# 10 LAND USE AND INFRASTRUCTURE REQUIREMENTS





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## Introduction

This section explores some of the main land use and infrastructure requirements of the new neighbourhoods. This assessment is relatively high level, largely based on the fact that there is no "top-down" housing requirement figure to work from and there are a mixture of large and small sites scattered across an area of search, making a detailed "land use budgeting" approach difficult.

Instead, this is a "bottom up" constraints based exercise that identifies potential site development capacities and general site/ town wide land use requirements, whilst still remaining flexible to future changes in policy and local decision making processes.

This section firstly explains the approach to calculating the site capacities, secondly sets out the key issues relating to the additional community infrastructure requirements and thirdly provides site capacities and infrastructure requirements relating to each of the individual sites and combined areas of search.



# Site capacities

In order to understand the possible development capacities of each site and the areas of search as a whole, we undertook the following:

- 1. Measured the area of each identified development site (as identified in the previous section)
- 2. Multiplied this by a gross residential density of 20 dwellings per hectare (dph) to ascertain a housing figure.

The standard measurement of residential development is usually <u>net density</u> and should (according to Annex B of PPS3) incorporate only those areas that will be developed for housing and directly associated uses (including access roads within the site, private garden space, car parking areas, incidental open space, landscaping and children's play). Although no longer given as a minimum requirement in PPS3, an appropriate average net density is considered to be around 30 dph. The Urban Character section found

that the Wimborne Minster sites averaged around 32 dph and although the other locations fell below this threshold, it could be argued that they have followed less sustainable patterns of development in the last few decades and that the creation of sustainable communities, with walkable facilities and reliable public transport will require future density levels to be higher than those that exist today.

However, applying an average residential density of 30 dph to the sites would imply that they will only comprise housing. The achievement of mixed use sustainable communities will require not just housing, but potentially other uses including schools, local shops, health/ community centres, sports fields and parks. At this stage, the precise requirement, location and size of each is not known and may change over the course of the Core Strategy's development and, therefore, the achievement of housing at 30dph as well as the supporting community infrastructure will require a gross density measurement to be applied across the sites to account for



this. An average gross residential density of 20 dph is generally recognized to equate to a net density of 30 dph and has been used in this assessment.

3. Multiplied the number of homes by an average household size of 2.46 to ascertain the population from the development.

The population generated from the housing figure is dependent on the assumptions made in relation to future household population size. There are a number of schools of thought on this matter, including:

CLG's Household Projections to 2031.
 This work predicted that household sizes will fall over the next 20 years as a result of an increase in one person households, driven by people moving out of home but not into a family home, higher divorce rates etc. These projections forecast average household sizes of 2.16 by 2026.



- Existing household size. Existing household sizes in the district average out at 2.32 people/ dwelling.
- New development. This takes the view that large scale new developments tend to attract families who move there and grow in size. This point is proven somewhat in the district's most recent large scale developments at Verwood where household sizes are higher than the rest of the district and average out at 2.46 people/ dwelling.
- It is considered that the new neighbourhood developments in East Dorset will include a large number of family homes and that the household sizes in Verwood would be the most appropriate to use. Therefore, household sizes of 2.46 have been applied to generate a population from the developments.

Additional community infrastructure
As stated above, each development
will contain a number of uses in addition
to housing.

Such uses are likely to include:

• Local shops - An important factor in the creation of sustainable communities is the provision of local facilities and services that are in close proximity to where people live, thus enabling them to be able to walk to such areas, thus serving their day-to-day needs in a sustainable way. New neighbourhoods, such as those suggested in East Dorset, will need to have access to a level of services to achieve this objective. It is important to note that such services should be small scale and not seek to compete with other more central areas such as Wimborne Minster or Ferndown town centres. It should also be noted that retail patterns are quite varied in the area and although the towns do accommodate various levels of retail provision, residents do travel further afield to large stores in Poole and Bournemouth.







• <u>Schools</u> – The increasing population is likely to require additional school provision where there is no current capacity in the existing schools. In order to understand the existing education situation and future requirements needed as a result of the additional population housed in the new neighbourhoods, several meetings were held with the **Education Authority (Dorset County** Council). Overall, the schools in East Dorset are based on a three tier pyramid structure comprising first schools (for 4-9 years), middle schools (9-13 years) and upper schools (13-16 years). The adjoining authority of Purbeck also has an existing three tier structure, and has recently been the subject of a review by the Education Authority. It is considered that Purbeck may change to a two tier structure (primary and secondary schools). The issue of education could,

therefore, be complicated by the fact that pupil attendance is not defined by administrative boundaries, but by a combination of feeder schools and parent choice and pupils who live in East Dorset can attend schools outside of the district and vice-versa. Whether East Dorset remains as a three tier structure, in light of the surrounding authority's structures, remains to be seen and it is not inconceivable that part of or all of the district could become two tier in the future. If this was the case, it could have implications for the strategy.



- Community centres These play an important role in providing a focal point for club activities, local group events and social interaction. In order to understand the community hall requirements within each new neighbourhood, we met with community officers at East Dorset District Council to identify likely need.
- Health centres The increased population could place more pressure on the existing healthcare provision in the district. To understand the current situation and future requirements needed as a result of the additional population housed in the new neighbourhoods, we spoke to both Dorset Primary Care Trust (who cover the Wimborne Minster and Ferndown and West Parley areas) and also Bournemouth and Poole Primary Care Trust (who cover the Corfe Mullen area).







• Employment – Access to jobs is a key factor in the creation of sustainable communities. In order to understand the local economy, the existing economic situation in the area and future requirements, we held a meeting with the Economic Development Officer at East Dorset District Council. However, it is considered that given the sites' size, locations and contexts, employment is unlikely to be an appropriate land use.







· Open space - Open space, sport and recreation provision are key ingredients of any community. In developing new communities, such provision needs to provide the opportunity to recreate formally and informally throughout the year. It must also provide for all ages. Furthermore, it should be of a high quality to encourage people to use it as well as be in locations that are easily accessible and safe. Such provision also helps in terms of "place-making" with open space in particular helping to shape the character of a development. Open space, sport and recreation will be an important feature of the new neighbourhoods. In May 2007, Inspace Planning Ltd produced a Planning Policy Guidance 17 (PPG17) compliant study for EDDC. The study examined existing provision and set standards for future development in the district. It provided standards in terms of quantum, as set out in the table (above right).

It is also important to remember that any development of new neighbourhoods in East Dorset will almost certainly require

Type of open space provision	Standard (ha/ 1,000 people)
Recreation grounds and public gardens	0.5
Natural and semi-natural green space	1
Amenity green space	0.5
Children and young people's space	0.25
Allotments	0.25
Outdoor active sports space	1.25
Total	3.75

the provision of Suitable Alternative
Natural Greenspace (SANGs) to mitigate
the impact on the surrounding healthland
brought about by the new population.
Although the exact standards are still being
decided on by Natural England they are
likely to require a SANGs ratio of between
8ha - 16ha per 1,000 people.

## **Assessment of Capacity and Infrastructure Needs**

## Wimborne Minster North

# Site capacity

The site capacities for Wimborne Minster North are set out in the table below.

Location	Suitable Area for Development (ha)	Units (20 dph)	Population (2.46 people/home)
1) Land north of Wimborne	26.21	524	1,290
Industrial estate adjacent to land north of Wimborne	1.16	23	57
3) Stone Lane Industrial Estate	1.73	35	85
4) Land off St Margaret's	0.70	14	34
5) Cuthbury allotments and football club	7.53	151	370
6) Land south of Cuthbury allotments	0.29	6	14
Total	37.62	753	1,850

Overall, the table shows that the Wimborne Minster North area of search provides around 38ha (gross) of developable land. This area of land could provide for around 750 dwellings and a population of around 1,850 people.

# Additional community infrastructure

Possible social and community infrastructure requirements for Wimborne Minster North are set out below.

- Local shops
- · New first school
- · New health centre
- Sports, recreation and open space (6.94ha)
- SANGs (between 14.81ha and 29.61ha)
- Possible Combined Heat and Power (CHP) plant

#### **Assessment of Capacity and Infrastructure Needs**

#### Wimborne Minster East

## Site capacity

The site capacity for Wimborne Minster East are set out in the table below.

Location	Suitable Area for Development (ha)	Units (20 dph)	Population (2.46 people/home)
1) Land south of Parmiter Drive	27.45	549	1,351
Total	27.45	549*	1,351

Overall, the table shows that the Wimborne Minster East area of search provides over 27ha (gross) of developable land. In pure housing terms, this area of land could potentially provide around 550 dwellings and a population of 1,350 people.

\* However, it is important to note that the development of this area would be based around an affordable housing land swap/ leisure strategy, with limited numbers of new homes comprising "enabling development". Furthermore, large parts of the site are not suitable for housing due to the proximity of the sewage treatment works at Brook Lane and its odour contour. It is, therefore, more likely that the above residential figures could be half that shown leading to a residential figure of around 250 dwellings.

# Additional community infrastructure

Possible social and community infrastructure requirements for Wimborne Minster East are set out below.

- Potential new first school (dependant on size of the residential element) or expansion of one of the existing first schools in the town.
- Sports, recreation and open space (5.06ha)

- SANGs (between 10.80ha and 21.61ha)
- · Relocated football club
- · Relocated rugby club
- · Relocated allotments

# Additional community infrastructure - town wide

The potential social and community infrastructure is also provided as a town-wide requirement covering new neighbourhoods at both north and east Wimborne Minster. This could comprise:

- · Local shops in the north
- New first school in the north and potentially a new first school (or expansion of the one of the existing first schools depending on the size of the residential element) in the east.
- Should both sites come forward for development, the additional population could create demand for a new secondary school in the district and the re-distribution of pupils. The opportunity exists to build such a facility at Verwood.
- · New health centre in the north
- Town-wide open space (12.01ha)
- Town-wide SANGs (between 25.61ha and 51.22ha)
- Possible Combined Heat and Power (CHP) plant in the north

## **Assessment of Capacity and Infrastructure Needs**

Corfe Mullen

# Site capacity

The site capacities for Corfe Mullen are set out in the table below.

Location	Suitable Area for Development (ha)	Units (20 dph)	Population (2.46 people/home)
1) East part of recreation ground	8.43	169	415
2) Land off Violet Farm Close	3.83	77	188
3) Lockyers School	4.14	83	204
Total	16.40	328	807

Overall, the table shows that the Corfe Mullen area of search provides over 16ha (gross) of developable land. This area of land could potentially provide around 330 dwellings and a population of 800.

# Additional community infrastructure

Possible social and community infrastructure requirements for Corfe Mullen are set out below.

- Local shops (including 2,000 sqm convenience store – as set out in the NLP retail report)
- Replacement middle (primary) school for Lockyers.
- Sports, recreation and open space (3.03ha)
- SANGs (between 6.46ha and 12.91ha)
- Possible Combined Heat and Power (CHP) plant

## **Assessment of Capacity and Infrastructure Needs**

# Ferndown and West Parley

#### Site capacity

The site capacities for Ferndown and West Parley are set out in the table below.

Location	Suitable Area for Development (ha)	Units (20 dph)	Population (2.46 people/home)
1) Land at Holmwood House	4.21	84	207
2) Land north of Christchurch Road	2.21	44	109
3) Land east of New Road	18.86	377*	928
4) Land west of Ridgeway	10.54	211	519
Total	35.82	716*	1,762

Overall, the table shows that the Ferndown and West Parley area of search provides just under 36ha (gross) of developable land. This area of land provides around 715 dwellings and a population of around 1,760 people.

\* However, it should be noted that there are concerns over the quantum of development and the subsequent population impacts on Parley Common. This could more than halve the housing on the land to the east of New Road, thus reducing this figure to a total of about 100 new homes.

# Additional community infrastructure

Possible social and community infrastructure requirements for Ferndown and West Parley are set out below.

- Local shops (including 3,000 sqm convenience store – as set out in NLP retail report)
- No new school requirement is envisaged, though pressure on Parley First School could result in the need to redistribute pupils between this school and Ferndown First School (which is generally below capacity).
- · New health centre
- Sports, recreation and open space (6.61ha)
- SANGs (between 14.10ha and 28.20ha)
- Possible Combined Heat and Power (CHP) plant