

Graven Hill Design Code

GRAVEN HILL DEVELOPMENT COMPANY | JUNE 2015



Vision & Rationale



SECTION ONE

This section provides an overview of the project vision & the principles that have informed the production of the code including the aspiration to employ a 'hands off' approach & to achieve site-wide character as desired.

Introduction

What is the purpose of the design code & how does it relate to the project vision?

RIGHT

Masterplan layout of the Graven Hill Village development proposal



PROJECT VISION

The Graven Hill Village project consists of the redevelopment of 190 hectares of brown-field land to deliver approximately 1800 new homes along with a primary school, employment space, recreational areas, a local pub/restaurant & a small number of local shops.

The Graven Hill Village Development Company's vision for the project is as follows:

- 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. Graven Hill will have its own primary school, nurse, community centre, local shops & local pub.

- To have a strong sense of character & identity. Existing features (heritage and landscape) are to be retained & re-invented wherever possible.
- To provide a strategic location for new employment space. Creating jobs & training for local people & attracting new investment into Bicester are to be explored wherever possible.

PURPOSE OF THE DESIGN CODE

A Masterplan & Design Code has been produced in response to this vision.

Whilst the Masterplan focuses on the majority of technical aspects (such as phasing, mix, street hierarchy etc.) the Design Code's focus is on the desired sense of character & the essential design rules needed to achieve it.

It also serves as a reference point, facilitating the quick resolution of any subsequent

planning applications that may be required. Although addressing different conditions of the development's outline planning approval, these two separate documents are entirely interrelated.

STRUCTURE OF THE DESIGN CODE

The first section provides an overview of the approach employed & how this has informed the development of 'character components' across the site.

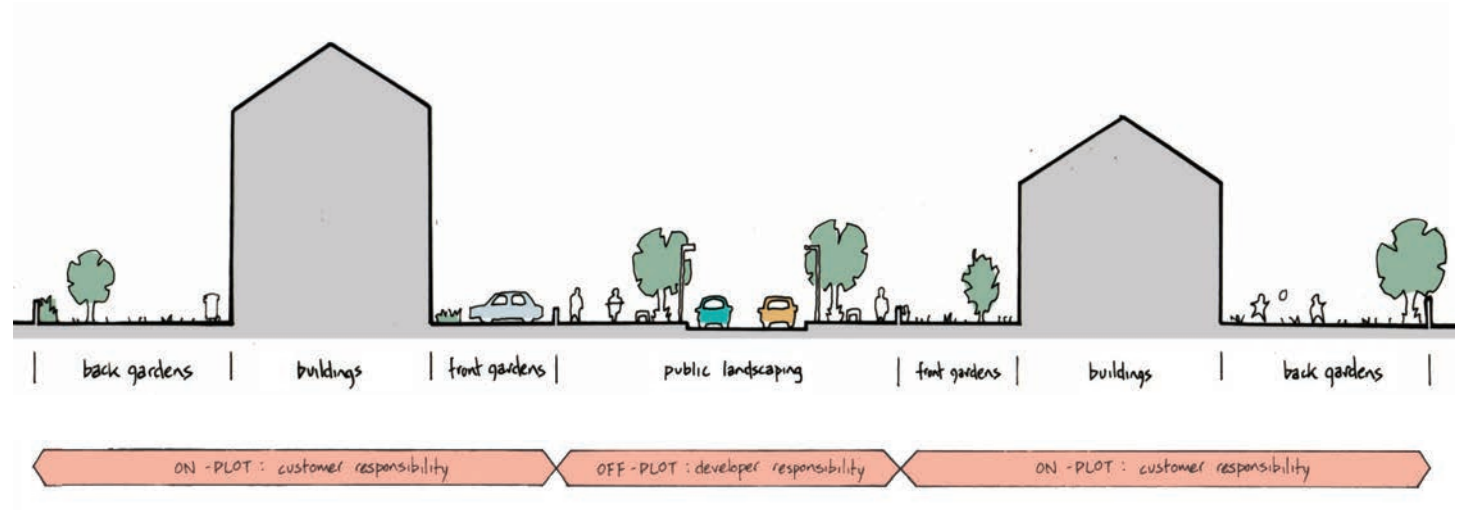
The 12 subsequent sections each look at

a specific 'character component' in more detail, describing the qualities desired, the level of design freedom available, the design rules to be applied & any other key details needed to realise the intended vision. These sections aim to provide clarity to both professionals & potential customers of the options available.

The report culminates with an overview of the proposed 'plot passport' documents (essentially snapshot codes for each individual plot) together with a description of the proposed material palette for plots

BELOW

Section through a typical street showing the extents of 'on plot' & 'off plot' features



What are the overriding principles that have informed the development of the code?

Coding Approach

The aspiration for Graven Hill is to be the UK's largest self-build scheme where community creativity is encouraged & maximum design flexibility is afforded.

This key visionary driver has informed the need to employ a 'hands off' approach to all 'on-plot' features (for which customers are responsible) wherever possible.

Only those specific features deemed critical to establishing the desired 'sense of place' will be regulated - but nothing else.

Informed by this principle, it is proposed that a concise list of only six 'baseline' constraints

be applied to all plots. These are as follows:

- Boundary heights
- Main facade positions
- Vehicular access points
- Parking requirements
- Bin store requirements

Design decisions for all remaining aspects can, therefore, be left to the discretion of plot purchasers (and/or their designers).

Only where absolutely necessary (either due to their visibility or position in the street hierarchy) are more 'enhanced' controls to be applied.

Sense of Place Definition

A 'sense of place' encompasses a number of aspects, notably the [areas] local distinctiveness, visual quality & propensity to encourage social activity

An overview of the levels of control & constraints to be applied to each area is given in the diagram overleaf.

Supported by the Masterplan, this approach is considered to be in accordance with best practice in that it has encouraged the multidisciplinary team to focus less on architectural *style* & more on those lasting elements of design important to 'get right' at the outset (e.g street pattern, ownership boundaries, transport links etc).

This realignment of emphasis is clearly shown by the consideration given to the public space in the subsequent sections.

BELOW

Masterplan showing levels of control across the site.



- **High Design Freedom**

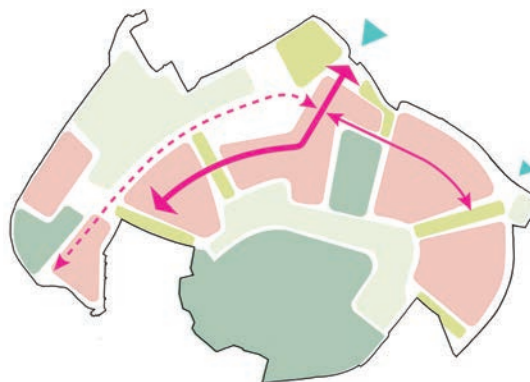
As shown on the diagram above, the majority of the developed areas of the site benefit from a high level of design freedom. Only baseline constraints will apply to these areas.
- **Some Design Freedom**

The main arterial routes demand a higher level of control in order to achieve a clearly legible street network. Some enhanced constraints will apply to these areas
- **Low Design Freedom**

The village core contains the majority of socio-economic functions &, will, therefore offer least design freedom. The single-aspect fringe streets that face onto key public areas are also less . All enhanced constraints will apply to these areas.

BELOW LEFT & RIGHT

Masterplans showing the 2 character concepts that have informed the detail behind the constraints.



- **Urban Structure**

The exact details of the constraints themselves have been informed by the character desired at any specific location.
- **Rural Structure**

The diagram above shows the general arrangement of the two opposing characters across the site, that of an 'urban' structure & that of a 'rural' structure.

These structures are made up from 12 separate component parts (see masterplan overleaf), each exhibiting 'urban' or 'rural' qualities to varying degrees.

A further aspect relating to character that has been considered in establishing constraint



- **Circular Railway**

particulars is that of the site's military quality.
- **Water Towers**

A major focus in developing proposals has been to 're-invent' & incorporate as many existing military features as possible. These bold celebrations of Graven Hill's history are scattered throughout, providing continual 'reminders' that link the scheme together as a whole.
- **EWS Ponds**
- ▲ **Concrete Plinths**

The level of control, extent of rural/urban qualities & concentration of military features of a given area have together dictated the constraints proposed. These constraints (& their associated plans) are given in the subsequent sections of this report..
- Potential Buildings to Retain**



- 1 Gateway Park
- 2 Village Centre
- 3 Tree-lined Boulevard
- 4 Community Streets
- 5 Urban Lanes
- 6 Circular Railway
- 7 Swales
- 8 Rural Lanes
- 9 Meadows
- 10 Woods
- 11 Allotments
- 12 Sports Grounds

LEFT

Location of the 12 character components across the site

Character Components



SECTION TWO

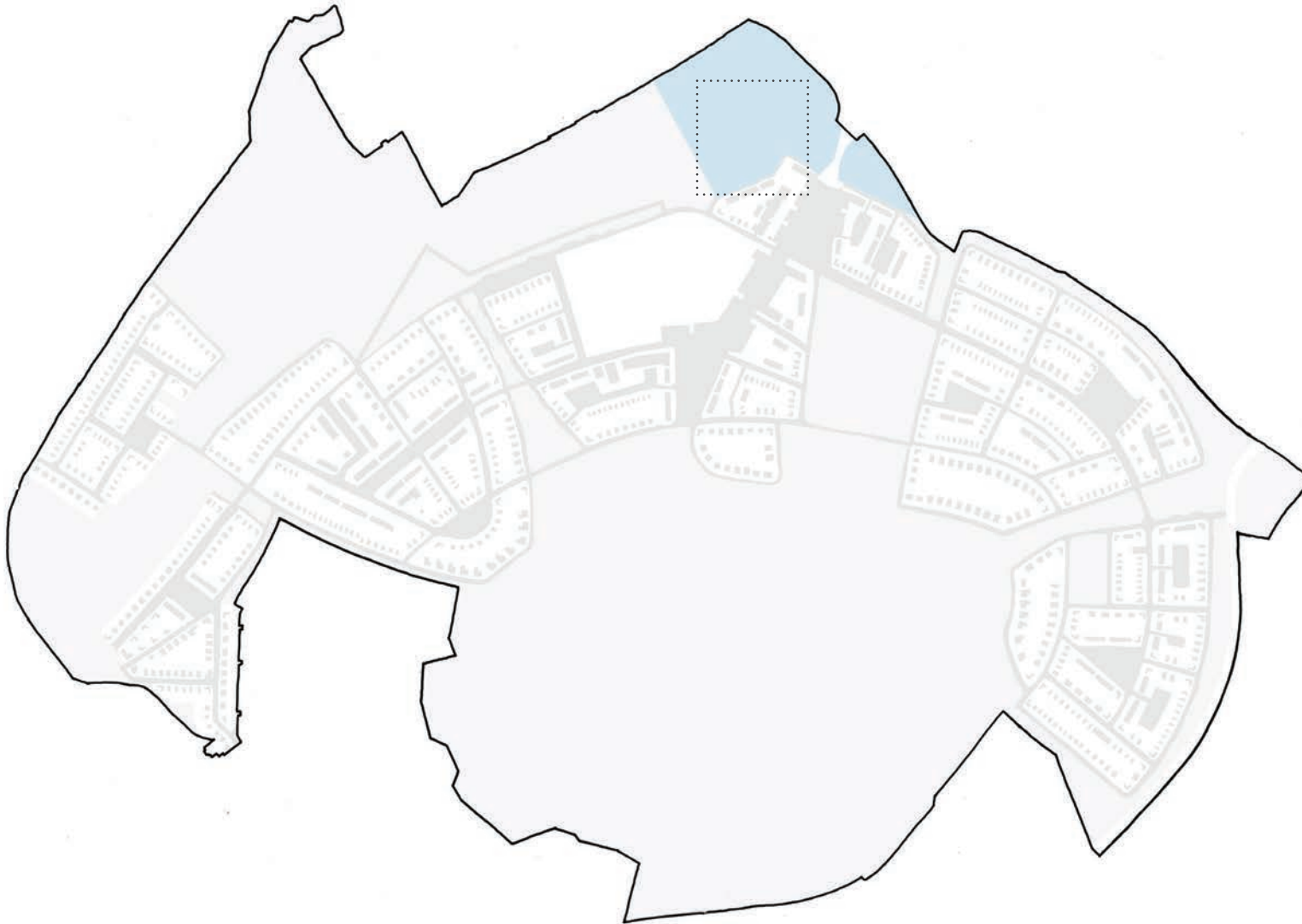
This section provides an overview of each character component including their level of control, relevant case studies, # general layout principles & proposed regulatory constraints.

Gateway Park

Large wetland habitat beside main site entrance.

● RURAL ● LOW DESIGN FREEDOM





ABOVE
Location of
Gateway Park.
Box shows
extent of plan on
page 10

Overview

LOCATION

The 'Gateway Park' is a key amenity space located immediately adjacent to the main A41 entrance. It serves to provide a welcoming transition space upon arrival that celebrates the site's extensive natural landscapes.

CHARACTER

The intention is to create a lush & informal recreational park containing swales, ponds & marginal planting. Longer, meadow-like grasses will be located on higher banks that link to the surrounding meadows.

Walk & cycle routes are to be as discrete as possible. Undefined pathway edges, meandering layouts & unintrusive finishes are proposed (e.g. decomposed granite) in order to retain the natural feel desired.

Timber boardwalk crossings are proposed along routes to add interest, protect the habitats below & create ideal spots for wildlife watching.

DESIGN FREEDOM

As a strategic amenity, the Gateway Park does not at this stage 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

BELOW Discrete timber boardwalks, such as that pictured below at an estuary in New Zealand, provide discrete recreational routes, their elevated profiles protecting the habitats below.



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.



FAR LEFT
Estuary, New Zealand,
taken from:
<http://goo.gl/t7bC4E>

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



Principles

Essential off plot principles for delivery of desired character

ABOVE

Indicative plan showing a typical area of the Gateway Park. N.B. variations will exist elsewhere

1 Hard Landscaping

● Footpaths & Boardwalks

2 Soft Landscaping

- Shared Cycle/ Pedestrian Paths
- Marginal
- Amenity Grass
- Longer Grass
- Shrubs
- Trees (Existing)
- Trees (New)
- Water Bodies

3 Lighting

✗ Any

4 Furniture

✓ Benches, Bins

5 Management

✓ Amenity, Attenuation Pond & Ecology Pond Strategy

OFF PLOT (DEVELOPER)

To be as discrete as possible

Boardwalks to be simple design of a natural finish. Elevated to minimise impact to habitats below. Handrails only where necessary..

To be as discrete 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.

Modest design. To be a weathered timber finish.

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

Bi-annual cutting of selected grass areas with regular cutting of remaining areas

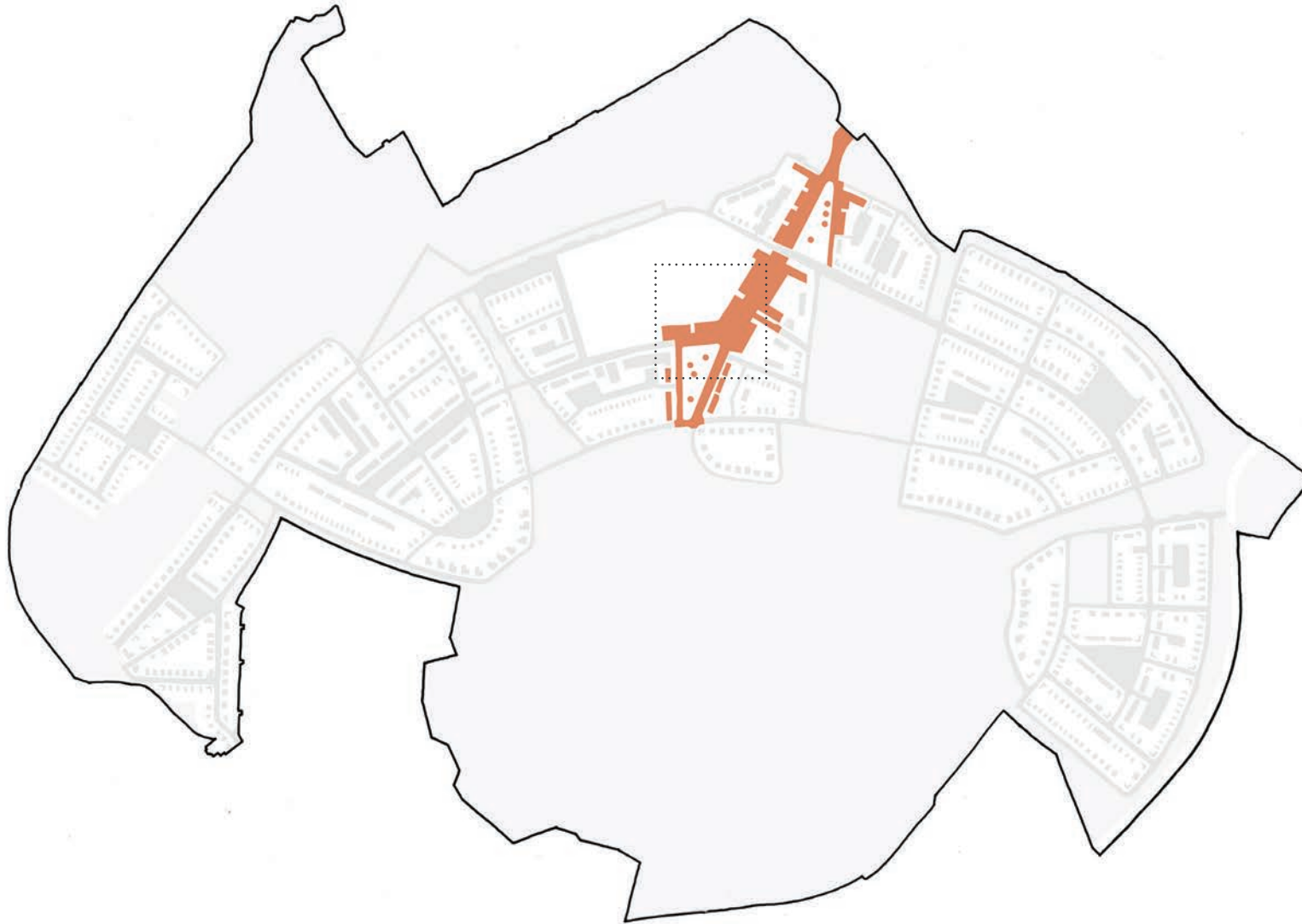
Watering, weed control & general management of trees, woody & herbaceous planting during establishment period & beyond.

Village Centre

Socio-economic hub at the heart of the site.

● URBAN ● LOW DESIGN FREEDOM





ABOVE
Location of the Allotments. Box shows extent of plan on page 15

Overview

LOCATION

The Village Centre consists of a north-south strip of higher density development that adjoins the main site entrance off the A41. All principle routes converge at this space that contains the majority of site facilities (including shops, offices & public greens).

CHARACTER

Functionality & accessibility is key to the long-term sustainability of this primary movement corridor & socio-economic hub.

Accordingly, all built form is to exhibit a formal character with precise, orderly & 'clutter-free' treatments. The two 'village greens' that flank the central commercial core act as north-south 'bookends' providing important areas of public open space for events, markets & social gatherings. They are to exhibit a naturalistic character that contrasts with the formality of the adjacent built form, thereby 'anchoring' the Village Centre to its surrounding wild landscape.

CONTROL

As the socio-economic heart of the site, the Village Centre will be subject to the highest level of design control. Plots will be subject to an enhanced constraints including specific boundary treatments, material palettes & min. building heights. A number of 'rogue' plots that remain uninhibited by increased controls are proposed in order to bring localised elements of architectural vibrancy.

Case Studies - General Principles



ABOVE A linear 'water rill' set flush into the footway at More London, creates a playful focal point along a busy movement corridor.

A similar feature is to run along the entire length of the northern village green, creating a unique sense of arrival & a visible connection between the main site entrance & commercial core.

ABOVE RIGHT A simple & accessible paved area provides a multi-use space for a variety of community activities e.g. markets, social gatherings & information days. A similar ad-hoc space is proposed along the eastern edge of the southern village green where vehicular use will be restricted on event days.

RIGHT The village centre at Dickens Heath demonstrates strong street-lines, restrained material palettes, regular building heights & formal boundary treatment as here proposed.

LEFT
Water rill at More,
London:
<http://goo.gl/Bmdr85>



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.

ABOVE LEFT
Fiesta at Wodd St,
London, from: <http://goo.gl/UDknN7>

BELOW LEFT
Dickens Heath, Solihull:
<http://goo.gl/dkOYH3>

ABOVE
Gough Street, San
Francisco:
<http://goo.gl/HwFBC8>

Case Studies - Village Green Principles



ABOVE

Photo of central green at RAF Bicester Heritage.

RIGHT

Jubilee celebration, West Sussex:
<http://goo.gl/EHQ90E>

BELOW

Normand Park, London:
<http://goo.gl/D31zTc>



ABOVE LEFT The central green at RAF Bicester Heritage exemplifies an informal social space with military features, including a discernible grassy mound of a former wartime bunker.

LEFT The communal greens are to provide flexible spaces for community occasions, specifically the southern green which is intended for use as a 'spill-out' zone for market street events.

ABOVE Normand Park in London demonstrates the naturalistic treatment intended for both greens. Long, tufty, meadow-like grasses & informal tree layouts offers opportunities for picnics, socialising & creative play



Principles

Essential off plot & on plot principles for delivery of desired character

ABOVE

Indicative plan showing a typical area of the Village Centre

N.B. variations will exist elsewhere

1 Hard Landscaping

- Carriageways
- Pedestrian zones
- Cycleways

2 Soft Landscaping

- Verges
- Incidental planting
- Street trees
- Village Greens

3 Lighting

- ✓ Play Areas
- ✓ Columns

4 Furniture

- ✓ Benches, Bins & Cycle Stands

5 Management

- ✓ Streetscape Strategy

6 Baseline

- ✓ Rogue Plots
- Building Zone
- XX Max. Building Height (m)
- × Boundary Heights
- Position of Main Facade(s) - Fixed
- ▶ Vehicular Access
- Vehicular & Cycle Parking

7 Enhanced

- ✓ Specific Boundary Treatments
- ✓ Material Palettes
- ✓ Min. Building Height (m)

OFF PLOT (DEVELOPER)

6m macadam with rolled silver-grey granite chippings. Change in texture to demarcate bays..

Concrete ground flags. Flush 225mm silver-grey conservation kerbs to plot boundaries.

1.75m macadam with rolled silver-grey granite chippings. 75mm splayed kerb upstand to footways

Edged by 225mm cons. kerbs - 15mm upstand. Longer grasses with mown strip to carriageway..

Informal planting design with wildflowers.

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

To be informal & naturalistic with wildflowers & meandering paths. Mown edges to carriageways to provide 'spill-out' spaces for events. Designs to deliver a visually strong & distinctive statement.

Naturalistic design..

Standard columns with LED lantern units.

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

Bi-annual cutting of selected grass areas with regular cutting elsewhere. Watering, weed control & general management of trees, woody & herbaceous planting. Reporting & repairing incidents of vandalism or incidental damage.

ON PLOT (CUSTOMER)

Only 'baseline' principles apply. Location TBA.

Portion of plot that may be developed.

Total building height (including roof) must not exceed values shown on plan.

Not applicable. All boundaries subject to enhanced principles. See below.

Main facade(s) of building must be constructed on line shown. Bay windows/porches /balconies must not protrude more than 0.5m beyond this line.

Driveway access must be located as shown..

No. of vehicle bays shown must be provided. Min. of 2 secure cycle spaces per dwelling must be provided.

Bins should not be visible from the street & are to be kept in bin stores or within rear gardens.

Front boundaries to be max. 0.9m high brick wall or railings. Side/rear boundaries to be max. 1.5m high wall with max. 0.4m trellis over.

Facades to be brick or limestone or render. Roofs to be grey slates or grey profile metal roofing or red plain clay tiles. See p.60..

Total height must not be less than values shown.