Bovingdon

Design Guidance and Code

Final report

July 2022

Delivering a better world

Quality information

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Revision History

Issue no.	Issue date	Details	Issued by	Position
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		Research, site visit, drawings	Hoorieh Morshedi	Urban Designer
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Contents

Introduction

01

1. Introduction

1.1 About this report

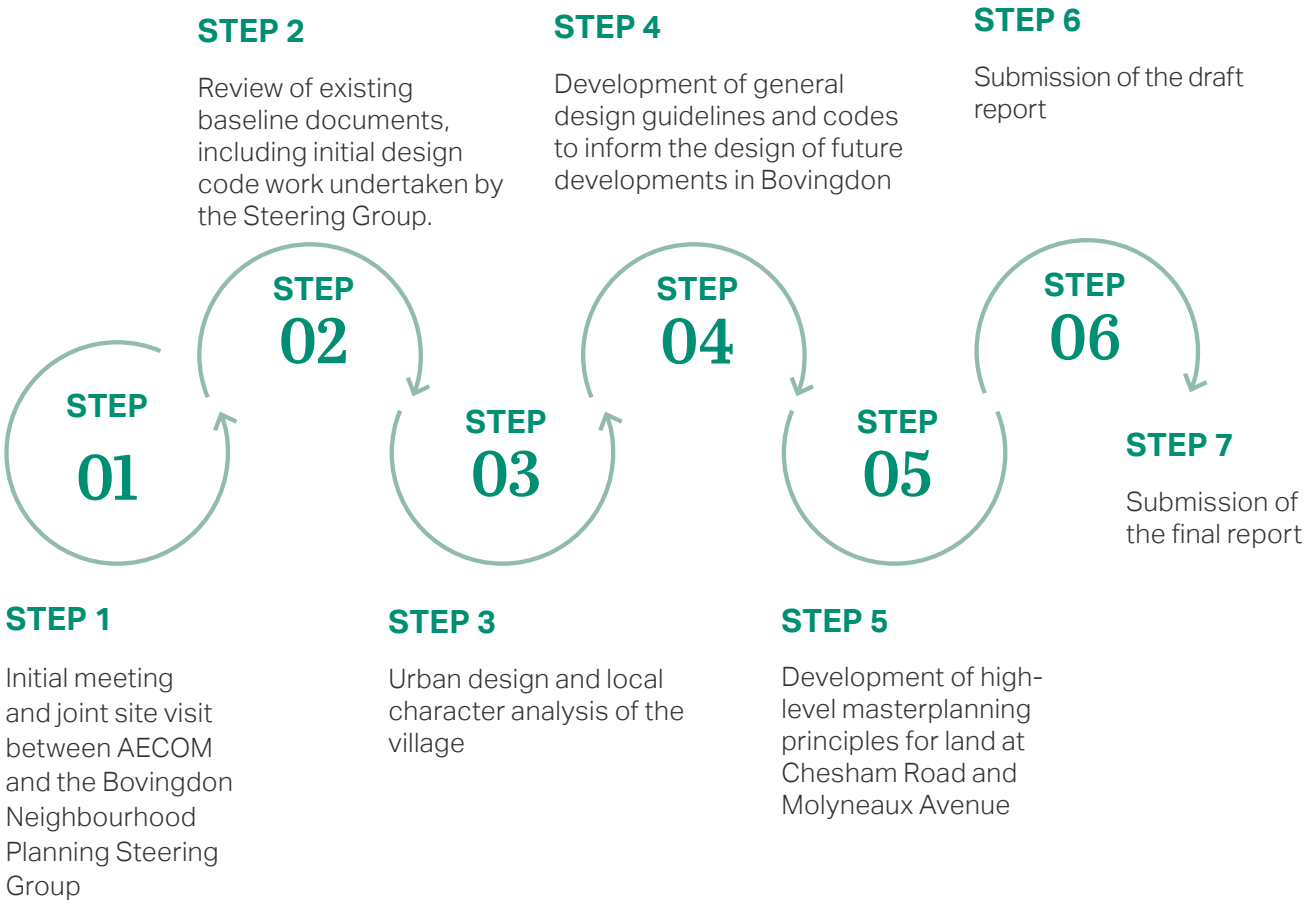
Through the Government's Neighbourhood Planning Technical Support Programme led by Locality, AECOM has been commissioned to provide design support to Bovingdon Parish Council.

The main objective of this report is to provide design guidance (**Chapter 3**) for future development in the Bovingdon Neighbourhood Plan Area to help protect and enhance its special character.

This report also sets out the key masterplanning principles and strategic recommendations for an emerging housing site allocation between Chesham Road and Molyneaux Avenue (**Chapter 4)**, based on the design guidance developed in Chapter 3 of this report.

1.2 Process

The development of this report is informed by an accompanied site visit and engagement with the Bovingdon Neighbourhood Planning Steering Group. **Figure 01** sets out the key steps undertaken to produce this report, as agreed with the Steering Group in an inception meeting.



F.1 **Figure 01:** Key steps involved in the development of the Bovingdon Neighbourhood masterplanning and design guidance

1.3 The Vision for Bovingdon

The development of the design guidance for Bovingdon is informed by the 15-year vision established in the Bovingdon Neighbourhood Plan Vision and Objectives document.

> ***Bovingdon's vision to 2038 is to be a village in which residents enjoy an excellent quality of life, where they feel valued, safe and connected.***
>
> ***Bovingdon will preserve its historic legacy and welcoming character, while ensuring that green spaces are protected and any planned development is sustainable. There will be a flourishing local economy, and the infrastructure will be enhanced to benefit all residents, visitors and businesses.***
>
> ***Development in Bovingdon will strengthen the community, enrich the rural identity and enhance the safe and inclusive essence of the village.***
>
> *-- Bovingdon Neighbourhood Plan Vision and Objectives*

1.4 Area of study

Bovingdon is a large rural village in Hertfordshire with a population of circa 5,200. Located in the Borough of Dacorum, Bovingdon is located approximately 3 miles southwest of Hemel Hempstead and 3 miles northeast of Chesham in the neighbouring county of Buckinghamshire.

Bovingdon Village has historically followed a linear pattern of development along the High Street. Its key amenities are mainly located on the High Street and include: Bovingdon Primary Academy, the Memorial Hall, Bovingdon Library, a supermarket, as well as multiple independent businesses.

Bovingdon's primary movement corridor is the B4505 (Chesham Road/Hempstead Road/Box Lane) which connects the village to nearby settlements including Hemel Hempstead and Chesham. Chipperfield Road, as a secondary corridor links Chesham Road to the M25. Outside of the village centre, the rest of the study area encompasses swathes of agricultural land with a strong rural character. These areas are generally accessed via residential roads.

1.5 Potential development sites

Dacorum Borough Council is currently preparing a new Local Plan which would guide decisions on planning for the future of the Borough up to 2038. Policy SP27 Delivering Growth in Bovingdon of the emerging Local Plan states that at least 241 dwellings will be delivered in Bovingdon within the plan period.

Grange Farm (Bv01) and Chesham Road/ Molyneaux Avenue (Bv02) are identified as potential Growth Areas in the emerging Local Plan, where development will be generally supported. In addition, the Molyneaux Avenue site is also previously allocated in the adopted Local Plan (Policy LA6), with high-level masterplanning principles set out in the adopted Masterplan for Local Allocation LA6 Chesham Road/ Molyneaux Avenue, Bovingdon. In addition, The Bobsleigh has planning permission for 60 homes.

Chapter 4 of this report provides the high-level masterplanning principles for the Chesham Road/Molyneaux Avenue site.

Site reference	Existing condition
Bv02- Chesham Road/ Molyneaux Avenue	**Site area:** 2.6 ha **Location:** The site is bounded by Molyneaux Avenue to the west and Lancaster Drive to the north. **Existing condition:** Vacant land available for residential development

Table 01: Context of the Chesham Road/Molyneaux Avenue Site

F.2 **Figure 02:** Bovingdon Parish's local context, including the location of the Molyneaux Avenue Site

Local Context

02

2. Local Context

2.1 Local character analysis

PHYSICAL FEATURES AND LANDSCAPE

Key landscape features within the village include Bovingdon Green, a green space along Old Dean and Bovingdon Football Club. Bovingdon Green is a historic green space of medieval origins. It is home to the Bovingdon Cricket Club and contains a wildlife-rich pond. The green space along Old Dean serves the surrounding communities and provides children's play space.

Much of the landscape to the east of Bovingdon's urban centre is made up of arable farmland and grassland for grazing and equestrian use. This is supported by the Landscape Character Assessment for Dacorum (2004) which suggests that Bovingdon Village is surrounded by arable farmland on both the Bovingdon and Chipperfield Plateau.

The northwestern urban fabric of Bovingdon is dominated by the former World War II Bovingdon Airfield and Her Majesty's Prison the Mount. The Airfield consists of two runways that dominate the landscape of this area. Officially decommissioned in 1972, the Airfield now hosts the Bovingdon Market on Saturdays at one of its runways and is home to multiple private businesses in leisure and entertainment.

HMP The Mount is a men's prison complex that opened in 1987 at the northwest of the village, between the main settlement and Bovingdon Airfield. It is adjacent to Chesham Road and Molyneaux Avenue site.

Other features of note include King George V Playing Fields, High Street Conservation Area, Boxmoor Trust, Brickworks Nature reserve, St Lawrence Church and 4.5 acre churchyard, and Little Hay Golf Club.

TOPOGRAPHY

Occupying the south-eastern slopes of the Chiltern Hills 150 metres (500 feet) above sea level, Bovingdon is on the fringe of the Chilterns Area of Outstanding Natural Beauty. To the northwest lies the higher regions of the Chilterns and the Aylesbury plains. To the south-east, there is the Thames Valley area which leads onto the sprawling conurbation of Greater London.

There is a dip in the Bovingdon plateau that forms part of the dry river valley of Whippendell. The valley runs from Bovingdon to the Gade Valley near Watford. On the other side of the village, the land stretches westwards into the neighbouring county of Buckinghamshire and down towards the historic market town of Chesham.

VIEWS

Multiple key views have been identified within the study area, including:

1. Bury Farm westwards towards Church;
2. Stoney Lane southeastwards towards Homefield Spring;
3. Chipperfield Road northeastwards to Ryder Memorial;
4. Mounts Hill eastwards towards Great Wood;
5. Footpath BV29 southwards towards Strawberry Woods; and
6. Footpath BV16 between Homefield Spring and Rainhill Dell looking southwestwards (see **Figure 08**).

HERITAGE

Bovingdon was first named in c.1200 as it only emerged as a settlement during the medieval period. It is believed that a church or chapel was built in at least c.1200, at the current site of the Church of St Lawrence. The tower is medieval and the majority of the church was rebuilt in 1840s.

Previously part of the Parish of Hemel Hempstead, Bovingdon became an independent parish in 1834.

The historic core of Bovingdon was first designated as a Conservation Area in 1974, owing to its special architectural and historic character. The Conservation Area has since been revised and extended in 2012 (see **Figure 08**).

Some of the key heritage assets in Bovingdon include:

- Bury Farm and Yewtree Farm;
- No. 84-86 High Street;
- 104 High St;
- Bull Cottages;
- Ryder Memorial as a key landmark of Bovingdon's historic core;
- The flint-built Church of St Lawrence from the mid-1400s, with its tower added towards the end of the century. The Church and its churchyard are key landmarks within the Conservation Area and in Bovingdon;
- Buildings around Bovingdon Green; and
- Old airbase settlements

Figure 03: View from High Street to the Grade II listed Ryder Memorial

Figure 04: The Grade II listed Bell Public House along High Street

Figure 05: The Grade II* listed Church of St Lawrence

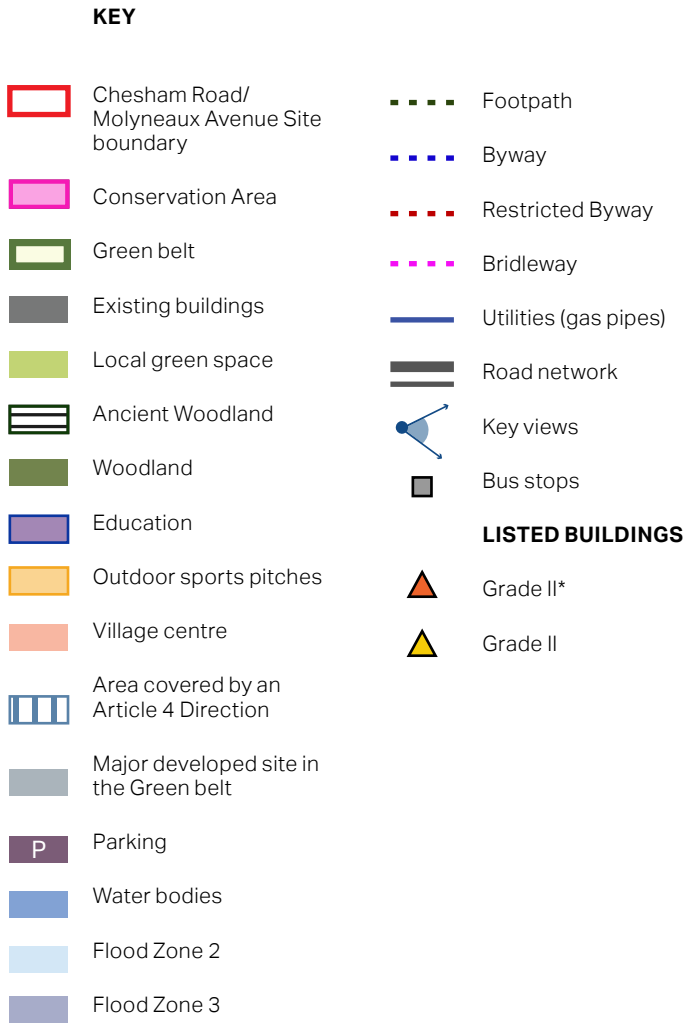
Figure 06: View towards Bovingdon Green, a massive open space located to the south of the village

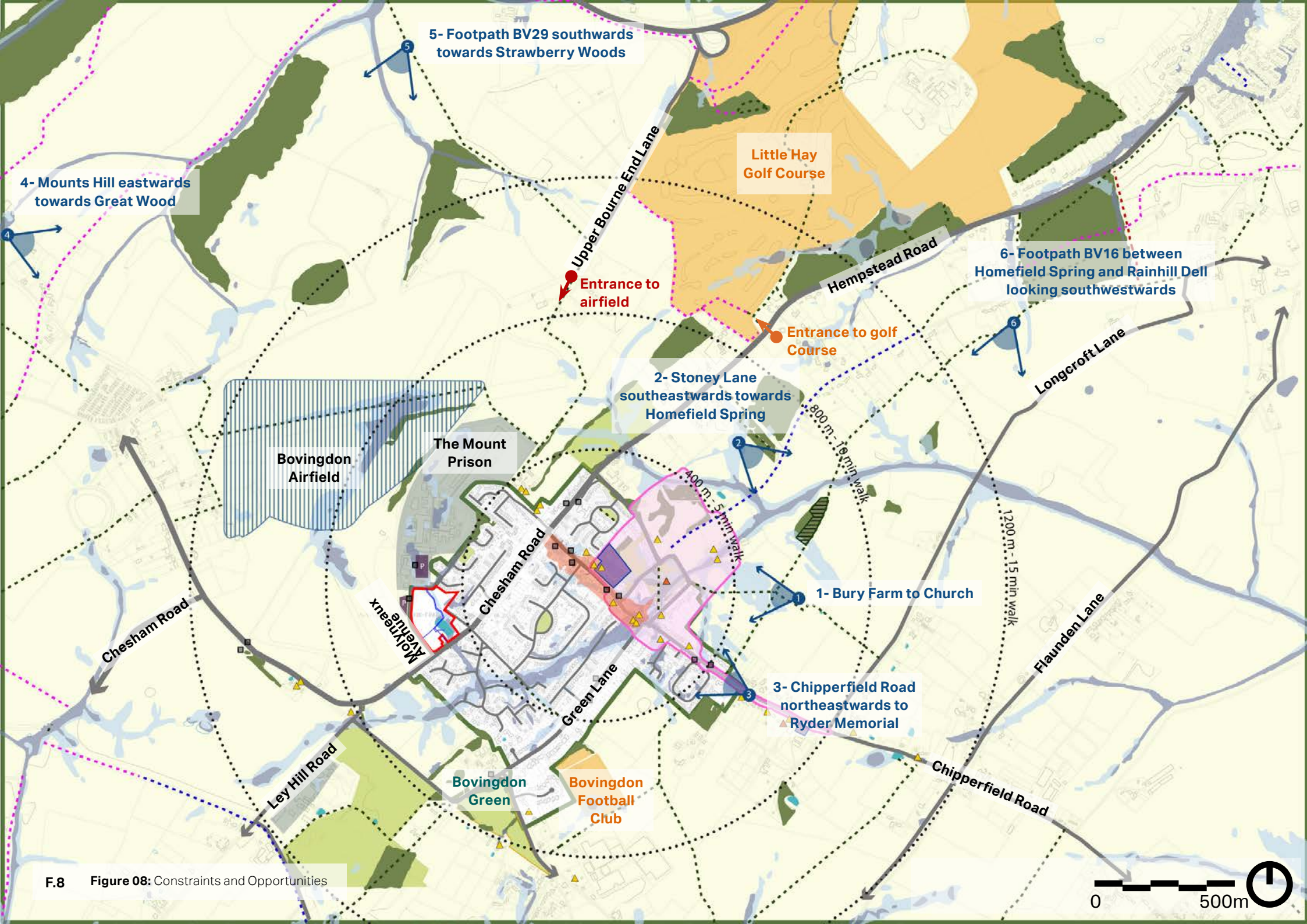
Figure 07: Green Lane with front gardens sloping slightly toward the street

ACCESS

The primary movement corridor within the study area is the B4505 (Chesham Road/ Hempstead Road/Box Lane) which runs through the village and forms a T junction with High St. It provides vehicular links to the neighbouring towns of Hemel Hempstead (northeast) and Chesham (southwest).

Local bus services in Bovingdon provides key links to neighbouring towns and villages. While there are no railway stations within the study area, there are several train stations nearby, including Hemel Hempstead, Apsley and Berkhamsted, provide frequent services to the region and Greater London. There is a need to develop pedestrian routes reaching out of the parish as alternatives to road travel.





F.8 **Figure 08:** Constraints and Opportunities

2.2 Land use

The distribution of land uses across Bovingdon is typical of similar-sized settlements. Figure 13 illustrates the range of uses, including retail, education and community facilities, sited along Bovingdon's village centre (High St and Chipperfield Road). Beyond the High Street, most plots within the settlement are in residential use, with others in agricultural and industrial uses separated from the main village via open spaces.

A notable addition to the area's land use composition is the large prison complex (HMP The Mount) situated to the northwest of the village. This complex dominates the village since it covers the single largest area of any of the land uses.

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Figure 09: Mixed use development with flats on top of pharmacy on the High Street


F.10

Figure 10: An example of a small retail shop converted from the historic Reading Room


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Figure 11: The Grade II* listed Church of St Lawrence on Church Street


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Figure 12: Bovingdon Primary Academy on the High Street

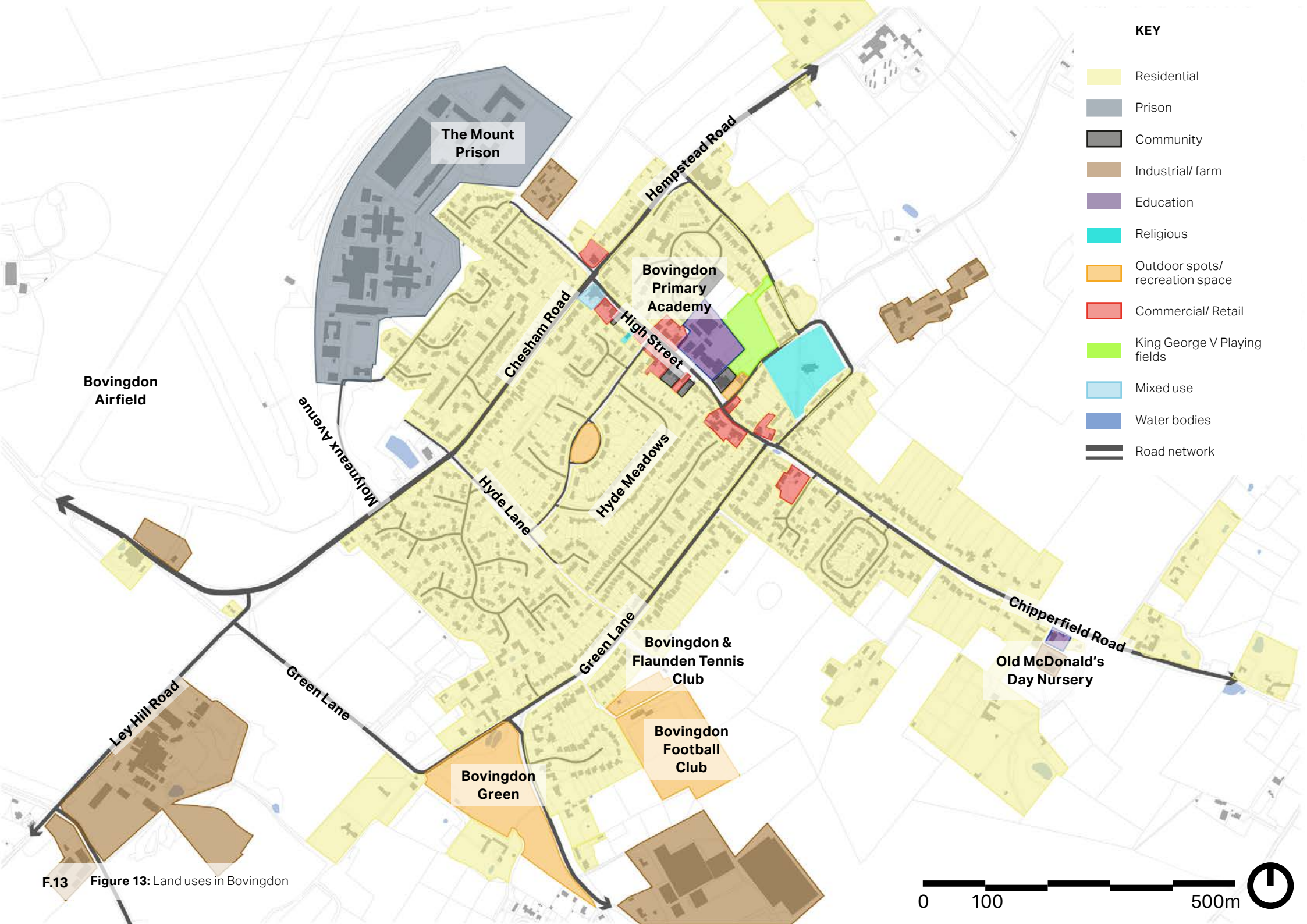


Figure 13: Land uses in Bovingdon

2.3 Movement

PEDESTRIAN AND CYCLING NETWORK

Bovingdon has an extensive footpath and byway network (**Figure 18**). The village's rural character makes it particularly walkable and accessible for pedestrians.

STREET NETWORK

Vehicular movements in Bovingdon are concentrated along the B4505 and High St/ Chipperfield Road. It is connected to the network of local residential roads providing access to homes across the village.

SUSTAINABLE TRANSPORT

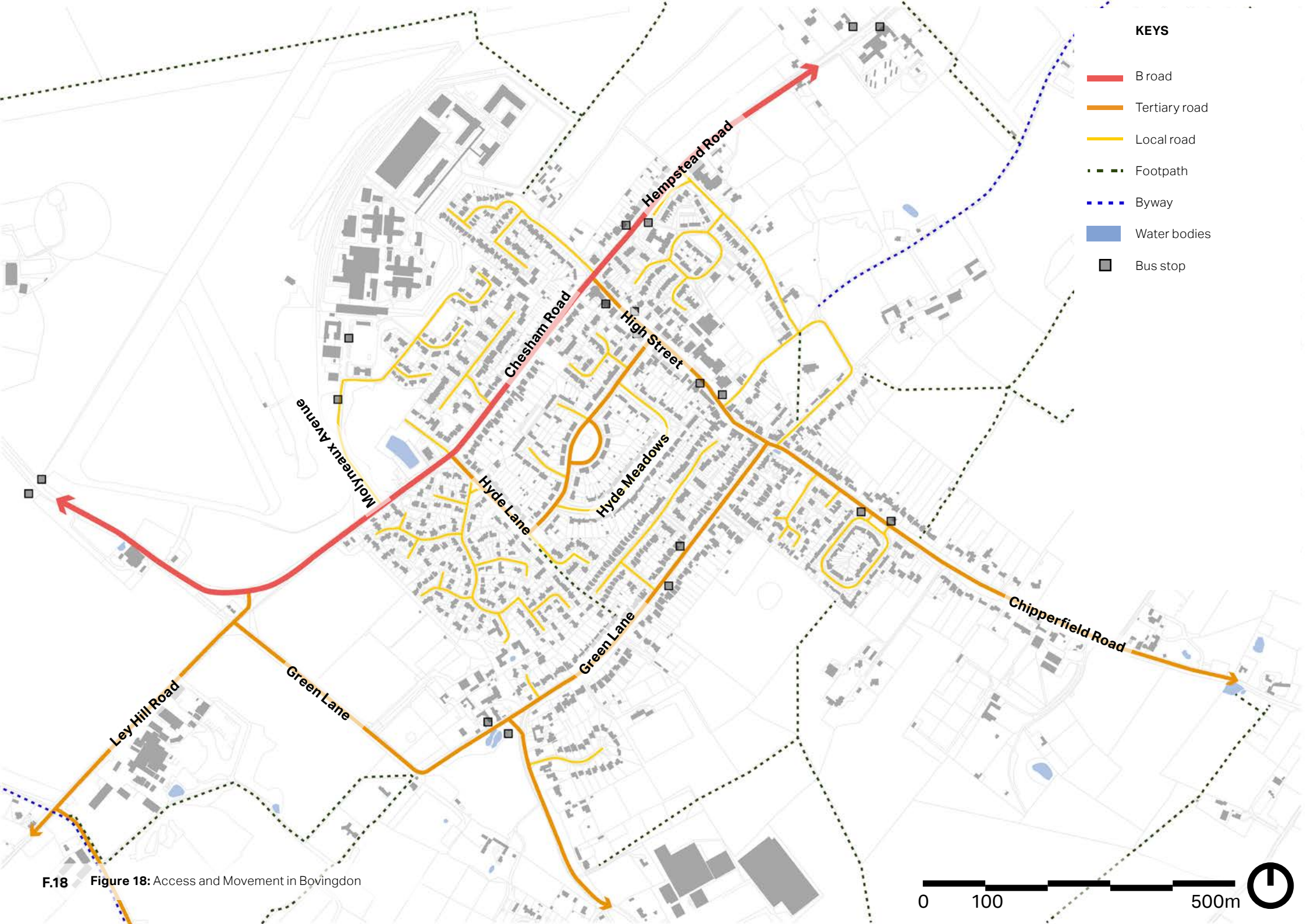
Public transport in Bovingdon is limited to bus services with regular connections to neighbouring towns and villages, including Chesham, Hemel Hempstead, Watford, Chipperfield, High Wycombe, Hazlemere and Amersham.

Figure 14: High Street as main movement corridor within the village

Figure 16: Old Dean, a local road with green verges and footpaths on both sides

Figure 15: Hempstead Road (B4505) with a footpath with green verges on one side

Figure 17: Footpath on Stoney Lane provides a good pedestrian connection to the northeast of the village



F.18 **Figure 18:** Access and Movement in Bovingdon

2.4 Density and massing

Most buildings in Bovingdon are 2 storeys, although there are occasionally some 3-storey buildings on High Street.

The density and scale of developments vary within the village (See **Figure 23**). The size of front and back gardens, road width and open space can impact the density in any given development.

For example, outer areas around Chipperfield and Green Lane are of lower density, whereas properties along High Street are of higher density due to their compact configurations.

Figure 19: Low density developments (4 dph) on Chipperfield Road with wide roads, green verges and footpaths on both sides

Figure 21: Low density developments (19dph) on Hyde Lane next to Molyneaux Avenue Site

Figure 20: Medium density developments (29 dph) on Nye Way. Properties have medium-size front gardens.

Figure 22: Compact development (48dph) to the north east of High Street with narrow roads , less open space and green verges

 Figure 23: Selected density in Bovingdon

2.5 Environmental and Heritage Designations

GREEN BELT

Most of the built-up area of Bovingdon is surrounded by the Green Belt, with the exception of the prison, industrial land and some outlying dwellings at the edge of the settlement. Development within the Green Belt would need to comply with national and local Green Belt policies and maintain the Green Belt's open character.

Figure 25: View north from Hempstead Road to the Green Belt

Figure 24: View from Green Lane to Bovingdon Green

Figure 26: Bovingdon Green within the Green Belt

F.27 **Figure 27:** Green Belt designations in Bovingdon

HERITAGE ASSETS

Designated in 1974 and extended in 2012, the Bovingdon Conservation Area covers the historic core of Bovingdon in recognition of its special architectural and historic character (**Figure 31**). There are various listed buildings in the village such as:

- **Church of St Lawrence** (List Entry Number (LEN): 134832), a Grade II* listed building built of flint, stone dressings, old stonework in clunch and steep slated roofs;
- **Yew Tree Farm** (LEN: 1100480), a Grade II listed building from the 17th century. This is previously a farmhouse built of a steep old red tile roof, timber frame cased in red brickwork and tile-hung upper floor at front; and
- **The Bell Public House** (LEN: 1172685), a Grade II listed building from the early 18th century built of a painted brick front with a steep old red tile roof.

In addition, there are some Locally Listed Buildings identified by Dacorum Borough Council[1].

F.28

Figure 28: View to High Street from Chipperfield Road

F.29

Figure 29: Church of St Lawrence, a Grade II* listed building, on Church Street

F.30

Figure 30: Yew Tree Farm, a Grade II listed building, on Chipperfield Road

1. http://www.dacorum.gov.uk/docs/default-source/planning-development/cons-appraisal-bovingdon-2011.pdf?sfvrsn=8a4d0d9f_0

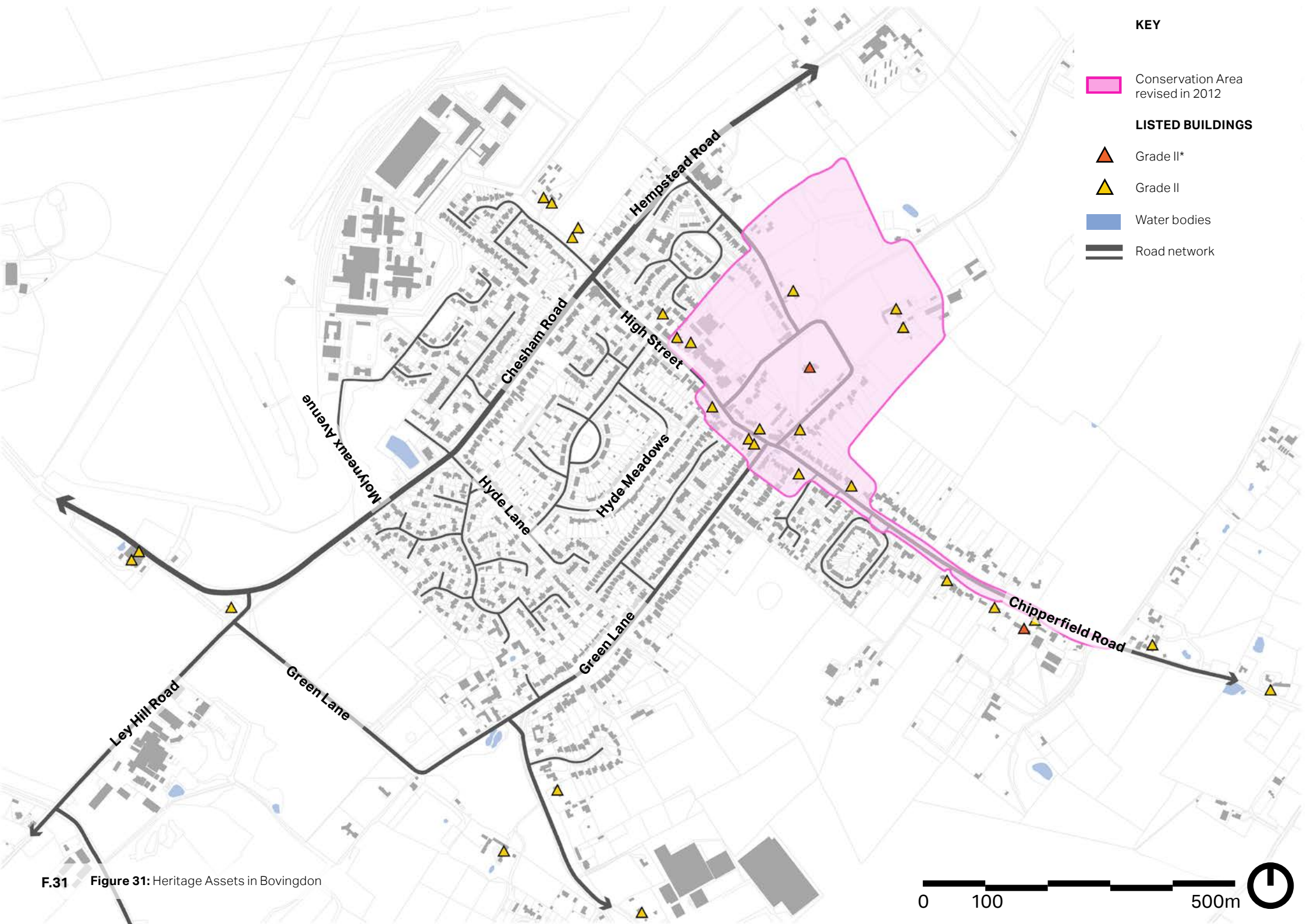


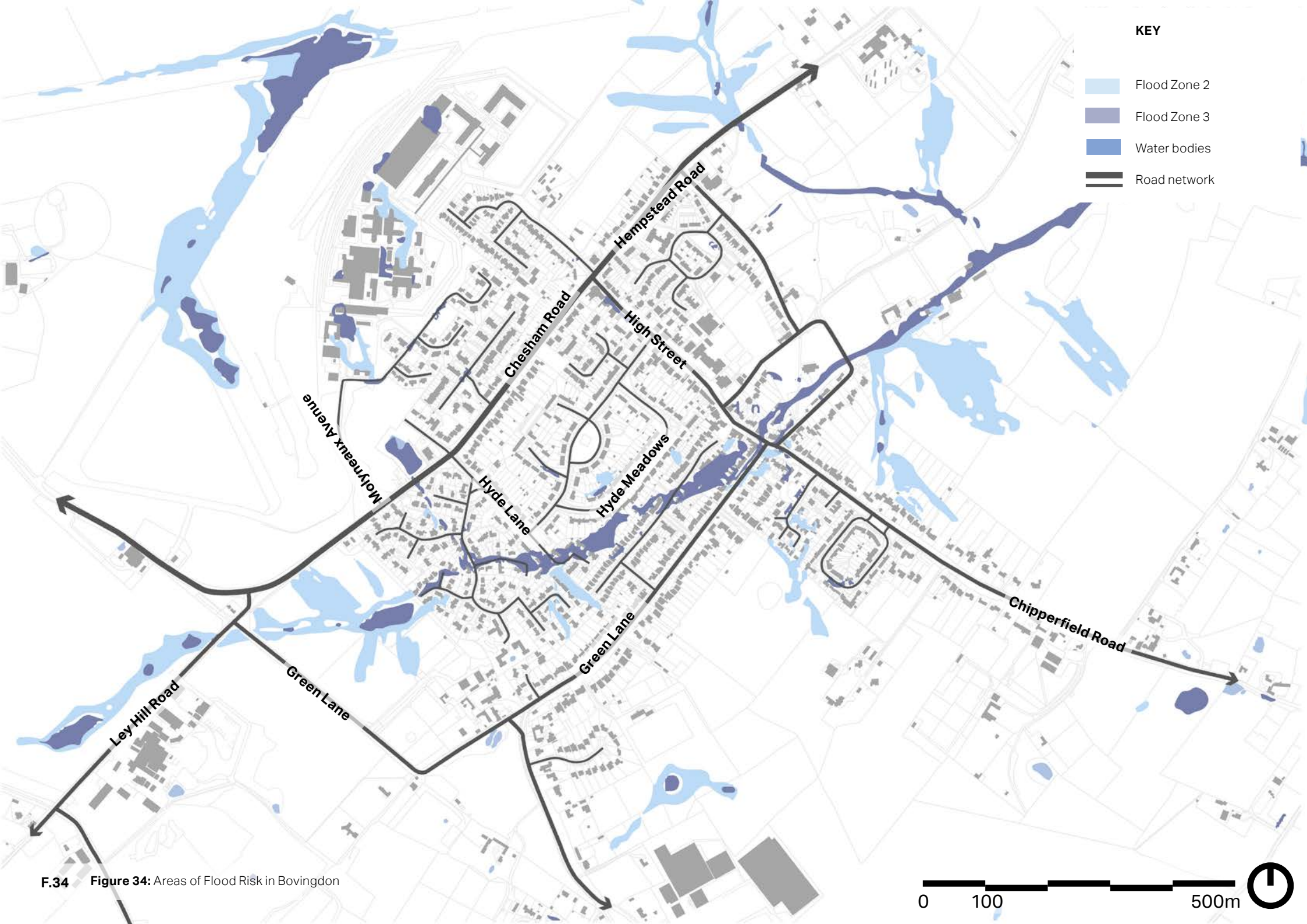
Figure 31: Heritage Assets in Bovingdon

FLOOD RISK

Parts of the study area falls within Flood Zone 2 and 3 (Figure 34). This is concentrated along the low-lying areas in Bovingdon, including the Molyneaux Avenue site, Green Lane, Middle Lane and HMP the Mount.

Figure 32: The Docks Pond adjacent to Ryder Memorial on High Street

Figure 33: The pond in Molyneaux Avenue Site



F.34 **Figure 34:** Areas of Flood Risk in Bovingdon

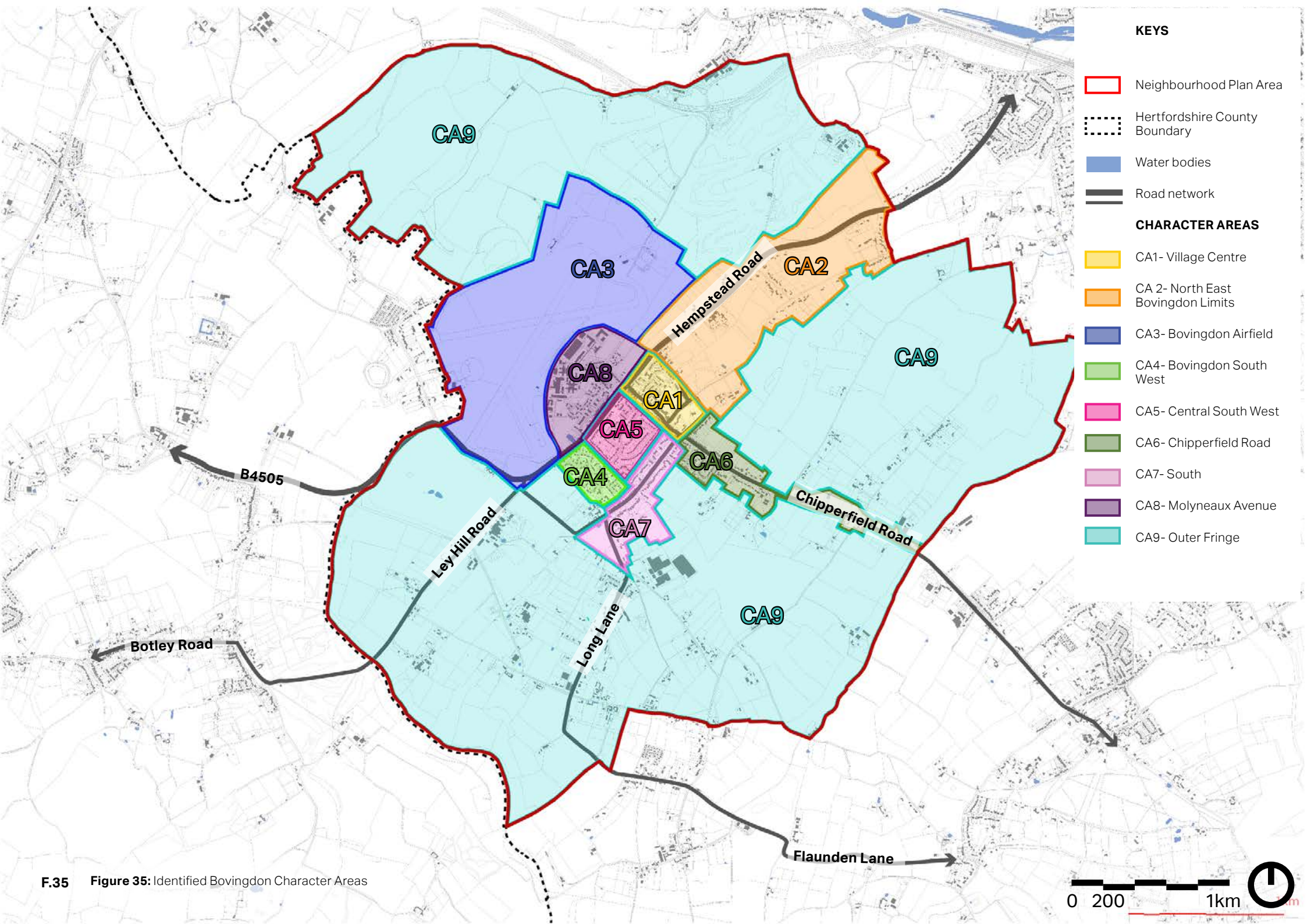
2.6 Character areas

Building on the local context analysis, this section identifies character areas within Bovingdon based on the following characteristics:

- Build types & structures
- Built form, scale and heights
- Common materials
- Details and features
- Plot boundaries
- Front garden
- Roofscape
- Public realm

Figure 35 illustrates the 9 Character Areas identified by the Bovingdon Neighbourhood Planning Steering Group. These are:

- CA1: Village Centre
- CA2: North East Bovingdon Limits
- CA3: Bovingdon Airfield
- CA4: Bovingdon South West
- CA5: Central South West
- CA6: Chipperfield Road
- CA7: South
- CA8: Molyneaux Avenue
- CA9: Outer Fringe (Long Lane, venus Hill, Chipperfield Road, Pudds Cross, Stantock Hall)



F.35 **Figure 35:** Identified Bovingdon Character Areas

CA1: VILLAGE CENTRE

As Bovingdon's village centre, this is where the historic linear pattern of the village is visible along High Street. Land use along High Street is varied but has a dominant retail offering. Part of the area lies within the Conservation Area due to the village's historic core hosting numerous heritage assets such as the Grade II* Listed St Lawrence Church. Successive periods of development have radiated from the High Street in creating residential estates such as those surrounding St Lawrence Close.

Figure 36: Village Centre Character Area

Factors	Characteristics
Build types & structures	Development forms a linear pattern along the historic core of Bovingdon which runs down High Street. Successive development has radiated from High Street and has formed a housing estate pattern with several cul-de-sacs.
Built form, scale and heights	Variety of build types ranging from small historic cottages to more recent and larger developments (i.e. Memorial Hall and Bovingdon Primary Academy). Residential typologies include cottages, apartments, terraces, semi-detached and detached dwellings. Building heights range between 1-3 storeys with 2 storeys being the most common.
Common materials	Red brick; pale render; timber; red clay tiles; welsh slate tiles
Details and features	Many of the historic buildings are characterised by timber framing, pale render and sash windows.
Plot boundaries	Hedgerow; picket fences; low-rise brick walls; direct frontage onto pavements
Front garden	Setbacks range greatly throughout the area with the village's historic development directly fronting the pavement while later residential developments have significant setbacks from the main road (High Street).
Roofscape	Heterogeneous roofscape due to a variety of development periods. Range of roof typologies, orientations and heights with red clay and welsh slate roof tiles being the most common roof materials.
Public realm	Double paved streets that can become increasingly narrow in places (i.e. historic core). Grass verges are commonplace with street furniture such as benches scattered along busier streets such as High Street.

Table 02: Key characteristics of CA1 Village Centre

F.37

Figure 37: Central Bovingdon where High Street becomes Chipperfield Road

F.38

Figure 38: The Grade II* Listed St Lawrence Church

F.39

Figure 39: Mixed use with residential above along High Street

F.40

Figure 40: Recent mixed-use development along High Street

F.41

Figure 41: This is purpose built sheltered accommodation with shared facilities along St Lawrence Close

CA2: NORTH EAST BOVINGDON LIMITS

This area is characterised by a largely rural landscape with residential development forming a sporadic and linear pattern along the area's roads. Hempstead Road (B4505) runs through the area and is the Neighbourhood Plan area's primary access route and movement corridor, connecting Bovingdon to Hemel Hempstead. The area includes a large disused hotel complex that fronts Hempstead Road. The Bobsleigh development has planning permission for 60 homes.

F.42

Figure 42: North East Bovingdon Limits Character Area

Factors	Characteristics
Build types & structures	Development forms a linear pattern along Hempstead Road, Bushfield Road, Bury Rise and Stoney Lane, sometimes sporadically.
Built form, scale and heights	Generally large building footprints due to the presence of mansion-style buildings such as the disused hotel complex and Mountbatten House apartment complex. Height of development ranges between 2 and 3 storeys.
Common materials	Red brick; welsh slate; red clay tiles
Details and features	Grand entrances to dwellings; mansion-style decor; dense vegetation obscuring properties from street-level; rural landscape
Plot boundaries	Hedgerows; dense vegetation; red brick walls
Front garden	Very substantial setbacks due to the size and scale of each dwelling. A significant amount of land surrounds most dwellings within the area.
Roofscape	Varied roof orientations and sizes due to large and heterogeneous scaling of dwellings. Mostly hip roofs made of either welsh slate or red clay tiles.
Public realm	Generally double paved streets. Hempstead Road has substantial grass verges separating road from pavement with some stretches of the road having single-sided paving only.

Table 03: Key characteristics of CA2 North East Bovingdon Limits

Figure 43: Pavement along Hempstead Road guarded by safety railings

Figure 44: Mountbatten House apartment complex fronting Hempstead Road

Figure 45: Increasingly rural landscape along Hempstead Road as travelling further away from Bovingdon

Figure 46: Many homes within the area are obscured by dense vegetation and substantial setbacks

Figure 47: Mountbatten House along Vicarage Lane

CA3: BOVINGDON AIRFIELD

This area is home to the historic Bovingdon Airfield constructed during 1941/42 and where the RAF Bomber Command took up residence. Since being decommissioned in 1972 the site has lent its open space and two runways to a variety of uses including as a home to Bovingdon Market, ITV Studios, and various leisure businesses.

F.48
Figure 48: Bovingdon Airfield Character Area

Factors	Characteristics
Build types & structures	Development dominated by the two decommissioned runways. All other development includes sporadic outbuildings / storage facilities. A subsequent lack of any form of road network due to the presence of the airfield.
Built form, scale and heights	Generally large building footprints due to the nature of building use in the area (i.e. TV studios and leisure). Development ranges between 1 and 2 storeys.
Common materials	Red brick; steel
Details and features	Large open spaces; two decommissioned runways; rural landscape
Plot boundaries	Fencing; mature planting; brick walls
Front garden	N/A
Roofscape	The small number of buildings within the area generally have sheet metal roofing
Public realm	Public realm substantially lacking due to the privately owned airfield dominating the character area. There are public footpaths across the airfield.

Table 04: Key characteristics of CA3 Bovingdon Airfield

F.49

Figure 49: One of two access points to Bovingdon Airfield from Chesham Road (Source: Google Maps)

F.51

Figure 51: Upper Bourne End Lane leading towards Bovingdon Airfield (Source: Google Maps)

F.50

Figure 50: View into Bovingdon Airfield from Chesham Road (Source: Google Maps)

CA4: BOVINGDON SOUTH WEST

A late 20th century suburban residential housing estate which is solely accessed via either Pembridge Road or by the public rights of way between Hyde Lane, Eastnor and Haymer Close. The road acts as the development's primary movement corridor connecting to the numerous residential cul-de-sacs. The area is made up of a variety of housing typologies from several decades of the late 20th century, along with several infill developments from the 21st century.

Figure 52: Bovingdon South West Character Area

Factors	Characteristics
Build types & structures	Numerous residential cul-de-sacs radiating from Pembridge Road, which acts as the developments primary movement corridor
Built form, scale and heights	Range of housing typologies from successive decades of development including: terraces, semi-detached dwellings, detached dwellings, and apartments. Building heights predominantly 2-storeys with exception of 3-storey apartment buildings.
Common materials	Red brick; pale render; welsh slate; red clay tiles; wooden panelling
Details and features	Several car parking bays / car park spaces; grass verges
Plot boundaries	Red brick walls; wooden fencing; many dwellings lacking boundaries
Front garden	Setbacks vary between small grassed front gardens and more sizeable setbacks that include driveways
Roofscape	Generally gable end roofs made of red clay tiles with the exception of several dwellings with hip roofs and slate materiality
Public realm	Double paved streets with grass verges are commonplace throughout the area. The areas higher density developments (i.e. apartment complexes) are surrounded by grassed shared spaces and mature trees.

Table 05: Key characteristics of CA4 Bovingdon South West

Figure 53: Semi-detached dwellings fronting Dinmore

Figure 54: On-plot parking with garages

Figure 55: Gravelled shared car parking area

Figure 56: Grass shared spaces and mature trees on Dinmore

Figure 57: A semi-detached property without boundary treatment

CA5: CENTRAL SOUTH WEST

Central South West is a mid-20th century residential area that has extended from Bovingdon's historic core along High Street. Old Dean radiates south from High Street where it runs through the character area before reaching a circular green space located at the core of Central South West. The primary movement corridor of the area is Chesham Road (B4505) which connects Bovingdon with the nearby town of Chesham.

F.58
Figure 58: Central South West Character Area

Factors	Characteristics
Build types & structures	Large housing estate centred around a circular green space along Old Dean. Generally homogeneous development due to being tandem / masterplan development. Some more recent infill development along Chesham Road.
Built form, scale and heights	Predominantly 2-storey semi-detached dwellings with the exception of Chesham Road which includes numerous detached dwellings and bungalows ranging between 1 and 2 storeys.
Common materials	Red brick; pale render; welsh slate roof tiles
Details and features	Mature trees lining streets; high volume of greenery (i.e. grass verges)
Plot boundaries	Hedgerows; wooden fencing
Front garden	Majority of dwellings have substantial setbacks made up of grassed or planted front gardens and / or driveways
Roofscape	Mixture of welsh slate gable end and hip roofs. Generally continuous rooflines throughout the area due to scale of development.
Public realm	Double paved streets with generous grass verges and mature trees lining some streets. Central circular green space along Old Dean with children's playground, basic street furniture (i.e. benches) and planting

Table 06: Key characteristics of CA5 Central South West

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Figure 59: Large double-fronted semi-detached dwellings along Old Dean

F.60

Figure 60: Central green space with children's playground on Old Dean

F.61

Figure 61: Hyde Meadows adorned by mature trees and grass verges

F.62

Figure 62: Semi-detached dwellings fronting Old Dean's central green space

F.63

Figure 63: Wooden fencing as boundary treatment on Old Dean

CA6: CHIPPERFIELD ROAD

This area encompasses Chipperfield Road and includes predominantly linear residential development between High Street and Tower Hill. Chipperfield Road is one of the Neighbourhood Plan area's key movement corridors that provides access from the south east, providing connections to the nearby parish of Chipperfield. Development throughout the area varies greatly due to successive periods of development from historic to present day.

Figure 64: Chipperfield Road Character Area

Factors	Characteristics
Build types & structures	Mostly linear development along Chipperfield Road with the exception of several small housing estates (i.e. Yew Tree Dr; Austins Mead; Farriers Close) that radiate from the south of the road.
Built form, scale and heights	Variety of building footprints with most of the development fronting Chipperfield Road including large detached dwellings and historic cottages/ farm buildings. Building heights mostly 2-storeys with some occasional 1.5 storey developments.
Common materials	Red brick; pale render; red clay roof tiles
Details and features	Mature trees; large grass verges
Plot boundaries	Hedgerows; mature planting; wooden fencing;
Front garden	Most dwellings fronting Chipperfield Road have large setbacks due to extensive front gardens and / or driveways. Large grass verges also lie between plot boundaries and the road.
Roofscape	Heterogeneous roofscape due to variety of development periods. Range of roof typologies including hip roofs, gable ends, and jerkinheads.
Public realm	Chipperfield Road has large grass verges and is mostly double paved with the exception of some stretches which have single paving. All other streets are generally double paved and have occasional grass verges.

Table 07: Key characteristics of CA6 Chipperfield Road

Figure 67: Chipperfield Road looking up towards Bovingdon Village Centre

Figure 65: Former Public House, The Bull, fronting Chipperfield Road

Figure 66: Detached dwellings with large setbacks from Chipperfield Road

Figure 68: Austins Mead housing estate located just off Chipperfield Road

Figure 69: Recent residential development on Farriers Close

CA7: SOUTH

This area's development forms a linear pattern along Green Lane which runs through and connects to numerous quieter residential cul-de-sacs and streets. The area is also home to several key open spaces including Bovingdon Green/Pond and Bovingdon Football Club. Bovingdon Green has medieval origins and comprised of several cottages surrounding the Green and nearby rural lanes.

F.70
Figure 70: South Character Area

Factors	Characteristics
Build types & structures	Development follows a linear pattern along Green Lane with later residential streets and cul-de-sacs radiating from it
Built form, scale and heights	Generally large building footprints along Green Lane and adjacent Bovingdon Green due to significantly sized 2-storey detached dwellings and single storey bungalows. Development along Green Lane's radiating streets and cul-de-sacs includes smaller scale detached dwellings, 1.5 storey bungalows, and 2-storey semi-detached dwellings.
Common materials	Red brick; welsh slate roof tiles
Details and features	Large grass verges; open green spaces (i.e. Bovingdon Green/Pond, Bovingdon Football Club, fields)
Plot boundaries	Hedgerows; red brick walls
Front garden	Generally large setbacks due to large front gardens and / or driveways, especially along Green Lane.
Roofscape	Heterogeneous roofscape due to variety of development periods. Common roof typologies including hip roofs and gable ends.
Public realm	Green Lane is characterised by large grass verges and is mostly double paved with the exception of some stretches. Large green open spaces include Bovingdon Green/Pond as well as there being several sports/recreational spaces.

Table 08: Key characteristics of CA7 South

Figure 71: More recent 21st century development fronting Hyde Lane

Figure 72: Bovingdon Green and Bovingdon Cricket Club

Figure 73: Detached dwellings fronting Green Lane

Figure 74: Typical dwelling along Green Lane

Figure 75: Recent infill development of a detached dwelling on Hyde Lane

CA8: MOLYNEAUX AVENUE

This area is dominated by the HMP The Mount which is a complex of large buildings surrounded by a perimeter wall/fence. The rest of the area is made up of residential housing estates that lie between the prison and Chesham Road. This area also includes the masterplan site which is located between Molyneaux Ave, Chesham Road, and Hyde Lane.

F.76

Figure 76: Molyneaux Avenue Character Area

Factors	Characteristics
Build types & structures	Large gated prison complex with several small residential housing estates located to the east of the prison
Built form, scale and heights	Prison complex includes very large buildings as well as internalised open spaces. Surrounding residential development predominantly 2-storey semi-detached dwellings and 2-storey terraces along with several 2-storey detached and 3-storey apartment buildings.
Common materials	Red brick; orange-red brick; yellow brick; welsh slate tiles; red clay tiles
Details and features	Large prison complex; couple of large green spaces
Plot boundaries	Hedgerows; wooden fencing
Front garden	Setbacks generally made up of averagely sized front gardens with / or driveways
Roofscape	Contrasting roofscapes between the prison buildings and that of the lower lying residential development. Typical residential roof types include gable ends with welsh slate materiality
Public realm	Several open green spaces (incl. Molyneaux Ave masterplan site). Most streets are double paved with occasional grass verges throughout the residential housing estates.

Table 09: Key characteristics of CA8 Molyneaux Avenue

F.77

Figure 77: Access from Molyneaux Avenue to HMP The Mount

F.78

Figure 78: Bungalows along Hyde Lane

F.79

Figure 79: Semi-detached dwellings and terraces fronting Howard Agne Close

F.80

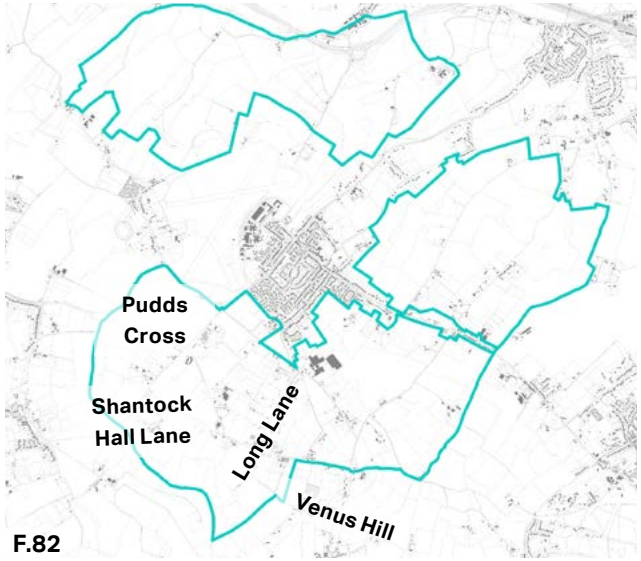
Figure 80: Access to the Molyneaux Avenue masterplan site

F.81

Figure 81: Molyneaux Avenue masterplan site

CA9: OUTER FRINGE

This area is spread across the NP Area. Some of them are along the Long Lane, Venus Hill, Pudds Cross and Shantock Hall Lane. Long Lane has dispersed residential development. Pudds Cross and Shantock Hall Lane have clusters of industrial businesses surrounded by rural land. A sporadic mix of industrial use and residential development can be found along Venus Hill. These areas are detached from the main settlement of Bovingdon by open green spaces.



F.82

Figure 82: Outer Area Character Areas

Factors	Characteristics
Build types & structures	Long Lane: linear residential extension stems from Bovingdon Green Venus Hill: Branchs off Long Lane, this narrow road run along deatched houses and a horse riding school Pudds Cross: small industrial estate cluster separated from Bovingdon's main settlement pattern by fields Shantock Hall Lane: Small industrial estate scattred along the lane with some open fields and farm lands in between
Built form, scale and heights	In average the density is low in these areas and building storeys are between 1 to 2 storey
Common materials	Red brick; metal; welsh slate roof tiles
Details and features	Industrial units; open green spaces
Plot boundaries	Wooden fencing; hedges; mature planting
Front garden	Generally large setbacks along Long Lane and Venus Lane due to substantial front gardens and / or driveways. Development within Pudds Cross includes setbacks in the form of car parks and large yard / storage spaces
Roofscape	Generally heterogeneous roofscape due to sporadic distribution of development throughout the sites.
Public realm	Public realm limited to occasional grass verges along Long Lane, Venus Hill and Shantock Hall Lane due to lack of pavement throughout both sites.

Table 10: Key characteristics of CA9 Outer Fringe

Figure 84: Mix of weatherboard and render on a new-build house on Long Lane (Source: Bovingdon Parish Council)

Figure 83: Barn built by red brick, tiles, flint and casement windows on Long Lane (Source: Bovingdon Parish Council)

2.7 Key characteristics

COLOUR PALETTE AND MATERIALS

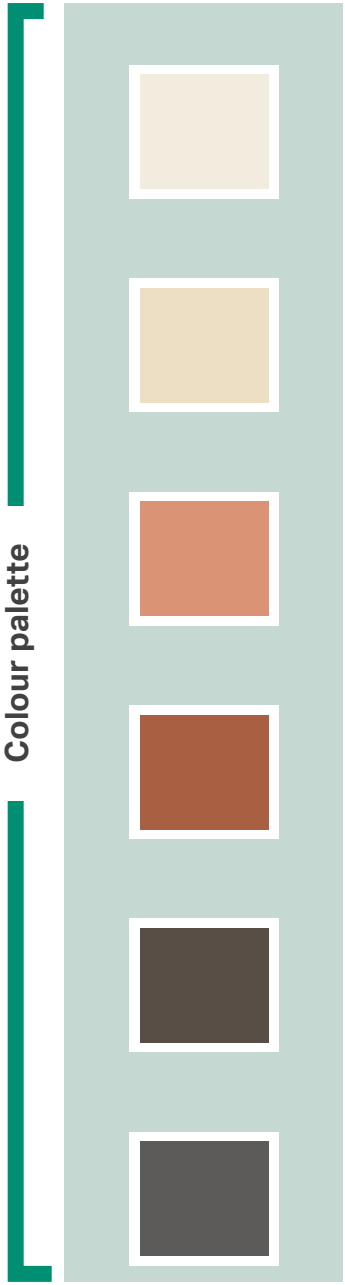
There are various colour palette used for building materials such as terracotta; the red used for Bovingdon Red Brick; grey and dark grey for slate; pale yellow and white used for rendering.

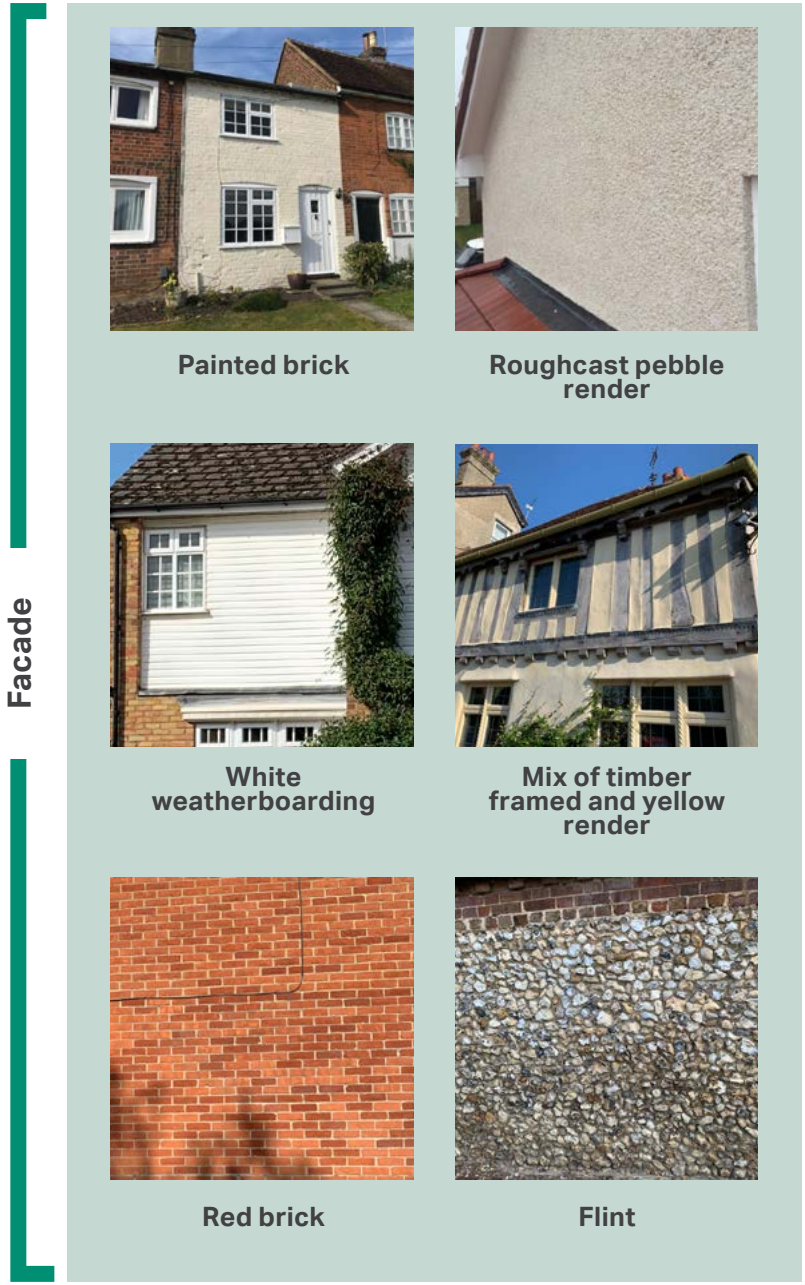
FACADE

Bovingdon red brick, rendering, painted brick, white painted plain flettons, weatherboarding and pebble dashed render are predominant in Bovingdon. Flint is used in some residential dwellings and the Church of St Lawrence.

CLADDING

Timber cladding is used in more isolated buildings.





ROOFING

Pitched roofs are commonly used in residential dwellings. In addition, hipped roof style can be seen in the village. Materials used for roofing range from clay tile, slate and concrete to plain tile. Chimney stacks are built mostly by red bricks.

MASONRY DETAILING

Plinths, offset string and band coursing, quoins and indents to corners and edges are mostly used in the village.

DOORWAY

Timber doors are used in the majority of houses in Bovingdon. Some residential dwellings have gabled porches or arched doorways.

Roofing

Heritage clay roof tile

Slate

Hipped roof

Gabled roof

Dormer

Eyebrow dormer

Hipped dormer

Shed dormer

Gabled dormer

Doorway

Porch with red brick

Arched doorway

Hipped porch

Shed porch

WINDOWS

The window types varied such as casement, bay window, box window, visastas and sash windows. The majority of windows are side and top hung casements with a small number of sliding sash windows.

BOUNDARY TREATMENT

Different types of boundary treatments are used in each of the character areas including thick hedgerows, picket fences, low-rise brick wall and mature planting.

Windows

Bow window

Bay window

Box window

Casement window

Mix of casement and Vasistas windows

Sash window

Boundary treatment

Mix of flowers, hedges and low wall

Wooden fence

Thick hedgerows

Design guidance and codes

03

3. Design guidance and codes

This chapter provides guidance on the design of development, setting out the expectations that applicants for planning permission in the Parish will be expected to follow.

3.1 Introduction

New development, at any scale, should not be viewed in isolation, but considerations of design and layout must be informed by the wider context and respond to local character.

The general design principles that look at the pattern of streets and spaces, building traditions, materials and the natural environment all respond to the character and identity of the village, while recognising that new building technologies are capable of delivering more suitable, adaptable and flexible built form and may sometimes be more efficient in terms of their use of materials.

It is important that the new design embodies the 'sense of place' and also meets the aspirations of people already living in Bovingdon, maintaining a harmony between any new development and the surroundings.

The set of design principles shown on the following pages are specific to Bovingdon and are based on the analysis of the character areas and work on a design code already undertaken by the Neighbourhood Plan Steering Group, which was informed by engagement with local people.

3.2 The importance of good design

As the National Planning Policy Framework (paragraph 124) notes, "good design is a key aspect of sustainable development, creates better places in which to live and work and helps make development acceptable to communities".

Research, such as the Government's Commission for Architecture and the Built Environment (now part of the Design Council; see The Value of Good Design[1]) has shown that good design of buildings and places can:

- Improve health and well-being;
- Increase civic pride and cultural activity;
- Reduce crime and anti-social behaviour; and
- Reduce pollution.

Local people understand what good design means in the context of Bovingdon. Consultation work carried out by the Neighbourhood Plan Steering Group shows the villagers appreciate the quality of their surroundings.

This document seeks to emphasise an understanding of how good design can make future development as endearingly popular as the best of what has gone before.

1 The Value of Good Design https://www.designcouncil.org.uk/sites/default/ files/asset/document/the-value-of-good-design.pdf

3.3 Structure of design codes

These design codes are structured by five key topic areas. Each has a set of guideline or codes that applicants will be expected to follow.

Settlement layout (SL)

SL01. Layout and grain

Safe movement (SM)

SM01. Pedestrian and cycle paths connectivity

SM02. Accessibility, safety and inclusivity

SM03. Legibility and wayfinding

SM04. Parking

Buildings (BU)

BU01. Lifetime home and flexibility of uses

BU02. Public and private spaces

BU03. Active frontages

BU04. Aspect and orientation

BU05. Proportion

BU06. Landmarks and open views

BU07. Extensions, alterations and conversions

BU08. Outbuildings

BU09. Security and lighting

BU10. Enclosure

Respecting local character (LC)

LC01. Landscape and green spaces

LC02. Boundary treatment

LC03. External building materials and finishes

Sustainability (SU)

SU01. Sustainable design and use, reduced carbon, offsetting, green energy

SU02. Protection of wildlife and ecology

SU03. Energy efficiency and energy generation

SU04. Electric charging points

Settlement layout (SL)

SL01. Layout and grain

Understanding and appreciating the local historic environment and the different character areas can help to ensure that the new development is properly integrated with the existing settlement and does not result in the loss of local distinctiveness.

- Development should respect the locally distinctive grain (i.e., the size and shape of plots and the shape, layout and position of buildings within the plot) with a mix of form, layout and size;
- Siting and layout of new development must be sympathetic to the specific character areas and must respect the historic heritage of the village; and
- Development with density and layout which does not reflect the current pattern of development in Bovingdon should be avoided, unless there is a good reason for adopting a different design approach. Proposals need to consider existing density and the relationship between buildings and plot sizes.


F.85


F.86


F.87

Figure 85: Large grain on Green Lane

Figure 86: Medium grain on Pembridge Road

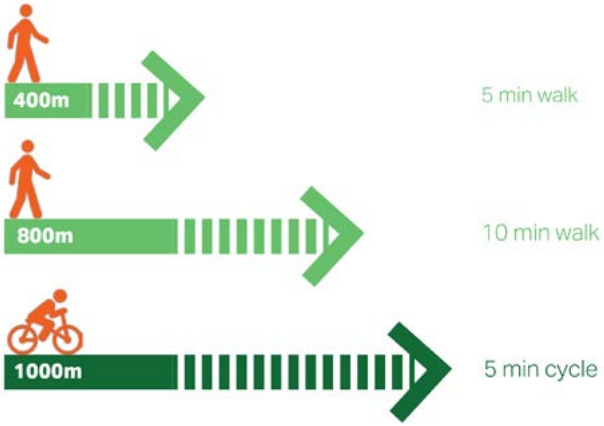
Figure 87: Small grain on High Street

Safe movement (SM)

SM01. Pedestrian and cycle paths connectivity

Public footpaths permeate throughout Bovingdon and offer access to the wider landscape that surrounds the village. The following principles relate to the provision of pedestrian and cycle routes.

- New development should respond to pedestrian and cyclist desire lines and complement a permeable and legible connected street pattern;
- New streets should be considered a space to be used by all, not only vehicles. Therefore, it is essential that street design prioritises the needs of pedestrians, cyclists and public transport users. The pedestrian and cycle provision must be integral to the design of streets; and
- New development must integrate with the existing network of footpaths and cycle routes, enhancing these where possible and adding new routes that connect places of interest (including open space and sports provision), services and amenities and residential areas.



F.88

Figure 88: The tree-lined footpath linking Church Street to Church Lane

F.89

Figure 89: The existing Public Right of Way on Green Lane.

SM02. Accessibility, safety and inclusivity

Developments should provide a coherent movement network for road users, cyclists and pedestrians of all ages. Developments should be designed to enable direct and convenient walking and cycling routes into and throughout the village. There should be a clear hierarchy of movement in the order of pedestrians, cyclists and motor traffic. New developments should strive to calm traffic and reduce the speed of motor vehicles by incorporating a variety of traffic calming measures.

- Building design should facilitate suitable safe and secure use, accommodation and access all;
- Design out crime by considering the safety and comfort of pedestrians;
- Ensure that road and pavement surfaces encourage easy access to developments, especially for elderly and disabled pedestrians and wheelchair users whose needs must be considered;
- For the largest developments, consider new pedestrian crossings to improve access to different parts of Bovingdon;
- All schemes should consider how they will incorporate traffic calming measures to reduce car speeds and make residential developments tranquil and safe for pedestrians. Traffic calming measures can include attractive tree and shrub planting, raised pedestrian crossings and painted verges for pedestrians and cyclists where a pavement is not possible; and
- Avoid road dominated visual scenes in new developments by incorporating attractive and varied road surfaces and beautifying developments with trees and planting.

F.90

Figure 90: An example of raised pedestrian crossing with a plateau in Hemel Hempstead

F.91

Figure 91: A footpath running between the properties connecting Old Dean to Hyde Meadows

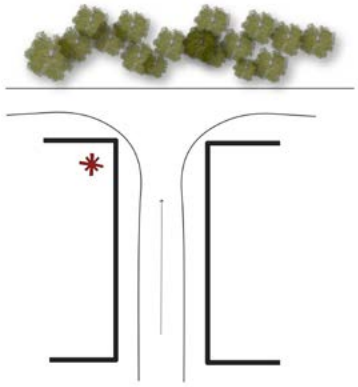
SM03. Legibility and wayfinding

A legible and well signposted village is easier for the public to understand as people can orientate themselves with visual landmarks and direct routes. Being able to navigate around a place makes people feel safer and creates a more pleasant living environment.

- Use opportunities such as corners and junctions to incorporate landmark buildings, gateways and focal points so that each part of the development is visually distinct and recognisable;
- These gateways and nodes should incorporate distinctive and characterful architectural elements which nod to Bovingdon's diversity of built heritage;
- New developments should closely consider their relationship with each of the designated character areas and foster a contiguous sense of place for each respective character area;
- Wayfinding must be clearly established, particularly along pedestrian and cycle routes;
- Signs should avoid cluttering the public spaces and can be an opportunity for attractive and distinct features which complement the neighbouring properties rather than detract from the visual scene; and
- Street and development names should seek to reflect relevant local history.

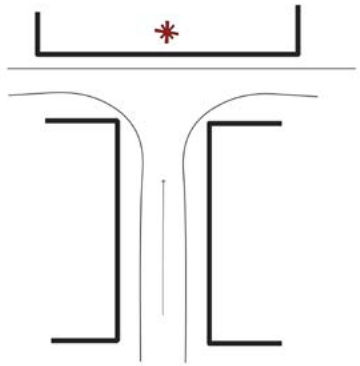
F.94

Figure 94: The view toward the Ryder Memorial as a gateway toward the village on High Street



F.92

Figure 92: A view terminating at a wooded area with a landmark buildings located on the left



F.93

Figure 93: A landmark building located at the termination of the view

SM04. Parking

Adequate parking solutions must be integrated into new developments in line with the Borough Council Local Plan requirements. Parking is a necessary fact of life in rural areas. However, when done without sensitivity, parking can contribute to the urbanisation of villages and also present problems for pedestrians, cyclists, the disabled and other road users.

Domestic car parking sometimes presents constraints which mean that different solutions will have to be considered. For Bovingdon, the following types are considered most recommendable for the village:

- Most homes should have on-plot parking wherever possible and cars should be located at the front or the side of the property;
- Rear parking courts can be acceptable where necessary as in CA1: Village centre but can detract from the rural character of villages, and impinge on space for back gardens and nature;
- Car parking should be designed to avoid being visually intrusive, such as by screening these areas with planting and high quality landscaping. Boundary treatment is key to ensuring this and can be achieved by using elements such as hedges, trees, flower beds, low walls and high quality paving materials;
- Driveways must be constructed from porous materials to minimise surface water run-off. These materials such as cobbles or flagstones are also much more attractive than the use of tarmac;
- Garages should be designed either as a free standing structure or an additive form to the main building. In both cases, garages should reflect the architectural style of the building and look an integral part of it rather than a mismatched unit. Garages should be behind or in line with the building, never positioned ahead of the building line;

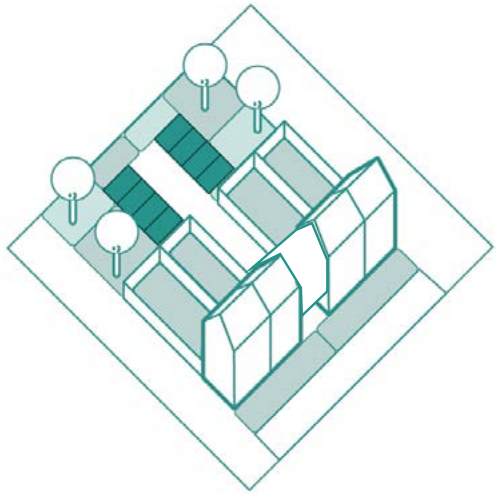
F.95
Figure 95: Diagram showing on-plot parking

F.96
Figure 96: On-plot parking on Chipperfield Road

- Where on-street parking is the only option, it must avoid blocking the way of pedestrians, wheelchair user and cyclists, in particular by discouraging pavement parking. Recessed parking bays with trees and planting can reduce the negative visual impacts of on-street parking which can have an urbanising effect on villages;
- Parking courtyards may be of practical use in some circumstances and these must benefit from natural surveillance and be overlooked. These courts should have a high-quality design incorporating attractive materials and landscaping to avoid detracting from the built environment. Surfaces must be water permeable to avoid drainage issues;
- There is no reason why new developments should not seek to incorporate cycle parking, as it occupies very little space and can be incorporated into the domestic curtilage, either with a secure cycle store at the front, or space for bicycles behind a secure side gate to a back garden. Cycle parking should

F.97
Figure 97: On-plot parking with garage

F.98
Figure 98: On-plot parking with garage on Hyde Lane

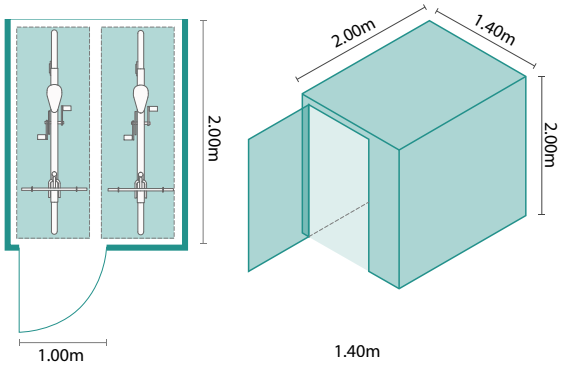


F.99
Figure 99: Diagram showing rear parking courtyard

F.100
Figure 100: An example of rear parking courtyard on High Street

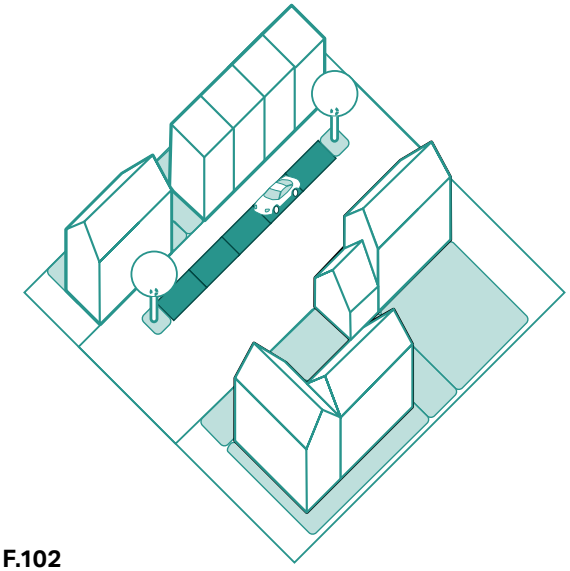
be incorporated into new housing and commercial developments (See Figure 101);

- Developments should incorporate electric car charging facilities as these are likely to substantially increase in model share with HM Government's commitment to Net Zero;
- Adequate visitor parking should be incorporated into development following the principles above; and
- Non-residential development should provide adequate car parking for users including employees and customers to avoid parking on pavements or green verges.



F.101

Figure 101: Secure covered cycle store for two cycle storage illustration



F.102

Figure 102: Diagram showing on-street car parking

F.103

Figure 103: Inset on-street parking with electric vehicle charging points

F.104

Figure 104: A positive example of on-street parking on Church street

F.105

Figure 105: A bad example of parking which obstructing the pavement on Austins Mead

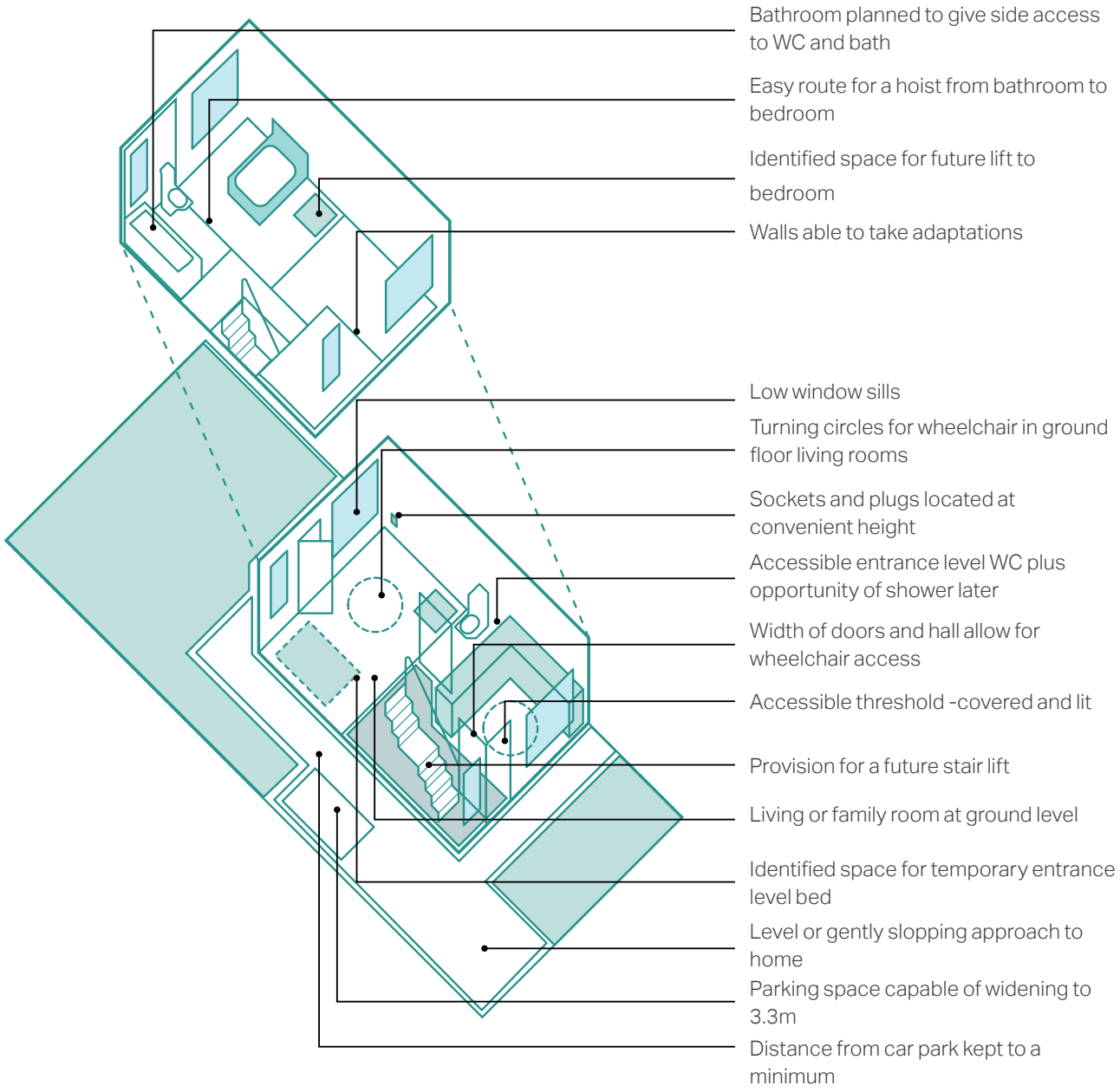
Buildings (BU)

BU01. Lifetime home and flexibility of uses

Bovingdon has an aging population, which must be reflected in the housing stock. New homes and conversions should be designed to meet the differing and changing needs of households and people's physical abilities over their entire lifetime. One way to achieve this is to incorporate Lifetime Homes Standards design criteria in the design of new homes and to assess whether they can be retrofitted in existing properties.

The diagram on this page illustrates the main principles of inclusivity, accessibility, adaptability and sustainability. It shows a number of measures that, wherever possible, should be included in new homes to make the suitable for all.

This is an important priority for Bovingdon.



BU02. Public and private spaces

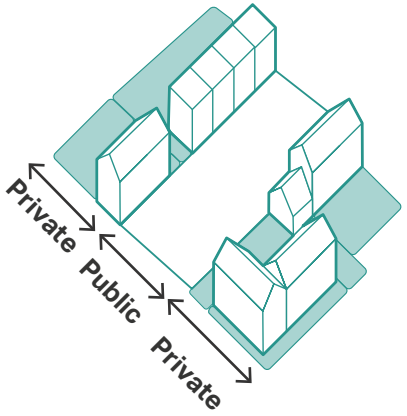
Setbacks from the street and front garden landscaping, together with more detailed architectural design should seek to balance privacy for front living rooms with natural surveillance of the streets, and the need for street enclosure.

The privacy distance between the backs of the properties should be a minimum of 20m. When this is not possible, the layout should be a back to-side arrangement, or use single-aspect buildings (north facing single aspect units should be avoided) to avoid creating overlooking issues.

Appropriate boundary treatments including low walls, hedges and railings must be incorporated into design proposals to clearly distinguish public and private space.

F.106

F.108



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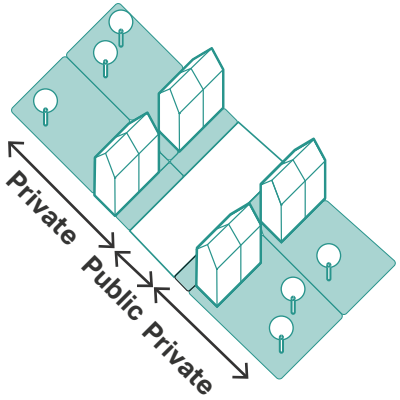

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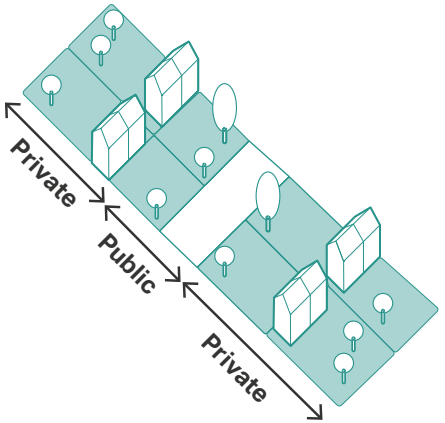


F.110

Figure 106:
Well-defined public and private space on Pembridge Road

Figure 107:
Public and private spaces on High Street

Figure 108:
Detached house well set back from the pavement on Chipperfield Road

Figure 109:
Public and private spaces on Old Dean

Figure 110:
Public and private spaces on Green Lane

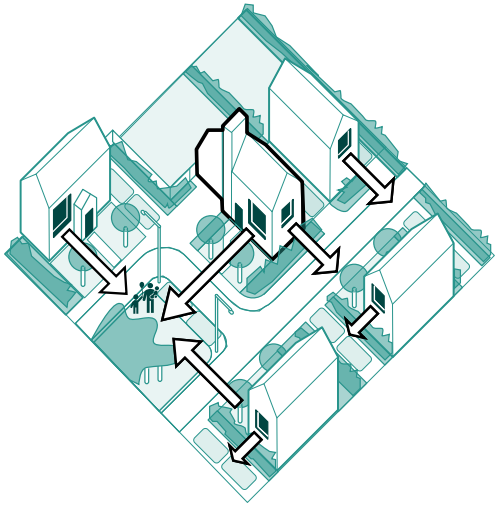
BU03. Active frontage

Active frontages bring life and vitality to streets and public spaces.

- Introducing regular doors, windows, front gardens and front parking, providing it does not dominate, can stimulate activity and social interactions;
- Narrow frontages with a vertical rhythm can create a more attractive and interesting streetscape, while articulation on façades and use of bays and porches can create interest; and
- Exposed blank façades facing the public realm must be avoided. They should normally be fully fenestrated.

F.111

Figure 111: A detached building with regular openings on Green Lane



F.112

Figure 112: The active frontages with a well-supervised public realm.

F.113

Figure 113: A detached house with active frontage in South Character Area. Corner buildings provide more level of active frontage

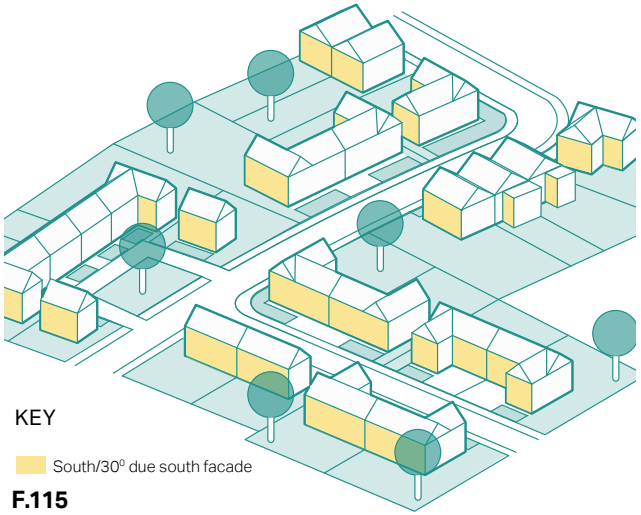
F.114

Figure 114: Active frontage with various windows, front garden and door overlooking Vicarage Lane

BU04. Aspect and orientation

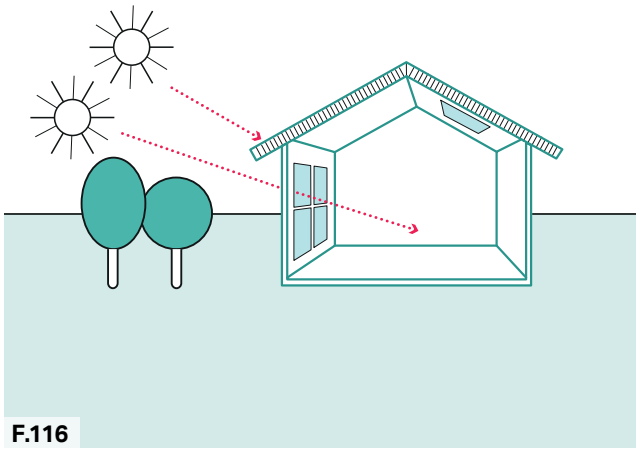
Buildings should be designed to maximise solar gain, daylight and sun penetration, while avoiding overheating. Subject to topography and the clustering of existing buildings, they should be orientated to incorporate passive solar design principles.

- One of the main glazed elevations should be within 30° due south to benefit from solar heat gain. Any north- facing facades might have a similar proportion of window to wall area to minimise heat loss on this cooler side;
- If houses are not aligned east-west, rear wings could be included so that some of the property benefits from solar passive gain;
- Homes should be designed to avoid overheating through optimisation of glazed areas, natural ventilation strategies including high- and low- level openings, longer roof overhangs, deep window reveals and external louvres/ shutters to provide shading in hotter summer months; and
- North facing single aspect units should be avoided or mitigated with the use of reflective light or roof windows.



F.115

Figure 115: The active frontages with a well-supervised public realm



F.116

Figure 116: The use of roof window, pitch roof, location and size of windows in favour of maximising solar gain

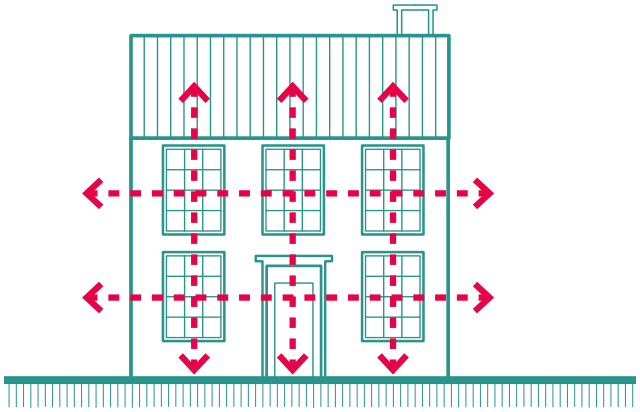
BU05. Proportion

The relationships between the building and its elements can provide visual interest and enhance local character. Many buildings in Bovingdon demonstrate a visually pleasing approach to proportion and simplicity, with clean façade lines and vertical and horizontal rhythms.

- A building's elements should all be proportioned and related to the scale of the building itself;
- The proportion should consider the surrounding context, especially within the Conservation Area;
- The front elevation should avoid large areas of blank wall but also avoid unnecessary cluttering and the awkwardly close adjacent windows and doors seen in some modern developments should be avoided; and
- Features such as windows and doors should provide a clear vertical and horizontal rhythm, and sense of design cohesion.

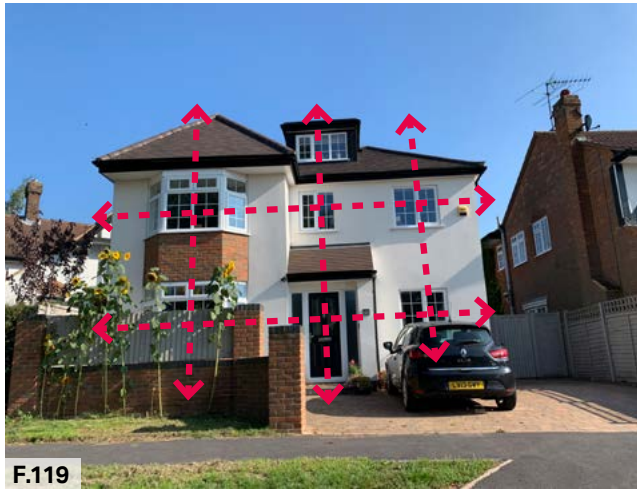
F.117

Figure 117: Proportion rhythm on Chipperfield Road



F.118

Figure 118: Elevation showing typical building proportion in a detached house



F.119

Figure 119: Proportion rhythm on Hyde Lane

F.120

Figure 120: Proportion rhythm on Hempstead Road

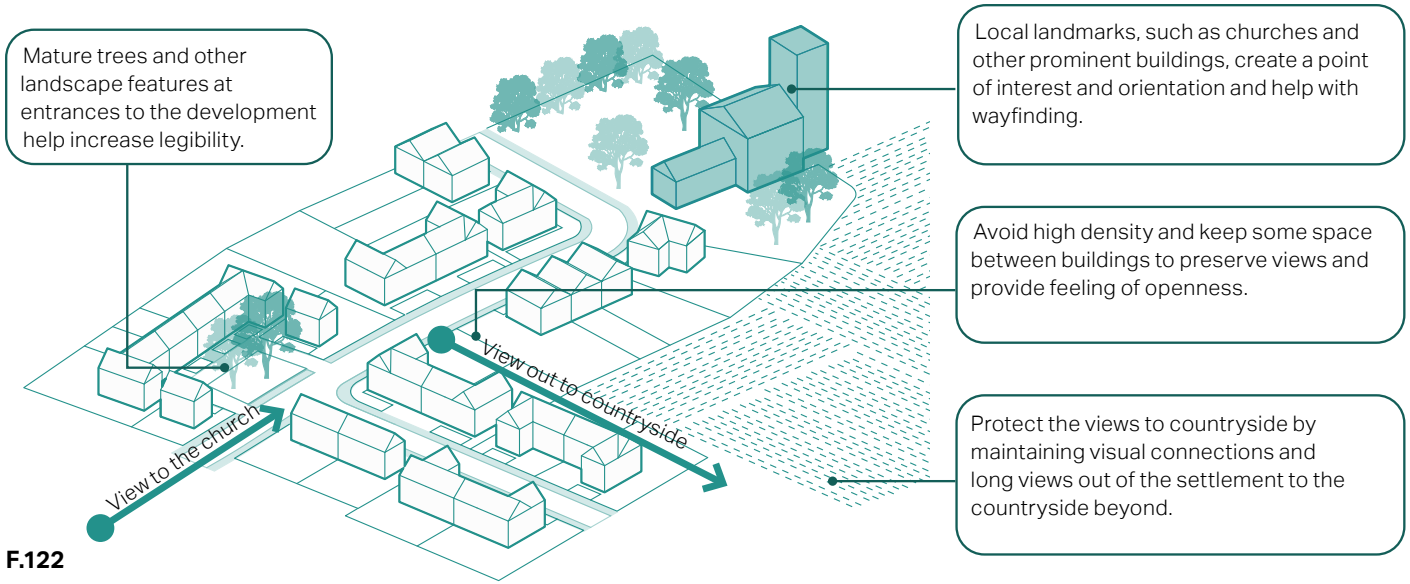
BU06. Landmarks and open views

Landmarks make places easy to navigate, more pleasant and uplifting. Bovingdon has a number of important landmarks such as Church of St Lawrence, The Ryder Memorial and Yew Tree Farm. These landmarks make a major contribution to the character and the setting of the village.

- The village should be complemented by a variety of identifiable landmarks, gateways and focal points to create visual links and establish a clear hierarchy between places;
- The village should be complemented by distinctive architectural elements around gateways and nodes;
- New developments should be designed around a series of nodal points focusing on the relationship with the existing character areas as well as the surrounding landscape; and
- Development should seek to respect important vistas of historic buildings by having careful attention to the placement and heights of new buildings and extensions to existing properties where these impact on such vistas.

F.121

Figure 121: The Halfway House, a well-known landmark at the junction of Newhouse Road and Hempstead Road



F.122

Figure 122: A diagram example showing the wayfinding elements in public realm

BU07. Extensions, alterations and conversions

There are multiple ways to create extra space within a building using different types of extensions. Extensions must be designed to an appropriate scale and be secondary to the original building. The pitch and form of a building's roof forms part of its character; therefore, extensions should respond by enhancing the existing character. Extensions should consider the materials, architectural features and proportions of the original building and designed to complement these existing elements.

Many household extensions are covered by permitted development rights, meaning that they do not need planning permission. Check the latest guidance here: https://www.planningportal.co.uk/info/200130/common_projects/17/extensions.

- The character of the existing building, along with its scale, form, materials and details should be taken into consideration when preparing proposals for alterations and/or extensions;
- External extensions should respect or enhance the visual appearance of the original buildings and the character of the wider street scene;
- Extensions should be subordinate in term of scale and form and shall not be visually dominant or taller than the existing building;
- Extensions should be recessed or in line with the existing building façade and shall use lower ridge and eaves levels to ensure that the length and width of the extension are less than the dimensions of the original building;
- Extensions should be designed using materials and details to match the existing building or, alternately, use contrasting materials and details with a contemporary design approach. However, in either case extensions should create a harmonious overall composition and a strong degree of unity with the original building.
- Extensions should safeguard the privacy and daylight amenity of neighbouring properties;

Figure 123: Barn conversion, Long Lane (Source: Bovingdon Parish Council)

- Extensions should retain on-site parking capacity and a viable garden area to meet the needs of existing and future occupiers; and
- Extensions of existing buildings should help to reduce carbon emission by complying with high energy efficiency standards and utilising low energy design.

FRONT EXTENSIONS

Front extensions are generally not acceptable. If proposed, in all cases front extensions should take the form of the existing building, mirroring the roof pitch, replicate or have lower cornice height and their ridge should be below the existing ridge height. The extension can project maximum 2 metres beyond the front facade and will not cover more than 50% of the front elevation.

REAR EXTENSIONS

Single-storey rear extensions are, generally, the easiest way to extend a house and provide extra living space. The extension should be set below any first-floor windows and designed to minimise any effects on neighbouring properties, such as blocking day light. A flat roof is generally acceptable for a single storey rear extension.

Double-storey rear extensions are not common as they usually affect neighbours' access to light and privacy, however, sometimes the size and style of the property allows for a two-storey extension. In these cases, the roof form and pitch should reflect the original building and sit slightly lower than the main ridge of the building.

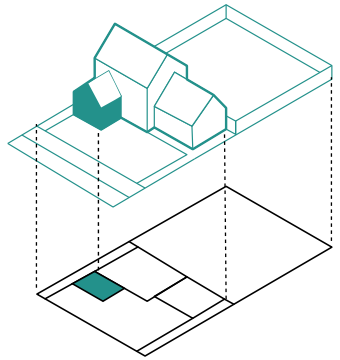


Figure 124: Drawing showing front extension

Figure 125: An example showing front extension

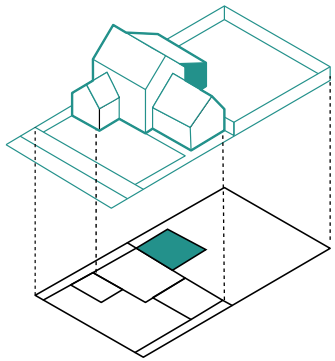
Figure 126: Barn conversion on Bovingdon Green

SIDE EXTENSIONS

Side extensions are a popular way to extend a building to create extra living space. However, if poorly designed, they can negatively affect the appearance of the street scene, disrupting the rhythm of spaces between buildings. Single-storey and double-storey side extensions should be set back from the main building line to the front of the dwelling and complement the materials and detailing of the original building, particularly along the street elevation. The roof of the extension should harmonise with that of the original building. Side windows should also be avoided unless it can be demonstrated that they would not result in overlooking of neighbouring properties.

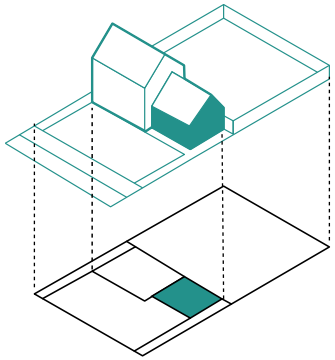
BU08. Outbuildings

Secondary outbuildings should be of a softer rustic/rural/agricultural character. Pre-fabricated, pre cast concrete and plastic panelled to be avoided.



F.127

Figure 127: Drawing showing rear extension



F.128

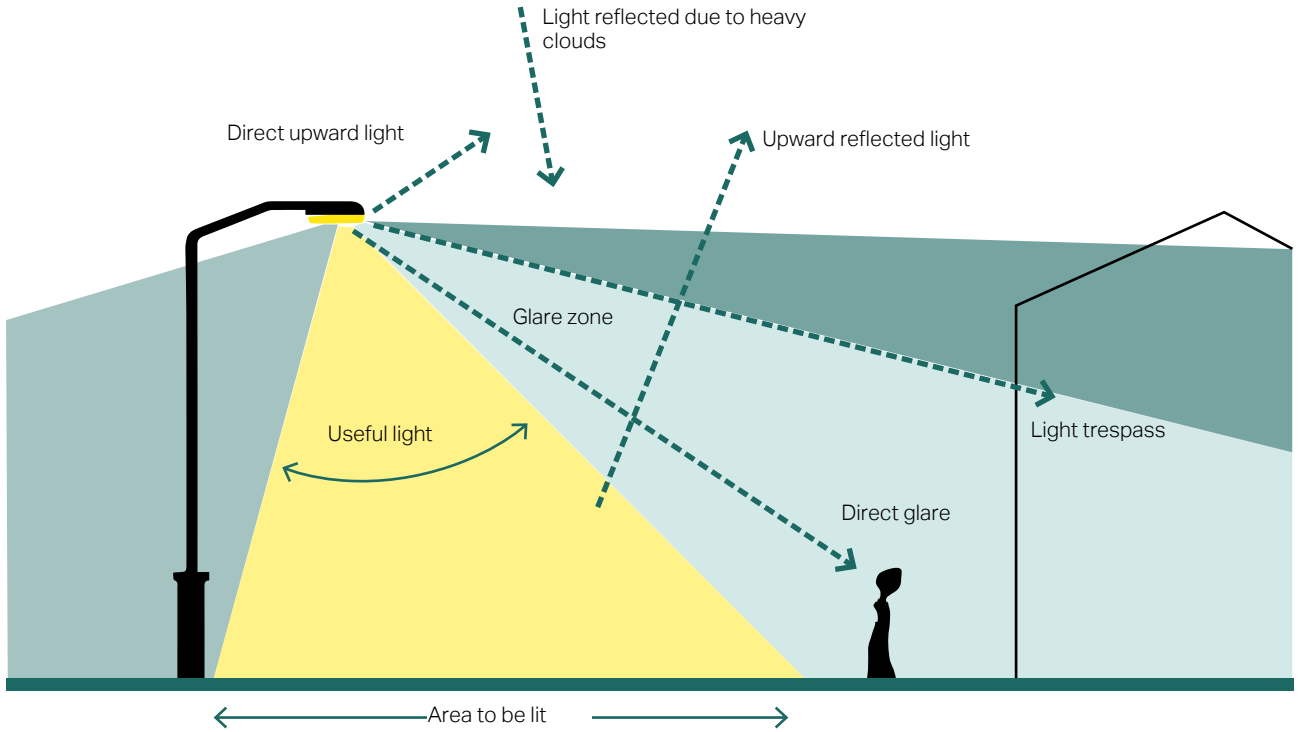
Figure 128: Drawing showing side extension

F.129

Figure 129: Use of cladding on an outbuilding (garage) with a soft character, Bovingdon Green (Source: Bovingdon Parish Council)

BU09. Security and lighting

- A proliferation of home security cameras and systems must be balanced against infringements of personal liberty and privacy of neighbours and welcomed visitors;
- External lighting is important for safety and security but should be more low level, low key, energy efficient and not contribute to unnecessary light pollution and nuisance;
- Security and personal alarm systems are likely to be integrated with home management systems but their effectiveness and nuisance should be taken into consideration with form of local registration; and
- Natural surveillance takes place where people can see what is happening where they live. Crime rates are less in areas where people believe they are being watched. Maximise opportunities for communities to become self-policing.

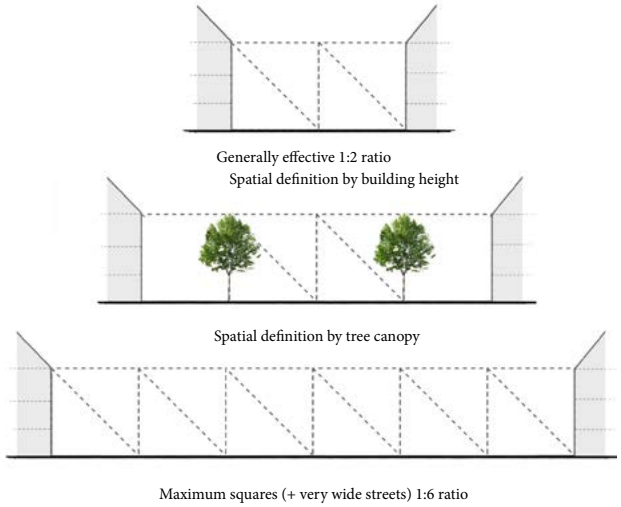


F.130
Figure 130: Diagram to illustrate the different components of light pollution and what 'good' lighting means

BU10. Enclosure

Enclosure is the relationship between public spaces and the buildings or other features that surround them. A more cohesive and attractive village form is achieved where this relationship is in proportion.

- Façades should have an appropriate ratio between the width of the street and the building height;
- Building lines should run parallel to the road;
- In the lower density Character Areas CA2, CA5, CA6, CA7 and CA8 , the sense of enclosure can be provided from the use of natural elements such as trees and hedges; and
- Proposals should consider the existing enclosure in an area and seek to positively respond in terms of the siting and position of any new buildings.



*Guidance from Urban Design Compendium (Homes England)

Figure 131: Higher enclosure on High Street compared to other parts of Bovingdon

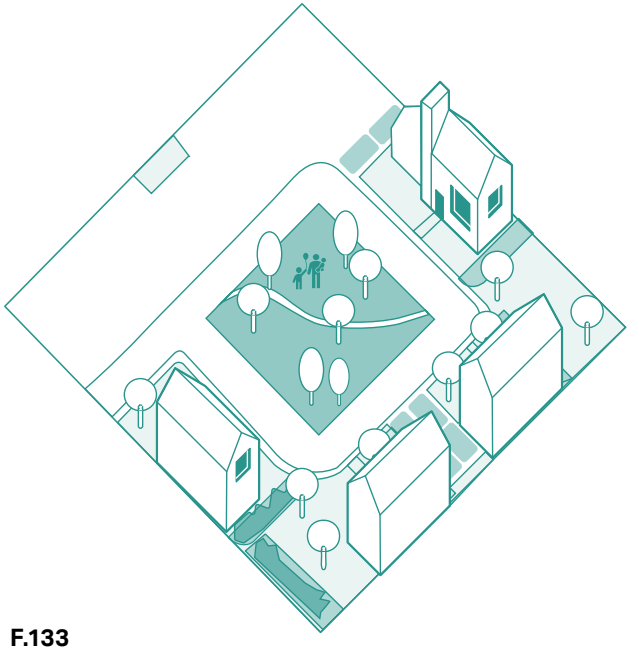
Figure 132: Improving the sense of enclosure by use of mature trees on Old Dean

Respecting local character (LC)

LC01. Landscape and green spaces

The village is adjacent to large areas of open fields, with the majority of them falling within Green Belt. The most significant green space in the village is Bovingdon Green. All of these existing landscape should be retained and protected. Any new development should respect these landscape assets and future open spaces should be planned with respect to the following principles:

- Design new open space such that it incorporates existing landscape features to create open space with opportunities for natural play and informal recreation;
- Landscape planting should be used to soften the mass of built form at the interfaces with the wider landscape;
- Green buffers can be a satisfactory transition between old and new neighbourhoods. This could take the form of a 'semi-natural' woodland strip, or more formal open space such as playing fields (including those belonging to schools);
- All existing good quality woodland, hedgerows, trees and shrubs to be retained within the layout of the parks and enhanced, with improved management;
- New trees, grassland and shrubs to be planted to supplement existing vegetation;
- Green spaces to have buildings presenting active frontages that encourage active and passive surveillance of the space;
- Provide allotments or other community garden facilities where appropriate; and
- Allow for flexible use of the space including temporary uses with a varied programme of events and use.



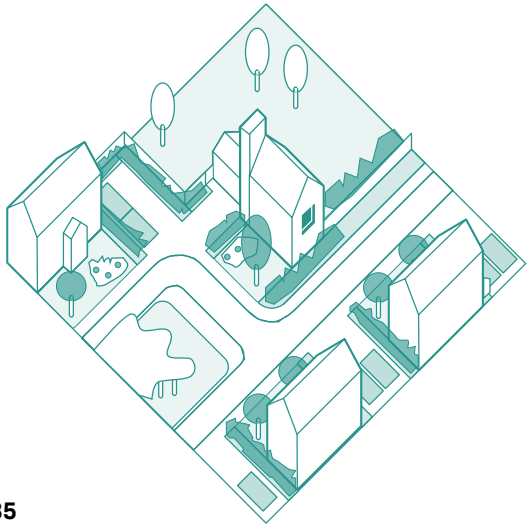
F.133
Figure 133: Green space at the heart of a development

F.134
Figure 134: A view to Bovingdon Green and Pond, a significant green space in the south west of the village

LC02.Boundary treatment

Boundary treatments, such as hedges, low walls and fences should be included in design proposals to clearly distinguish public and private spaces.

- High walls and fences or railings should be avoided;
- Boundary treatments should reflect locally distinctive forms and materials, consisting predominantly of red brick, railing and wooden fencing for boundary walls, or hedgerows, trees and wooden fencing;
- Development shall identify existing boundary treatments in the context of the site and consider appropriate boundaries for new development to ensure integration with existing context; and
- Existing boundary trees and hedgerow should be retained and should be reinforced with native species.



F.135

Figure 135: Diagram showing the boundary treatment such as low wall and hedges in front of houses

F.136

Figure 136: A well-kept front garden with low wall and various plantation as boundary treatment on Vicarage Lane

LC03. External building materials and finishes

Emphasis should always be on high quality materials in keeping with existing older style buildings but need not totally exclude modern materials in contemporary designs of high quality.

ROOFSCAPE

- The existing broad stylistic approach generally emphasises the visibility of the roof pitch;
- Clay tile or slate roofing should be encouraged;
- While slate is to be supported as a natural and durable material its sustainability has to be questioned as it is no longer quarried in the UK. Most common quality sources are from northern Spain with an increased carbon foot print. As an alternative, there are many concrete plain tiles with an added colour and texture to mimic hand made plain clay;
- Open eaves with exposed rafter ends are common;
- There should be variety in roofscapes , changing ridge lines and slopes though 90 degree;
- All plain tile roofs should have a pitch angle at 35-50 degrees;
- Flat roofs may be used when as a base for green or sedum planting as they will support ecology, insulate and cool buildings. Large expanses of flat roof should be concealed behind parapet walls and similar features;


F.138

Figure 138: Pitched roof with clay tile on Church Street


F.137

Figure 137: A 45- degree angled pitched roof with plaintile


F.139

Figure 139: Traditional house with painted brick and slate roof on Vicarage Lane (Source: Bovingdon Parish Council)

- Crown roofs are often successfully used in older larger properties - they are unseen and unnoticed;
- Flat roofs may be used to support inclined solar panels (both photo voltaic and solar/thermal types);
- In the domestic realm there should be attention to finer slimmer edge detailing to prevent the unsightly deep flat or stepped projecting fascias;
- Avoid large expanses of PVCu roof sheeting;
- Lead roofs should include suitable high quality detailing of rolled joints etc; and
- Brick built chimneys are preferred to shiny steel clad appendages.

Figure 140: A detached house with crown roof in Bovingdon South West Character Area

Figure 141: Brick built chimney on a detached housing built with mix of flint and red brick on Green Lane

Figure 142: A cross pitched roof with chimney stack

Figure 143: Clay tile roof and two chimney stacks built by brick on High Street

WALLS

- Traditional brickwork should be favoured over modern wire cut bricks, used in association with good quality brick detailing such as plinths, offset string and band coursing to give horizontal definition at level changes, quoins and indents to corners and edges;
- Bovingdon Bricks should be encouraged;
- A characterful stock brick with a 'smile' distinctive warm red/brown/purple often blended into 'Multis' Similar in the area 'Dunton's and Matthews. Sadly only Matthews remains;
- There are areas where white painted plain flettons have been used and would blend in to the existing built form;
- Plain smooth render to be white except for subordinate contrasting features; and
- Pebble dashed render is also frequently used on older buildings. Often used in conjunction with plain clay tile detailing to form drips.

Figure 144: Weatherboard on a new-build property on Long Lane (Source: Bovingdon Parish Council)

Figure 145: Terraced houses built by red brick on Austins Mead

Figure 146: Mix of plain smooth render and timber

Figure 147: Mix use of pebble dashed and red brick on a detached house in Central South West Character Area

- Plain clay tiles hung vertically as a cladding material may be used as a principal finish- usually to first floors and gables or as a subordinate contrasting feature;
- It is common and an interesting contrasting feature for the external finishes to be different at ground and first floor; and
- Where possible use sustainable or eco products to replace less efficient non environmentally friendly products.

CLADDING

- Timber cladding would be appropriate in the more isolated developments to suit a more rustic/agricultural setting or to provide minor contrasting features;
- Timber is also suitable for outbuildings and garages; and
- Timber should be from managed sustainable sources.

WINDOWS AND DOORS

- The design, configuration and material make a great difference to the character of a building or group of buildings;
- Small pane, cottage style 'all bar' divided casements windows are a traditional local feature from the past and carried through to more modern types;
- Most are side and top hung casements - a few vertical sliding sash types;
- While sustainable timber windows would be desired the quality and durability is not always certain. Less sustainable 'engineered' laminated timber are more durable; and
- The chosen material for many double glazed replacement windows has been PVCu which adapts well to include drought seals and secure ironmongery systems but is far less sustainable. Perhaps one may justify its use as it is efficient, can replicate original styles well, durable, longer lasting and relatively maintenance free so retains the embodied energy for a long time.

DETAILING

- The excellence of design of the interface between the different components, materials and finishes is vital both from the aesthetic and functional viewpoints;
- Any future developments should be good looking, long lasting and low maintenance;
- Where possible any detailing should be in harmony with surrounding local architecture styles; and
- Good detailing can create richness and character to a building. However, there should be a balance as a building that is over embellished can detract from an area.

BUILDING FEATURES AND MINOR ADDITIONS

New building could include features and additions similar to others within the character area. Bay windows, gable and dormer roofs, porches and lean-to structures can give buildings a local rural character.

- Additions should match the parent structure as closely as possible to harmoniously blend in seamlessly and unnoticed; and
- New energy saving features to be encouraged. Where external insulation is to be added to external walls, care should be taken to maintain proportions and to have surfaces broken with different colours/features as if new existing detailing to be copied.

Figure 148: Slate roof tiles in Bovingdon Green (Source: Bovingdon Parish Council)

Figure 149: Church Gate Church Lane House, a Grade II listed building, built with painted brick, low pitched welsh slated roof

Figure 150: A detached building with pitched porch on the High Street

Figure 151: Wooden window in Green Farm Bovingdon Green (Source: Bovingdon Parish Council)

Figure 152: Bay window and door with arch on Hempstead Road

Sustainability (SU)

SU01. Sustainable design and use, reduced carbon, offsetting, green energy

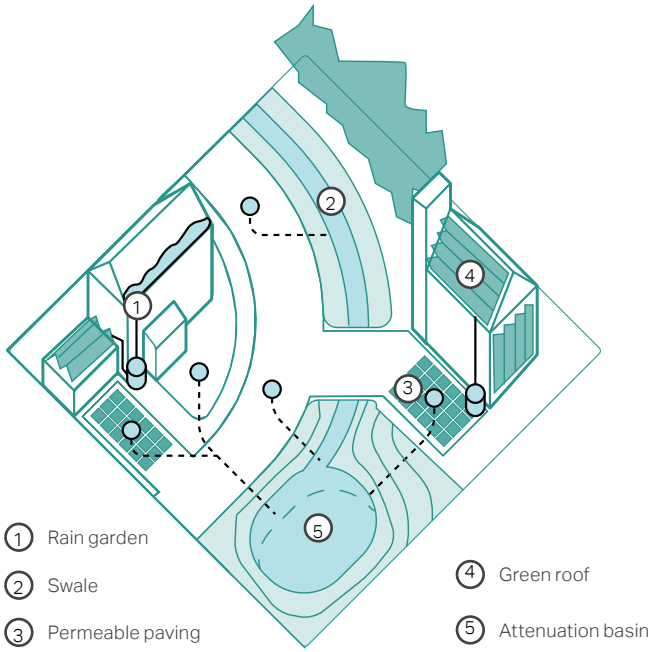
- There is further guidance and regulation from a number of local and national sources including NPPF;
- Consideration to be given for alternative constructions when their intent is to make vast improvements in sustainability for the sake of climate change and lower carbon uses and lifestyles. Best practice of the respective kinds to be followed to produce a high-quality product; and
- Outside spaces of homes should be designed in a way that enables and encourages composting.

SUSTAINABLE DRAINAGE SYSTEMS (SUDS)

The term SuDS stands for Sustainable Drainage Systems. It covers a range of approaches to managing surface water in a more sustainable way to reduce flood risk and improve water quality whilst improving Bovingdon amenity benefits.

The most effective type or design of SuDS would depend on site-specific conditions such as underlying ground conditions, infiltration rate, slope, or presence of ground contamination. A number of overarching principles can however be applied:

- Creative surface water management such as rills, brooks and ponds to enrich the public realm and help improve a sense of wellbeing and offer an interaction with nature;
- Reduce runoff rates by facilitating infiltration into the ground or by providing attenuation that stores water to help slow its flow down so that it does not overwhelm water courses or the sewer network;
- Integrate into development and improve amenity through early consideration in the development process and good design practices;
- SuDS are often as important in areas that are not directly in an area of flood risk themselves, as they can help reduce downstream flood risk by storing water upstream;



F.153

Figure 153: Diagram showing the best use of harvesting water systems rain garden, swales, permeable paving, green roofs

F.154

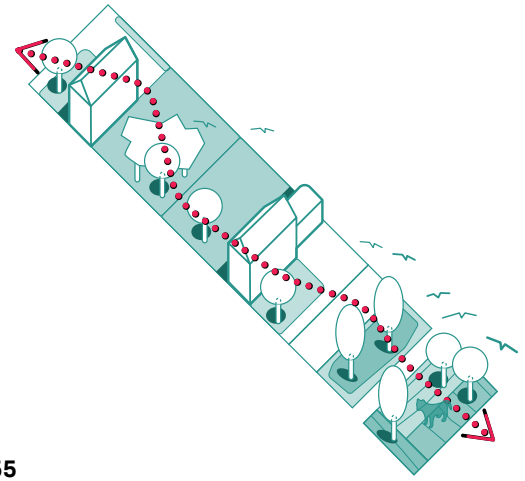
Figure 154: Examples of SuDS designed as a public amenity and fully integrated into the design of the public realm, Sweden

- Some of the most effective SuDS are vegetated, using natural processes to slow and clean the water whilst increasing the biodiversity value of the area;
- Best practice SuDS schemes link the water cycle to make the most efficient use of water resources by reusing surface water; and
- SuDS must be designed sensitively to augment the landscape and provide biodiversity and amenity benefits.

SU02. Protection of wildlife and ecology

Bovingdon has a rich and varied landscape character. There are many natural features and assets, such as woodlands, hedgerows, verges, water courses, front and back gardens. These assets contribute to provide habitats for biodiversity to flourish and places for people to visit and enjoy, therefore, any new development or any change to the built environment should follow these guidelines:

- Include both bat and bird nesting boxes (not necessarily mounted on the main building);
- Incorporate gaps under fences to allow hedgehogs to freely pass;
- Green roofs could be planted with wild flowers to support bees;
- New developments should reinforce the grass species rich verges, hedgerows and tree lining routes through the area which are characteristic of the rural area. Where new development is proposed there should be no net loss of trees. Native trees & plants should be planted wherever possible; and
- All new developments to include more new trees to offset the carbon footprint or alternatives to capture carbon for extended periods.



F.155

Figure 155: Diagram to highlight the importance of creating wildlife corridors

F.156

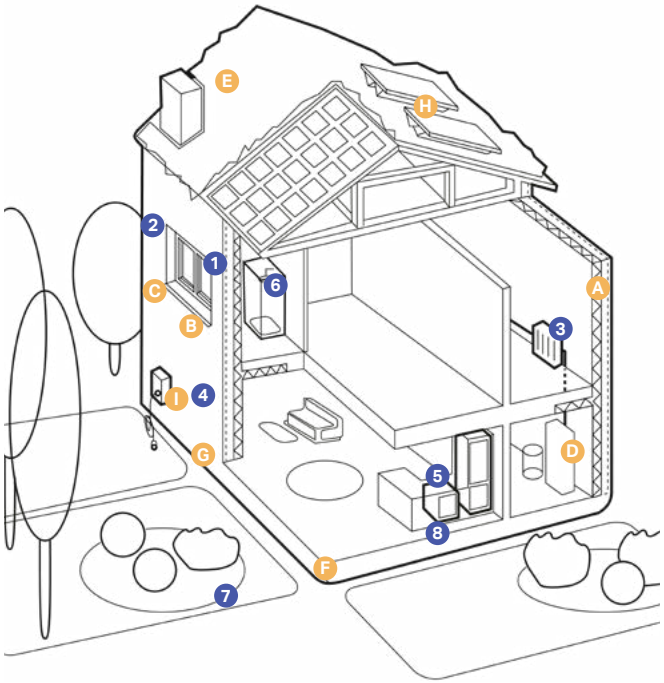
Figure 156: Examples showing a bughouse decorating rear gardens or public green spaces (left), conservation bat box (top right), hedgehog friendly fence (bottom right)

SU03. Energy efficient housing and energy production

Energy efficient or eco homes combine all around energy efficient construction, appliances, and lighting with commercially available renewable energy systems, such as solar water heating and solar electricity.

The aim of these interventions is to reduce overall energy use as cost effectively as the circumstances allow for. The final step towards a high performance building would consist of other on-site measures (such as interventions in the built fabric, the use of low-energy appliances, etc.).

It must be noted that eco design principles do not prescribe a particular architectural style and can be adapted to fit a wide variety of built characters. A wide range of solutions is also available to retrofit existing buildings, included listed properties, to improve their energy efficiency.



F.157

Existing homes

1. **Insulation** in lofts and walls (cavity and solid)
2. **Double or triple glazing with shading** (e.g. tinted window film, blinds, curtains and trees outside)
3. **Low- carbon heating** with heat pumps or connections to district heat network
4. **Draught proofing** of floors, windows and doors
5. **Highly energy-efficient appliances** (e.g. A++ and A+++ rating)
6. **Highly waste-efficient devices** with low-flow showers and taps, insulated tanks and hot water thermostats
7. **Green space (e.g. gardens and trees)** to help reduce the risks and impacts of flooding and overheating
8. **Flood resilience and resistance** with removable air back covers, relocated appliances (e.g. installing washing machines upstairs), treated wooden floors

New build homes

- A **High levels of airtightness**
- B **Triple glazed windows and external shading** especially on south and west faces
- C **Low-carbon heating** and no new homes on the gas grid by 2025 at the latest
- D **More fresh air** with mechanical ventilation and heat recovery, and passive cooling
- E **Water management and cooling** more ambitious water efficiency standards, green roofs and reflective walls
- F **Flood resilience and resistance** e.g. raised electrical, concrete floors and greening your garden
- G **Construction and site planning** timber frames, sustainable transport options (such as cycling)
- H **Solar panels**
- I **Electric car charging point**

Figure 157: Diagram showing low-carbon homes in both existing and new build conditions

SU04. Electric charging points

ON-STREET CAR PARKING

- Car charging points should be provided when on-street parking is suggested, always adjacent with public open space;
- Where charging points are located on the footpath a clear footway width of 1.5m is required next to the charging point, for a wheelchair user and a pedestrian to pass side-by-side;
- Charging points should never be placed in such a way that forces drivers to park on the pavement or across spaces for cables to reach the charge point from the vehicle; and
- Charging points should be placed so they can serve as many vehicles as possible. While vehicles should leave once they are charged, user experience and access to the charge point will be improved if the layout is designed to be as flexible as possible.

OFF-STREET CAR PARKING

- Generally, new development should integrate mounted charging points and associated services into the design from the start to avoid cluttering elevations, in particular main façades and front elevations.

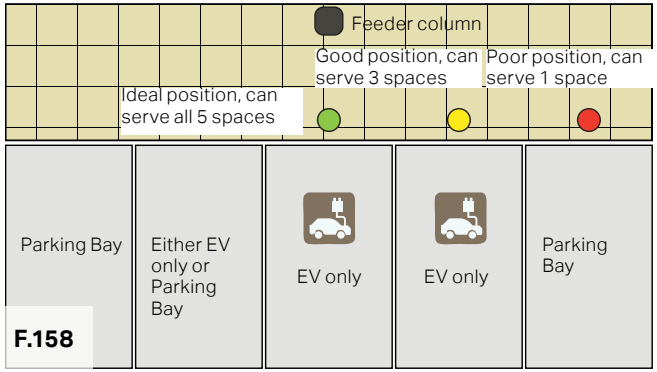


Figure 158: How the placing of on-street charge points and dedicated EV bays can restrict or maximise access

Figure 159: Off-street mounted car charging points

Figure 160: On-street free-standing car charging point

3.4 Character area specific requirements

CA1 VILLAGE CENTRE

- **SM04 -** Parking areas are acceptable in this area, but must be sensitively designed and benefit from natural overlooking and surveillance.
- **BU06-** As an exception, heights may extend to 3 storeys. Different range of housing typologies are used in this area. Terraces maybe suitable where the immediate context supports them.
- **BU05-** Buildings may extend up to the pavement where the immediate site context supports this.
- **BU10-** The enclosure ratio should follow the existing pattern. Setbacks should be varied to avoid a monotonous line.
- **LC02-** Use of hedgerows, picket fences, low-rise red brick walls as boundary treatment would be recommended.
- **LC03-** Developments should always use traditional building materials.
- **SL01-** Residential development should follow the linear pattern.

CA2 NORTH EAST BOVINGDON LIMITS

- **LC02-** Use of hedgerows, dense-vegetation and red brick wall recommended.
- **LC03-** Developments should be comprised of traditional building materials.
- **SL01-** Residential development should follow the linear pattern. Large building footprints are recommended.
- **BU02-** Dense vegetation and rural landscape are recommended.
- **BU06-** Heights may extend to 2 storeys. Development should avoid blocking views of Green Belt.
- **BU10-** The enclosure ratio should follow the existing pattern. Setbacks should be varied to avoid a monotonous line.
- **SM02-** Double paved streets with substantial grass verges would be recommended with some stretch of road being single-sided paving.

CA3 BOVINGDON AIRFIELD

- **LC01-** Development should particularly consider views of the open fields and Green Belt.
- **LC02-** Use of fencing, mature planting and brick walls as boundary treatment would be recommended.
- **BU06-** Heights may extend to 2 storeys.
- **LC03-** Developments should be comprised of traditional building materials.

CA4 BOVINGDON SOUTH WEST

- **SL01-** Residential development should respect Pembridge Road as primary movement corridor.
- **BU02-** Double paved streets with grass verges should be recommended.
- **BU06-** Heights may extend to 2 storey with exception of 3-storey apartment buildings.
- **BU10-** The enclosure ratio should follow the existing pattern. Setbacks should be varied to avoid a monotonous line.
- **LC02-** Use of wooden fencing and red brick wall as boundary treatment recommended.
- **LC03-** Contemporary styles of architecture will only be encouraged where they are exemplary and enhance or express the historic character of the area.
- **SM04 -** Parking areas are acceptable in this area, but must be sensitively designed and benefit from natural overlooking and surveillance.

CA5 CENTRAL SOUTH WEST

- **LC01-** Respect the green space at the heart of development on Old Dean and overlooking to that.
- **LC02-** Use of hedgerows and wooden fencing as boundary treatment recommended.
- **LC03-** Developments should always use traditional building materials.
- **SM04 -** Parking areas are acceptable in this area, but must be sensitively designed and benefit from natural overlooking and surveillance.
- **BU06-** Heights ranging between 1 and 2 storeys. Semi-detached housing is recommended in this area with the exception of Chesham Road including detached houses and bungalows.
- **BU10-** The enclosure ratio should follow the existing pattern. Setbacks should be varied to avoid a monotonous line with some properties having substantial set back from road due to the size of front gardens.

CA6 CHIPPERFIELD ROAD

- **SL01-** Residential development should follow the linear pattern. Variety of footprints are recommended and they should respect the surrounding grain.
- **SM04 -** Parking areas are acceptable in this area, but must be sensitively designed and benefit from natural overlooking and surveillance.
- **LC02-** Use of hedgerows, mature planting and wooden fencing as boundary treatment recommended.
- **LC03-** Contemporary styles of architecture will only be encouraged where they are exemplary and enhance or express the historic character of the area.
- **BU06-** Heights should be 1.5 to 2 storeys. Development should avoid blocking views of Green Belt.
- **BU10-** Setbacks should be varied to avoid a monotonous line with some properties having substantial set back from road, but there should always be one.

CA7 SOUTH

- **SL01-** Residential development should follow the linear pattern. Large building footprints are recommended.
- **BU02-** Mature trees along streets and high volume of greenery are recommended.
- **BU06-** Heights should be 1.5 to 2 storeys.
- **BU10-** Large setbacks should be proposed along Green Lane.
- **LC01-** Design future developments in a way to respect Bovingdon Green/ Pond, Bovingdon Football Club and fields.
- **LC02-** Use of hedgerows and red brick walls would be recommended.
- **LC03-** Developments should always use traditional building materials.
- **SM04 -** Parking areas are acceptable in this area, but must be sensitively designed and benefit from natural overlooking and surveillance.

CA8 MOLYNEAUX AVENUE

- **SL01-** Large buildings used in Prison Complex. Semi-detached, detached, terraced houses and apartment typologies would be suggested.
- **BU02-** Hedgerows and wooden fencing as boundary treatment are recommended.
- **BU06-** Heights may extend to 2 storey.
- **BU10-** The enclosure ratio should follow the existing pattern. Setbacks should be varied to avoid a monotonous line.
- **SU01-** Use of appropriate SuDS Scheme around the Pond recommended for Molyneaux Avenue site.
- **SU02-** Protecting the wildlife corridor and the native species.
- **SM04 -** Parking areas are acceptable in this area, but must be sensitively designed and benefit from natural overlooking and surveillance.

CA9 OUTER FRINGE

- **SL01-** Residential development, where it is appropriate, should follow the linear pattern in Long lane, Venus Hill, Shantock Hall Lane and Pudds Cross include small industrial estates. Large building footprints are recommended.
- **BU02-** Wooden fencing and mature planting as boundary treatment are recommended.
- **BU10-**The enclosure ratio should follow the existing pattern.
- **LC03-** Developments should consider traditional building materials.
- **SM04 -** Parking areas are acceptable in this area, but must be sensitively designed and benefit from natural overlooking and surveillance.

3.5 Checklist

Because the design guidance and codes in this document cannot cover all design eventualities, this chapter provides a number of questions based on established good practice against which the design proposal should be evaluated. The aim is to assess all proposals by objectively answering the questions below. Not all the questions will apply to every development. The relevant ones, however, should provide an assessment as to whether the design proposal has considered the context and provided an adequate design solution.

As a first step there are a number of ideas or principles that should be present in all proposals. These are listed under 'General design guidance for new development'. Following these ideas and principles, several questions are listed for more specific topics on the following pages.

1

General design guidelines for new development:

- Integrate with existing paths, streets, circulation networks and patterns of activity;
- Reinforce or enhance the established settlement character of streets, greens, and other spaces;
- Harmonise and enhance existing settlement in terms of physical form, architecture and land use;
- Relate well to local topography and landscape features, including prominent ridge lines and long-distance views;
- Reflect, respect, and reinforce local architecture and historic distinctiveness;
- Retain and incorporate important existing features into the development;
- Respect surrounding buildings in terms of scale, height, form and massing;
- Adopt contextually appropriate materials and details;
- Provide adequate open space for the development in terms of both quantity and quality;
- Incorporate necessary services and drainage infrastructure without causing unacceptable harm to retained features;
- Ensure all components e.g. buildings, landscapes, access routes, parking and open space are well related to each other;
- Positively integrate energy efficient technologies;
- Make sufficient provision for sustainable waste management (including facilities for kerbside collection, waste separation, and minimisation where appropriate) without adverse impact on the street scene, the local landscape or the amenities of neighbours;
- Ensure that places are designed with management, maintenance and the upkeep of utilities in mind; and
- Seek to implement passive environmental design principles by, firstly, considering how the site layout can optimise beneficial solar gain and reduce energy demands (e.g. insulation), before specification of energy efficient building services and finally incorporate renewable energy sources.

2

Street grid and layout:

- Does it favour accessibility and connectivity? If not, why?
- Do the new points of access and street layout have regard for all users of the development; in particular pedestrians, cyclists and those with disabilities?
- What are the essential characteristics of the existing street pattern; are these reflected in the proposal?
- How will the new design or extension integrate with the existing street arrangement?
- Are the new points of access appropriate in terms of patterns of movement?
- Do the points of access conform to the statutory technical requirements?

3

Local green spaces, views & character:

- What are the particular characteristics of this area which have been taken into account in the design; i.e. what are the landscape qualities of the area?
- Does the proposal maintain or enhance any identified views or views in general?
- How does the proposal affect the trees on or adjacent to the site?
- Can trees be used to provide natural shading from unwanted solar gain? i.e. deciduous trees can limit solar gains in summer, while maximising them in winter.
- Has the proposal been considered within its wider physical context?
- Has the impact on the landscape quality of the area been taken into account?
- In rural locations, has the impact of the development on the tranquillity of the area been fully considered?
- How does the proposal impact on existing views which are important to the area and how are these views incorporated in the design?
- How does the proposal impact on existing views which are important to the area and how are these views incorporated in the design?
- Can any new views be created?
- Is there adequate amenity space for the development?
- Does the new development respect and enhance existing amenity space?

3 (cont.)

Local green spaces, views & character:

- Have opportunities for enhancing existing amenity spaces been explored?
- Will any communal amenity space be created? If so, how this will be used by the new owners and how will it be managed?
- Is there opportunity to increase the local area biodiversity?
- Can green space be used for natural flood prevention e.g. permeable landscaping, swales etc.?
- Can water bodies be used to provide evaporative cooling?
- Is there space to consider a ground source heat pump array, either horizontal ground loop or borehole (if excavation is required)?

4

Gateway and access features:

- What is the arrival point, how is it designed?
- Does the proposal maintain or enhance the existing gaps between settlements?
- Does the proposal affect or change the setting of a listed building or listed landscape?
- Is the landscaping to be hard or soft?

5

Buildings layout and grouping:

- What are the typical groupings of buildings?
- How have the existing groupings been reflected in the proposal?
- Are proposed groups of buildings offering variety and texture to the townscape?
- What effect would the proposal have on the streetscape?
- Does the proposal maintain the character of dwelling clusters stemming from the main road?
- Does the proposal overlook any adjacent properties or gardens? How is this mitigated?

5 (cont.)

Buildings layout and grouping:

- If any of the buildings were to be heated by an individual air source heat pump (ASHP), is there space to site it within the property boundary without infringing on noise and visual requirements?
- Can buildings with complementary energy profiles be clustered together such that a communal low carbon energy source could be used to supply multiple buildings that might require energy at different times of day or night to reduce peak loads? And/or can waste heat from one building be extracted to provide cooling to that building as well as heat to another building?

6

Building line and boundary treatment:

- What are the characteristics of the building line?
- How has the building line been respected in the proposals?
- Has the appropriateness of the boundary treatments been considered in the context of the site?

7

Buildings layout and grouping:

- What are the characteristics of the roofline?
- Have the proposals paid careful attention to height, form, massing and scale?
- If a higher than average building(s) is proposed, what would be the reason for making the development higher?
- Will the roof structure be capable of supporting a photovoltaic or solar thermal array either now, or in the future?
- Will the inclusion of roof mounted renewable technologies be an issue from a visual or planning perspective?If so, can they be screened from view, being careful not to cause over shading?

8

Household extensions:

- Does the proposed design respect the character of the area and the immediate neighbourhood, and does it have an adverse impact on neighbouring properties in relation to privacy, overbearing or overshadowing impact?
- Is the roof form of the extension appropriate to the original dwelling (considering angle of pitch)?
- Do the proposed materials match those of the existing dwelling?
- In case of side extensions, does it retain important gaps within the street scene and avoid a 'terracing effect'?
- Are there any proposed dormer roof extensions set within the roof slope?
- Does the proposed extension respond to the existing pattern of window and door openings?
- Is the side extension set back from the front of the house?
- Does the extension offer the opportunity to retrofit energy efficiency measures to the existing building?
- Can any materials be re-used in situ to reduce waste and embodied carbon?

9

Building materials & surface treatment:

- What is the distinctive material in the area?
- Does the proposed material harmonise with the local materials?
- Does the proposal use high-quality materials?
- Have the details of the windows, doors, eaves and roof details been addressed in the context of the overall design?
- Do the new proposed materials respect or enhance the existing area or adversely change its character?
- Are recycled materials, or those with high recycled content proposed?

9 (cont.)

Building materials and surface treatment:

- Has the embodied carbon of the materials been considered and are there options which can reduce the embodied carbon of the design? For example, wood structures and concrete alternatives.
- Can the proposed materials be locally and/or responsibly sourced? E.g. FSC timber, or certified under BES 6001, ISO 14001 Environmental Management Systems?

10

Car parking:

- What parking solutions have been considered?
- Are the car spaces located and arranged in a way that is not dominant or detrimental to the sense of place?
- Has planting been considered to soften the presence of cars?
- Does the proposed car parking compromise the amenity of adjoining properties?
- Have the needs of wheelchair users been considered?
- Can electric vehicle charging points be provided?
- Can secure cycle storage be provided at an individual building level or through a central/ communal facility where appropriate?
- If covered car ports or cycle storage is included, can it incorporate roof mounted photovoltaic panels or a biodiverse roof in its design?

11

Architectural details and design:

- If the proposal is within a conservation area, how are the characteristics reflected in the design?
- Does the proposal integrate with the adjacent properties? This means that it follows the height massing and general proportions of adjacent buildings and how it takes cues from materials and other physical characteristics.
- Does the proposal maintain or enhance the existing landscape features?
- Has the local architectural character and precedent been demonstrated in the proposals?
- If the proposal is a contemporary design, are the details and materials of a sufficiently high enough quality and does it relate specifically to the architectural characteristics and scale of the site?
- Is it possible to incorporate passive environmental design features such as larger roof overhangs, deeper window reveals and/or external louvres/shutters to provide shading in hotter months?
- Can the building designs utilise thermal mass to minimise heat transfer and provide free cooling?
- Can any external structures such as balconies be fixed to the outside of the building, as opposed to cantilevering through the building fabric to reduce thermal bridge?

Applying the design guidance

04

4. Applying the design guidance

4.1 Introduction

This section applies the guidelines and codes to the Chesham Road and Molyneaux Avenue site and proposes masterplanning approach for its development. This chapter comprises of following parts:

1. Chesham Road and Molyneaux Avenue Site and site photographs;
2. Constraints and opportunities; and
3. Site design principles and concept masterplan.

4.2 The site

The site is located to north west of Bovingdon, to the south of the Mount Prison. It is bounded to the west by Molyneaux Avenue, north by Lancaster Drive, southeast by an old telephone exchange and east by residential development. Bovingdon Airfield, dating from WWII, is located to the west.

Site No.	Site reference	Principally allocated for	Site area (Ha)
Bv02- Chesham Road/ Molyneaux Avenue	Residential led	Around 40 dwellings, with public open space	2.6 ha

Table 12: Site description

Figure 161: Map showing the views toward Molyneaux Avenue Site

The site has irregular shape with an area of 2.6 hectares including a surface water drainage pond to the southeast of the site.

The current access to the site is from Chesham Road and Molyneaux Avenue. The site is vacant and there are various vegetation types such as grass, shrubs and young trees which are colonising the area. Strips of young broadleaved planting can be found to the south, west, and south eastern boundaries of the site.

Areas to the south and east are characterised by two-storey residential development and the predominant housing typologies are terraced and semi-detached properties. The materials used in the surrounding properties are red brick, timber weatherboarding - added at a point after construction - under pitched or full hipped roof.

The site, situated on the Chiltern plateau, is relatively flat and undulates gently toward north and south towards the Bulbourne and Chess Valleys.

Figure 162: View 1- The existing access to the site on Chesham Road

Figure 163: View 2- A view to Molyneaux Avenue toward The Mount Prison

Figure 164: View 3- A view to the Pond on Molyneaux Avenue

Figure 165: View 4- The view to the car parking area in front of Airfield on Molyneaux Avenue

Figure 166: View 5- A view toward the potential vehicular access at the west edge of the site on Molyneaux Avenue

Figure 167: View 7- The view to Lancaster Drive towards the north

Figure 168: View 9- The view from Hyde Lane toward the site and the back of properties on Mitchell Close

Figure 169: View 6- The access from north of the site on Lancaster Drive, the potential vehicular access to the site

Figure 170: View 8- A view to The Mount Prison on Molyneaux Avenue

Figure 171: View 10- A view from Hyde Lane, the potential pedestrian/cycle access to the site

4.3 Constraints and opportunities

The Dacorum District Council Masterplan, adopted in 2017, identifies the following constraints within the site boundary:

- Location, size and reservoir's configuration;
- Retain and protect the existing hedgerows and young broadleaved trees;
- The site restricted by the location of gas pipes;
- Protecting the amenity of adjacent residents on Hyde Lane and Mitchell Close.

It identifies the following opportunities:

- The site is in a good proximity of local services and facilities since it falls just beyond the 400m walk distance from village centre and it is within 800m walk distance;
- Providing a new public open space and a children's play area;
- Provision and enhancement of the existing cycle routes around the site;
- Design a SuDS scheme and incorporate the reservoir to the wider area;
- Provision of 40% affordable homes (subject to review);
- Create a clear, definable Green belt boundary for the village; and
- Provision of a new pedestrian crossing on Chesham Road to improve pedestrian access to the village center for residents living to the north of Chesham Road.

F.172 **Figure 172:** Molyneaux Avenue Site constraints and opportunities plan

4.4 Design principles

This section applies the guidance in chapter 3 and includes:

- Key design principles, including recommended access, open space and high level block layout;
- Illustrative masterplan framework;
- Option study, include policy compliant assumed housing mixed,car parking and open space standards; and
- Illustrative masterplan.

KEY DESIGN PRINCIPLES

The following principles have been used to guide the site master plan and will be used to assess the subsequent planning application. These principles should be followed by sets of design codes mentioned in chapter 4 of this document:

- Deliver a mix of two storey housing including 40% affordable homes;
- Provide for vehicular access off Molyneaux Avenue with pedestrian access off Chesham Road;
- Incorporate perimeter development with outward facing buildings, dual fronted properties will address corners providing surveillance over areas of open space;
- Limit buildings to two-storey given the height restriction associated with the air traffic control navigation beacon at Bovingdon Airfield and surrounding buildings;
- Appropriate landscaping to ensure that the development is well screened and that existing trees and hedges are retained where possible. Local species of trees and hedges to be introduced where needed;
- Potential for limited new vehicular crossovers to allow some direct access to properties facing Chesham Road;
- Provide for cycle and pedestrian access to Hyde Lane and Lancaster Drive;
- Integrate cycle parking and electric car charging infrastructure;
- Layout, design, density and landscaping to relate well to existing housing, create a soft edge with the countryside and secure a strong long term Green Belt boundary; and
- Mitigate the impact on the local road network through the promotion of sustainable travel options.

F.173 **Figure 173:** Illustrative masterplan for Molyneaux Avenue Site

HOUSING, PARKING AND OPEN SPACE ASSUMPTIONS

Housing numbers

The assumed housing mix is based on the Bovingdon Housing Needs Assessment (AECOM, 2021), which came to similar findings to the South West Hertfordshire Strategic Housing Market Assessment (2016) .

Housing mix	1 bed	2 bed	3 bed	4+bed	Total
All dwellings	**4**	**14**	**16**	**6**	40

Table 13: Housing mix

Car parking standards

The car parking spaces calculated based on Parking Standards Supplementary Planning Document (adopted November 2020) for different housing mix.

Use class	Description		Car parking standard (accessibility zone 3)
C3 dwelling houses	1 bed	Allocated	**0**
		Unallocated	**5**
	2 bed	Allocated	**19**
		Unallocated	**0**
	3 bed	Allocated	**36**
		Unallocated	**0**
	4 bed	Allocated	**18**
		Unallocated	**0**
	Visitor parking	Car parking standard plus 20%	**16**
Total	-	-	**94**

Table 14: Car parking spaces

Land use budget

Overall the site area is 2.6 hectares of which 1.29 hectares is not developed for housing and 0.36 hectares is allocated for various types of open space and playground as shown on opposite page. 1.31 ha hosts 40 homes with gardens and a net density of 30 dwellings per hectare (dph).

The gross (whole site) density is 15 dph.

Site	Area (Sqm)	Area (ha)	Net density (dph)	Gross density (dph)	Total units
Parks and gardens	800	0.08	-	-	-
Natural & semi- natural	1,800	0.18	-	-	-
Amenity green space	600	0.06	-	-	-
Existing landscape	7,500	0.75	-	-	-
Play area (LEAP)	400	0.04			
Developable parcel	13,500	1.31	30	15	40
Existing pond	1814	0.18	-	-	-
Total	26,000	2.6	N/A	N/A	N/A

Table 15: Land use budget

MASTERPLAN

The masterplan (Figure 174) with the relevant design guidance from chapter 3 of this report presented in this section with the following key components:

- Design 40 units up to two storey dwellings;
- Provision of main vehicular access from Molyneaux Avenue and secondary access from Lancaster Drive;
- Providing pedestrian and cycle route from Hyde Lane and Lancaster Drive to connect to the existing footpath routes;
- Provision of open space and a play area to the north of the pond. Provision of a SuDS scheme and incorporate the reservoir to the wider area;
- Provision of pedestrian crossing on Chesham Road;
- Retain the existing landscape and create additional amenity space to reduce the negative impact of the new development;
- Create a clear and definable Green Belt boundary for the village; and
- Propose perimeter development with outward facing buildings, dual fronted properties will address corners providing surveillance over areas of open space; and
- Design landmarks as gateway to improve wayfinding.

F.174 **Figure 174:** Applying the design guidance on masterplan

F.175 **Figure 175:** Housing mix map


Delivery
05

5. Delivery

The Design Guidelines & Codes will be a valuable tool in securing context-driven, high quality development in Bovingdon. They will be used in different ways by different actors in the planning and development process, as summarised in the table.

Actors	How they will use the design guidelines
Applicants, developers, & landowners	As a guide to community and Local Planning Authority expectations on design, allowing a degree of certainty – they will be expected to follow the Guidelines as planning consent is sought.
Local Planning Authority	As a reference point, embedded in policy, against which to assess planning applications. The Design Guidelines should be discussed with applicants during any pre-application discussions.
Parish Council	As a guide when commenting on planning applications, ensuring that the Design Guidelines are complied with.
Community organisations	As a tool to promote community-backed development and to inform comments on planning applications.
Statutory consultees	As a reference point when commenting on planning applications.

Table 16: Delivery

About AECOM

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Policy review

A

ANNEX: Policy review

This section highlights the key adopted and emerging policies relevant to the design guidelines included in this document.

Adopted Local Plan

DACORUM CORE STRATEGY 2006-2031 (ADOPTED SEPTEMBER 2013)

Policy CS8 Sustainable Transport requires all new development to contribute to a well-connected and accessible transport system with the following principles:

- Give priority to the needs of other road and passenger transport users over the private car in the following order: pedestrians, cyclists, passenger transport (buses, trains and taxis), powered two wheeled vehicles and other motor vehicles;
- Ensure good access for people with disabilities;
- Ensure passenger transport is integrated with movement on roads, footways and cycleways;
- Create safer and continuous footpath and cycle networks, particularly in the towns;
- Maintain and extend the rural rights of way network;
- Improve road safety and air quality;
- Strengthen links to and between key facilities (bus and railway stations, hospitals, main employers and town centres); and
- Provide sufficient, safe and convenient parking based on car parking standards (the latest parking standards are set out in the Parking Standards SPD adopted in 2020): the application of those standards will take account of the accessibility of the location, promoting economic development and regeneration, supporting shopping areas, safeguarding residential amenity and ensuring highway safety.

Policy CS10 Quality of Settlement Design sets out a 3 Step Approach to Successful Design that new development should follow. The 3 Steps are: (1) Be spatially aware (elaborated in Figure 11.2 of the Core Strategy); (2) Consider design and access (elaborated in Figure 12.3 of the

Core Strategy); and (3) Consider sustainable design and construction (elaborated in Policy CS28 and CS29 of the Core Strategy). Policy CS10 also requires all development to follow the following design principles at a broad settlement level:

- Respect defined countryside borders and the landscape character surrounding the town or village;
- Reinforce the topography of natural landscapes and the existing soft edges of towns and villages;
- Promote higher densities in and around town centres and local centres;
- Protect and enhance significant views into and out of towns and villages;
- Deliver landmark buildings at movement and pedestrian gateways and enhance focal points with high quality architecture;
- Preserve and enhance green gateways; and
- Protect and enhance wildlife corridors.

Policy CS11 Quality of Neighbourhood Design sets out design principles for development at the settlement and neighbourhood level, including:

- Respect the typical density intended in an area and enhance spaces between buildings and general character;
- Preserve attractive streetscapes and enhance any positive linkages between character areas;
- Co-ordinate streetscape design between character areas;
- Protect or enhance significant views within character areas;
- Incorporate natural surveillance to deter crime and the fear of crime; and
- Avoid large areas dominated by car parking.

Policy CS12 Quality of Site Design sets out design principles for development at the site-level, including:

- Provide a safe and satisfactory means of access for all users;
- Provide sufficient parking and sufficient space for servicing;
- Avoid visual intrusion, loss of sunlight and daylight, loss of privacy and disturbance to the surrounding properties;
- Retain important trees or replace them with suitable species if their loss is justified;
- Plant trees and shrubs to help assimilate development and softly screen settlement edges;
- Integrate with the streetscape character;
- Respect adjoining properties in terms of layout, security, site coverage, scale, height, bulk, materials and landscape and amenity space
-

Policy CS13 Quality of the Public Realm expects new development to contribute to the quality of the public realm by:

- Providing active frontages and natural surveillance;
- Promoting clutter free streets by removing unnecessary signs and utilising multi-purpose street furniture;
- Promoting pedestrian friendly, shared spaces in appropriate places;
- Incorporating a coherent palette of sustainable surface materials, planting and street furniture;
- Including an interactive and stimulating realm with public art and appropriate lighting; and
- Incorporating suitable trees, living walls and soft landscaping.

Policy CS18 Mix of Housing requires new housing development to provide a diverse choice of homes comprising a range of housing types, sizes and tenure; housing for those with special needs and affordable housing in accordance with Policy CS19. The appropriate type of mix of homes will be guided by strategic housing market assessments, housing needs surveys, and informed by other housing market intelligence and site-specific considerations. The latest South West Hertfordshire Strategic Housing Market Assessment (February 2016) recommends the following housing mix for the 2013-2036 period:

Housing mix

	1 bed	2 bed	3 bed	4+bed
Market	5-10%	25-30%	40-45%	20-25%
Affordable	30-35%	30-35%	25-30%	5-10%
All dwellings	15%	30%	40%	15%

Table 17: Recommended housing mix- South West Herts HMA

Policy CS19 Affordable Housing require new housing development to provide 35% of the new dwellings as affordable homes on sites of a minimum size of 0.16ha or 5 dwellings or larger in Bovingdon.

Policy CS24 The Chilterns Areas of Outstanding Natural Beauty seeks to conserve the special qualities of the Chilterns Area of Outstanding Natural Beauty. Development should support the principles sets out within the Chilterns Buildings Design Guide and associated technical notes.

Policy CS25 Landscape Character requires all new development to help conserve and enhance Dacorum's natural and historic landscape.

Policy CS26 Green Infrastructure seeks to protect, extend and enhance the green infrastructure network in Dacorum.

Policy CS27 Quality of the Natural Environment requires all new development to favour the conservation of heritage assets and positively conserve and enhance the appearance and character of conservation areas.

Policy CS29 Sustainable Design and Construction requires new development to comply with the highest standards of sustainable design and construction where possible, following the principles below:

- Use building materials and timber from verified sustainable sources;
- Minimise water consumption during construction;
- Recycle and reduce construction waste which may otherwise go to landfill;
- Provide an adequate means of water supply, surface water and foul drainage;
- Plan to limit residential indoor water consumption to 105 litres per person per day until national statutory guidance supersedes this advice;
- Plan to minimise carbon dioxide emissions;
- Maximise the energy efficiency performance of the building fabric, in accordance with the energy hierarchy set out in Figure 16 of the Core Strategy;
- Incorporate at least one new tree per dwelling/per 100sqm (for non residential developments) on-site;
- Minimise impacts on biodiversity and incorporate positive measures to support wildlife;
- Minimise impermeable surfaces around the curtilage of buildings and in new street design;
- Incorporate permeable and lighter coloured surfaces within urban areas;
- Provide on-site recycling facilities for waste;

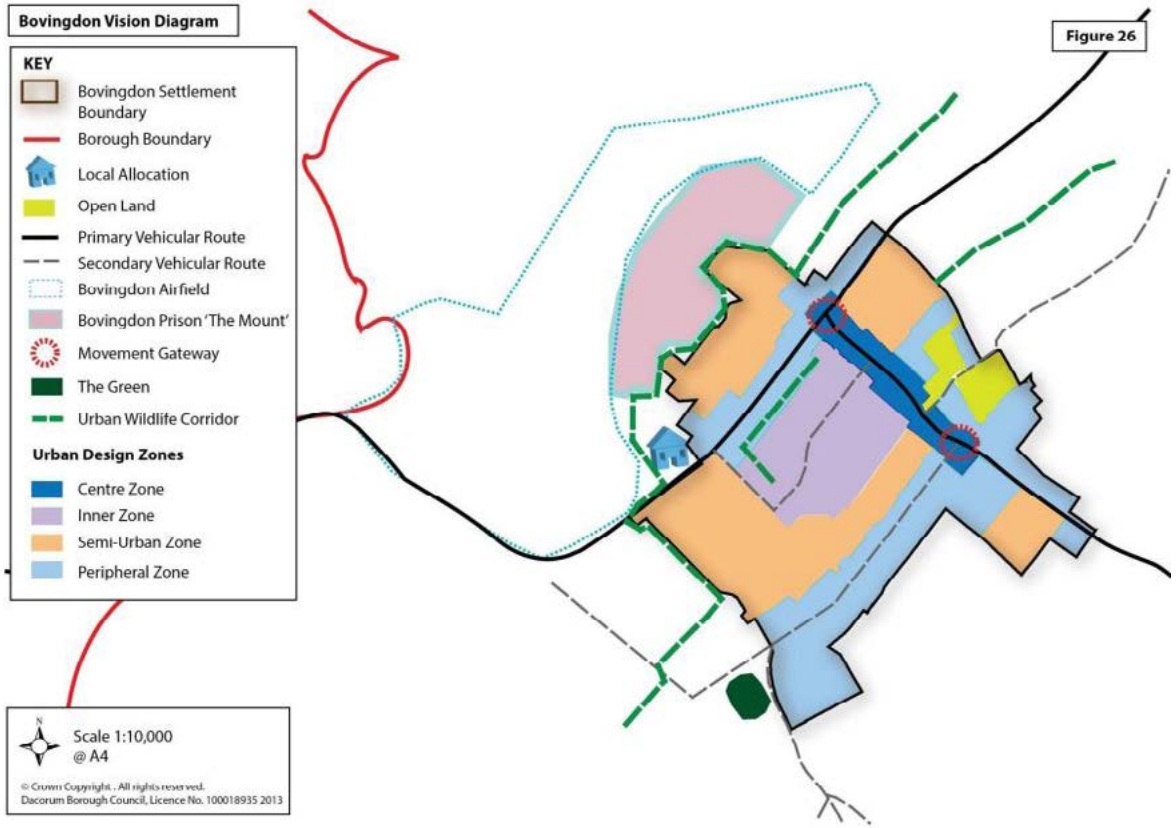
Policy CS31 Water Management requires development to minimise water runoff and secure opportunities to reduce the cause and impact of flooding, such as using green infrastructure for flood storage. It also requires development to secure opportunities to conserve and enhance biodiversity and avoid damage to Groundwater Source Protection Zones.

Chapter 24 of the Core Strategy sets out a place strategy and vision for Bovingdon: Bovingdon remains a vibrant compact village, delivering a high quality of life for local residents and businesses. Its natural, historic and built heritage has been conserved, particularly the village centre and its setting within gently undulating open countryside. Locally distinctive features such as The Dock have enhanced, and Bovingdon Brickworks protected. New housing development has helped to secure new open space for the village and a high level of affordable housing. The local centre remains the heart of the village and continues to deliver a range of local shops, services and facilities. Support has been given to the retention of

local businesses, schools and community facilities. Existing wildlife and biodiversity resources on the outskirts of the village are protected.

SAVED POLICIES OF THE DACORUM BOROUGH LOCAL PLAN 1991-2011 (ADOPTED APRIL 2004)

Policy 18 The Size of the New Dwellings encourages development to provide a range of dwelling in size and type with regards to the need of homes for small households, the floor area of individual buildings, the density and character of development that is suitable in the area and the client group for whom the dwellings are intended. For sites capable of delivering more than 25 or more homes, at least 10% of all dwellings shall be designed as life-time homes. In appropriate locations, provision for live-work homes is also encouraged.



F.176 **Figure 176:** Bovingdon Place Strategy Vision Diagram. (Source: Adopted Core Stratgey 2006-2013)

Policy 21 Density of Residential Development sets out the general expectation on net density to be in the range of 30 to 50 dwellings per hectare. Higher densities are generally encouraged in urban areas at locations where services and/or workplaces can be reached with active and public transport. For sites at the edge of an urban area, proposals will be expected to retain existing trees and hedges and incorporate appropriate landscape in order to achieve a soft edge to the countryside.

Policy 54 Highway Design expects all new development to meet current national and local standards for highway design, access and servicing arrangements and circulation space.

Policy 58 Private Parking Provision states that the level of parking provision to be provided in new development will be assessed using the demand based parking guidelines and approach to parking set out in Appendix 5 of the Plan (now replaced by the Parking Standards SPD).

Policy 62 Cyclists states that appropriate provision for cyclist, or shared cycle and pedestrian facilities (including secure parking/storage and changing/shower facilities for employees) will be a requirement of all major development proposals.

Policy 97 Chilterns Area of Outstanding Natural Beauty seeks to preserve and enhance the beauty of the area with the economic and social well-being of the area and its communities taken into account.

Policy 99 Preservation of Trees, Hedgerows and Woodlands gives a high priority to the retention and protection of trees, hedgerows and woodlands in new development proposals.

Policy 119 sees to preserve of special architectural or historic interest.

Policy 120 Development in Conservation Area expects development proposals which would affect the character and setting of the conservation area to:

- Respect established building lines, layouts and patterns. In particular, infilling proposals will be carefully controlled;
- Use materials and adopt design details which are traditional to the area and complement its character;
- Be of a scale and proportion which is sympathetic to the scale, form, height and overall character of the surrounding area;
- In the case of alterations and extensions, be complementary and sympathetic to the established character of the building to be altered or extended;
- Conform with any design guides for conservation areas prepared by the Council.

Appendix 3 and Appendix 4 of the Local Plan (saved) sets out guidance on the layout and design of residential areas and employment areas.

Appendix 6 of the Local Plan (saved) sets out quantitative and qualitative guidance on open space and play provision, including on the type of open space, design and maintenance.

DACORUM SITE ALLOCATIONS 2006-2031 (ADOPTED JULY 2017)

Adopted in July 2017, the Site Allocations document sets out detailed policies and requirements for allocated sites.

Policy LA6 Chesham Road and Molyneaux Avenue, Bovingdon releases the 2.3 Ha land from the Green Belt and allocates it for 60 new homes and open space. Policy LA6 also sets out the key development principles, an indicative spatial layout and delivery and phasing requirements for the site:

Key Development Principles

The following principles have been used to guide the site master plan and will be used assess the subsequent planning application:

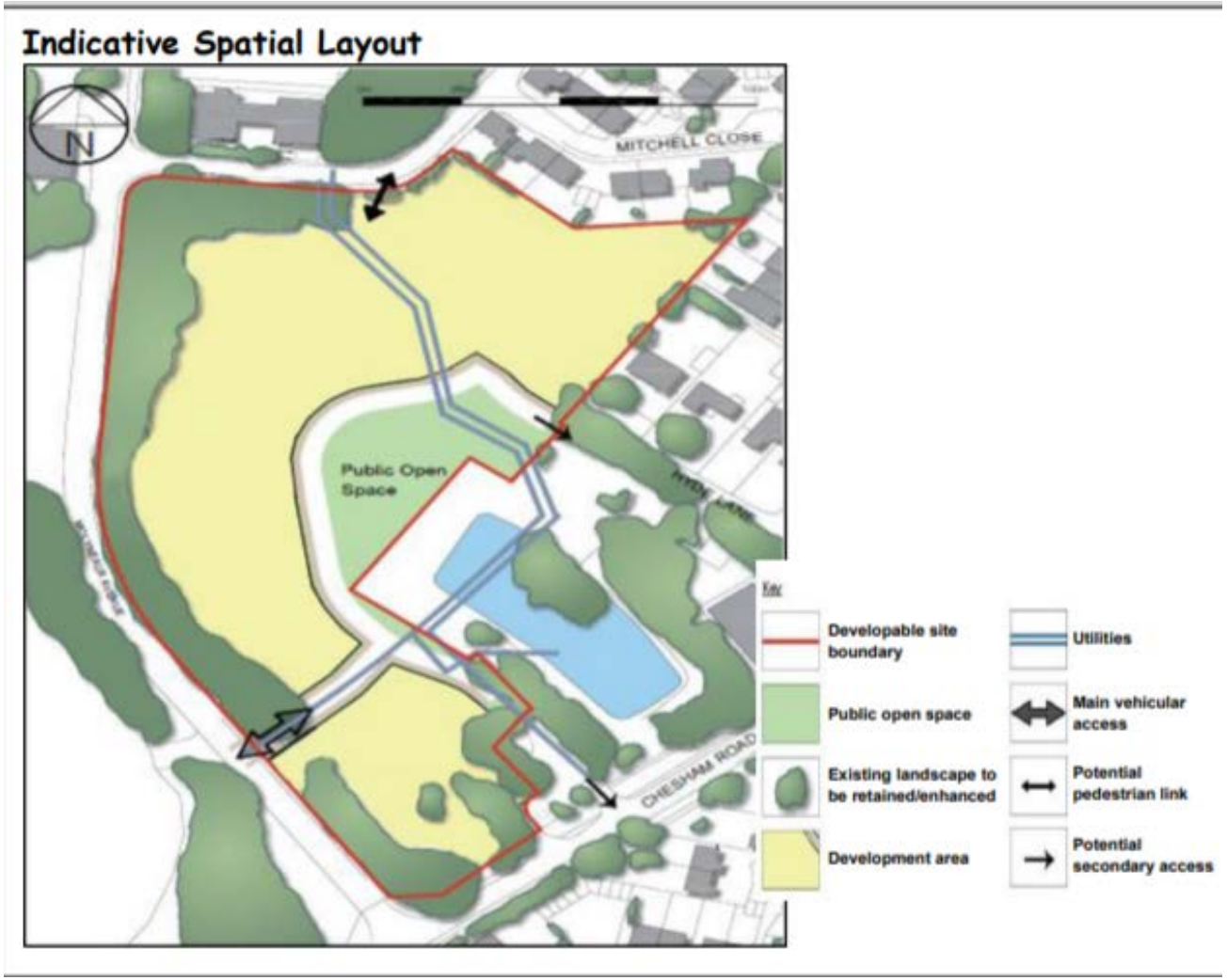
- Deliver a mix of two storey housing including 40% affordable homes;
- Provide for vehicular access off Molyneaux Avenue with pedestrian access off Chesham Road;
- Incorporate perimeter development with outward facing buildings, dual fronted properties will address corners providing surveillance over areas of open space;
- Limit buildings to two-storey given the height restriction associated with the air traffic control navigation beacon at Bovingdon Airfield;
- Appropriate landscaping to ensure that the development is well screened and that existing trees and hedges are retained where possible. Local species of trees and hedges to be introduced where needed;
- Potential for limited new vehicular crossovers to allow some direct access to properties facing Chesham Road;
- Provide for cycle and pedestrian access to Hyde Lane and Lancaster Drive;
- Layout, design, density and landscaping to relate well to existing housing, create a soft edge with the countryside and secure a strong long term Green Belt boundary; and
- Mitigate the impact on the local road network through the promotion of sustainable travel options.

Delivery and Phasing

- LA6 is scheduled to come forward from 2021 onwards, in accordance with Policies CS3: Managing Selected Development Sites, SA1: Identified Proposals and Sites, SA8: Local Allocations and the Schedule of Housing Proposals and Sites;
- The site will be developed in a single phase in accordance with the master plan;
- No abnormal costs have been identified that would undermine the ability of this site to provide appropriate contributions towards infrastructure through CIL and Section 106, as appropriate, in accordance with Core Strategy Policy CS35: Infrastructure and Developer Contributions;
- Key planning obligations are set out in the site master plan and include 40% affordable housing and contributions towards improving local social and transport infrastructure;

- Key off-site transport works are set out in the Schedule of Transport Proposals and Sites (Proposal T/23);
- Early liaison required with Thames Water to develop a Drainage Strategy to identify any infrastructure upgrades that are required as a result of the development in order to ensure that sufficient sewerage and sewage treatment capacity is available to support the timely delivery of this site; and
- Early liaison required with the local planning authority to ensure appropriate sustainable drainage is designed into the development scheme at the early design stage.

This is supplemented by the **adopted Masterplan for Local Allocation LA 6 Chesham Road / Molyneaux Avenue, Bovingdon (Adopted July 2017)** which provides a framework through which a high-quality residential scheme can be delivered on the site and guides future planning applications.



ADDITIONAL PLANNING GUIDANCE

In addition, Dacorum Borough Council has published a series of Supplementary Design Guide[1] relevant to the design and layout of developments, which this Design Code has had regard of:

1. http://www.dacorum.gov.uk/home/planning-development/planning-cons-design/urban-design-advice, http://www.dacorum.gov.uk/home/planning-development/planning-strategic-planning/supplementary-planning-documents-(spds)

- Parking Standards Supplementary Planning Document (adopted November 2020)
- Dacorum Strategic Design Guide Supplementary Design Document (adopted February 2021): The guide sets out the design process and principles for new developments (including employment-use buildings) in Dacorum. It seeks to create distinctive, attractive and successful places to live and work that are adaptable for the future;
- Local Allocations Masterplan Chesham Road / Molyneaux Avenue, Bovingdon (adopted July 2017);
- Chilterns Buildings Design Guide and Supplementary Technical Note;

Use class	Description		Car parking standard (accessibility zone 3)	Disabled parking provision	Motorbike parking	Electric vehicles	Cycle parking standard
C3 dwelling houses	1 bed	Allocated	1.25	5% of spaces Disabled persons parking bays must be for residents' use only and not be allocated to specific dwellings, unless provided within the curtilage of the dwelling	Assessed on individual case basis Assessed on individual case basis	50% of all spaces to be active provision, another remaining 50% to be passive provision;	1 Short Term Space per 10 Units <50 units, 1 per 20 units for >50 units + 1 Long Term Space per unit if no garage or shed provided
		Unallocated	1				
	2 bed	Allocated	1.5				
		Unallocated	1.2				
	3 bed	Allocated	2.25				
		Unallocated	1.8				
	4 bed	Allocated	3				
		Unallocated	2.4				
	Visitor parking	-	Car parking standard plus 20%				

Table 18: Car parking standards

- Shopfronts (Environmental Guidelines Supplementary Planning Guidance Section 5);
- Advertisements (Environmental Guidelines Supplementary Planning Guidance Section 6);
- Development in conservation areas or affecting listed buildings (Environmental Guidelines Supplementary Planning Guidance Section 7); and
- Conversion of agricultural buildings (Environmental Guidelines Supplementary Planning Guidance Section 8).

Emerging Local Plan

Dacorum Borough Council is currently at the early stage of preparing a new Dacorum Local Plan which would guide decisions on planning for the future of the Borough up to 2038. The Council has consulted on the Dacorum Local Plan (2020-2038) Emerging Strategy for Growth from November 2020 to February 2021. The document sets out the preferred approach to accommodating growth across Dacorum, potential sites for allocations and draft development control policies. The key policies relevant to the design code included in this document are:

Policy DM1 Mix of Housing requires developments of 10 or more homes to include a mix of housing types and sizes, comprising affordable housing, accessible and adaptable housing, accommodation for older people, custom and self-build housing and gypsy and traveller pitches. The housing mix of sites should take into account of the location and nature of sites, with the broad housing mix across the Borough set as:

Housing mix across the Borough

	1 Bedroom	2 Bedroom	3 Bedroom	4+ Bedroom
Market Housing	5%	20%	45%	30%
Affordable Home Ownership	25%	40%	25%	10%
Affordable Housing (Rent)	High proportion of 1 and 2 bedroom - further guidance will be provided in the Affordable Housing Supplementary Planning Document			

Table 19: Housing mix across the Borough, extracted from Emerging Local Plan (Source: https://www.dacorum.gov.uk/home/planning-development/planning-strategic-planning/new-single-local-plan)

Policy DM2 Affordable Housing requires developments of 10 or more homes, or 0.5 ha or greater to provide on-site affordable housing at 40% on the identified Growth Areas and in areas outside of the existing urban area of Hemel Hempstead.

Policy DM11 Density of Development sets out the appropriate density thresholds for different areas in Dacorum. Development will be supported if local circumstances indicate that the density of the scheme would not have an adverse effect on the character of the area; residential amenity; highway safety; heritage assets; or townscape.

Place	Minimum density			
	Maintain density with any uplift considered on its merit	Whichever is greater:		
		40 dph (net) or 20% uplift	70 dph (net) or 30% uplift	100 dph (net) or >30% uplift
Opportunity Areas in Hemel Hempstead	X	X	X	√
Other Town Centres, District and Local Centres within Dacorum	X	X	√	X
Elsewhere in the Towns	X	√	X	X
Elsewhere in Dacorum	√	X	X	X
Allocated Growth Areas	Acceptable densities in Growth Areas will be guided by Masterplans and Design Codes to be informed by the site specific allocations and the Dacorum Design Guidance.			

Table 20: Acceptable density, extracted from Emerging Local Plan

Note: Bovingdon is located in "Elsewhere in Dacoroum" and the minimum density needs to be maintained with any uplift considered on its merit (Source: https://www.dacorum.gov.uk/home/planning-development/planning-strategic-planning/new-single-local-plan).

Policy DM12 Nationally Prescribed Standards requires new build residential development or redevelopment to comply with the nationally prescribed space standards.

Policy DM23 Energy and Carbon Emissions Reductions in New Development sets out the energy performance standards and carbon reduction contributions required for all new major residential developments. In relation to design, developments are expected to be developed in accordance with the sequencing of the energy hierarchy set out (i.e. design, fabric first, approach and energy efficiency measures before considering decentralised renewable or low carbon energy sources). Development proposals should be designed to enable retrofitting to meet higher energy efficiency standards in future such as heat pumps or other low or zero carbon sources and, in District Heating Opportunity Areas (DHOAs) how development could be connected to networks of community heating if this were available.

Policy DM24 Low Carbon Community Heat and Energy Networks requires all major development proposals within a Renewable Energy Opportunity Area or in defined Growth Areas to create site-wide community heat or energy network or connect to an existing decentralised network where this is available.

Policy DM27 Landscape Character and Chilterns Area of Outstanding Natural Beauty requires all new development to help conserve, restore or enhance the prevailing quality, character and condition of Dacorum's natural and historic landscape.

Policy DM30 Biodiversity Net Gain requires all major development to deliver an overall net gain of biodiversity of 10%.

Policy DM36 Trees Retention and Protection requires developers to protect and retain existing trees and hedgerows as part of development proposals, and to replace them where their loss is justified. All development will be expected to incorporate two or more new trees per dwelling. Where a tree is lost through development at least three new 'like for like' trees must be provided.

Policy SP13 Delivering High Quality Design requires all new development to be of high quality that reflects the character of the local area and both physically and visually enhances and complements its surroundings. All development are required to meet Dacorum Design Guidance's Outcomes and Principles.

Policy DM41 Height of Buildings sets out guidance in relation to the height of development. In allocated Growth Areas, the height of buildings will be guided by site specific masterplans, design codes and growth area guidance. Generally buildings up to and including two storeys in height will be supported and taller buildings will be

Table 26 Design Outcomes and Principles

	Principle Categories	Outcomes
1	A Distinctive Place	Provide a clear narrative or vision which directs the design to reinforce local character and meet future needs, and demonstrate in an objective design rationale how the three step structured design process (table 25) has been adhered to in order to ensure a character-led approach
2	A Compact Place	Create compact neighbourhoods, and ensure the effective use of land in terms of a development's scale, height, massing (volume, shape), orientation, siting, layout and landscaping
3	A Place for All	Integrate and include for all people of varying backgrounds, socio-economic groups, ages and abilities
4	A Connected Place	Maximise spatial, visual and functional integration with the existing settlement, in order to enhance outcomes for existing neighbourhoods and communities
5	Great Streets and Public Spaces	Create legible public spaces and streets with active frontages that facilitate social interaction, deter crime and the fear of crime itself
6	Great Homes	Promote high quality homes and avoid significant detrimental impacts on the amenity of occupiers of neighbouring properties
7	Active and Healthy	Give prominence to creating healthy places and enabling active lifestyles for all
8	Facing the Climate Crisis	Embed environmental sustainability into the design and layout of the development
9	Flexible and Adaptable	Incorporate design that is flexible to future adaptation, including the changing needs of occupants and users, and future changes in technology
10	For the Long Term	Sustain quality through use of high quality, long-lasting and low maintenance materials and landscaping, and ensure that community led stewardship is well established

Table 21: Design outcomes and principles, extracted from Emerging Local Plan (Source: https://www.dacorum.gov.uk/home/planning-development/planning-strategic-planning/new-single-local-plan)

generally supported in local centres within Dacorum. Policy DM41 also sets out other height considerations, including sensitivity to local character, appearance of street scene, skyline and image of Dacorum, mix of uses, heritage assets, design quality, environmental impacts and locally important features (including designated views).

Policy DM42 Crime and Security expects all development to reduce the opportunity for crime and reduce the fear of crime. Where appropriate development must encourage passive surveillance of on street activity, ensure that lighting is effective and strategically placed and implement appropriate security hardware. Security features should be designed in a sensitive manner which respects the overall character of the location.

Policy DM43 Historic Environment seeks to preserve and enhance the historic environment of Dacorum.

Place	Up to 3 storeys	Taller Buildings	Tall Buildings
Allocated Growth Areas	Subject to masterplanning	Subject to masterplanning	Subject to masterplanning
Opportunity Areas in Hemel Hempstead	√	√	√
Intensification Areas: Other Town, District and Local Centres within Dacorum	√	√	X
Elsewhere in the Towns	√	Limited to appropriate locations in renewal areas	X
Elsewhere in Dacorum	√	X	X

Table 22: Extracted from Emerging Local Plan (Source: https://www.dacorum.gov.uk/home/planning-development/planning-strategic-planning/new-single-local-plan)

Policy DM46 Conservation Areas seeks to preserve or enhance the special interest, character and appearance of the Conservation Areas. Proposals are expected to:

- respect established building lines, layouts and patterns;
- use materials and adopt design details which reinforce local character and are traditional to the area;
- be of a scale, proportion, form, height, design and overall character that accords with and complements the surrounding area;
- in the case of alterations and extensions, be complementary and sympathetic to the parent building; and
- have regard to any 'Conservation Area Character Appraisals' prepared by the Council and safeguard all aspects which contribute to the area's special interest and significance, including important views and green spaces.

Policy DM52 Movement and Access expects development proposals to minimise the need to travel by car in the first instance. Policy DM52 also sets out a range of principles which seeks to prioritise sustainable transport modes and ensure safe, suitable and convenient access for all users.

Policy DM53 Walking and Cycling expects all development proposals to promote safe and attractive walking and cycling provision to nearby employment, essential services and community facilities.

Policy DM54 Passenger Transport requires all development proposals to be designed to meet the needs of passenger transport operation and users.

Policy DM55 Parking Provision – Residential states that all residential development is required to provide parking in accordance with standards contained with the Parking Standards SPD in order to encourage a shift towards more sustainable and active forms of movement. Car parking will be expected to:

- be conveniently located, be visible from surrounding dwellings and have safe and convenient access from the dwellings they are intended to serve
- not result in a dominance of car parking in a way that would dominate the street scene, be adequately screened and broken up by soft planting to mitigate its visual impact
- provide an appropriate proportion of spaces of conveniently located disabled spaces
- provide an appropriate amount of active and passive Electric Vehicle charging points.

Policy DM63 Open Space Provision requires all new residential development of 25 homes or more to comply with the Council's open space provision standard of 3.2 ha per 1000 population. The specific form and mix of provision will be determined by local open space deficiencies and the Fields in Trusts' recommended benchmark provision and accessibility standards.

Type of open space		Hectares per 1,000 population	Accessibility	Time equivalent
Parks and gardens		0.80	710m	9-minute walk time
Natural & semi- natural		1.80	720m	9-minute walk time
Amenity green space		0.60	480m	6-minute walk time
Play areas and provision for young people (minimum activity area ha)	LAP (0.01)	0.25	100m	1-minute walk time
	LEAP (0.04)		400m	5-minute walk time
	NEAP (0.1)		1,000m	12.5-minute walk time
	MUGA/Youth (0.1)		700m	9-minute walk time
Allotments		0.25	N/A	N/A

Table 23: Recommended benchmark provision and accessibility standards for open space

Policy DM63 also requires new developments of 25 homes or more to deliver play space of 0.25 ha per 1000 population. The thresholds for the type of play provision are as follows: a. Local Area of Play (LAP) - 25 homes; b. Local Equipped Area of Play (LEAP) - 70 homes; c. Youth/ Multi-Use Games Area (MUGA) - 200 homes; d. Neighbourhood Equipped area of Play (NEAP) - 500 homes.

Policy SP27 Delivering Growth in Bovingdon states that at least 241 dwellings will be delivered in Bovingdon within the plan period. Grange Farm and Chesham Road/Molyneaux Avenue are identified as Growth Areas, where development of these sites will be supported where they are in accordance with the allocation requirements, local and national policies. Bovingdon High Street is also allocated as a Local Centre where its renewal is supported.

Growth area	Allocation type	Principally allocated for
BV01-Grange Farm	Major Urban Extension	Around 150 dwellings, with public open space; and Safeguard three hectares of land for future education use.
Bv02- Chesham Road/ Molyneaux Avenue	Residential led	Around 40 dwellings, with public open space

Table 24: Growth areas

Growth Area Bv02 Chesham Road and Molyneaux Avenue is allocated for around 40 dwellings (subject to masterplanning) and public open space. The site specific requirements set out the in the allocation policy are as follow:

Urban Design Principles:

- Incorporate perimeter development with outward facing buildings, dual fronted properties will address corners providing surveillance over areas of open space;
- Limit buildings to two-storey given the height restriction associated with the air traffic control navigation beacon at Bovingdon Airfield;
- Potential for limited new vehicular crossovers to allow some direct access to properties facing Chesham Road; and
- Layout, design, density and landscaping to relate well to existing housing, create a soft edge with the countryside and secure a strong long term Green Belt boundary.

Access, Highways, and Sustainable Transport:

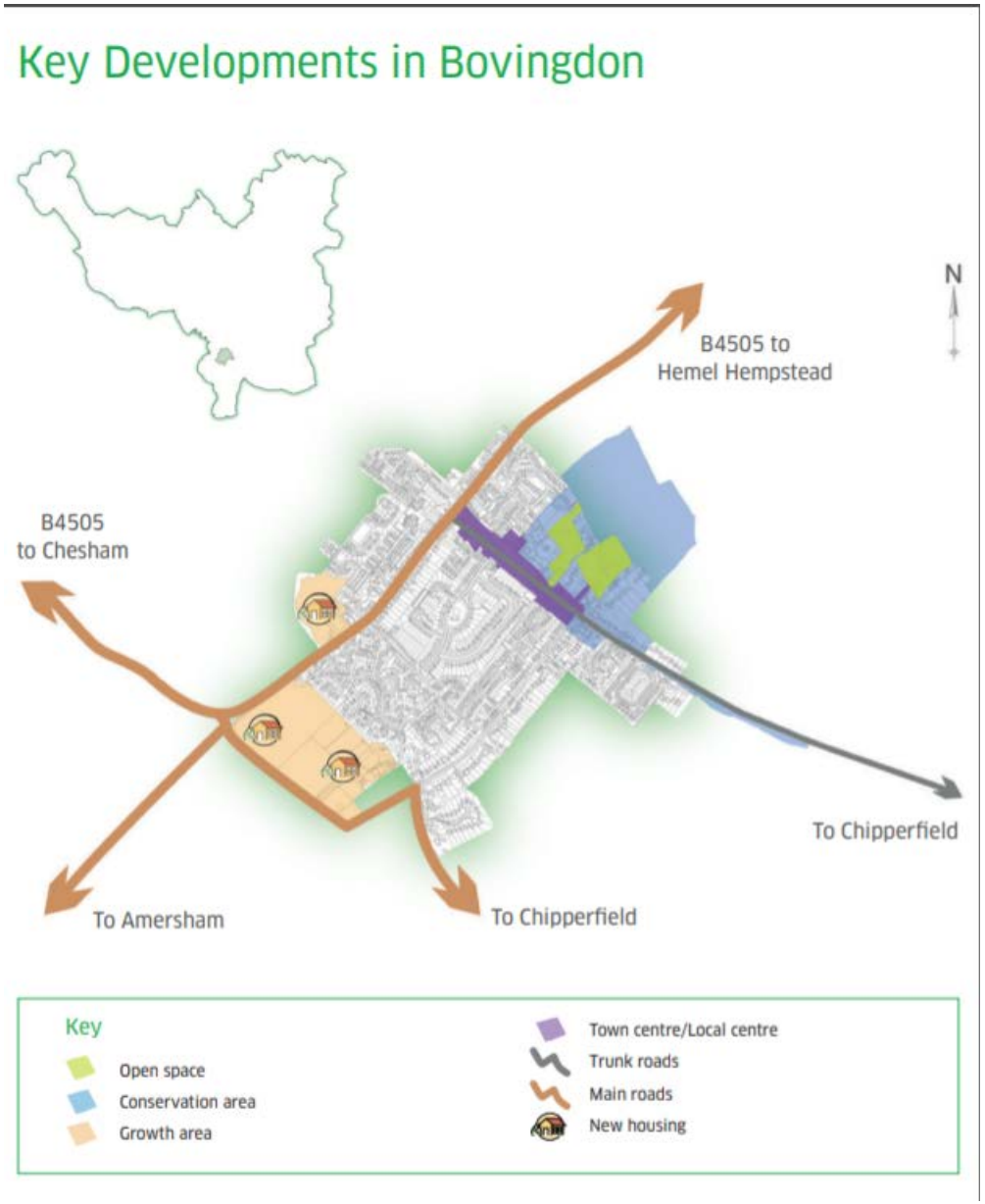
- Access to be provided from Molyneaux Avenue, with pedestrian access from Chesham Road; and
- Provide for cycle and pedestrian access to Hyde Lane and Lancaster Drive.

Landscape Considerations:

- Ensure that development is well screened and that existing trees and hedges are retained where possible; and
- Local species of trees and hedges to be introduced where needed.

Biodiversity and Green Infrastructure:

- As part of delivering a net gain in biodiversity, ensure new opportunities link with existing corridors in the vicinity of the site.



Flood Risk and Drainage:

- Ensure that drainage infrastructure associated with HMP The Mount and the adjacent holding reservoir for Bovingdon are maintained and where necessary, enhanced;
- Surface water run-off rates as a result of development of the site should not exceed existing Greenfield run-off rates;
- Measures which achieve this should be discussed and agreed with Hertfordshire County Council's ecologist, flood engineer and the Environment Agency; and
- Any development will need to have regard to the recommendations of the Level 2 Strategic Flood Risk Assessment for this site.

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