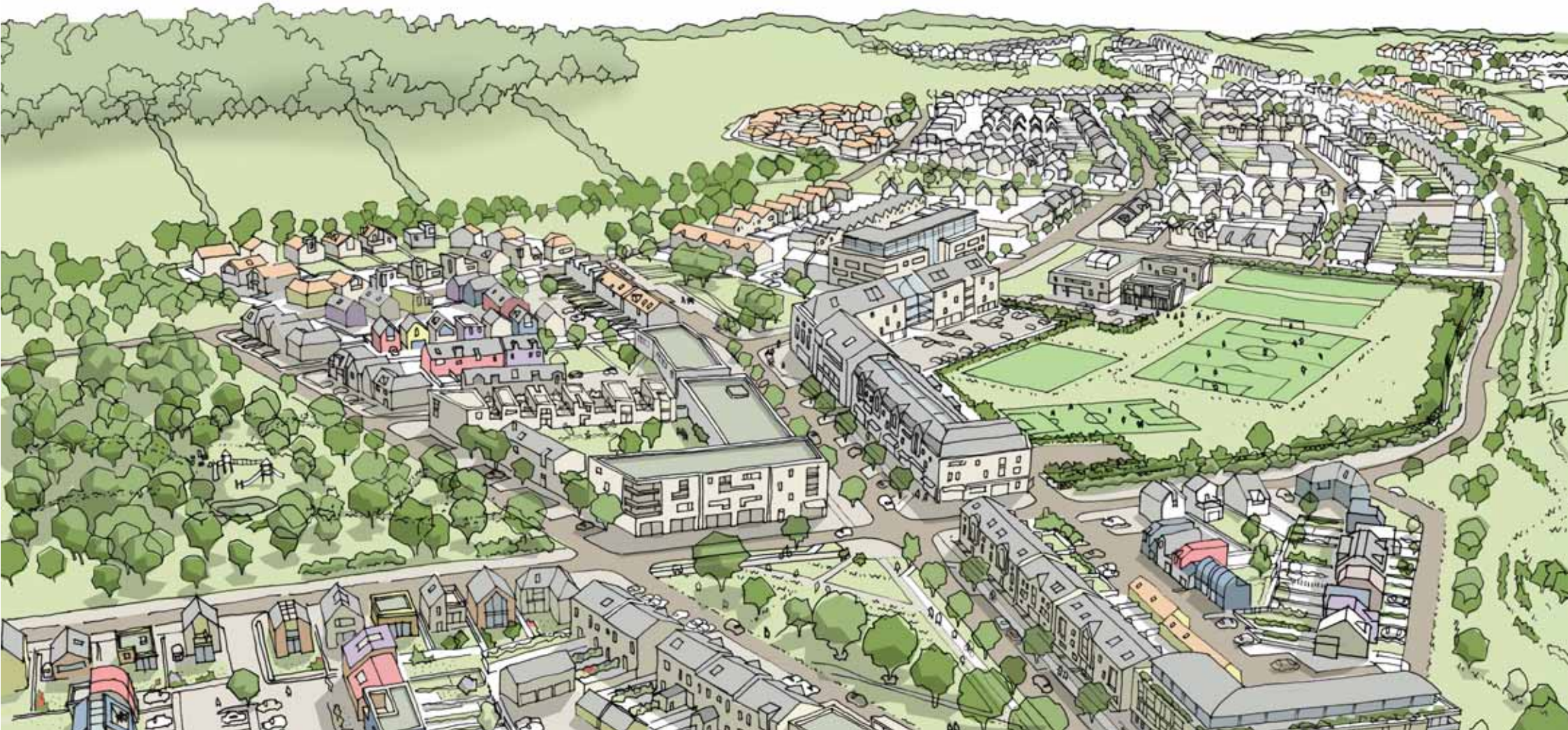
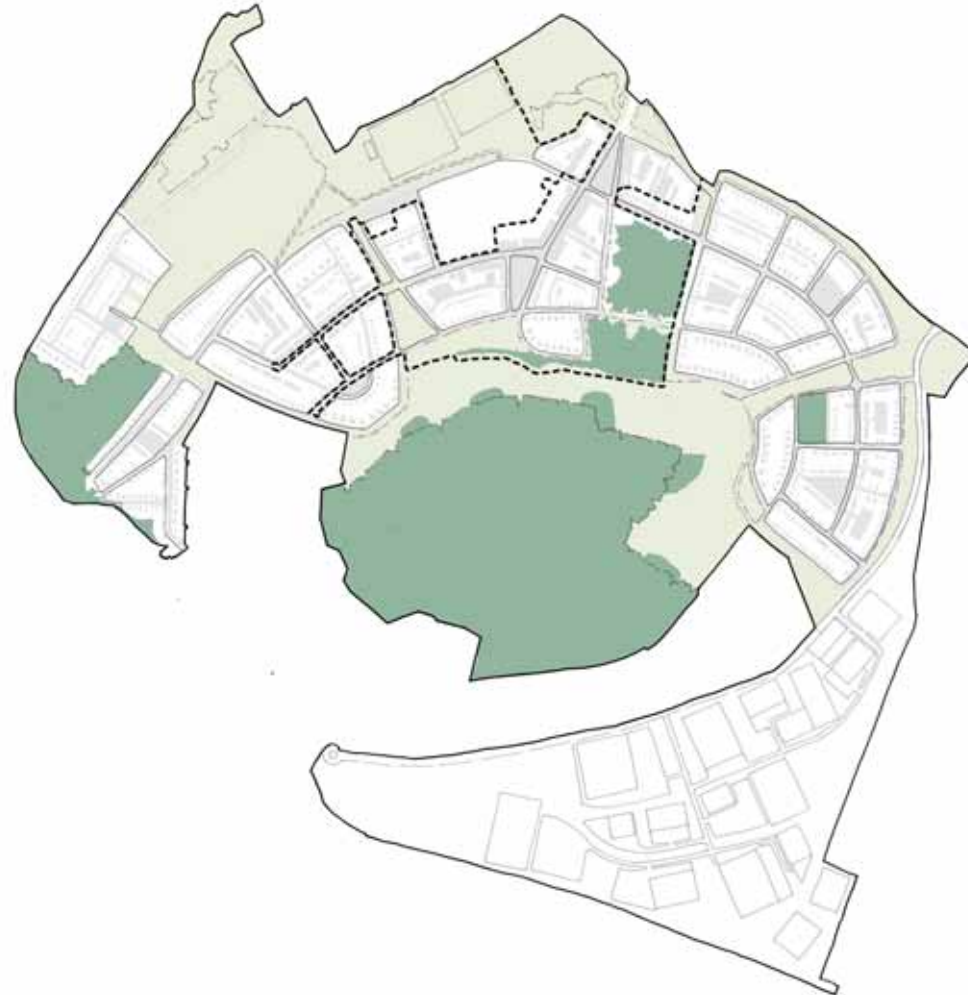


Design Code

Graven Hill Village 2018 v1





The entire extent of the Graven Hill Village development is shown opposite. The plan depicts both the residential land allocation to the north and the commercial land allocation to the south.

requirements for the northern residential area of the development only. This Design Code sets out the design

With project delivery expected to last 15 years, it is likely that there will be changes in market perception, Government policy and implementation procedures during this period. The Code will, therefore, be reviewed and refined prior to each phase of development with future versions incorporating a section on 'lessons learnt.'

1) is indicated by a dashed line on the plan. The current phase of development (Phase 1) Purchasers of plots within this area will need to demonstrate that their design proposals comply with this Code. Their feedback and experiences will be recorded and used to inform future iterations of this document.

LEFT

Masterplan showing area of code application & extent of Phase 1 of the developments.

Contents

| | | |
|--|---|--|
| Introduction <i>purpose of the design code</i> 01 | Gateway Park <i>large wetland habitat beside main site entrance</i> 08 | Swale Parks <i>linear wetland habitats forming 'green corridors' within the development</i> 33 |
| Process <i>steps followed to establish the code</i> 02 | Village Centre <i>socio-economic hub at the heart of the site</i> 12 | Rural Lanes <i>single aspect streets that face onto the rural landscape</i> 37 |
| Building Performance Criteria <i>the Graven Hill Village Passive Design Standards for residential buildings</i> 05 | Tree-lined Boulevard <i>central leafy thoroughfare</i> 17 | Meadows <i>field habitats containing a selection of retained heritage features</i> 42 |
| The Self-Build Process <i>the Graven Hill Village Golden Brick Customer Journey</i> 06 | Community Streets <i>residential areas offering maximum design freedom</i> 21 | Woods <i>established woodland habitats incorporating recreational routes and play areas</i> 46 |
| | Urban Lanes <i>mews-like residential areas offering maximum design freedom</i> 25 | Allotments <i>co-managed amenity space offering opportunities for community uses</i> 50 |
| | Circular Railway <i>east-west heritage route incorporating existing site railway</i> 29 | Useful References 54 |

Introduction

Purpose of the design code & how it relates to the project vision

The Graven Hill Village project consists of the redevelopment of 190 hectares of brown-field land to deliver up to 1900 new homes along with a primary school, employment space, recreational areas, a local pub/restaurant, a community centre, allotments, nursery and a small number of local shops.

The project is as follows:

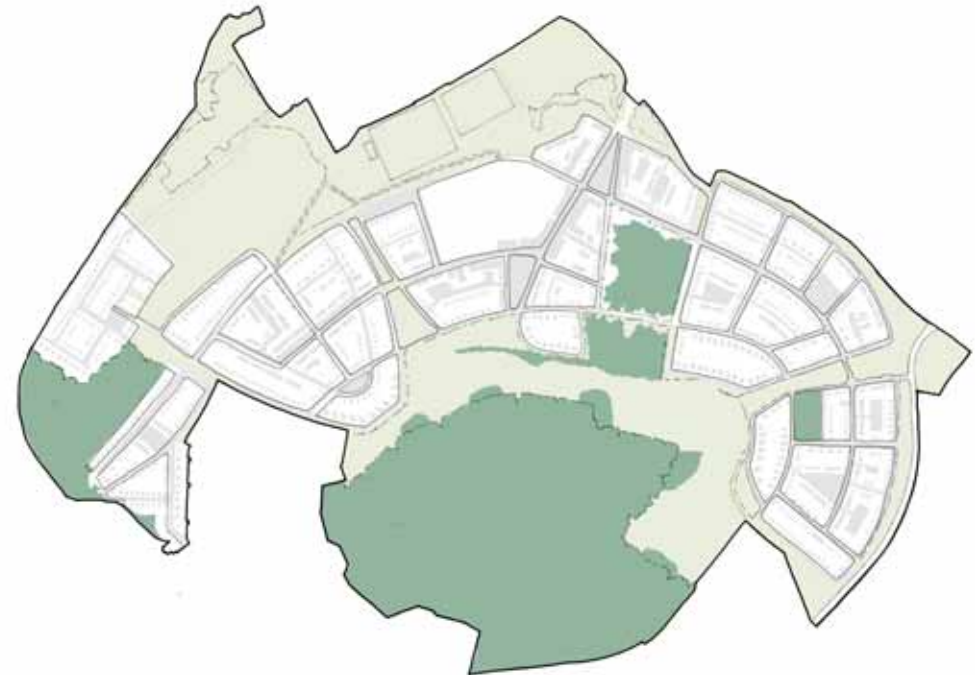
- The overarching vision for the project is to offer the largest opportunity in the UK for people who want to build their own home. This will be for households of all sizes & will include opportunities for people to build as a group and as individuals.
- To have extensive open space. This is to include woodland, allotments, cycle paths & sports pitches.
- To deliver a scheme that looks different to typical UK housing developments where individuality and creativity will be supported and a strong sense of identity achieved through the retention

of existing features.

- To provide a strategic location for new employment space, creating jobs & training for local people & attracting new investment into Bicester.

The Design Code has been produced in response to this vision. It focuses on the characteristics desired for each area and stipulates design rules for all features considered critical to achieving them. All remaining features are purposefully left unhampered by design constraints so as to allow community members to fulfil their creative visions.

This document serves as a reference point for ongoing design processes. It will also facilitate the quick resolution of any further planning applications that may be required. It is to be read in conjunction with the approved Local Development Order and Outline Planning consent 15-02159 OUT dated 03.06.16.



ABOVE
The Graven Hill Village site

Process

Steps followed to establish the Code

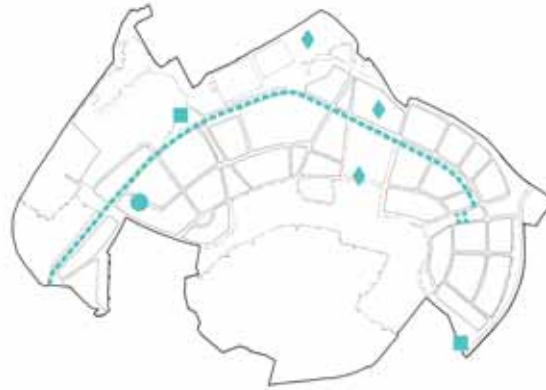


STEP 1
Street Hierarchy

of categorising routes according to their contribution to a site's social structure and/or traffic flows.

(see above) and streets that were found to be significant in both aspects designated as 'primary routes' with those that were found to be less significant designated as 'secondary' and 'tertiary' routes.

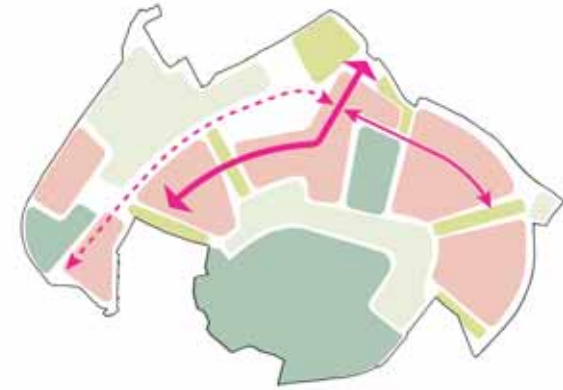
- Primary Routes
- Secondary Routes
- Tertiary Routes



STEP 2
Retention Plan

to preserve as much of the site's rich military heritage as possible. Towards this aim, a selection of existing features were identified for retention (see above). These dispersed features will form an integral part of the landscaping. They will be treated in a coherent manner in order to provide a continual design element that links the site together as a whole.

- Rail Tracks
- Water Towers
- Military Water Reserves
- ◆ Military Buildings



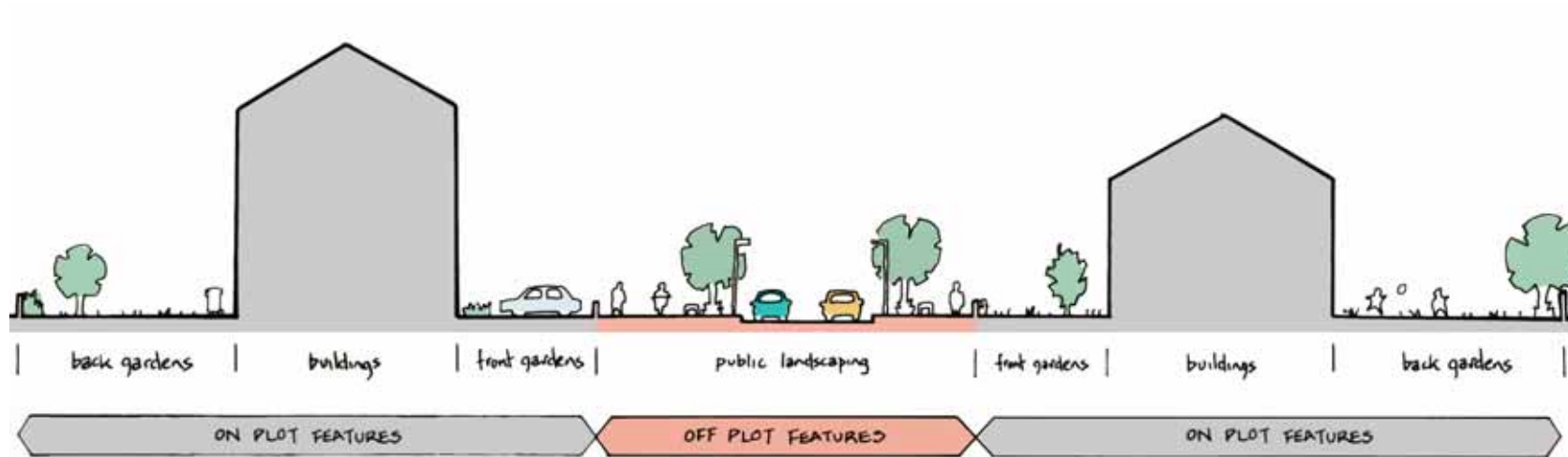
STEP 3
Development Pattern

of 'urban' development within an expansive 'rural' landscape around the base of a wooded hill. The proposed design seeks to emulate this pattern and provide for a range of experiences from innermost urban cores to fully submersive rural environments. As such, the 'rural' and 'urban' zones were mapped (see above) and an appropriate gradation of treatment established.

- Rural Treatment
- Urban Treatment

BELOW

Section through a typical street showing the extent of 'On-Plot' and 'Off-Plot' features



STEP 4
Character Areas

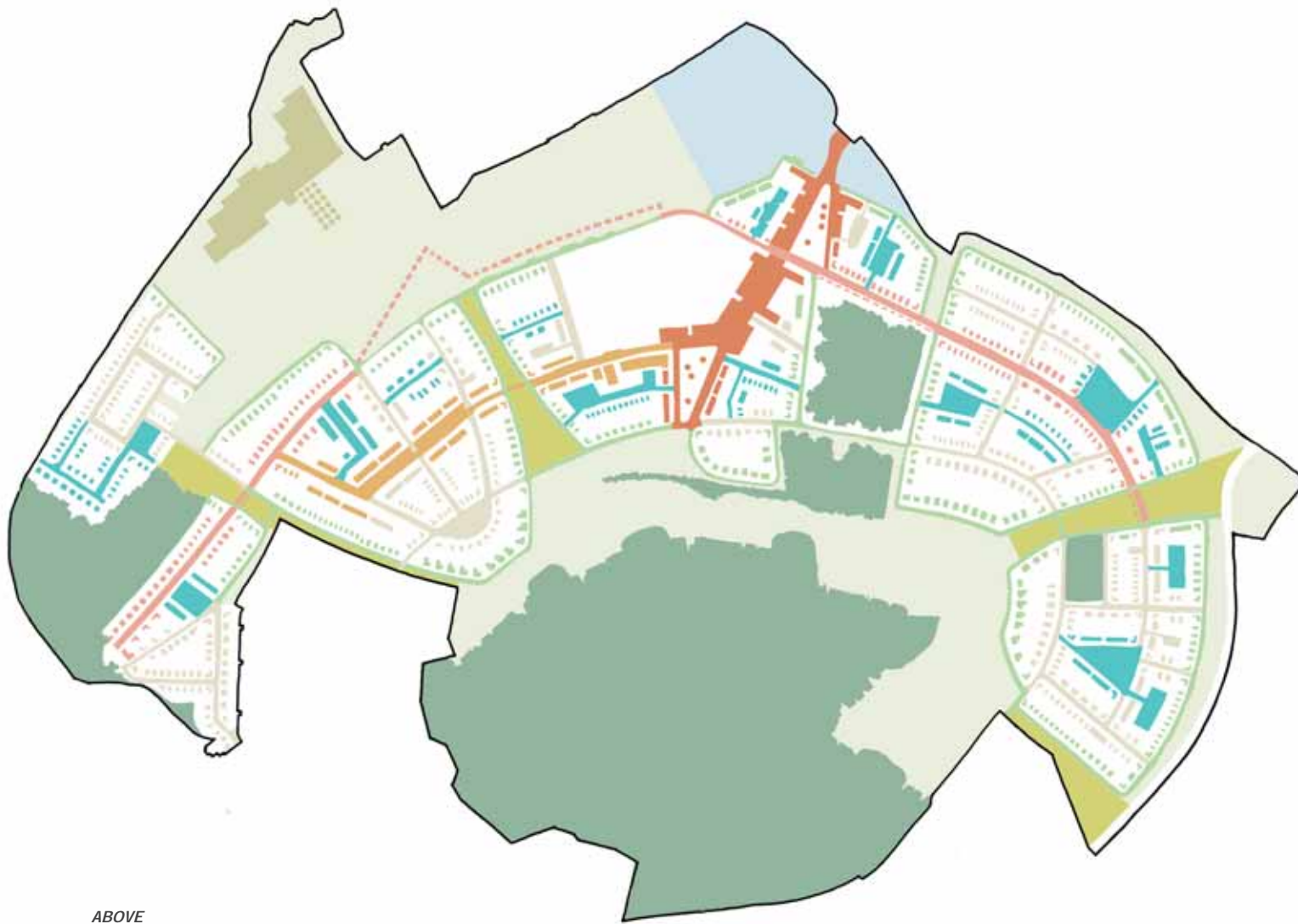
A clear picture of the prevailing characteristics found within each area of the site. Each portion of the site demonstrating its own distinct set of attributes was defined as a 'Character Area.' A total of eleven different Character Areas were identified (see plan on page 4 overleaf), each with subtle differences in terms of their status in the street hierarchy (step 1), number of retained heritage features (step 2) or contribution to an urban/rural structure (step 3).

STEP 5
Design Rules

Once all eleven Character Areas had been identified (step 4), appropriate design rules could be set to ensure their successful delivery. These rules also needed to respond to the overarching aspiration for Graven Hill Village to be the UK's largest self-build scheme where community creativity is encouraged and maximum design flexibility afforded. This key visionary driver informed the need to employ a 'hands off' approach throughout, with only those specific

'Character Area'
a portion of a site with its own distinct set of attributes.

features deemed critical to establishing the desired characteristics regulated - but nothing else. The involvement of customers in the design and delivery of their own homes has also informed the way in which rules are categorised. Whilst the residents will be responsible for the delivery of all 'On Plot' features, the developer will retain responsibility for the delivery of all 'Off Plot' features (see above). For clarity, design rules have, therefore, here been defined under these headings..

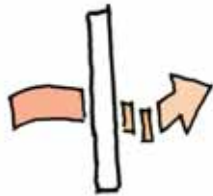


- Gateway Park
- Village Centre
- Tree-lined Boulevard
- Community Streets
- Urban Lanes
- Circular Railway
- Swale Parks
- Rural Lanes
- Meadows
- Woods
- Allotments

ABOVE
 Location of the various
 Character Areas across the site

Residential Building Performance Criteria

Standards required for all residential buildings across the site



Thermal Element U-values
walls 0.15 W/m²K or less
ground floors 0.15 W/m²K or less
roofs 0.15 W/m²K or less



Thermal Bridges
use Accredited Construction Details or
achieve ψ -value of 0.08W/m²K or less



Window U-values and g-values
1.4W/m²K or less and achieve a solar
gain factor (g-value) of between 0.50-0.70



Air Leakage Rate
3m³/hr/m² @ 50 Pa
(to be tested on site)



MVHR Efficiencies
electrical of 1.5 W/l.s or less
heat recovery of 70% or more



Overheating Risk
As a minimum comply with Building Regulations
Part L (SAP) Appendix P or equivalent to achieve a
'low' or 'medium' risk



Electrical Lighting
Minimum 75% of fixed lighting to be
low energy (e.g. LEDs)



Solar Photovoltaic
Recommended if orientation and feed-in
tariffs suitable (customer choice)

Self-build Process

The Graven Hill Village Golden Brick Customer Journey

A unique delivery method has been created for all self-build plots at Graven Hill Village to help guide customers (and their respective design teams) through the planning and construction process. This process has been termed the 'Graven Hill Golden Brick Customer Journey' and is summarised on the right. For full details of the Golden Brick customer journey please visit the Graven Hill website. A simple program of delivery is proposed, consisting of three core stages; a 'Design Stage' lasting a maximum period of 5 months; an 'Approval Stage' lasting a maximum period of 1 month; and a 'Construction Stage' lasting a maximum period of 24 months. Plot purchasers will be expected to submit information to the Graven Hill Village Development Company Ltd (GHVDC) throughout the process and to complete the activities required within the necessary time scales. To assist customers along their Golden Brick journeys, GHVDC have produced handy 'go-to guides' called 'Plot Passports'.

Design Stage 5 months

Following plot reservation, customers must design their homes in accordance with the relevant 'Plot Passport' and submit detailed proposals to the Graven Hill Village Development Company Ltd within 5 months.

Approval Stage 1 month

Designs are checked against the relevant 'Plot Passport' and a formal response provided within 1 month.


Construction Stage 24 months

Following the Completion of Sales Contract, construction activities may commence. Unit completion must be achieved within 24 months following below ground works.

The 'Plot Passports' are, in essence, succinct inventories of the various design parameters associated with a particular plot. They will act as a key reference point for a plot purchaser, capturing all relevant information from this Design Code, the approved Masterplan, Local Development Order and Outline Planning consent 15-02159 OUT (dated 03.06.16) in an easily understandable and readily accessible format.

for the architectural element of these documents is given right and overleaf.

As shown in the layout, this section summarises the main features of the plot, complimented by a plan and key to assist designers with the production of initial sketch proposals; the second section provides a list of all the design rules associated with a particular plot; finally, the third section details the range of facade finished and roofing options available if located in an area subject to a material palette (please note, not all areas are subject to material palettes).



GRAVEN HILL
IMAGINE, CREATE, BUILD, LIVE.

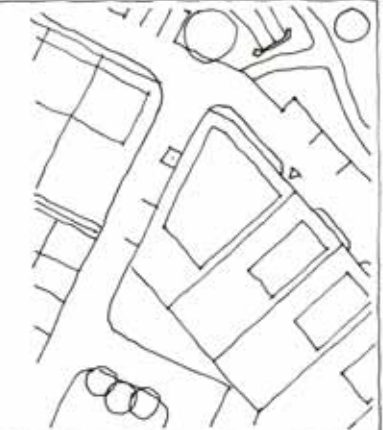
Plot Passport

0035

Main features

Plot Number: 0035
Unit Type: 3 Bed Detached
Local Character: Rural Lane
Plot Area: 324 m² / 0.0802 acre
Max. GIA: 137 m²

Built zone (material constraint)
 Edgeline of plot & dimensions (metres)
 On-plot car parking spaces
 Vehicular access
 XX'-YY' Min. to max. building height (metres)
 Front boundary



Rules of your build

1 Prior to development commencing, you must apply to the Local Planning Authority for a determination as to whether your design complies with the Masterplan and Design Code.

2 Your home must be built within the 'built zone' and not exceed the max. permissible Gross Internal Area (GIA) stated above. The footprint of your home does not need to fill the entire 'built zone' & can be positioned anywhere within it. See the reverse for GIA definition.

3 No temporary buildings or caravans are allowed.

4 No works or storage of materials may be undertaken outside the curtilage of your plot without permission from the Highways authority or District Council.

5 Any part of your home that would have more than a single storey and would be within 2 metres of the boundary with a neighbouring house, must not extend beyond the rear wall of the neighbouring house by more than 3 metres.

6 The principle elevation of your home must front a highway.

7 This plot is for one detached unit with a max. of 3 bedrooms. The merging & subdivision of this plot is not permitted.

8 Any upper-floor window that is on a side elevation and less than 1.7m above the floor of the room and faces onto a neighbouring house must be:-
 (i) obscure-glassed
 (ii) non-opening

9 A min. area of 50% of the plot frontage (the area between the highway and your front wall) must be permeable (i.e. grass / shrubs / gravel etc.). On remaining area Provision must be made to direct run-off water from all non-permeable areas to a porous surface within the curtilage of your plot.

10 Unit Completion must take place within 24 months of the Completion of Sales Contract. Unit Completion is as defined in the Agreement for Lease and Build Out.

11 Your home must be between 8.5m and 11.2m in height. This equates to approximately 2.5 - 3 storeys.

12 Provision for the secure storage of min. 2 bicycles must be demonstrated in the design. Storage for 3 no. 240 litre wheeled bins (59w x 107h x 74d (cm)) for recycling, garden and residual waste should also be shown.

Note: This document is to be read in conjunction with the Plot Passport and documents MP1, GC1 & SP1

- ② 2 car parking spaces must be provided on the plot and be a min. of 2.4m x 4.8m in size. The position of parking bays is to your discretion. However, the position of vehicular access is fixed and must be located as shown on the Plot Plan provided. The min. internal dimensions for a single car garage is 3m x 6m.
- ④ The facade and roof materials of your home must comply with the material palette (refer to document MP1).
- ⑤ Front boundaries to be max. 1.1m high Dogwood hedgerows (any variety). Side/rear boundaries to public areas to be max. 1.5m high with 0.3m trellis over. Side/rear boundaries to private areas to be max. 1.5m high. Any material/colour permitted.
- ⑥ This is a corner plot. Elevations and boundary treatments facing a street must be designed to respond to the public realm (E.g. incorporate windows). It is advised that windows facing on to the public realm are active (i.e. provide views from habitable rooms such as living rooms/kitchen).

Gross Internal Area (GIA)

The Gross Internal Area is the area of a building measured to the internal face of the perimeter walls at each floor level.

Includes:

- Areas occupied by internal walls and partitions
- Columns, piers, chimney breasts, stairwells, lift-wells, other internal projections, vertical ducts, and the like
- Atria with clear height above, measured at base level only
- Internal open-sided balconies and the like
- Structural, raked or stepped floors are to be treated as a level floor measured horizontally
- Horizontal floors, with permanent access, below structural, raked or stepped floors.
- Mezzanine areas intended for use with permanent access
- Lift rooms, plant rooms, fuel stores, tank rooms which are housed in a covered structure of a permanent nature, whether or not above main roof level
- Service accommodation such as toilets, toilet lobbies, bathrooms, showers, and the like
- Voids over stairwells and lift shafts on upper floors
- Areas with headroom of less than 1.5m
- Basements are allowed as a percentage of above ground size but in addition to that area (40% is suggested).
- Garages
- Conservatories

Excludes:

- Perimeter wall thicknesses and external projections
- External open-sided balconies
- Canopies
- Voids over or under structural, raked or stepped floors
- Greenhouses, garden stores, fuel stores, and the like in residential property

Performance and Sustainability Requirement:

| | |
|---|--|
| Thermal element U-values, at least: | Walls: U = 0.15 W/m ² K, Ground Floor: U = 0.15 W/m ² K, Roofs: U = 0.15 W/m ² K |
| Thermal bridges, meet one of the following standards: | (1) Use Approved Construction Details, approved by the Government's planning portal website. An overview can be downloaded from www.planningportal.gov.uk . In particular at: http://www.planningportal.gov.uk/building-information-systems/documents/certificates/associateddocuments/1/1/1 |
| | (2) Allow the Association of Environmentally Conscious Builders (AECB) GAB or Silver Standard details as a minimum to achieve $\psi = 0.08$ W/m ² K. |
| | (3) Improve on the Approved Construction Details to achieve a maximum $\psi = 0.08$ W/m ² K. |
| Window U-values and g-values (Glazing & Frames combined) of least: | U = 1.4 W/m ² K, Range for solar gain factor (g-value) = 0.30 - 0.65 |
| Air Leakage rate: | Indoor at 50 Pa |
| Mechanical ventilation with heat recovery where specified: | Electrical efficiency > 1.5 kWh/kWh, Heat recovery efficiency > 70% |
| Overheating risk: | Control design strategies that minimise the risk of overheating exceeding risk. As a minimum comply with Building Regulations Part 1, Standards Assessment Procedure (SAP) Appendix F, or equivalent assessment method to achieve 'low' or 'medium' risk of overheating. |
| Electrical lighting: | Minimum 75% of fixed lighting to be low-energy (such as compact fluorescent or LEDs) |



Coordinates - Eastings, Northings (metres)

| | |
|---------------------------|---------------------------|
| A: 459160.445, 211065.127 | B: 459163.070, 211065.826 |
| C: 459164.083, 211065.049 | D: 459172.873, 211055.108 |
| E: 459154.214, 211056.745 | F: 459148.849, 211041.847 |
| G: 459151.174, 211063.809 | |

This plan is provided as a guide only and is not a contract. There are additional conditions that are set out in the 'Additional Information' section of the planning portal website. It is advised that you consult the planning portal website for more information before proceeding with design and construction. The information provided is for information only and is not a contract. It is advised that you consult the planning portal website for more information before proceeding with design and construction.

Material Palette

VILLAGE CENTRE + RURAL LANES

Facades



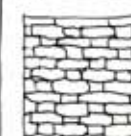
Limestone
White/bleach grey to match local pale calcic limestone



Brick Option 1
Deep red/orange to match local traditional brick type



Brick Option 2
Deep pink/orange with thin marks to match bricks of military buildings

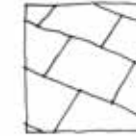


Brick Option 3
White painted brick of any type

Render Options
Choice of 8 NCS colours as shown below to match tones found within local limestone

- 0505 Y20R
- 0505 Y30R
- 1005 Y20R
- 1010 Y30R
- 1010 Y20R
- 1510 Y20R
- 2010 Y20R
- 3000R

Roofs



Slate
Natural or dark grey fibre-cement slates



Tiles
Any variety of red plain clay tile



Standing Seam
Medium/dark grey standing seam metal roofing



Flat Roof Options
Felt, EPDM or Fibreglass
Green Roofs

Additional Options for RURAL LANES ONLY



Timber
Any type permissible



Corrugated Metal
Natural/galvanised

Note: This document is to be read in conjunction with the Plot Elevation and documents MP1, GC1 & SP1

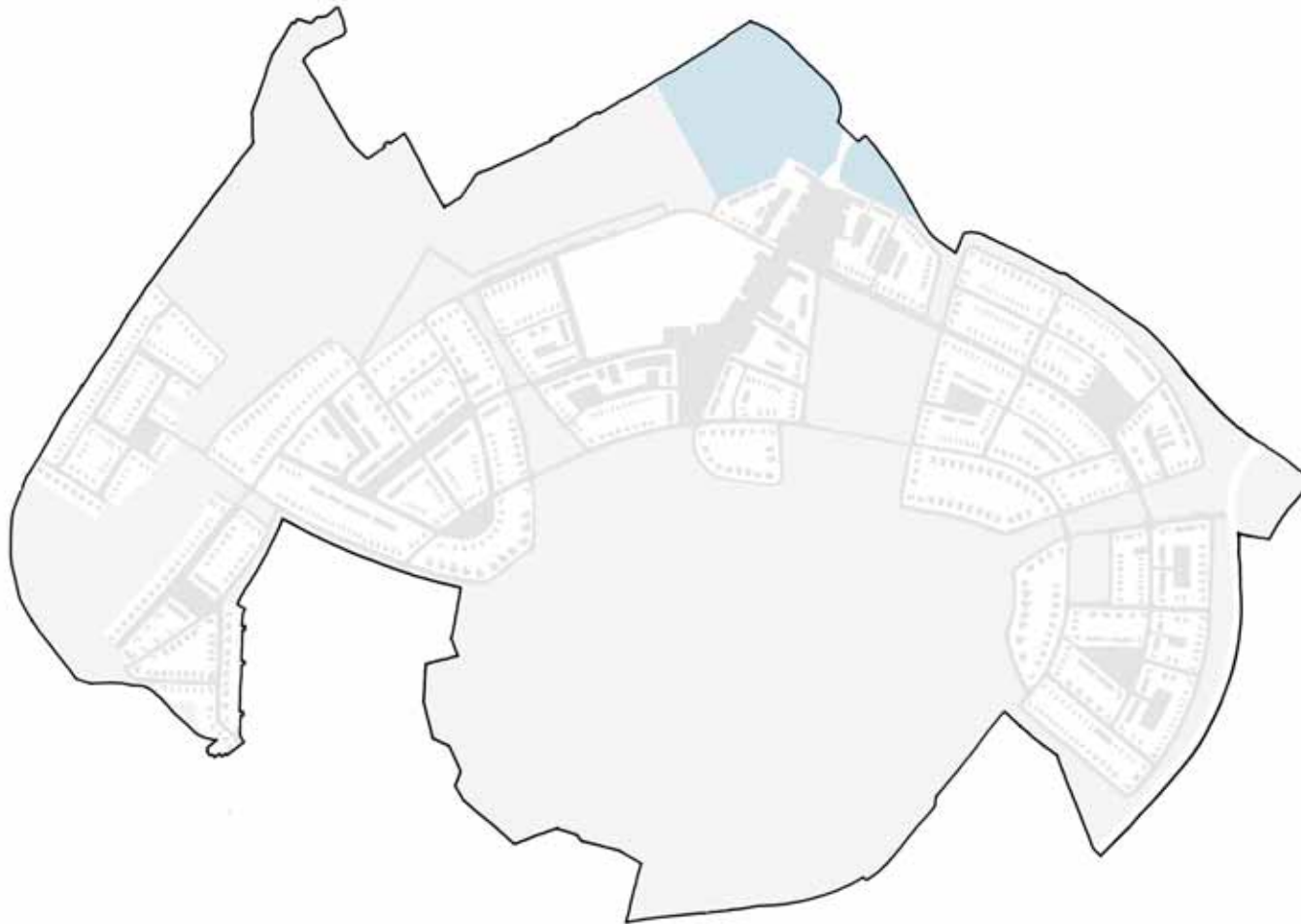
Gateway Park

*Large wetland habitat beside
main site entrance*

RURAL - LOW DESIGN FREEDOM



Overview



ABOVE
Plan showing location of the Gateway Park.

Location

The 'Gateway Park' is located immediately adjacent to the main site entrance off the A41. It aims to provide a welcoming arrival point and create a more gentle transition into the Village setting.

Character

The intention is to create a peaceful and tranquil wetland park where wildlife can flourish.

Landscape features will include swales, ponds, wet meadows, reedbeds and other marginal planting. Longer, meadow-like grasses will be located on higher banks that link to the surrounding fields.

Walking & cycling routes are to be as visually unobtrusive as possible, adopting meandering layouts, minimum allowable widths & natural finishes (e.g. crushed ironstone aggregate).

Timber boardwalks will add interest along routes, protect the habitats below & create ideal spots for wildlife watching.

Management

The park will be owned and managed by Cherwell District Council.

Design Freedom

As a strategic amenity area located at the entrance to the site, great care must be taken in its delivery and so the Gateway Park does not at this stage offer opportunities for community design.

The potential for later involvement with the on-going management, use and evolution of this space is to be explored

Case Studies

BELOW

Discrete timber boardwalks, such as that pictured below, provide visually unobtrusive recreational routes, their elevated profiles protecting the habitats below.

Estuary, New Zealand
TAKEN FROM <http://goo.gl/t7bC4E>



ABOVE

The nature reserve at Otmoor, Oxfordshire demonstrates the naturalistic treatment proposed for the attenuation ponds within the Gateway Park. The unencumbered backdrop, informal marginal planting & meandering water bodies offer a serene environment for spotting wildlife.

RSPB Otmoor, Oxfordshire, TAKEN FROM <http://goo.gl/27H84o>



Design Rules

Requirements considered critical to achieving the desired Gateway Park character

Hard Landscaping

● Footpaths & Boardwalks

● Shared Cycle/Pedestrian Paths

Soft Landscaping

● Marginal

● Amenity Grass

● Longer Grass

● Shrubs

● Trees (Existing)

● Trees (New)

● Water Bodies

Lighting

✗ Any

Furniture

✓ Benches, Bins

Management

✓ Amenity, Attenuation Pond & Ecology Pond Strategy

Off Plot Features

Design to be as visually unobtrusive as possible.

Boardwalks to exhibit a simple design of a natural finish and elevated to protect wildlife below.

Handrails are only to be used if necessary.

Design to be as visually unobtrusive as possible

Informal design of predominantly native species

Mown for multifunctional uses

To contain wildflower species

Informal arrangement of native species

To be retained

Fluid arrangement of native species to support wildlife flight paths, pollard management

Retention ponds as part of SUDS

Not applicable. Wetland Park is to remain unlit

Design to be as unobtrusive as possible (e.g. weathered timber finish)

To be managed by Cherwell District Council

Presumption in favour of dead wood retention (subject to safety inspections).

Report & undertake repair and replacement of trees, planted areas & grass once cause of loss/damage has been established

Removal of undesirable woody and herbaceous species from planted areas and grass sward.

Removal of leaves and fallen woody material to suitable recycling facility

Remove litter, foreign materials from ponds generally to ensure flow/capacity is not impeded

Annual removal of marginal & aquatic vegetation to ensure acceptable area of open water remains visible.

Biannual cutting of selected grass areas with regular cutting of remaining areas

Watering, weed control & general management of trees, woody & herbaceous planting during establishment period & beyond

Village Centre

Socio-economic hub at the heart of the site

URBAN · LOW DESIGN FREEDOM



Overview



ABOVE
Plan showing location of the Village Centre

Location

The Village Centre forms the socio-economic hub of the development. It extends from the main site entrance to base of the hillside.

Character

The Village Centre will exhibit the highest densities found across the site. It will adopt an 'urban' treatment with a clear and well-defined streetscape created by the use of material palettes, robust detailing, strong 'street-lines,' clear demarcation, hard boundary treatments and a repetitive linear arrangement.

The area will also contain two large, triangular village greens; one to the north beside the main entrance and one to the south beside the hillside. These greens are to reflect the polarities of the existing site by adopting a informal & wild planting scheme that is contrasted by the use of precisely laid linear routes and an industrial treatment on furniture.

Management

Freeholders and leaseholders will be responsible for the management of buildings, Oxfordshire County Council for all features within the highway and Cherwell District Council for the landscaping within the two greens.

Design Freedom

As the socio-economic heart of the site, the Village Centre will be subject to a higher level of design control. To bring localised elements of architectural vibrancy, however, a number of 'leeway' plots are proposed that will remain uninhibited by increased design constraints.

Case Studies



ABOVE
 The village greens are to provide flexible spaces for community occasions, specifically the southern green that is located beside the village pub and borders a traffic-calmed street intended for markets and other events.
 Jubilee celebration, West Sussex
 TAKEN FROM <http://goo.gl/EHQ90E>

ABOVE RIGHT
 A simple paved area provides a multi-use space for a variety of community activities. A similar flexible space is proposed along the edge of the southern green (as described above).
 Fiesta at Wodd St, London
 TAKEN FROM <http://goo.gl/UDknN7>

RIGHT
 Mont-Evrin Park in France demonstrates the landscaping treatment intended for the village greens where a wild and informal planting scheme of long, tufty, meadow-like grasses is dissected by precisely laid linear routes. Also to note is the use of industrial galvanised steel on the benches placed within mown clearings found throughout the space.
 Mont-Evrin Park, France
 TAKEN FROM <http://goo.gl/OHBZ6V>



ABOVE
 Neutral, restrained & accessible hardscape on Gough Street in San Francisco. All street clutter (e.g. cycle stands, lighting columns, benches, bins etc.) is confined to a 'functional strip' that separates vehicular from pedestrian zones in order to maintain clear & legible routes for passing traffic. Intermittent street trees also sit within this strip, adding a welcome dose of greenery to the otherwise hard, urban treatment of this space.

Gough Street, San Francisco.; TAKEN FROM <http://goo.gl/HwFBC8>



Design Rules

Requirements considered critical to achieving the desired Village Centre character

Hard Landscaping

- Carriageways
- Pedestrian zones

Soft Landscaping

- Cycleways
- Incidental planting
- Street trees
- Village Greens

Street Furniture

- ✓ Play Areas
- ✓ Columns
- ✓ Benches, Bins & Cycle Stands

Maintenance

- ✓ Streetscape Strategy

Generic

- Feature Plots
- Build Zone
- ✓ Building Performance
- ▽ Max. Building Height (m)
- ✓ Plot Boundaries
- ▶ Vehicular Access
- Vehicular & Cycle Parking
- ✓ Waste Management

Bespoke to Village Centre

- ✓ Boundary Materials
- ✓ Material Palette
- △ Min. Building Height (m)
- Fixed Elevation Position

Off Plot Features

Bitumous construction with pre-coated chippings. Granite setts to demarcate parking bays.

Silver-grey concrete ground flags. Flush conservation kerbs to plot boundaries & cycleways

Bitumous with flush conservation kerbs to carriageways.

Natural design with contrasting formal elements

To be planted in tree pits & be min. 15m high after 25yrs

To incorporate a formal structures (urban materials, linear layouts etc) within an otherwise wild & natural planting design to reflect existing site character. Designs to deliver a visually strong & distinctive statement.

Design to fit with surrounding landscape.

Standard columns with LED lantern units.

Robust & functional design. Min. of 39 commercial & 235 residential cycle stands to be provided.

Public amenity to be managed by CDC. Highways to be managed by OCC

On Plot Features

None of the 'Bespoke' rules (see below) apply.

Area of the plot that may be developed. All facades that face onto the public realm must have windows

Residential buildings to achieve the 'Passive Design Standards' as stipulated on page 5.

Total building height (including roof) must not exceed this value.

Front boundaries to be no higher than 0.9m. Side & rear boundaries to be no higher than 1.8m

Driveway access must be located as shown.

No. of vehicle bays shown must be provided. Min. of 2 secure cycle spaces/unit must be provided.

Storage for 3 x 240l wheelie bins must be provided. These must not be visible from the road. Refuse stores must not be forward of any elevation which faces onto the public realm.

Boundaries facing onto the public realm must either be one of the brick varieties specified in the Village Centre material palette (overleaf) or railings.

See material options overleaf.

Total building height (including roof) must not fall below this value..

The buildings principal and/or side elevation must be constructed on the line shown. Bay windows/porches/balconies must not protrude more than 1.5 metres beyond this line.

Village Centre Material Palette

Facade Options

The 9 NCS render colours as shown below have been chosen to match tones found within the local oolitic limestone.

Where desired, readily available products of a similar tone may be used. Under these circumstances samples will need to be submitted for approval as part of the compliance process.



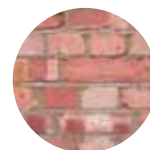
Limestone
To match local oolitic limestone



Brick Option 1
Deep red/orange to match traditional local brickwork



Brick Option 2
White painted bricks of any type



Brick Option 3
Deep pink/orange with kiln marks to match existing site buildings



Lime Render
Natural colour



Render Option 1
Colour 1005-Y10R



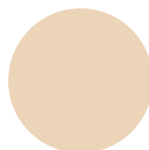
Render Option 2
Colour 0505-Y20R



Render Option 3
Colour 0505-Y30R



Render Option 4
Colour 1005-Y20R



Render Option 5
Colour 1010-Y30R



Render Option 6
Colour 1010-Y20R



Render Option 7
Colour 1510-Y20R



Render Option 8
Colour 2010-Y20R



Render Option 9
Colour 3000N

Minor Options

The following accent materials can be used on up to 30% of your home's total surface area.

Please note, the use of a green wall must be applied over one of the permitted facade materials as stipulated above.



White Render



Corten Steel



Structural Members



Green Walls



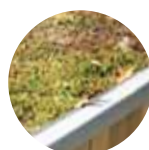
Mirror Finishes



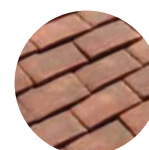
Metal Cladding

Roof Options

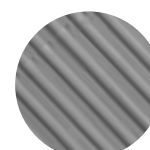
Please note: the metal, tile, timber & slate options shown opposite can be used wherever feasible. The 'flat roofs only' options are not permitted for use on pitched roofs.



Additional Options for Flat Roofs Only
Any variety of green roof, felt, EPDM or fibreglass



Tiles
Any variety of plain clay or smooth red/grey plain concrete tiles of a slim profile.



Metal Roofing
Any variety of of an exposed finish or of a grey colour



Slates
Any variety of natural slate or med/dark grey fibre cement slate



Solar Tiles
Any variety of roof-integrated solar tiles, shingles or slates.

Tree-lined Boulevard

Central, leafy thoroughfare

URBAN - SOME DESIGN FREEDOM



Overview



ABOVE
Plan showing location of the Tree-lined Boulevard

Location

The 'Tree-lined Boulevard' forms a primary movement corridor serving the majority of the residential area within the western half of the site.

Character

The reigning feature of this area is its formal avenue of trees that runs along its entire length, creating a leafy, enclosed space of dappled light that is very much distinct from all other urban residential streets across the site.

The feel of this Character Area will be less formal than that of the 'Village Centre' - buildings will offer greater variety and 'softer' boundaries to plots will start to loosen-up the overall street-scene. However, the importance of this route must be acknowledged by maintaining a degree of formality. As such, the avenue of trees will be laid symmetrically, the designated cycleways will remain as will the higher densities through the use of terraced units.

Management

Management of buildings and plots will be undertaken by freeholders and leaseholders, highway elements by Oxfordshire County Council and parking forecourts by a management company.

Design Freedom

Rules regarding material palettes and boundary treatments have been removed in order to offer a greater level of design freedom than that found within other Character Areas. However, restrictions on minimum building heights and main facade positions will remain in order to keep a degree of uniformity.

Case Studies



ABOVE

Subtle differences between each terraced unit at Mollenplein in the Netherlands. Small variations in architectural form and materials of each individual unit creates a characterful elevation despite the presence of repetitive plot widths and building heights of the terraced composition.
 Mollenplein, the Netherlands TAKEN FROM <http://goo.gl/dN34gL>

ABOVE RIGHT

The dappled, tree-lined avenue leading from the main entrance area of RAF Bicester Heritage illustrates the quality of space that can be afforded through the application of simple and robust detailing alongside visually strong landscaping statements.
 RAF Bicester Heritage, Bicester, photo © GHVDC Ltd



RIGHT

Several design principles found along the waterside development in Oxford are to be incorporated including parking forecourts with 'soft' border planting, speed tables at key junctions and simple but high quality detailing consisting of silver-grey conservation kerbs, granite setts and resin bound gravel.

Waterside, Oxford, photo © GHVDC Ltd

FAR RIGHT

The existing water towers at Graven Hill are located at the point where the boulevard & 'Circular Railway' will meet. Their retention would form an exciting transition 'event' that is integral to the existing fabric of the site

Water towers at Graven Hill Bicester, photo © GHVDC Ltd





Design Rules

Requirements considered critical to achieving the desired Tree-lined Boulevard character

Hard Landscaping

- Carriageways
- Footways
- Cycleways
- ▨ Table Junctions
- Parking Forecourts

Soft Landscaping

- Verges & Street Trees
- Incidental Planting

Street Lighting

- ✓ Columns

Street Furniture

- ✓ Benches & Bins

Maintenance

- ✓ Streetscape Strategy

Generic

- Feature Plots
- Build Zones
- ✓ Building Performance
- ▽ Max. Building Height (m)
- ✓ Plot Boundaries
- ▶ Vehicular Access
- Vehicular & Cycle Parking
- ✓ Waste Management

Bespoke to Tree-lined Boulevard

- ✗ Boundary Materials
- ✗ Material Palette
- △ Min. Building Height (m)
- Fixed Elevation Position

Off Plot Features

Bituminous construction with pre-coated chippings. Granite setts to demarcate parking bays.

Silver-grey concrete paving slabs. Flush conservation kerbs to plot boundaries & cycleways

Bituminous with conservation kerb to carriageways.

Bituminous construction with precoated chippings. Ramps to be surfaced with granite setts.

Resin bound gravel to parking area.

To be edged with silver-grey conservation kerbs. Informal planting design with long, tufty grasses & wildflowers. Mown edge strip to carriageway. Trees to be min. 15m high after 25yrs.

Informal planting design with wildflowers

Standard columns with LED lantern units.

Robust & functional design.

Amenity to be managed by CDC, highways by OCC & parking courts by a management company.

On Plot Features

None of the 'Bespoke' rules (see below) apply.

Area of the plot that may be developed. All facades that face onto the public realm must have windows

Residential buildings to achieve the 'Passive Design Standards' as stipulated on page 5.

Total building height (including roof) must not exceed this value.

Front boundaries to be no higher than 0.9m. Side and rear boundaries to be no higher than 1.8m. The use of close-boarded/lap timber fencing along any public facing boundary is not permitted

Driveway access must be located as shown.

No. of vehicle bays shown must be provided. Min. of 2 secure cycle spaces/unit must be provided.

Storage for 3 x 240l wheelie bins must be provided. These must not be visible from the road. Refuse stores must not be forward of any elevation which faces onto the public realm.

Not applicable

Not applicable

Total building height (including roof) must not fall below this value.

The buildings principal and/or side elevation must be constructed on the line shown. Bay windows/porches/balconies must not protrude more than 1.5 metres beyond this line.

Community Streets

Residential areas offering maximum design freedom

URBAN - HIGH DESIGN FREEDOM



Overview



ABOVE

Plan showing location of the Community Streets

Location

The 'Community Streets' are medium density, suburban areas predominantly consisting of detached plots.

They span between the site's inner urban streets and the outer rural fringes.

Character

Creative experimentation is encouraged to achieve the informal, vibrant & easy-going feel is desired along these secondary routes.

They will be defined from their primary counterparts by; reducing highway widths, resulting in a friendly, more enclosed feel; removing restrictions on facade positions, building materials, building heights and boundary treatments which, together with the detached nature of the houses, will result in a more varied street-scene; lower traffic flows, resulting in a quieter, more family-orientated environment.

A simple and neutral palette of materials will be applied to the public realm to provide a complimentary backdrop for the variety of building styles and external finishes that may be developed

Management

Buildings and plots will be managed by freeholders and leaseholders, the amenity areas will be managed by Cherwell District Council and the highway will be managed by Oxfordshire County Council.

Design Freedom

Plots within this area offer the highest level of design freedom. As such, only 'generic' site-wide rules are here applied.

Case Studies



ABOVE

A street in north Oxford contains a variety of building forms, materials, boundary treatments & architectural styles.

Elmthorpe Rd, Oxford TAKEN FROM <http://goo.gl/Lc00yQ>



ABOVE

A remodelled early Victorian, two-bedroom semi-detached house in Birmingham presents an inventive approach to sustainable design.

John Christopher's zero carbon house, Birmingham TAKEN FROM <http://goo.gl/Jlu7AB>



Design Rules

Requirements considered critical to achieving the desired Community Streets character

Hard Landscaping

- Carriageways
- Footways

Soft Landscaping

- Verges & Street Trees

Maintenance

- ✓ Columns
- ✓ Benches & Bins
- ✓ Streetscape Strategy

Generic

- Feature Plots
- Build Zones
- ✓ Building Performance
- ▽ Max. Building Height (m)
- ✓ Plot Boundaries
- ▶ Vehicular Access
- Vehicular & Cycle Parking
- ✓ Waste Management

Bespoke to Community Streets

- ✗ Boundary Materials
- ✗ Material Palette
- ✗ Min. Building Height (m)
- ✗ Fixed Elevation Position

Off Plot Features

Bituminous construction.

Bituminous construction with flush conservation kerbs to plot boundaries.

To be edged with silver-grey conservation kerbs. Informal planting design with long, tufty grasses & wildflowers. Mown edge strip to carriageway. Trees to be min. 15m high after 25yrs.

Standard columns with LED lantern units.

Robust & functional design.

General amenity management is to be undertaken by Cherwell District Council. Highway management is to be undertaken by Oxfordshire County Council

On Plot Features

Not applicable as no 'bespoke' design rules apply to plots in this Character Area.

Area of the plot that may be developed n.b. all facades that face onto the public realm must incorporate windows.

Residential buildings must achieve the 'Passive Design Standards' as stipulated on page 5.

Total building height (including roof) must not exceed this value.

Front boundaries to be no higher than 0.9m. Side and rear boundaries to be no higher than 1.8m. The use of close-boarded/lap timber fencing along any public facing boundary is not permitted

Driveway access must be located as shown.

No. of vehicle bays shown must be provided (n.b position of parking bays within plot to discretion of plot purchaser). Min. of 2 secure cycle spaces/unit must be provided within the plot area.

Storage for 3 no. 240 litre wheelie bins (59w x 107h x 74d (cm)) must be provided. These must not be visible from the road. Refuse stores must not be forward of any elevation which faces onto the public realm.

Not applicable

Not applicable

Not applicable

Not applicable

Urban Lanes

Mews-like residential streets offering maximum design freedom

URBAN - HIGH DESIGN FREEDOM



Overview



ABOVE
Plan showing location of the Urban Lanes

Location

The 'Urban Lanes' are privately owned, shared-surface, tertiary routes that exhibit low traffic flows. They stretch between many of the secondary routes across the site and often contain small community courtyards, providing localised shared amenity for residents.

Character

The Urban Lanes are pedestrian friendly zones with a 'mews-like' feel.

Features are to encourage interaction between neighbours and provide a safe environment for children to play. As such, the Urban Lanes will typically be dual aspect to increase passive natural surveillance. They will also exhibit shared-surfaces, raised planters and narrower street widths - all of which help to deter vehicular use and create the opportunity to dwell in a communal setting. A close relationship between buildings and the street will be provided by the use of coach-house parking arrangements and reduced frontages.

Management

Buildings and plots will be managed by freeholders and leaseholder. The shared-surface zones between will be managed by a management company.

Design Freedom

As per the 'Community Streets' creative experimentation is encouraged with a view to achieving the informal, vibrant and easy-going feel desired. Plots within this area will, therefore, also offer the highest level of design freedom with only the 'generic' site-wide design rules here being applied to residential properties.

Case Studies



ABOVE

A shared surface street in Nieuw Leyden, Netherlands conveys the friendly 'mews-like' setting desired for all Urban Lanes at Graven Hill. Narrow plot frontages & the removal of designated highway zones (e.g. footways) are key design principles to achieving this.

Nieuw Leyden, Netherlands, photo © GHVDC Ltd

RIGHT

Community commotion at The Methleys, Leeds demonstrating the vibrancy that such shared-surface, mews-like environments can bring.


















The Methleys, Leeds TAKEN FROM <https://goo.gl/luipA7>





Design Rules

Requirements considered critical to achieving the desired Urban Lanes character

| | | |
|-------------------------------|--|---|
| Hard Landscaping |  Shared Surface | Off Plot Features Bituminous construction with sections of silver-grey conservation paving slabs and/or silver-grey granite sets to . Flush kerbs to all plot boundaries to demarcate edge of highway. |
| Soft Landscaping |  Verges, Raised Planters & Street Trees | Informal planting design with long, tufty grasses & wildflowers. Trees to be min. 15m high after 25yrs. |
| Street Furniture |  Columns | Standard columns with LED lantern units. |
| |  Benches & Bins | Robust & functional design. Each Urban Lane is to adopt a slightly different character. |
| Maintenance |  Streetscape Strategy | A management company will be responsible for general management of the shared surface zones including; grass cutting; watering; weed control; management of woody & herbaceous planting; reporting & repairing incidents of vandalism &/or incidental damage. |
| Generic |  Feature Plots | On Plot Features Not applicable as no 'bespoke' design rules apply to plots in this Character Area. |
| |  Build Zones | Area of the plot that may be developed n.b. all facades that face onto the public realm must incorporate windows. |
| |  Building Performance | Residential buildings must achieve the 'Passive Design Standards' as stipulated on page 5. |
| |  Max. Building Height (m) | Total building height (including roof) must not exceed this value. |
| |  Plot Boundaries | Front boundaries to be no higher than 0.9m. Side and rear boundaries to be no higher than 1.8m. The use of close-boarded/lap timber fencing along any public facing boundary is not permitted |
| |  Vehicular Access | Driveway access must be located as shown. |
| |  Vehicular & Cycle Parking | No. of vehicle bays shown must be provided (n.b position of parking bays within plot to discretion of plot purchaser). Min. of 2 secure cycle spaces/unit must be provided within the plot area. |
| |  Waste Management | Storage for 3 no. 240 litre wheelie bins (59w x 107h x 74d (cm)) must be provided. These must not be visible from the road. Refuse stores must not be forward of any elevation which faces onto the public realm. |
| Bespoke to Urban Lanes |  Boundary Materials | Not applicable |
| |  Material Palette | Not applicable |
| |  Min. Building Height (m) | Not applicable |
| |  Fixed Elevation Position | The buildings principal and/or side elevation must be constructed on the line shown. Bay windows/ porches/balconies must not protrude more than 1.5 metres beyond this line |

Circular Railway

*East-west heritage route
incorporating existing site railway*

URBAN - SOME DESIGN FREEDOM



Overview



ABOVE
Plan showing location of the Circular Railway

Location

The Circular Railway is a primary east-west route that follows the line of the existing site railway. It also provides a route to a secondary (eastern) site access.

Character

The Circular Railway will incorporate features that reflect the existing railway, offering a unique experience for users that celebrates the site's rich military heritage. The treatments will focus on pedestrian areas and will be twofold; in 'urban' areas sections of corten steel will be embedded into footways; and in 'rural' areas corten steel sections will be used to create an elevated walkway that crosses. At various intervals, sections of existing track will also be left in-situ.

A unique streetscene exhibiting a variety of building styles is desired. Material palettes have, therefore, been removed and it is proposed that all units be detached to allow greater flexibility in form. As a primary route, a degree of formality will, however, be achieved by the use of higher densities, repetitive plot widths, designated cycleways and restrictions on front facade positions and building heights.

Management

Freeholders and leaseholder will maintain buildings and plots, Cherwell District Council the elevated walkway and Oxfordshire County Council for all features within the highway.

Design Freedom

Some design freedom is afforded through the removal of material palettes and restrictions on boundary treatments.

Case Studies

BELOW

The use of corten steel, concrete (pavers & poured) & embedded former rail lines at the Philadelphia Navy Yard offers a unique, robust & industrial streetscape for users as desired along all urban sections of the Circular Railway.

Philadelphia Navy Yard, US TAKEN FROM <http://goo.gl/3TNR1E>



ABOVE

The elevated walkway at Südgelände Nature Park is made from an anti-slip metal grille deck that spans between 2 former site rail lines. This angular path crosses the surrounding wild landscape in a 'low intervention' manner. Both the physical & visual separation of the hard, industrial walkway against the wild, natural landscape gives the appearance of it being seemingly 'placed' into its surroundings. This approach is to be adopted along all rural sections of the Circular Railway.

Südgelände Nature Park, Berlin TAKEN FROM <http://goo.gl/ow4NQ4>

LEFT

Newhall in Harlow demonstrates a number of intended character traits for the streetscenes along the Circular Railway, including repetitive plot widths, strong street-lines & controlled building heights, a creative use of materials & contemporary architectural styles. A more varied range of building forms that than shown would, however, be desirable.

Newhall, Harlow TAKEN FROM <http://goo.gl/F7xNI>





Design Rules

Requirements considered critical to achieving the desired Circular Railway character

Hard Landscaping

- Carriageways
- Footways
- Cycleways
- ▨ Table Junctions

Soft Landscaping

- Verges & Street Trees

Street Furniture Maintenance

- ✓ Columns
- ✓ Benches & Bins
- ✓ Streetscape Strategy

Generic

- Feature Plots
- Build Zones
- ✓ Building Performance
- ▽ Max. Building Height (m)
- ✓ Plot Boundaries
- ▶ Vehicular Access
- Vehicular & Cycle Parking
- ✓ Waste Management

Bespoke to Circular Railway

- ✗ Boundary Materials
- ✗ Material Palette
- △ Min. Building Height (m)
- Fixed Elevation Position

Off Plot Features

Bituminous construction with precoated chippings. Granite setts to demarcate parking bays.

Silver-grey concrete paving slabs to northern footway. Poured concrete to southern footways with embedded rails. Flush conservation kerbs to plot boundaries & cycleways

Bituminous with conservation kerb to carriageways. Bituminous construction with precoated chippings. Ramps to be surfaced with granite setts.

To be edged with 145mm silver-grey conservation kerbs with 15mm upstand to carriageways. Informal planting design with long, tufty grasses & wildflowers. Mown edge strip to carriageway. Trees to be min. 15m high after 25yrs.

Standard columns with LED lantern units.

Robust & functional design.

Amenity to be managed by CDC, highways by OCC (including embedded rail feature)

On Plot Features

No 'Bespoke' design rules (listed below) apply.

Area of the plot that may be developed. All facades that face onto the public realm must have windows

Residential buildings to achieve the 'Passive Design Standards' as stipulated on page 5.

Total building height (including roof) must not exceed this value.

Front boundaries to be no higher than 0.9m. Side and rear boundaries to be no higher than 1.8m. The use of close-boarded/lap timber fencing along any public facing boundary is not permitted

Driveway access must be located as shown.

No. of vehicle bays shown must be provided. Min. of 2 secure cycle spaces/unit must be provided.

Storage for 3 x 240 litre wheelie bins must be provided. These must not be visible from the road. Refuse stores must not be forward of any elevation which faces onto the public realm.

Not applicable

Not applicable

Total building height (including roof) must not fall below this value.

The buildings principal and/or side elevation must be constructed on the line shown. Bay windows/porches/balconies must not protrude more than 1.5 metres beyond this line

Swale Parks

*Linear wetland habitats forming
'green corridors'
within the development*

RURAL - LOW DESIGN FREEDOM



Overview



ABOVE
Plan showing location of the Swale Parks

Location

The Swale Parks are linear wetland corridors that radiate from the base of the central wooded hill to the perimeter meadows. They play an important role in the sustainable urban drainage strategy for the site and, also, provide essential habitat zones within the developed areas of the site.

Character

The network of swales and attenuation ponds will provide a defining characteristic of many public spaces within the Graven Hill Village development.

Within these 'green buffers,' the landscape design consciously reflect the ecological processes that occur within water movement and vegetation typologies. They not only assists in the delivery of a valuable habitat resource, but also provide absorbing natural environments for the community to enjoy.

Management

The management approach to these spaces will be similarly flexible. This will include ensuring the swales & attenuation ponds function as drainage features, but also that public amenity & habitats are protected. Cherwell District Council will be responsible for the on-going management of these spaces.

Design Freedom

As strategic amenity, the Swale Parks do not currently offer opportunities for community design. The potential for later involvement with the on-going management, use & evolution of these spaces is to be explored

Case Studies



ABOVE

The Swale Parks are a key component of the proposed play space provision for the site. Alongside more enclosed areas containing natural play equipment, these wetland landscapes offer numerous opportunity for informal & creative play e.g. fishing adventures, stepping stones etc.

Location unknown: TAKEN FROM <http://goo.gl/Z2dEuk>

LEFT

Waterside properties south of Amsterdam, Netherlands depict marginal planting, swales and rivers in close proximity to housing with a rural and friendly character. Single-aspect streets face into these central landscaped zones offering natural surveillance for recreational activities.

Waterside properties in the Netherlands, photo © of GHVDC Ltd



Design Rules

Requirements considered critical to achieving the desired Swale Parks character

Hard Landscaping

- Footpaths
- Shared Cycle/ Pedestrian Paths
- ✓ Bridge Crossings

Soft Landscaping

- Marginal
- Longer Grass
- Shrubs
- Trees
- Water Bodies
- Play Area

Lighting

- ✗ Any

Furniture

- ✓ Benches, Bins

Management

- ✓ Habitat Corridor & Play Space Strategy

Off Plot Features

To be as visually unobtrusive as possible (e.g. use of natural materials, minimal widths & meandering layouts)

To be as visually unobtrusive as possible (as above)

Simple design of a natural finish throughout (e.g. weathered timber). Elevated to minimise impact to habitats below. To be as discrete as possible with handrails only where necessary.

Informal design of predominantly native species

To contain wildflower species

Informal arrangement of native species

Fluid arrangement of native species to support wildlife flight paths, pollard management.

Swale as part of sustainable urban drainage (SUDS) strategy.

Naturalistic design incorporating proposed swale, elements of water & sand, stepping stones, bridges & other playful elements to interact with the water, encouraging creative play.

Not applicable. Rural Lanes are to remain unlit.

Modest design. To be a weathered timber finish.

Management to be undertaken by Cherwell District Council.

Selective use of natural regeneration from existing seed bank to assist with habitat creation

Watering, weed control & general management of new tree, shrub & herbaceous planting during establishment period & beyond

Maintaining and repairing path surfaces, edges, & boundary fencing/gates

General pruning to ensure highway safety & encourage natural surveillance.

General presumption in favour of dead wood retention (subject to safety inspections)

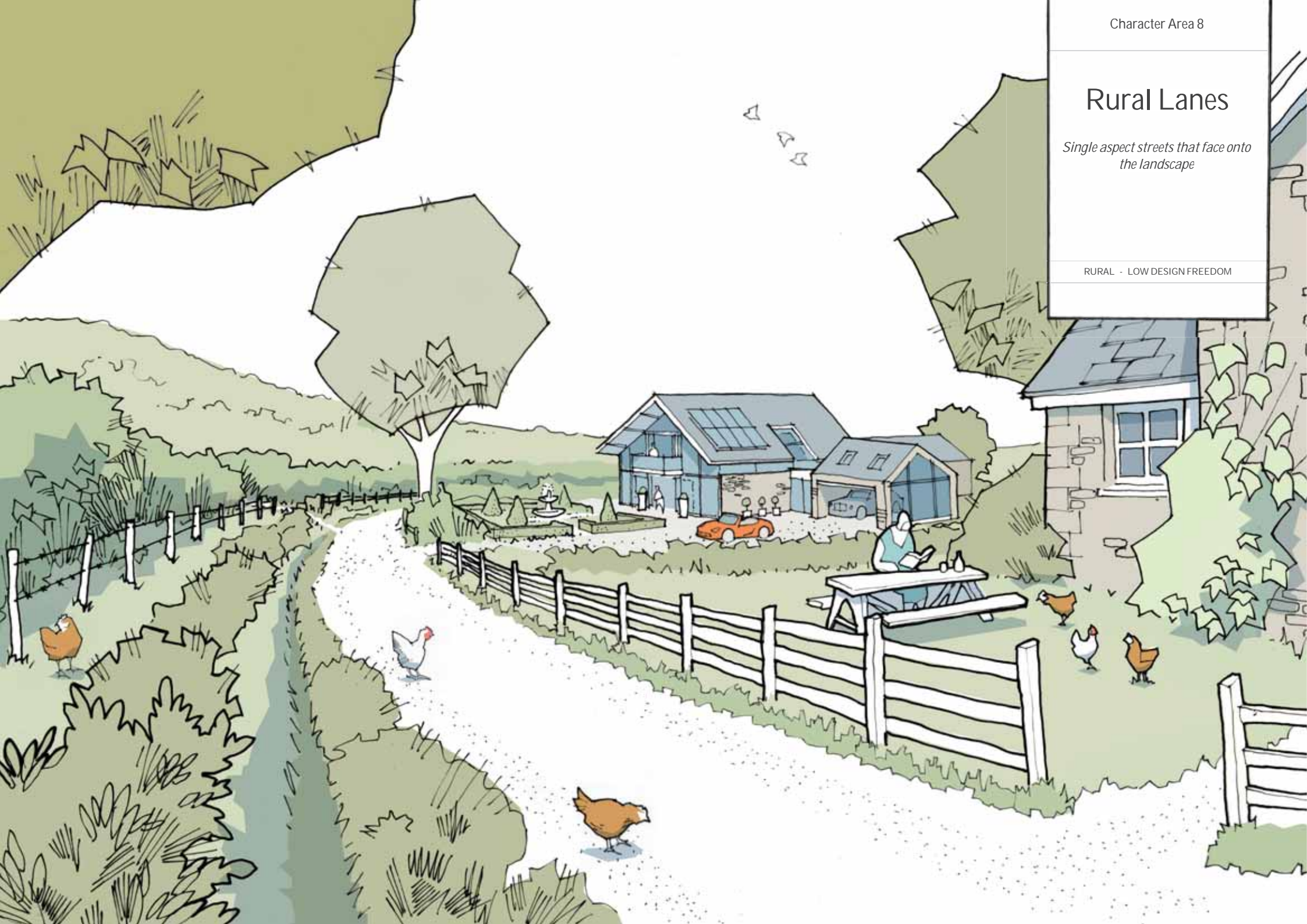
Reporting and repairing incidents of vandalism or incidental damage & immediately restricting access to defective play equipment

Regular safety check of all play equipment & associated features.

Rural Lanes

Single aspect streets that face onto the landscape

RURAL - LOW DESIGN FREEDOM



Overview



ABOVE
Plan showing location of the Rural Lanes

Location

The Rural Lanes are single aspect streets that face out onto extensive landscaping.

Character

Unlike the more centrally located zones, these 'off -the-beaten path' areas are to adopt a rural tone that seemingly 'blends' into the landscape. This will be achieved through the use of dry-stone wall and planted boundaries (with hidden secure boundaries where desired), a rural material palette, undulating street-lines with the ability to have a variety of front garden depths & a simple highway treatment of a single, shared macadam surface bordered by wildflower verges. Buildings on the upper levels of the hillside will have a reduced height allowance to protect views to the hilltop from the surrounding areas.

Management

Freeholders and leaseholder will be responsible for the management of buildings and plots, Oxfordshire Country Council for the shared surface zones and verges.

Design Freedom

Due to the application of material palettes and boundary treatment requirements, the Rural Lanes are more controlled than other site components. This higher level of control ensures that the 'fringes' of the development sit comfortably in their setting and do not impact negatively on surrounding views. Despite the need for more control, design freedom is still afforded on several aspects, most notably the style and shape of buildings which are left entirely to the discretion of plot purchasers.

Case Studies



ABOVE

Existing 'rural lane' at Graven Hill showing the proposed, simplistic highway design of a single, shared macadam surface with grass verges either side. Also notable is the weathered timber fence that sits discretely in the landscape & the meadows beyond which are to be retained.

LEFT

Example of a single aspect 'rural lane' at Wardington, Oxfordshire. This image shows a variety of proposed features including 'hotch-potch' building forms held together through the use of a vernacular material palette & undefined boundaries that 'bleed' into the surroundings.

Photo of Wardington, Oxfordshire
TAKEN FROM <http://goo.gl/0R4uta>

RIGHT TOP

Beech hedgerows with intermittent timber access gates as proposed for plot boundaries to soften the transition between public and private space.

TAKEN FROM <http://goo.gl/9589TY>

RIGHT BOTTOM

Dogwood hedgerows as alternative plot boundary treatment.

TAKEN FROM <http://goo.gl/CokPbQ>





Design Rules

Requirements considered critical to achieving the desired Rural Lanes character

Hard Landscaping

Shared Surface

Soft Landscaping

Verges

Meadows & Woods

Street Lighting

Columns

Street Furniture

Benches & Bins

Maintenance

Streetscape Strategy

Generic

Feature Plots

Build Zones

Building Performance

Max. Building Height (m)

Boundary Heights

Vehicular Access

Vehicular & Cycle Parking

Waste Management

Bespoke to Rural Lanes

Boundary Materials

Material Palette

Min. Building Height (m)

Fixed Elevation

Off Plot Features

Bituminous construction. Flush kerbs to plot boundaries. 'Hidden' kerbs to verges either side of shared surface.

To contain intermittent driveway crossings. To be of a natural, informal design with long, tufty grasses and wildflowers.

N.B. these areas do not form part of the 'Rural Lanes' but are shown here for indicative purposes.

Where Rural Lanes necessitate lighting, standard columns with LED lanterns are to be used.

Simple design of natural, untreated timber finish.

Adopted shared surface zones and verges will be managed by Oxfordshire County Council.

On Plot Features

No 'Bespoke' design rules (listed below) apply to these plots with a view to here encourage highly creative/exemplary designs.

Area of the plot that may be developed. All facades that face onto the public realm must have windows

Residential buildings to achieve the 'Passive Design Standards' as stipulated on page 5.

Total building height (including roof) must not exceed this value.

Front boundaries to be no higher than 1.1m. Side & rear boundaries to be no higher than 1.8m. The use of close-board/lap fencing along any public facing boundary is not permitted.

Driveway access must be located as shown.

No. of vehicle bays shown must be provided. Min. of 2 secure cycle spaces/unit must be provided.

Storage for 3 x 240l wheelie bins must be provided. These must not be visible from the road. Refuse stores must not be forward of any elevation which faces onto the public realm.

All public facing boundaries to be a native hedge mix consisting of equal amounts of Common Dogwood, Common Hazel, Guelder Rose, Field Maple & Wild Privet; or a single species hedge of Hornbeam; or a mortared natural limestone wall; or a timber post & rail or post & mesh fence (this can also be used as a secure boundary within a hedgerow boundary). Where hedgerows are installed, these are to be laid as double staggered rows & are to be cut approx 150mm after 3-4 years of unrestricted growth.

See external material options overleaf.

Not applicable

Not applicable

Rural Lanes Material Palette

Facade Options

The 9 NCS render colour options for render as shown below have been chosen to match tones found within the local oolitic limestone. Where desired, readily available products of a similar tone may be used. Under these circumstances samples will need to be submitted for approval as part of the compliance process.



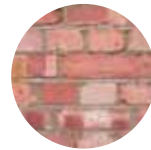
Limestone
To match local oolitic limestone



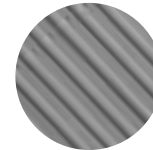
Brick Option 1
Deep red/orange to match traditional local brickwork



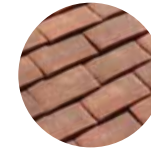
Brick Option 2
White painted bricks of any type



Brick Option 3
Deep pink/orange with kiln marks to match existing site buildings



Metal Cladding
Any variety of corrugated cladding of an exposed weathered finish or of a grey colour



Tiles
Any variety of plain clay or smooth red/grey plain concrete tiles of a slim profile. Double tiles are not permitted



Timber
Any variety of a natural finish. This includes charred & natural coloured or dark grey/black stains



Slates
Any variety of natural slate or med/dark grey fibre cement slate



Render Option 1
Colour 1005-Y10R



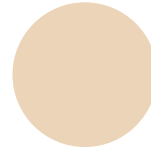
Render Option 2
Colour 0505-Y20R



Render Option 3
Colour 0505-Y30R



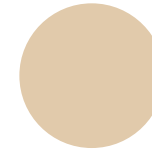
Render Option 4
Colour 1005-Y20R



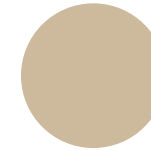
Render Option 5
Colour 1010-Y30R



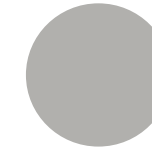
Render Option 6
Colour 1010-Y20R



Render Option 7
Colour 1510-Y20R



Render Option 8
Colour 2010-Y20R



Render Option 9
Colour 3000N



Lime Render
Natural colour

Minor Options

The following accent materials can be used on up to 30% of your home's total surface area.

Please note, the use of a green wall must be applied over one of the permitted facade materials as stipulated above.



White Render



Structural Members



Mirror Finishes



Corten Steel



Green Walls

Roof Options

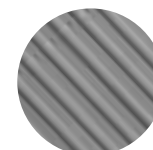
Please note: the metal, tile, timber & slate options shown opposite can be used wherever feasible. The 'flat roofs only' options are not permitted for use on pitched roofs.



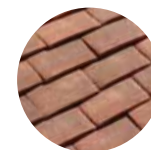
Additional Options for Flat Roofs Only
Any variety of green roof, felt, EPDM or fibreglass



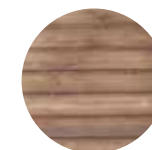
Solar Tiles
Any variety of roof-integrated solar tiles, shingles or slates.



Metal Roofing
Any variety of corrugated or standing seam roofing of an exposed weathered finish or of a grey colour



Tiles
Any variety of plain clay or smooth red/grey plain concrete tiles of a slim profile.



Timber
Any variety of a natural finish. This includes charred & natural coloured stains. Dark grey/black stains also permitted



Slates
Any variety of natural slate or med/dark grey fibre cement slate

Meadows

Field habitats containing a selection of retained heritage features

RURAL - LOW DESIGN FREEDOM



Overview



ABOVE
Plan showing location of the Meadows

Location

The meadows consist of existing pastoral farmland, predominantly situated on the upper slopes of the central hillside and to the north-west corner of the site.

Character

The meadow spaces within the Graven Hill Village will provide an impressive rural backdrop to the development.

These areas will be protected to provide an ongoing habitat and amenity resource.

It is proposed that the peppering of existing military features dispersed throughout the meadows be retained left in-situ wherever possible. These 'surprises in the landscape' will help root the development to its historical context and add interest along recreational routes.

Any existing variations in local topography (e.g. grass covered artificial mounds) are also to be retained as unique focal points.

Management

Cherwell District Council will manage this resource using traditional techniques that preserve the essential character of these spaces. Traditional techniques for grazing and seasonal cutting methods are to be explored.

Design Freedom

As strategic amenity, the Meadows do not at this stage offer opportunities for community design. The potential for later involvement with the on-going management, use and evolution of these spaces is to be explored

Case Studies



ABOVE

*Photo of a landscaped drainage feature at Graven Hill. The interesting topographical quality created by such features is to be preserved.
Photo taken at Graven Hill. Bicester, 2016 © of GHVDC Ltd*



ABOVE *A retained air raid shelter at Bicester Heritage creates a natural gathering point during events, its shadow offering some welcomed shade on hot summer days.
Photo taken at RAF Bicester Heritage, Bicester, 2016 © of GHVDC Ltd*

BELOW *Livestock grazing offers a traditional management solution to preserve character. Grazed meadow, Buckingham
TAKEN FROM <http://goo.gl/3a7BHT>*



LEFT

*Example of modest furniture treatment desired.
Rivacre Country Park, Cheshire
TAKEN FROM
<http://goo.gl/y08bp6>*





Design Rules

Requirements considered critical to achieving the desired Meadows character

Hard Landscaping

- Footpaths
- Shared Cycle/ Pedestrian Paths
- Retained Heritage Features

- ✓ New Structures

- Elevated Walkway

Soft Landscaping

- Longer Grass
- Shrubs
- Trees
- Ditch

Lighting

- ✗ Any

Furniture

- ✓ Benches, Bins

Management

- ✓ Meadow Areas & Amenity Areas Strategy

Off Plot Features

To be as visually unobtrusive as possible (e.g. a natural material finish & min allowable width)

To be as visually unobtrusive as possible (as above).

Existing military features that fall within the Meadows are to be retained wherever possible. The plan opposite depicts an existing Emergency Water Supply (EWS) pond structure that could potentially be 'reinvented' & incorporated into design proposals. Other possible features include the known location of a roman road, air raid shelters & rail tracks.

Any new buildings or structures to be located within the Meadows are to employ a vernacular palette of materials. Designs must be low-lying (to protect surrounding views) & be contextually relevant, either by reflecting the military heritage of the site or by 'blending' into the rural surroundings.

N.B. This feature forms part of the Circular Railway and not the Meadows. This feature demonstrates the design intention to incorporate 'reinvented' military features & so is annotated here for indicative purposes only.

To contain wildflower species.

Informal design of predominantly native species

Informal arrangement..

Varying profiles as part of SUDS.

Not applicable. Meadows are to remain unlit.

Modest design. To be a weathered timber finish.

Management to be undertaken by Cherwell District Council.

Report & undertake repair & replacement of trees, planted areas & grass.

Watering, weed control & general management of trees, woody & herbaceous planting including removal of undesirable woody & herbaceous species from sward

Check and maintain livestock fencing & access points to all grazed meadow areas

Biannual cutting of grass within remaining meadow with regular cutting of path links

Collection & removal of litter & other foreign materials

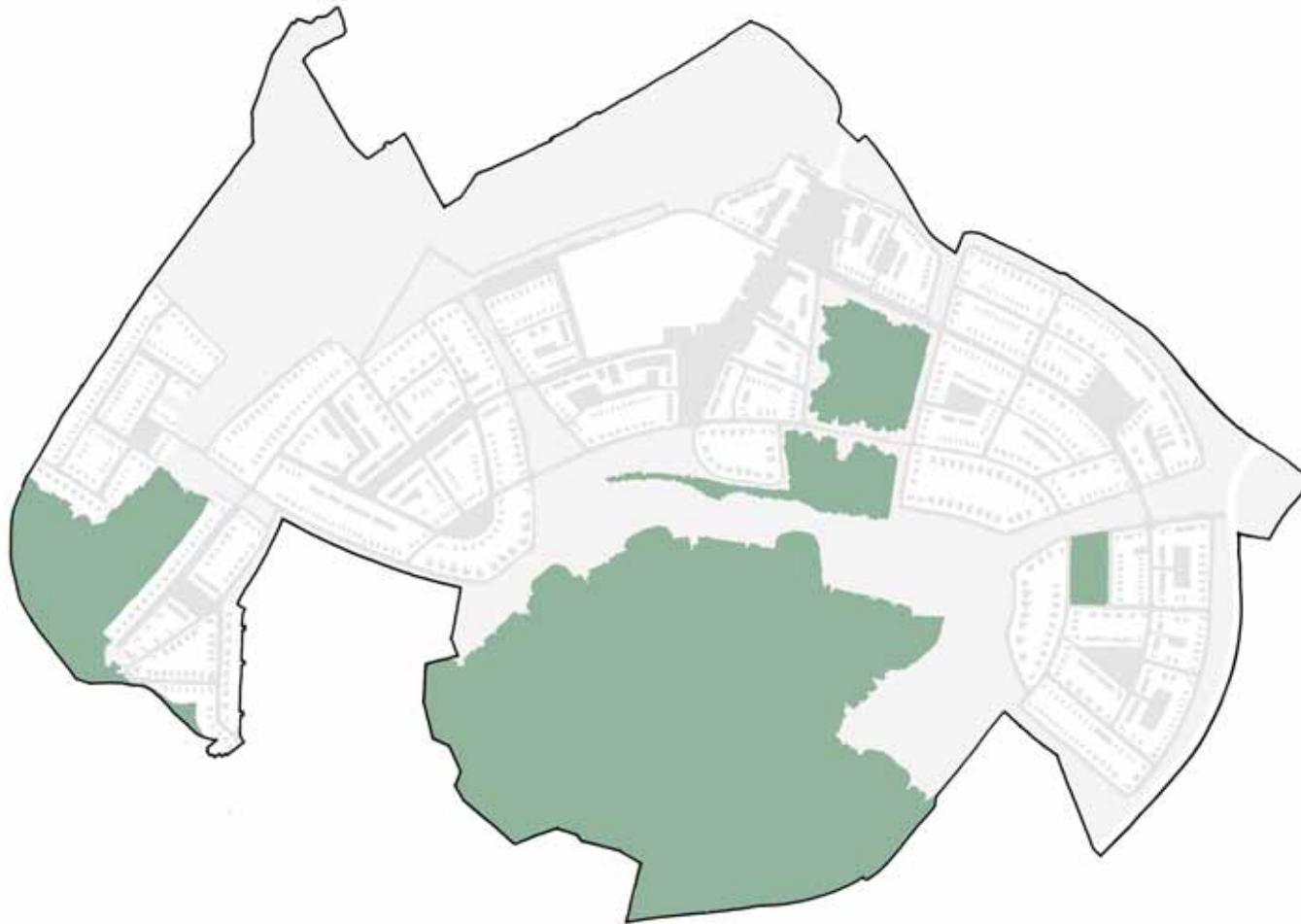
Woods

*Established woodland habitats
incorporating recreational routes
and play areas*

RURAL - LOW DESIGN FREEDOM



Overview



ABOVE
Plan showing location of the Woods

Location

The existing woodland is predominantly located on the hilltop with smaller pockets located around the base of the hillside. The strategic locations of any new areas of woodland have been informed by the location of these existing habitats and where opportunities to fulfil additional functions can be best delivered. This has included the creation of new habitat corridors, woodlands within amenity spaces and productive trees located near areas of food production.

Character

The wooded areas within Graven Hill Village are to reinforce the defining natural backdrop of the development. They play a strong role in reinforcing the unique identity of the site.

Management

The untouched and naturalistic appearance of the existing woodlands is to be both protected & enhanced through the adoption of a 'low intervention' approach throughout, with reliance upon natural processes. As such, Cherwell District Council will manage these areas using traditional techniques that are sympathetic to woodland ecology. Existing pathways will be utilised wherever possible to reduce the potential impact of new interventions.

Design Freedom

As strategic amenity, the Woods do not at this stage offer opportunities for community input. The potential for later involvement with the on-going management, use and evolution of these spaces is to be explored

Case Studies



ABOVE

A wooded stretch of a former rail line at Nidderdale Greenway has been sensitively upgraded to form a well-used, meandering recreation route suitable for cycling, walking & horse riding.

Nidderdale Greenway TAKEN FROM <http://goo.gl/v7jvYN>



ABOVE

Photo depicts an existing lowland pocket of woodland at Graven Hill with grassy ground cover. The untouched & naturalistic appearance of these woodlands is to be retained.

Photo of woodland at Graven Hill, Bicester, 2016 © GHVDC Ltd



LEFT

The playground at a campsite in Devon exemplifies the desired approach to playground equipment within the identified wooded provision. This includes the use of tree stumps, log frames, tyre swings & bark mulche ground covers.

Cofton campsite, Dawlish, Devon
TAKEN FROM <http://goo.gl/JhO2Qo>



Design Rules

Requirements considered critical to achieving the desired Woods character

Hard Landscaping

- ✓ Footpaths
- ✓ Shared Cycle/ Pedestrian Paths

Soft Landscaping

- Existing Trees
- Existing Vegetation
- New Trees
- Regenerating Woodland
- Play Areas

Lighting

- ✗ None

Furniture

- ✓ Benches, Bins

Management

- ✓ Deciduous Woodland, Coniferous Woodland & Play Areas Strategy

Off Plot Features

To be as visually unobtrusive as possible (e.g. use of natural material, minimal widths & meandering layouts). Low-key improvements/maintenance of existing access track(s)

To be as visually unobtrusive as possible (as above). Low-key improvements/maintenance of existing access track(s)

To be retained.

To be retained

Informal arrangement

New swathes of woodland to replace areas elsewhere.

To be of a naturalistic design, integrated into existing woodland. Natural play is to be encouraged through the use of logs & stumps, climbing structures, swings and other play equipment.

Wooded areas are to remain unlit.

Simple design of a natural, untreated timber finish.

To be undertaken by Cherwell District Council.

Watering, weed control & general management of trees, woody & herbaceous planting during establishment period & beyond.

Selective thinning out of undesirable species, allow greater diversity of ground flora & encourage age diversity within the canopy

Phased coppice management of under-storey areas

Removal of undesirable tree/plant species including those impeding normal operation of paths & play spaces

Presumption in favour of dead wood retention (subject to safety inspections)

Use of natural regeneration from existing woodland seed bank & rootstocks within areas of minimal-intervention

Undertake replacement of trees once cause of loss/damage has been established

Safety inspection of seating & informal areas of play. Reporting and repairing incidents of vandalism or incidental damage & immediately restricting access to defective play equipment.

Maintaining and repairing path surfaces, edges & boundary fencing/gates

Allotments

*Co-managed amenity space
offering opportunities for
community uses*

RURAL - SOME DESIGN FREEDOM



Overview



ABOVE
Plan showing location of the Allotments

Location

The allotment area has been located and planned to allow small scale subsistence production of food crops within an accessible location to the north west corner of the site

Character

As is typical of allotments generally, the intention is to create an informal social and recreational space where people from all walks of life will get 'stuck in.' A continuously changing environment that is clearly 'shaped' by its users is desired.

The accompanying community orchard (immediately south-east of the allotment plots) will provide produce that can be harvested and sold by local groups, as well as a green haven for simple contemplation and enjoyment.

It is the intention that this space also be used for local festivities (for example 'apple days'), as well as more traditional activities such as orchard wassailing (an ancient drinking custom intended to ensure a good apple harvest that is still practiced in cider-producing regions).

Management

The Allotments will be co-managed by Cherwell District Council and leaseholders of the plots.

Design Freedom

Unlike other strategic landscape areas across the site, end-user creativity is here encouraged. Although the broad structure and layout is defined, the individual plots are deliberately designed to offer flexibility to leaseholders and users of the space.

Case Studies



ABOVE

The sale of food produce offers a potential revenue stream for on-going management of the allotments. A community 'homegrown' store located within the Village Centre would be desirable.

The 'Allotment Deli' shop, St. Ives TAKEN FROM <http://goo.gl/2iDt6a>



ABOVE

Alongside day-to-day activities, the allotments are to act as a social 'hub' with on-site facilities (the construction of which offer a good opportunities for a local group project) to hold regular events.

Summer Street Allotments, Newcastle TAKEN FROM <http://goo.gl/QWGX9h>



Design Rules

Requirements considered critical to achieving the desired Allotments character

Hard Landscaping

- Footpaths
- Shared Cycle/ Pedestrian Paths

Soft Landscaping

- Allotment Beds
- Amenity Grass
- Longer Grass
- Shrubs
- Existing Hedgerows
- Incidental Trees
- Community Orchard
- Existing Ditch

Lighting

- ✗ None

Furniture

- ✓ Benches, Bins & Cycle Stands

Management

- ✓ Allotment & Orchard Strategy

Off Plot Developer

To be as visually unobtrusive as possible (e.g. use of natural material, minimal widths & meandering layouts).

Provides sustainable means of travel from allotments to all other areas across the site. To be as visually unobtrusive as possible (e.g. stabilised finely grated aggregate or similar).

Cultivated by allotment tenants

Mown for access

To contain wildflower species.

Informal design.

To be retained.

Fluid arrangement of native species to support wildlife flight paths, pollard management.

To be a mixture of regional varieties & commercially available fruit trees.

To be retained

Allotments to remain unlit.

Simple design of a natural finish. Cycle stands to be provided (quantity TBC).

Management of individual allotment plots & some communal areas to be undertaken by leaseholders.

Cherwell District Council to undertake management of all other areas.

Biannual cutting of grass within remaining meadow & below orchard tree canopies with regular cutting of informal path links

Collection & removal of litter & other foreign materials

Reporting & repairing incidents of vandalism or incidental damage once cause of loss/damage has been established

Removal of undesirable woody & herbaceous species from planted areas & grass sward

Maintaining & repairing path surfaces & edges

Control of weed growth and protection from browsing animals through initial establishment period of new orchard tree planting

Formative pruning to allow suitable development for crop production

Useful References



For any enquiries relating to this Design Code or the self-build process, please get in touch on...

☎ 01869 396070



info@gravenhill.org.uk

or visit our website

www.gravenhill.co.uk

Cherwell District Council (2015) *Local Plan 2011 - 2031*, Cherwell District Council, UK
<http://www.cherwell.gov.uk/index.cfm?articleid=1730>

Department for Communities and Local Government (2007) *Manual for Streets*, Thomas Telford, UK
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/341513/pdfmanforstreets.pdf

Oxfordshire County Council (2011) *Parking Standards for New Residential Developments*, Oxfordshire County Council, UK
<https://www.oxfordshire.gov.uk/cms/sites/default/files/folders/documents/roadsandtransport/transportpoliciesandplans/newdevelopments/parkingstandardsfornewresidentialdevelopments.pdf>

Department for Communities and Local Government (2015) *Technical Housing Standards: Nationally Described Space Standard*, DCLG, UK
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/524531/160519_Nationally_Described_Space_Standard____Final_Web_version.pdf

Secured By Design (2016) *New Homes: 2016*, SBD, UK
http://www.securedbydesign.com/wp-content/uploads/2016/03/Secured_by_Design_Homes_2016_V1.pdf

AMEC (2011) *Redevelopment of MOD Bicester: Design & Access Statement*, Defence Infrastructure Organisation, UK
<http://www.publicaccess.cherwell.gov.uk/online-applications/applicationDetails.do?activeTab=relatedCases&keyVal=LSHOWLEM09000>

Glenn Howells (2015) *Parameter Pan Rev F*, Graven Hill Village Development Company
<http://www.publicaccess.cherwell.gov.uk/online-applications/applicationDetails.do?activeTab=relatedCases&keyVal=LSHOWLEM09000>

Glenn Howells (2015) *Masterplan Northern Area Rev I*, Graven Hill Village Development Company
<http://www.publicaccess.cherwell.gov.uk/online-applications/applicationDetails.do?activeTab=relatedCases&keyVal=LSHOWLEM09000>

Glenn Howells (2015) *Street Hierarchy Summary 02/09/2015*, Graven Hill Village Development Company
<http://www.publicaccess.cherwell.gov.uk/online-applications/applicationDetails.do?activeTab=relatedCases&keyVal=LSHOWLEM09000>

Hoare Lea (2015) *Graven Hill Passive Design Standards*, Graven Hill Village Development Company
<http://www.publicaccess.cherwell.gov.uk/online-applications/applicationDetails.do?activeTab=relatedCases&keyVal=LSHOWLEM09000>

