Phase 5, Heyford Park, Upper Heyford, Bicester

Statement of Compliance to support an application for Reserved Matters

HEYFORD PARK, BICESTER PHASE 5 Statement of Compliance

produced by

Focus On Design The Old Brewery, Lodway, Pill, Bristol, BS20 0DH

On behalf of Dorchester Living

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Author	JG	
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1 Introduction

1.1 Purpose of Document

1.1.1 This Statement of Compliance is submitted on behalf of Dorchester Living in support of an application for the approval of Reserved Matters following Outline Planning Approval (Ref 13/01811/OUT) for the Former School Site, Heyford Park:

"Outline - Up to 60 dwellings and public open space with associated works"

This follows on from the grant of Outline Permission for the wider Heyford site (Ref 10/01642/OUT) for the following proposal:

"Outline - Proposed new settlement of 1075 dwellings including the retention and change of use of 267 existing military dwellings to residential use Class C3 and the change of use of other specified buildings, together with associated works and facilities, including employment uses, a school, playing fields and other physical and social infrastructure."

Following the grant of planning permission for the wider site as detailed above, the owners of the site, in partnership with the Department of Education, promoted the development of a 'Free School' at Heyford Park incorporating both Primary and Secondary provision which opened in September 2013. The 'Free School' makes use of two of the existing buildings on site (Building 74 and 583) and therefore the site previously identified for a new primary school became redundant.

This document sets out to demonstrate compliancy with the performance criteria for this area as set out in the "Former School Site Heyford Park Design And Access Statement" (Ref Pegasus D.0345_03-1 November 2013) which accompanied the Outline Planning Application.

The Design and Access Statement should be read in conjunction with the proposals set out in the "Heyford Park Design Code V5.2" (Ref Pegasus B.0286_21 October 2013) to ensure a comprehensive design for Heyford Park. This document also sets out to demonstrate compliancy with this Approved Design Code where certain design principles are not set out in the Design And Access Statement.

1.2 Site Location

- 1.2.1 The site is located at Heyford Park, Camp Road, Upper Heyford, Bicester, Oxfordshire, OX25 5HD.
- 1.2.2 This Statement of Compliance is for the development area identified in the plan below.

The development area identified includes the following two character areas as defined in the Design and Access Statement:

- CA1 Village Green
- CA2 Core Family Housing



D&AS - Indicative Masterplan

2 Design Proposals

2.1 Use & Amount of Development

2.1.1 Residential - Up to 60 dwellings (Class C3)

- ✓ The Planning Application provides 60no dwellings which equates to a gross density of 25dph.
- ✓ There will be a range of sizes and tenures across the site. The planning application includes detached, semi-detached and terraced forms and include open market and affordable properties.

2.1.2 Affordable Housing

✓ Affordable housing will be provided in a series of clusters and will include affordable (rented and intermediate) properties. Refer to \$106 agreement for further details.

2.1.3 Public Open Space & Green Infrastructure

✓ The planning application will contain 0.35ha of open space (based on Fields in Trust "Six Acre Standard).

The open space will be in the form of a key area of green containing a LAP along with a number of small, pocket parks. The main area of green is located in the south west of the site.

2.2 Layout & Access

2.2.1 Proposed Movement & Access

- The Planning Application contains a well connected movement network, accessible by all users which will help ensure that all areas of the development are easy to navigate, safe and secure. The movement hierarchy clearly defines the main routes and helps achieve a permeable layout.
- ✓ The development proposals have been influenced by "Manual for Streets 1 & 2".



D&AS - Access Plan

[DC: SECONDARY STREET (BUS ROUTE) ST2]

SECONDARY STREETS

[Design Code: TERTIARY STREET - ST3]

SHARED SURFACES

[DC: SHARED SURFACE (COMMUNITY STREET) - ST4]

[not shown - DC: LANES (GREEN EDGE) ST5

& PRIVATE DRIVES / COURTS]

PEDESTRIAN LINKS

SECONDARY STREETS

[DC: TERTIARY STREET - ST3]

SHARED SURFACES

[DC: SHARED SURFACE (COMMUNITY STREET) - ST4]

PEDESTRIAN LINKS

There are 2 main street types within the hierarchy:

Secondary Streets (Design Code - Tertiary Streets - ST3)

Secondary Streets have been designed to promote low vehicle speeds. They will consist of a footway to one or both sides of the street. There will be opportunities for on street parking.

Shared Surface Streets / Private Drives (Design Code - Shared Surface - ST2)

- Shared Surface Streets / Private Drives will be located within quiet residential areas and are characterised by buildings set back at varying distances to create a more interesting street scene.
- Trees will be planted strategically to soften the use of hard paving materials. The streets will contain a mix of on-street and on-plot parking. There will be variations in the width of the carriageway created via pinch points and tree planting.

Amendment to D&A Statement: The Landscaped Avenue (DC ref: Secondary Street (Bus Route ST2) will be addressed thorough a separate planning application.

2.2.2 Footpaths & Cycleways

The Planning Application provides for accessibility by foot and cycle through:

- Pedestrian / cycle links through the site.
- Internal road design to ensure low traffic speeds, promote safe walking and high permeability through the site.
- Attention paid to surface quality to provide definition to public and semi-private areas and resident only areas.



Street Hierarchy

- ✓ Appropriate signage and crossing points including dropped kerbs, tactile paving and guardrails as appropriate.
- ✓ Cycling will be on street, encouraged through high permeability and low traffic movement.

2.2.3 Parking

- ✓ Parking will be designed in line with Manual for Streets. A balanced approach between unallocated and allocated parking has been taken.
- ✓ Courtyard parking has been designed to serve a limited number of properties only.
- ✓ The majority of allocated parking has been provided on-plot either as a parking bay or garage.
- ✓ Disabled and cycle parking will be provided in accordance with the appropriate standards.

Refer to the "Parking Matrix" submitted as part of the Reserved Matters Application.

CAR PARKING PROVISION AT HEYFORD PARK TARGET NUMBER OF NUMBER OF MAXIMUM BEDROOMS NUMBER OF VISITOR SPACES WHEN ALLOCATED MINIMUM ALLOCATED PER DWELLING SPACES SPACE PER DWELLING IS PROVIDED MINIMUM ALLOCATED SPACES 1 1.5 0.25 2 0.25 3 3 0.25 4 0.5 4+

D&AS - Parking Provision

2.2.4 Street Hierarchy Tables

This section demonstrates compliance with p45 of the Approved Design Code - "Street Hierarchy".



	TERTIARY STREET ST3		COMPLIANCY
DESIGN SPEED	20 mph	√	
FOOTWAY	1.8m both sides	✓	
CYCLEWAY	On Road	✓	
VERGE	None	✓	
BUS ACCESS	No	✓	
MAX PROPERTIES	Up to 50	✓	
CARRIAGEWAY WIDTH	5.5 – 6.5 m	✓	Generally minimum 5.5m
ACCESS TO PROPERTIES	100% direct access	✓	
CARRIAGEWAY SURFACING	Asphalt (HRA) with block paved junctions	✓	
VERGE SURFACING	Grass	✓	Grass & planting
FOOTWAY SURFACING	As carriageway	✓	
KERBING	PCC Half Batter Kerb 125mm upstand	✓	
TRAFFIC CALMING OPTIONS C D	Horizontal deflection (left or right build out) calming at 100-150m Horizontal deflection (central pinch point) Raised table (gentle approach ramp) Informal alignment (calming method D)	✓ ✓ ✓ ✓ ✓	Refer to Dwg 0521-PH5-104
SWEPT PATHS	Refuse vehicle and Emergency Service Vehicles	✓	Larger service vehicles
ON STREET PARKING	On street parking bays 2.5 by 6m	✓	Refer to Dwg 0521-PH5-104
FORWARD VISIBILITY	10m	√	
JUNCTION SIGHTLINES	2.4 x 25m	✓	
JUNCTION SPACING	Site Specific	✓	
JUNCTION RADII	4m	✓	Increased to suit service vehicle
STREET LIGHTING (to be agreed at detailed stage with OCC)	Column mounted	✓	To be determined
STATUTORY SERVICES	In footway	✓	
DRAINAGE	Gully or permeable paving	✓	
LANDSCAPE/TREE PLANTING	Regular tree planting on alternating sides of road.	✓	Refer to landscape design

Design Code - Street Hierarchy Table - Tertiary Street ST3

		SHARED SURFACE ST4
DESIGN SPEED		10 mph
FOOTWAY		Shared surface
CYCLEWAY		Shared surface
VERGE		None
BUS ACCESS		No
MAX PROPERTIES		Up to 25
CARRIAGEWAY WIDTH		4.5 – 5.0 m (6m opposite parking/garaging)
ACCESS TO PROPERTIE	ES	100% direct access
CARRIAGEWAY SURFACING		Block paving
VERGE SURFACING		Shrub Planted
FOOTWAY SURFACING		
KERBING		Flush kerb and/or PCC Bull Nosed Kerb 25mm upstand where drainage required
	А	-
TRAFFIC CALMING	В	-
OPTIONS	С	-
	D	-
SWEPT PATHS		Refuse vehicle and Emergency Service Vehicles
ON STREET PARKING		On street informal bays 2.5 by 6m
		10m
JUNCTION SIGHTLINES	5	2.4 x 25m
		Site Specific
JUNCTION RADII		4m
STREET LIGHTING (to be agreed at detailed stage with OCC)		Column mounted
STATUTORY SERVICES		In carriageway (see note below)
DRAINAGE		Gully or permeable paving
LANDSCAPE/TREE PLANTING		Intermittent tree planting.

Design Code - Street Hierarchy Table - Shared Surface ST4

COMPLIANCY

\checkmark	
\checkmark	
✓ ✓ ✓ ✓ ✓ ✓	
\checkmark	
\checkmark	
\checkmark	
✓	
\checkmark	
✓	Block Paving & HRA
\checkmark	
n/a	
\checkmark	
n/a	
n/a	
n/a	
n/a	
✓	Larger service vehicle
\checkmark	Yes 2.5m x 6m
\checkmark	
\checkmark	
\checkmark	
Χ	Increased to suit larger service vehicles
\checkmark	To be determined
\checkmark	
✓	
✓	Refer to landscape design

2.3 Continuity & Enclosure

2.3.1 The planning layout provides:

- ✓ A development that is broadly based on perimeter blocks. Dwellings form a continuation of the adjacent building line. The proposed development will provide frontage over the proposed areas of public open space and provide surveillance over the new Village Green.
- ✓ Where gable ends of dwellings front streets, additional windows have been incorporated to reinforce surveillance over Village Green.
- Particular attention has been paid to the key frontages such as those overlooking the Village Green. These have been designed as a cohesive composition with particular attention paid to massing and architectural style, contributing positively to the quality and character of the place.



D&AS - Key Frontages Plan



Key Frontages

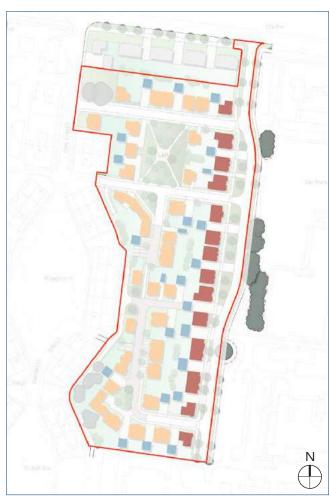
2.4 Scale & Density

2.4.1 Refer to Section 2.1.1 Use and Amount of Development - Residential.

2.5 Building Heights & Massing

2.5.1 The Planning Application shows:

- The height and massing of the proposed development varies across the site according to the nature of the public realm. 2 storey units will be located close to the existing, retained buildings with 2.5 and 3 storey dwellings focussed around the village green and key spaces and locations to provide some local distinctiveness.
- ✓ Variation in heights and massing has been achieved through the use of a range of house types and sizes from 2 to 5 bedrooms.
- ✓ Landmark buildings comprising variation in materials, colour, frontage treatment and architectural style have been included in certain locations to aid legibility of the development.



D&AS - Building Heights Plan

SINGLE STOREY / GARAGES (INDICATIVE)

3 STOREY 2.5 STOREY 2 STOREY 1 STOREY (GARAGES)

2.6 Appearance & Character



Storey Heights Plan

2.6.1 The Design and Access Statement sets out the proposed character areas of the development which are:

- CA1 Village Green, located on the eastern edge of the site boundary
- (Design Code Ref: CA5 Village Green)
- CA2 Core Family Housing
- (Design Code Ref: CA8 Core Housing East)

These describe the individual design elements which aid in making each character area distinct. The following sections demonstrate compliance with these Character Areas.

2.6.2 CA1 Village Green

The Planning Application shows:

Set piece housing that fronts onto the new Village Green. A maximum height of 3 storey, detached and semi-detached dwellings laid out in a formal approach with common building lines and regularised spaces between buildings.



CA1 VILLAGE GREEN

CA1	DESIGN PRINCIPLE	DEFINITION (MANDATORY)
1	URBAN FORM	 Frontage to village green Development will generally be formal, comprising a unified and regular massing of built form that fronts onto the Village Green. Villa style development, with detached and semi detached units will provide a regular rhythm to the space. Coherent groups of house types and styles to be used.
2	BUILDING TYPOLOGY	Detached and semi detached dwellings in the form of villas.
3	DENSITY	• Will generally be medium 30–35dph.
4	BUILDING LINES	Consistent frontages with regular spacing between dwellings. Development will follow a formal fixed building line. Encroachments are allowed in the form of balconies and central projections.
5	HEIGHT / ENCLOSURE	 2/3 Storey. Development should have greater presence than other areas of the scheme. Consideration should also be given to raise the ground floor 400mm to provide greater presence and privacy.
6	ROOFSCAPE	 Pyramidal or full hip roof to all dwellings. A consistent eaves and ridge line should be maintained. Dwellings should have a largely symmetrical plan and facade.
7	SCALE AND PROPORTION	 Relatively deep front to back symmetric buildings proportionate in scale and plot size to its surrounding context. Consistency in plot width across elevations. Eaves and roof line to be consistent across a frontage to maintain a symmetrical approach.
8	BUILDING DETAIL	Symmetrically arranged windows with a greater height than width. There should be a clear unity between building features and a formal geometry.
9	BUILDING MATERIALS	Wall- Render and brick to be dominant/consistent across frontage. Roof - Slate/Slate effect only.
10	LANDSCAPE DESIGN	Consistent and formal planting will match the character of the built form. Tree species will be of a formal habit. The landscape character should be formal and rectilinear in character. Strong connections visual and pedestrian connections are required to the Village Centre. A play area will form a component of this area designed in a manner complementary to the attractive visual prominence of the area.
11	PARKING	Parking will be locating alongside housing and predeominantly be on plot. Parallel or perpendicular parking alongside village green.

Design Code - CA1 - Village Green - Character Area Design Principles

CA1	DESIGN PRINCIPLE	COMPLIANCY		
1	URBAN FORM	✓ Refer to Dwg 0521-PH5-102 Planning Layout, Dwg 0521-PH5-103 Street Scenes & Accommodation Schedule.		
2	BUILDING TYPOLOGY	✓ Refer to Dwg 0521-PH5-102 Planning Layout, Housetype Booklet 0521-PH5-200-227 & Dwg 0521-PH5-103 Street Scenes.		
3	DENSITY	✓ Refer to Section 2.1.1 Use & Amount of Development - Residential.		
4	BUILDING LINES	✓ Refer to Section 2.3 Continuity & Enclosure & Dwg 0521-PH5-102 Planning Layout & Dwg 0521-PH5-103 Street Scenes.		
5	HEIGHT / ENCLOSURE	✓ Refer to Section 2.5 Building Heights & Massing.		
6	ROOFSCAPE	✓ Refer to Housetype Booklet 0521-PH5-200-227 & Dwg 0521-PH5-103 - Street Scenes.		
7	SCALE AND PROPORTION	✓ Refer to Dwg 0521-PH5-102 Planning Layout, Housetype Booklet 0521-PH5-200-227 & Dwg 0521-PH5-103 - Street Scenes.		
8	BUILDING DETAIL	✓ Refer to Housetype Booklet 0521-PH5-200-227.		
9	BUILDING MATERIALS	✓ Refer to Dwg 0521-PH5-108 Materials Layout.		
10	LANDSCAPE DESIGN	✓ Refer to Section 2.7 Landscape Strategy.		
11	PARKING	✓ Refer to Dwg 0521-PH5-102 Planning Layout & Section 2.2.3 Parking.		

2.6.3 CA2 Core Family Housing

The Planning Application shows:

- Simple, formal housing set in a perimeter block format which promotes a strong sense of public and private realm.
- Housing will be a maximum of 2.5 storeys.
- The character of the area has been inspired by the simple Arts and Crafts form found in Carswell Circle and the Officers' Housing.
- Eaves and ridge lines will typically be consistent between groups of buildings but may vary along length of a street.



CA2	DESIGN PRINCIPLE	DEFINITION
1	URBAN FORM	 Arranged in perimeter blocks with strong distinction between public and private realm. The area should have a mixture of formal and informal streets and places, which will be articulated through the landscape and building form and detail. Dwellings will provide clear presence and frontage onto streets and public realm.
2	BUILDING TYPOLOGY	 Detached and semi-detached housing with short terraces. Buildings will be predominantly single family homes. Buildings should be arranged in groups of 4 – 8 units which share similar characteristics to provide consistency across the street scene.
3	DENSITY	• Density will typically be 30 - 35 dph but will vary through the site.
4	BUILDING LINES	 Frontage in terms of setback may vary depending on edge type. Building lines should be consistent between groups of buildings but may vary along the length of the street. Building lines will be permitted to vary forward or back to give emphasis in key locations.
5	HEIGHT / ENCLOSURE	• 2–2.5 Storeys (predominantly 2 storey).
6	ROOFSCAPE	• Eaves and ridge lines will typically be consistent between groups of buildings, but may vary along the length of a street. • Dormer windows should be well set back to break up the roof line.
7	SCALE AND PROPORTION	Buildings and fenestration to encourage asymmetric buildings form, proportionate in scale and plot size to its surrounding context.
8	BUILDING DETAIL	 Traditional details, porch to be pitched or flat canopy with mandatory changes in canopy design between neighbouring dwellings. The houses should be configured to ensure, wherever possible, that windows to habitable rooms front onto the street and public realm. Dwellings should be designed to ensure that there are no blank walls onto the street and public realm.
9	BUILDING MATERIALS	Walls - Brick and render. Roof - Slate/Slate effect and tile.
10	LANDSCAPE DESIGN	Soft landscaping to be simple and largley open frontages Planting to be used screen and break up parking areas.
11	PARKING	Parking will predominantly be on plot. Parking will be configured as part of the public realm design.

Design Code - CA2 -Core Family Housing - Character Area Design Principles

CA2	DESIGN PRINCIPLE	COMPLIANCY		
1	URBAN FORM	✓ Refer to Dwg 0521-PH5-102 Planning Layout, Dwg 0521-PH5-103 Street Scenes & Accommodation Schedule.		
2	BUILDING TYPOLOGY	✓ Refer to Dwg 0521-PH5-102 Planning Layout, Housetype Booklet 0521-PH5-200-227 & Dwg 0521-PH5-103 Street Scenes.		
3	DENSITY	✓ Refer to Section 2.1.1 Use & Amount of Development - Residential.		
4	BUILDING LINES	✓ Refer to Section 2.3 Continuity & Enclosure & Dwg 0521-PH5-102 Planning Layout & Dwg 0521-PH5-103 Street Scenes.		
5	HEIGHT / ENCLOSURE	✓ Refer to Section 2.5 Building Heights & Massing.		
6	ROOFSCAPE	✓ Refer to Housetype Booklet 0521-200-227 & Dwg 0521-PH5-103 Street Scenes.		
7	SCALE AND PROPORTION	✓ Refer to Dwg 0521-PH5-102 Planning Layout, Housetype Booklet 0521-PH5-200-227 & Dwg 0521-PH5-103 Street Scenes.		
8	BUILDING DETAIL	✓ Refer to Housetype Booklet 0521-PH5-200-227.		
9	BUILDING MATERIALS	✓ Refer to Dwg 0521-PH5-108 Materials Layout.		
10	LANDSCAPE DESIGN	✓ Refer to Section 2.7 Landscape Strategy.		
11	PARKING	✓ Refer to Dwg 0521-PH5-102 Planning Layout & Section 2.2.3 Parking.		



STREET SCENE 1 - CORE HOUSING EAST



STREET SCENE 2 - VILLAGE GREEN





2.7 Landscape Strategy

2.7.1 The landscape helps to further define the public and private space whilst adding colour and seasonal interest. Successful green spaces help create more attractive places and provide safer routes and they can also increase flood prevention and sustainable drainage as well as providing better microclimates and enhancing biodiversity.

VILL GRE CARSWELL CIRCLE

D&AS - Landscapes Plan

2.7.2 Landscape Proposals

Public Realm Code

The overall design and character of the public realm will help establish a clear and unified vision for the site that will transcend several development parcels. The design rationale for the external spaces varies depending on location and function, the key aspects of which are scale and orientation of open space, existing landscape features and planting and how this approach links to private gardens and frontages.

Landscape Proposals

The landscape proposals have been designed in close association with the design team and client to help create a cohesive feel to the overall development, creating a contemporary and visually interesting setting to the new buildings.



The proposals shown on the detailed landscape reflect the need for a high quality scheme which links with the architectural style and prominence. Where space allows strategically placed trees along garden frontages and road verges will help to break up the building mass, these predominantly native tree species will link the adjacent trees and woodland areas creating 'green-corridors' through the development and beyond into the surrounding landscape.

Hard landscape treatments as described above will be designed to create interesting features and inviting exploration of the various open spaces.

Open space both within the site and surrounding environs helps to create a relatively soft setting to the scheme, the large area of open space to the village green has a relatively formal character and helps to unify the overall development proposals.

Robust yet simple landscape planting will be implemented which encapsulates a green structure of low native hedgerows, through which larger yet generally small canopied street trees will be implemented such as Tilia and Betula.

All of the retained trees which will be made safe and managed appropriately to an agreed programme of works. Generally, where space permits native shrub planting will be implemented to include species such as Holly, Dogwood & field maple to create vertical height and structure below the existing tree canopies and to help a green matrix throughout the site. It is anticipated that overall the proposals will encourage a range of birds and invertebrates typically found in gardens in the local area and to further this aim, new and existing tree species will be provided with bat and bird boxes.

Whilst the scheme is relatively tight regarding physical space for planting to individual plots the key landscape strategy is to create belts of colour to house frontages, this will be in the form of shrub and herbaceous planting to break the linearity with belts of smooth, curving planting with the structure of low/medium/high planted in waves wrapping through the scheme and leading through from primary to secondary routes, this will unify the scheme and create a sense of place and arrival.

The Local Areas for Play (LAPs) within these phases of the scheme has been designed to provide safe and secure areas for the local residents. The LAPs are individually designed to create distinct characters, specific to each phase, and thus improve orientation and enable local residents to experience a 'sense of ownership' of each space. The general palette of materials consists of selfbinding gravel, benches and open areas of grass with shrub and tree planting. The planting varies between the different LAPS, but is chosen to provide seasonal variation in colour, with strong colours and fragrance to appeal to younger user groups. Feature trees and existing trees have been used to create features of visual interest, and areas of dappled shade. Taller shrubs are located around the boundaries of the spaces to buffer external road activities and noise.

The benches are located to allow resting places whilst overseeing play within the space. Furthermore, each LAP is designed to be surrounded by a bow-top railing (approximately 1200mm in height) and self-closing gate, to enable a secure space for play but with good intervisibility to outside, thus creating a strong perception of safety and prevent any feeling of enclosure.

2.8 Sustainable Building Techniques

2.8.1 Sustainable Building Techniques

The development will be constructed using the latest in building techniques and to the current building regulations.

A full construction specification document has been submitted as part of the application for the approval of reserved matters.

2.9 Crime Prevention

- 2.9.1 The Planning Application responds to best practice guidance in relation to design and crime prevention and shows:
- ✓ Buildings are generally orientated back to back to ensure rear gardens are not exposed.
- ✓ Public open spaces are well overlooked.
- ✓ All routes are necessary and serve a particular function and where there are parking courts these areas serve only a few dwellings and are well overlooked.
- ✓ The internal street network forms a connected loop with lower category roads serving smaller groups of dwellings.
- ✓ Ownerships for external spaces have been clearly identified and are easy to maintain and manage.
- ✓ Natural surveillance is promoted wherever possible.
- ✓ Architectural details which promote natural surveillance have been designed into dwellings including through window positioning and use of bay windows.

2.10 Bus Routes & Refuse Collection

This section demonstrates compliance with pp52/53 of the Approved Design Code - "Bus Routes and Refuse Collection".

2.10.1 Bus Routes and Bus Stops

There are no bus routes or bus stops within this application.

2.10.2 Recycling and Refuse Collection Strategy

✓ The Refuse Storage Plan shows the location of areas for the storage of refuse and recycling. These will be positioned at a maximum distance of 30m from the furthest dwelling curtilage and positioned a maximum of 25m from the nearest adoptable road.

2.10.3 Dwelling Refuse

✓ The Planning Layout provides rear access to each dwelling to allow residents to store containers away from frontages and within the dwelling curtilage.

2.10.4 Apartments and Village Centre Refuse

There are no apartments proposed within this application.



Refuse Storage Plan

2.11 Building Types

This section demonstrates compliance with p114 of the Approved Design Code - "Building Types".

2.11.1 Built Form Guidance - Streetscene Overview

The Planning Application shows:

- \checkmark Creation of active street frontages through movement at building entrances and visibility through fenestration.
- ✓ Visible end elevations treated as part of the street scene.
- ✓ Dwellings will have living spaces fronting streets. No bathrooms or ancillary rooms to dominate street frontage / public realm.

2.11.2 Building Detail

The Planning Application shows:

✓ A relatively simple palette of materials which vary according to character area.

Refer to Dwg 0521-PH5-103 Street Scenes and Dwg 0521-PH5-108 Materials Layout.

2.11.3 Built Form - Architectural Design

The Planning Application shows:

- ✓ Modulation of structural form to create varied, identifiable character. This includes:
- ✓ Deep eaves to provide shading and modelling on walls.
- ✓ Use of simple projections including window bays to provide modulation and shading.
- ✓ Use of deeper door and window reveals (min 65mm) to give a sense of depth to openings.

2.11.4 Built Form Guidance - Fenestration

The Planning Application shows:

- ✓ A hierarchy of parts, reflecting the relative importance of their functions. This includes:
- ✓ Entrances emphasised through set backs, recesses, canopies and steps.
- ✓ Windows of principal rooms (eg lounges and main bedrooms) expressed through larger size or greater prominence.
- ✓ Windows are located to allow ease of surveillance of property, especially at entrances.
- ✓ Scale and proportions of windows have been considered in relation to the facade composition.

2.11.5 Built Form - Materials

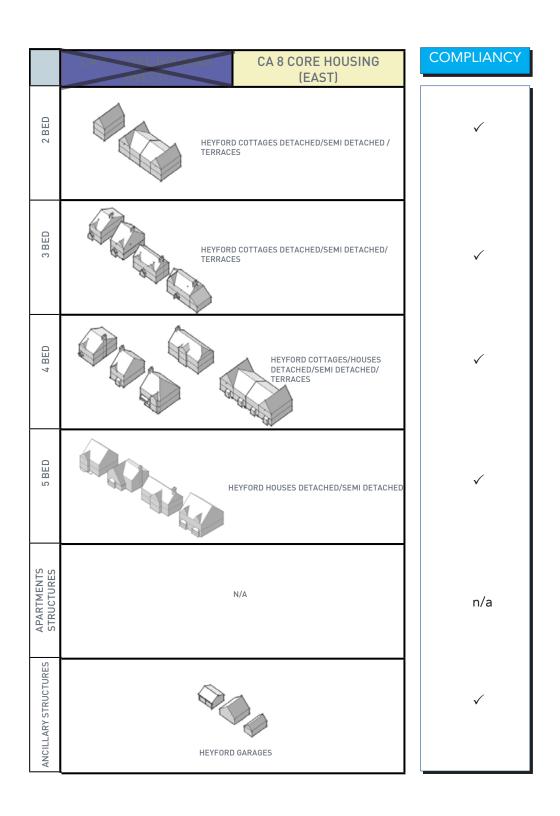
The Planning Application shows:

- ✓ A limited palette of materials which reflect the early 20thC Arts and Crafts architecture, and generally:
- ✓ Maximum 3-4 finishes in a single elevational composition.
- ✓ Change of materials used to express geometry of the building design rather than just for variety.
- ✓ Where buildings form a focus or marker, their main architectural elements such as entrances or projecting elements will be emphasised to create a feature.

2.11.6 Building Typology

The Planning Application complies with the Building Typology Codes as follows:

	CA 5 - VILLAGE GREEN	COMPLIANCY
2 BED	N/A	2 beds included in design for affordable market purposes to comply with s106
3 BED	N/A	3 beds included in design for affordable market purposes to comply with s106
4 BED	VILLAGE GREEN VILLAS DETACHED/ SEMI DETACHED	✓
5 BED	VILLAGE GREEN VILLAS DETACHED/SEMI- DETACHED	✓
APARTMENTS STRUCTURES	N/A	n/a
ANCILLARY STRUCTURES	HEYFORD GARAGES	✓



2.12 Drainage Infrastructure

This section demonstrates compliance with p128 of the Approved Design Code - "Drainage Infrastructure".

2.12.1 On Site Drainage Strategy

The Approved Flood Risk Assessment (FRA) prepared by Waterman sets out the approach to drainage and attenuation across the Upper Heyford site. The FRA makes the following statements/ indications:

- The proposed surface water strategy must mimic the existing situation, restricting flows to the existing rate while taking climate change into account.
- Surface water attenuation will be provided through the use of permeable paving and attenuation tanks where necessary. Swales will be incorporated within the development parcels where appropriate.
- The potential for infiltration techniques will also be investigated further at the detailed design stage, to confirm whether soakage rates are favourable.
- The area known as RMA2 falls within existing catchment area 2 which outfall to the south of the development as part of the "central diversion" network.

2.12.2 Adoption Strategy

It is envisaged that:

 All new primary drainage runs (generally located within adoptable roads) are to be adopted by the Water Company subject to a Section 104 application.

- All existing drainage downstream of the proposed drainage outfalls are to be adopted by the Water Company subject to a Section 102 application.
- All gullies serving the proposed adoptable roads are to be adopted by the County Council subject to a Section 38 application.
- All Storage tanks and swales are to be maintained by the Water Company or management company.
- All drainage not covered by the above will be the responsibility of the homeowners or management company.

2.12.3 Surface water strategy overview

The proposed surface water drainage system will be separate from the foul water system.

Due to the shallow groundwater and underlying rock encountered within the development, infiltration is not a suitable as the primary surface water discharge method for the scheme.

The proposed system has been designed using the latest version of micro drainage simulation software for storm events up to and including a 1 in 100 year return period plus a 30% allowance for climate change.

The area known as RMA2 includes:

- Phase 3 (parcels D1a and D2a)
- Phase 4 (parcels D3a and D4a)
- Phase 5 (former school site D6a)
- Phase 5b (parcel D4a north and D4a west)
- Phase 6 (parcel D4b)
- Cricket pitch

The design for RMA2 has been modelled as a complete system with no additional restrictions limiting where each individual parcel starts/ ends.

The maximum surface water storage volume estimated for each phase is as follows:

- Phase 3 174.8m3
- Phase 4 1263.3m3
- Phase 5 374m3
- Phase 5b 150m3
- Phase 6 214.5m3
- Parcel D4a west 0m3

The current design incorporated Hydrobrakes and orifices to restrict the speed of water passing through the system. Where water backs up due to these controls, oversized pipes and storage tanks have been utilised to ensure the water can be stored within the underground system.

In places the oversized pipes are shown as "twin" runs. This is due to the shallow nature of the drainage system defined by the level of the outfall.

The current design contains 1962.1m cu of underground storage tanks, the majority of which are 1.0m deep and are located within parking or other accessible areas.

A swale is also proposed for surface water attenuation and is currently located along the southern boundary. The swale has been designed as 132m long, 500mm deep with 1:3 side slopes.

The planning layout also requires a length of porous paving (on Phase 6). This will be lined and used for additional below ground attenuation.

Extreme event flood water is to be stored within the road. The proposed site levels will be designed so that the water will be directed away from the entrances to the proposed buildings and flow along designated flood routes.

It is proposed that the cricket pitch will drain by shallow infiltration trenches. This is subject to detailed design.

RMA2 discharges into the existing network to the south west of the phase. Water in the existing network passes through an existing petrol interceptor before discharging to a concrete culvert/ ditch.

In addition to the petrol interceptor, trapped gully pots will provide further protection against contamination from hydrocarbons.

The existing discharge rate at the outfall from the development which includes RMA2 during a 1 in 100 year storm event has been calculated as 253.6l/s.

The proposed discharge rate at the outfall from the development which includes RMA2 during a 1 in 100 year storm event plus a 30% allowance for climate change has been calculated as 250.2l/s.

There is no above ground uncontrolled flooding during a 1 in 100 year event including a 30% allowance for climate change.

2.12.4 SUDS

The SUDS elements proposed on RMA2 (and the downstream system) are:

- Flow control manholes
- Underground tanks
- Porous paving
- Petrol interceptor
- Swale

2.12.5 Foul Drainage

The area known as RMA2 has been designed as a complete system with no additional restrictions limiting where each individual parcel starts/ ends.

The majority of the scheme will flow by gravity through the "central diversion" network, under the Farmer's field to the east and into the existing Sewage Treatment Works.

Based on the current layout and preliminary levels design, 10 plots will discharge into the existing pumpstation located to the South West of RMA2.

