAPE

Illustrative landscape strategy

Lighting (illustrative only subject to Engineer specification)

- Pole mounted LED luminaire. Reference WE-EF PFL540 LED,4-5 metres high, Finish in grey metallic RAL 9007.
- Wall mounted fitting - mounting height TBA. Finish in grey metallic RAL 9007.
- Recessed light source integrated within bespoke gateway features
- Bollard/pathway LED luminaire, 700-900mm high with anchorage unit. Finish in grey metallic RAL 9007.
- Tree Uplighter: WE-EF ETC130-GB LED inground uplight or similar
- Light column with shielded light source. Reference WE-EF, LTM440 LED-FT, 3-4 metres high. Finish in grey metallic RAL 9007.

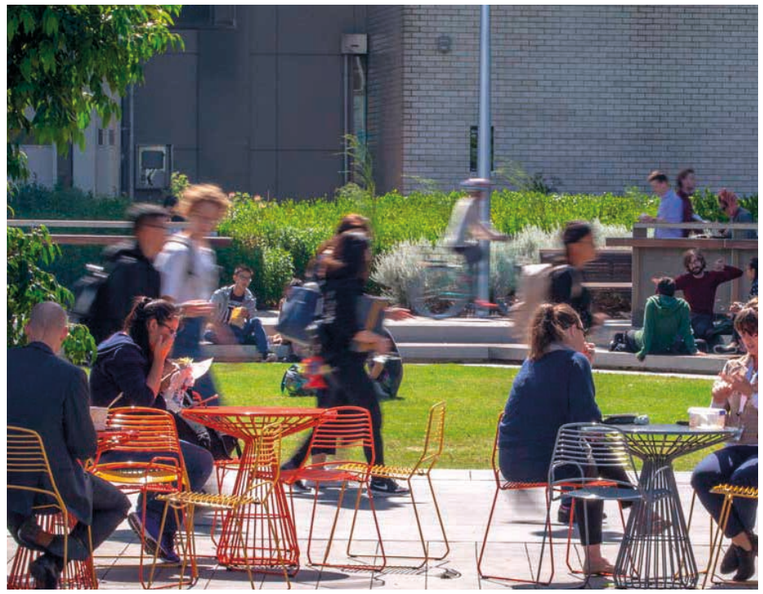
LEGEND

- Redline boundary of detailed application within Village Centre
- Design guidance boundary line of Village Centre (outline planning)
- Retained trees with RPA
- Existing trees to be removed
- Proposed trees
- Proposed hedge
- Amenity grass
- Structure planting
- Mixed Naturalistic perennial and structure planting
- Small scale natural stone paving
- Feature paving to plaza
- Large scale natural stone paving
- Resin bound paving to pedestrian paths
- Timber top Benches
- Raised planter with integrated bench
- Bespoke gateway features
- Retaining wall

6.6 KEY COMPONENT – LANDSCAPE

The Square

Garden Street



Village Green

Residential garden

The objective for the Village Centre is to create an attractive, diverse external environment and can be perceived as a place with its own identity.

The Village Centre will offer beautiful and functional outdoor areas, legible both in terms of the hierarchy and urban character, providing a range of enjoyable spaces suitable for relaxation and socialising.

The design seeks to sympathetically integrate the existing and new buildings whilst creating a destination at the heart of this new community.

The landscape design approach focuses on 4 main spaces; the Square, Garden Street, Residential Garden and Village Green. The main design principles for these spaces is summarised below:

THE SQUARE

(Refer to Chapter 2 for further detail of the Square that forms part of the detailed planning application)

GARDEN STREET

(Refer to Chapter 2 for further detail of the Garden Street that forms part of the detailed planning application)

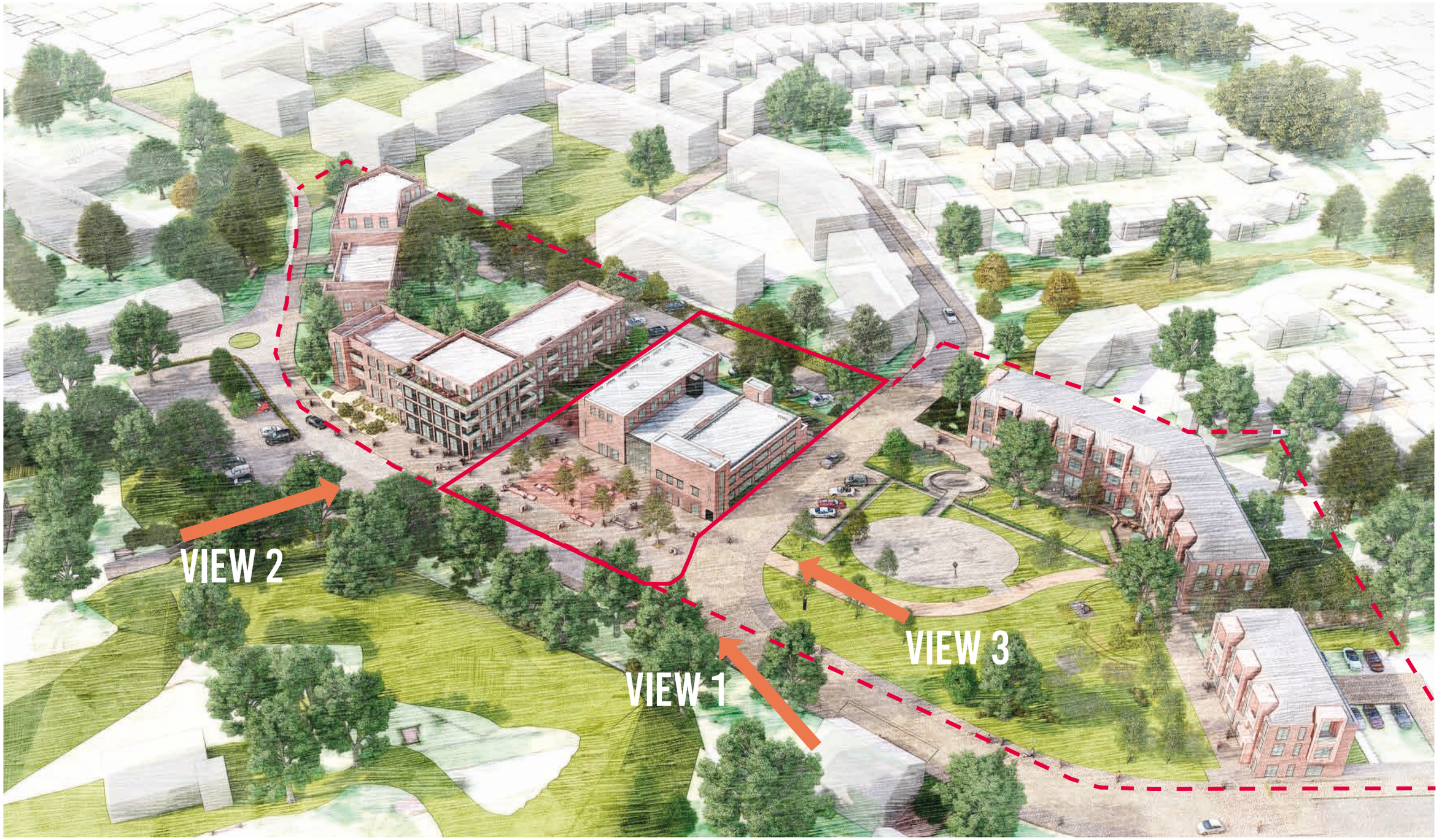
VILLAGE GREEN

The Village Green comprises an open green space that facilitates preservation of the existing trees and includes new specimen trees. A play area forms a central component of the green and is set within structure planting. Oval seating areas are included along the northern edge of the green, proving for informal gatherings and relaxed socialising.

RESIDENTIAL GARDEN

This area comprises a simple lawn with a number of existing mature trees and new specimen trees.

6.7 ILLUSTRATIVE VIEWS



Illustrative aerial of the village centre

6.7 ILLUSTRATIVE VIEWS

View 1: towards the square