
East of Harwell Campus

Response to the Inspector's Matters and Questions

Matter 9: South East Vale Sub Area

Respondent reference: 873607

January 2016

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Matter 9
South East Vale Sub Area

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CONTENTS

	Page
1.0 Introduction	1
9.1 Other than in connection with AONB issues (considered in matter 6) are the strategic housing allocations listed in policy cp15 soundly based and deliverable?	2
9.2 Are there other sites which would more appropriately meet the identified need for new housing?	6
9.3 Are the identified and safeguarded employment sites listed in policy CP15 soundly based and deliverable. Are there other sites which would more appropriately meet the identified need for employment land?	7
6.2 Would the alternatively proposed housing site at Harwell Campus...	8

APPENDICES

Appendix 1	-	Assessment of Harwell Campus Proposals
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1.0 INTRODUCTION

- 1.1 This Statement has been prepared on behalf of Ptarmigan Ltd, who control land to the East of Harwell campus.
- 1.2 This Statement should be read in conjunction with those relating to Matters 6.1, 6.2 and 7.
- 1.3 Ptarmigan has no further comments to make on sites which have not been mentioned in this statement. Please read our statement to Matters 6.1 for a detailed assessment of 'alternative sites' within the South East Vale Sub Area.

9.1 OTHER THAN IN CONNECTION WITH AONB ISSUES (CONSIDERED IN MATTER 6) ARE THE STRATEGIC HOUSING ALLOCATIONS LISTED IN POLICY CP15 SOUNDLY BASED AND DELIVERABLE?

(d) Valley Park (site 11)

- 9.1.1 This site is currently proposed to be allocated for 2,550 homes in the Local Plan, but is being promoted, through a planning application, for 4,254 homes. The proposal has therefore been considered within the Alternative Sites Assessment (submitted with Statement to Matter 6.1). This concludes that:
- Development at Didcot would help attract public and private sector investment in the town. An improved Didcot, acting as the large service centre is likely to be important in attracting future employees at Harwell;
 - The site is close to Milton Park and Didcot Town Centre, although planned route improvements are likely to be needed;
 - From a landscape perspective land to the south of Didcot Road is more sensitive;
 - There are potential noise constraints posed by the A34 and the Railway / A4130, which could result in the site not being able to accommodate as many dwellings;
 - There is no evidence to suggest that all 4,254 homes could be delivered within the plan period, with the Council's SHLAA viability assessment (INF02) concluding that the site would struggle to deliver in excess of 200 units per year.
- 9.1.2 It is our understanding that this area is subject to foul sewerage constraints, potentially restricting short term delivery. It is also understood that the Harwell Strategic Link Road is also subject to delays, which again may place a constraint on the ability to deliver the number of homes proposed within the plan period.
- 9.1.3 Both of the above delays are largely out of the control of the promoter and as such there is no guarantee of the District Council either granting consent for the proposed development or the ability to deliver more homes within the Plan period beyond the proposed allocation of 2,550 dwellings.
- 9.1.4 Given the lead-in time to commencement on site, even assuming the technical constraints outlined above can be overcome, it is unlikely that additional housing beyond 2,550 dwellings can be delivered by 2031:
- Outline consent secured – mid 2016 (earliest)
 - Land contracts / option agreements exercised and land sold – mid 2017
 - Detailed consents secured for first phase – early 2018
 - Site enabling works / infrastructure delivery – late 2018
 - Commencement of residential development – late 2018 / early 2019
- 9.1.5 In order to complete 2,550 dwellings by 2031, equates to the sale and completion of approximately 200 dwellings per annum from this site alone. Assuming two sales outlets, this equates to the sale of 17 dwellings per month.
- 9.1.6 Given the adjoining allocation of 800 dwellings to the northwest, and the existing Great Western Park to the east (under construction), acting as further competition the quantum of housing for sale at one time in a single area is significant. Experience suggests that even at their peak, it will be difficult to deliver this quantum of dwellings

per month, even with multiple outlets.

- 9.1.7 Therefore, even if the larger allocation of 4,254 dwellings was allocated or consented, it would be unlikely be able to deliver any additional homes within the plan period to 2031.
- 9.1.8 Valley Park is not within a reasonable walking distance of Harwell Campus, although cyclists could access the campus via the Winaway and Harwell Village. However, its relationship is clearly to Didcot, which will be looked to for its day to day needs, transport and employment.
- 9.1.9 This site is being promoted by a development consortium led by Taylor Wimpey and Persimmon, both of which have a particular development model, based around standard house types. This model is based upon selling properties (largely to order) to purchasers, with the standard product already determined. Variations to these standard products are limited. Whilst this type of product may be suitable for the mainstream housing market, it is very different from the approach needing to be taken at Harwell.
- 9.1.10 Our Development Framework and Statement to Matter 6.1 recognise the international significance of Harwell campus, where the form, nature and character of the campus will be very different to mainstream housing. The private rented sector will have a much bigger role, and the form and character will reflect the international character and operations and the transient nature of the Harwell campus population not being suited to buying a far more mainstream housing product at Didcot.
- 9.1.11 In light of the above, the allocation of 2,550 dwellings is supported. However, the ability to deliver additional housing beyond this quantum within the plan period is not considered to be deliverable and could not act as a substitute to the housing proposed at Harwell.

(f) East of Harwell Campus (site 13)

- 9.1.12 The allocation of land east of Harwell is considered to be soundly based. It is recognised that this site falls within the AONB, where the NPPF (Paragraphs 115/116) requires exceptional circumstances for development. Our Statement to Matter 6.1 addresses this, where it is concluded that:
- The circumstances at Harwell campus are "exceptional" by their very nature. It is not feasible to either relocate the campus or its supporting development outside of the AONB, which was designated long after (and recognizing) the nature, investment and future of the campus were determined.
 - The historic and continued investment of public and private funds into the campus demonstrate the need and (Government's intentions) for the growth and activities and that it is in the public interest for it to continue.
 - The impacts of the proposed development, in terms of benefits, far outweighs any residual negative impacts. No alternative exists to development east of the campus. The need to ensure sustainable patterns of development and the particular needs, locational advantages and circumstances for land east of Harwell campus therefore demonstrate both exceptional circumstances and the public

interest for the proposed development.

- On this basis, it is considered that East of Harwell Campus, when brought forward for development through a planning application, would comply with the requirements of paragraph 116 of the NPPF.

9.1.13 The projected growth at Harwell is very likely to occur in any event. The question over how this occurs is therefore for the Local Plan to determine. In essence, there are two options:

1. That the housing allocation east of Harwell should be deleted from the Local Plan:

- This ignores the above context and assumes that the operations at Harwell will continue in their current form.
- However, such an approach would inevitably lead to two consequences:
 1. The housing would need to be provided elsewhere, exacerbating current unsustainable travel patterns;
 2. Other competing campuses across the globe capitalize upon their ability to collaborate more effectively, attract employees and attract future investment etc. This would directly undermine the direct public sector investment and expectation of Government to realise Harwell's investment through future growth.
- This approach fails to recognise the need for an "innovation village" and the benefits it will bring.
- It is not for the Local Plan process to hinder or undermine the decisions made over the past decade, or future growth of Harwell campus. Rather, the Local Plan seeks to foster economic growth, recognising the importance of Harwell as part of the wider economy.

2. That the Local Plan allocation for 850 dwellings East of Harwell campus should be supported. This approach recognises:

- the international significance of Harwell Campus and its need to maintain its competitiveness on the world stage;
- the exceptional circumstances that exist (see Statement to Matter 6.1)
- the sustainability benefits of locating housing in close proximity to areas of employment growth;
- the need for an "innovation village" so as to secure future growth on a competitive world stage;
- the need for the Local Plan to embrace and foster such growth in a sustainable and comprehensive manner;
- No alternative offers the same advantages or opportunities (as concluded within the Alternative Sites Assessment within the Statement to Matter 6.1), or enables the delivery of this much needed housing and associated mixed uses, whilst minimizing its impact on the AONB.

9.1.14 The allocation has no overriding constraints to its development and offers the most appropriate form of development within the AONB (as determined by the LVIA).

- 9.1.15 The allocation is deliverable within the plan-period. As also set out within the Development Framework, which forms the basis for an outline application (potentially within the next 6 months), a process of stakeholder engagement is also in place. If the Council determine that they wish for a site-specific Development Plan Document to be prepared, the Development Framework will form the basis of this DPD.
- 9.1.16 On this basis, the allocation East of Harwell campus is deliverable and complies with the tests of soundness, in that:
- It has been positively prepared, recognising the particular needs at Harwell campus;
 - It is justified by the exceptional circumstances and public interest that exist for the development within the AONB and need to deliver sustainable patterns of development and growth;
 - It is effective in delivering growth within the plan period in the most sustainable and high quality manner, whilst minimizing impacts on the wider AONB;
 - It is consistent with national policy, in particular paragraphs 17 (Core Principles) and 116 (regarding the AONB).

(g) North-West of Harwell Campus (site 12)

- 9.1.17 The allocation of this land for 550 dwellings, alongside the 850 dwellings, as part of an integrated campus / innovation village, as set out in the Development Framework (appended to the Statement to Matter 6.1) is supported and is considered to comply with the tests of soundness, as set out in paragraph 182 of the NPPF.
- 9.1.18 As highlighted in the Statement to Matter 6.2, the alternative development proposal for accommodating 1400 dwellings within Site 12 and within the existing campus area is considered to be flawed and not deliverable for the reasons set out.

9.2 ARE THERE OTHER SITES WHICH WOULD MORE APPROPRIATELY MEET THE IDENTIFIED NEED FOR NEW HOUSING?

9.2.1 This matter has been addressed in the Statements to Matters 6.1 and 6.2, including within the Assessment of Alternative Sites.

9.2.2 In the event that additional sites are brought to the attention of the Inspector that have not been considered previously, Ptarmigan will wish to make oral representations on such sites at the Examination.

9.3 ARE THE IDENTIFIED AND SAFEGUARDED EMPLOYMENT SITES LISTED IN POLICY CP15 SOUNDLY BASED AND DELIVERABLE. ARE THERE OTHER SITES WHICH WOULD MORE APPROPRIATELY MEET THE IDENTIFIED NEED FOR EMPLOYMENT LAND?

9.3.1 Ptarmigan strongly supports the policy to safeguard employment land at Harwell Campus, in particular, the Enterprise Zone. As set out in the Statement to Matter 6.1, 6.2, 7 and 9.1, the Enterprise Zone is an important economic policy for the Science Vale area and generates business rates which are retained locally for infrastructure investment, and underpin a number of strategic infrastructure schemes across Science Vale. The loss of this land to alternative uses, such as residential would significantly undermine the Vale's Infrastructure Strategy.

9.3.2 Policy CP15, insofar as it relates to Harwell Campus, is soundly based in that it reflects the importance of the campus to the local and national economy (as set out in the Statement to Matter 6). It's safeguarding, alongside the allocations for residential (and associated uses) development is therefore considered to be critical to the continued economic success of the campus.

9.3.3 In addition, the continued and projected employment growth is evidence of deliverability of this employment area.

9.3.4 Given the unique characteristics and nature of the science and innovation undertaken at Harwell campus, combined with the extensive and continued public and private investment that has taken place over recent decades and projected to continue, it is obvious that there are no other sites which would more appropriately meet the particular identified need for employment land.

6.2 WOULD THE ALTERNATIVELY PROPOSED HOUSING SITE AT HARWELL CAMPUS:

(i) Accord with the exceptional circumstances and public interest tests?

- 6.2.1 The requirements for development within the AONB within the NPPF (paragraph 116) are set out in the Statement to Matter 6.1. The same tests apply to any site within the AONB. However, the extent to which any particular proposal meets these tests is an exercise of planning judgment.
- 6.2.2 Contrary to earlier representations and promotions, Harwell campus is now proposing that the residential allocations totaling 1,400 dwellings be accommodated within the existing campus (i.e. the area currently under its control), with 550 dwellings to the north of the campus.
- 6.2.3 The need for development of this scale in this approximate location is also outlined within the Statement to Matter 6, in that:
- The need for housing is identified within the SHMA;
 - Harwell is an area of extensive projected job growth, which is significant to both the local and national economy;
 - The extent of historic and ongoing investment by both public and private sector demonstrates the need and commitment to assist this growth and secure the benefits it will bring;
 - The Enterprise Zone is further demonstration of the commitment of national and local Government, as well as the LEP, to the future growth of Harwell;
 - There is a need for the campus to remain internationally competitive on the world stage;
 - there is a need for a broader mix of uses, including housing, so as to provide homes for those currently and projected to work at the campus, whilst also offering the opportunity to provide a more creative, collaborative and innovative campus environment attractive to investors, innovators, researchers and international recruits;
- 6.2.4 In terms of the cost / scope of locating the development elsewhere, the Alternative Sites Assessment provided in the Statement to Matter 6 outlines the potential alternatives. It is obvious that the campus and activities cannot be relocated to outside of AONB. Given the particular needs of the campus, set out in our Development Framework, locating the development away from the campus will not secure the campus environment needed and would hinder the economic benefits and projected growth.
- 6.2.5 Harwell campus has previously preferred locating housing to east of campus, but was unable to secure control of the land. Since then, they have changed their approach, seeking to provide housing within the campus itself, including housing within the designated Enterprise Zone, despite its economic objectives to the contrary. It is understood that this is on the premise that the campus will have greater control over the form of what takes place. There are, however, a number of problems with such an approach, as outlined below.
- 6.2.6 Ptarmigan has sought to work collaboratively with the campus partnership. However, to date, despite attempts by both Ptarmigan and the Council, the partnership has declined our invitation. It remains our intention to work collaboratively with the campus, the LPA

and all stakeholders in the finalization of the Development Framework subsequent planning applications.

6.2.7 In considering the potential impacts, and the extent to which that could be moderated, in light of the above, the need for the development and lack of scope to provide it elsewhere are the same, irrespective of whether the housing (and associated uses) are located west or east of Newbury Road. It therefore turns on how the campus is best masterplanned, in light of the AONB context (and its likely impact), the existing environment and Enterprise Zone.

6.2.8 As highlighted within the assessment of alternative sites, the implications of putting housing within the existing campus land would result in the loss of 28.3ha of Enterprise Zone (approximately one third). The employment growth and associated infrastructure at Harwell in the SHMA, SEP and City Deal are predicated on this employment land. This land is far better utilized for the business rate generating science and innovation buildings for which it is intended

6.2.9 It has been suggested by Harwell Campus that land to the East should be reserved for 'Big Science' instead of residential uses. This is not a deliverable strategy since the land is not within the control of the partnership and is unlikely to be sold for such uses. There is however land on the southern edge of the Campus which is more suitable for such uses because:

- It is within the control of the Campus
- There are existing 'Big Science' facilities in this location (ISIS and Diamond) behind a security fence. It is likely to be more feasible and easier to maintain to include development within this existing secure area, rather than create a new secure zone across the Newbury Road
- Big Science facilities can be limited to one area, limited landscape impact views, and maximizing benefits from existing structural planting and mitigation.
- The location of 'Big Science' on land east of Harwell will have more significant adverse landscape effects (due to associated size and security) with limited scope for mitigation. As a consequence, clustering them in one location not only assists in operational terms, but also limits any wider impact on the landscape / AONB.

In Summary...

6.2.10 The Campus' proposed alternative does not accord with the exceptional circumstances and public interest tests set out in Paragraph 116. The loss of Enterprise Zone land undermines economic growth through a net loss of prime employment land and infrastructure funding.

6.2.11 The proposals by the Campus cannot sensitively respond to the AONB setting, since they would result in an inappropriately dense development.

6.2.12 However as set out in our response to 6.1 it is necessary to create an innovation village at Harwell to ensure economic growth targets are met. Therefore, the proposed allocations, of 550 homes north of Harwell campus and 850 dwellings, with associated mixed uses, east of Harwell campus are supported. Together these provide the necessary mix of uses, including housing, to help address the unsustainable patterns of travel that

currently exist and that will be exacerbated in the future given the projected employment growth.

(ii) More appropriately meet housing needs?

6.2.13 In considering the proposals by the Campus Partnership, there are significant concerns over:

- The ability to accommodate this level of development within the campus. Appendix 1 considers the breakdown of proposed uses, concluding that the density of the development would be well in excess of that which would be considered appropriate in the AONB. Such development would also be significantly apartments, which would not offer the mix of housing needed and would also put into question the ability to deliver this quantum of housing within the plan-period;
- The incompatibility (in scale and use) of locating housing amongst and adjacent to the employment and research buildings (by virtue of their form, nature, scale, security, height, mass etc.);
- The loss of the economic and investment advantages of the Enterprise Zone when used for housing instead;
- The suggestion to use land east of Harwell campus for "Big Science" in the plan-period, which is better located within the existing "employment" areas.

6.2.14 Furthermore, in considering the tests of soundness, the allocations at Harwell:

- Have been positively prepared, embracing the most effective way of securing economic growth in the most sustainable manner;
- Are justified by identifying the most appropriate uses in the most appropriate locations, based upon the evidence available;
- Are effective in delivering the housing and economic growth aspired to and needed; and
- Are consistent with the requirements of national policy.

6.2.15 In light of the above, the alternative proposals for Harwell are not a more appropriate way of meeting the needs identified.

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Appendix 1

Assessment of Harwell Campus Proposals

East of Harwell Campus

Response to the Inspector's Matters and Questions

Matter 9: Strategy for South East Vale Sub-Area

Respondent reference: 873607

APPENDIX 1

ASSESSMENT OF ALTERNATIVE PROPOSED BY HARWELL CAMPUS

January 2016

East of Harwell Campus

Response to Inspector's Matters and Questions

Matter 9: Strategy for South East Vale Sub-Area

**APPENDIX 1
ASSESSMENT OF ALTERNATIVE PROPOSED BY HARWELL CAMPUS**

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CONTENTS

	Page
1.0 Introduction	1
2.0 Planning Policy Context	2
3.0 Open Space	5
4.0 Development Density	7
5.0 Conclusions	8

1.0 INTRODUCTION

1.1 To understand the development potential of the land within Harwell Campus, identified to be 47.23 ha across sites A, B, C, D & E (as indicated on plan KK1 in the Campus representations), we have undertaken a desktop study to establish a broad land use scenario for the total allocations proposed at Harwell at 1,400 new homes. To establish a land use budget we have assumed existing buildings are removed from the site. For land use quantum we have referred to current national and local planning policies, best practice urban design guidance and best practice open space standards.

The key documents referred to are:

- Submissions on Behalf of the Harwell Campus Partnership, Plan KK1 dated Dec 2014
- Vale of White Horse Local Plan 2031: Part One, Section 4 – Spatial Strategy
- Vale of White Horse Local Plan 2031 PART 1: STRATEGIC SITES AND POLICIES APPENDICES, November 2014
- “Guidance for Outdoor Sport and Play: Beyond the Six Acre Standard” Fields in Trust
- Census 2011 Summary, Vale of White Horse District Council.
- Vale of White Horse Residential Design Guide, December 2009

The key metrics referred to are:

Total site area	47.23 ha	Sum of areas identified as A to E
Totals units proposed by Harwell Campus	1,400	To be accommodated in sites A to E
Average household size	2.4 people per household	From VoWH census which identifies a total pop. of 121,000 residents across 49,400 households
Projected population in the proposed development	3,360 residents	

2.0 PLANNING POLICY CONTEXT

2.1 Harwell Campus sits within the South East Vale sub-area. According to the Spatial strategy, (Part One, Section 4, pp37-39), Harwell Campus is classified as a 'Larger Village' because it has equivalent facilities and services. There is a presumption in favour of sustainable development within the existing built area of Market Towns, Local Service Centres and Larger Villages in accordance with Core Policy 1. Larger villages are defined as:

"...settlements with a more limited range of employment, services and facilities. Unallocated development will be limited to providing for local needs and to support employment, services and facilities within local communities."

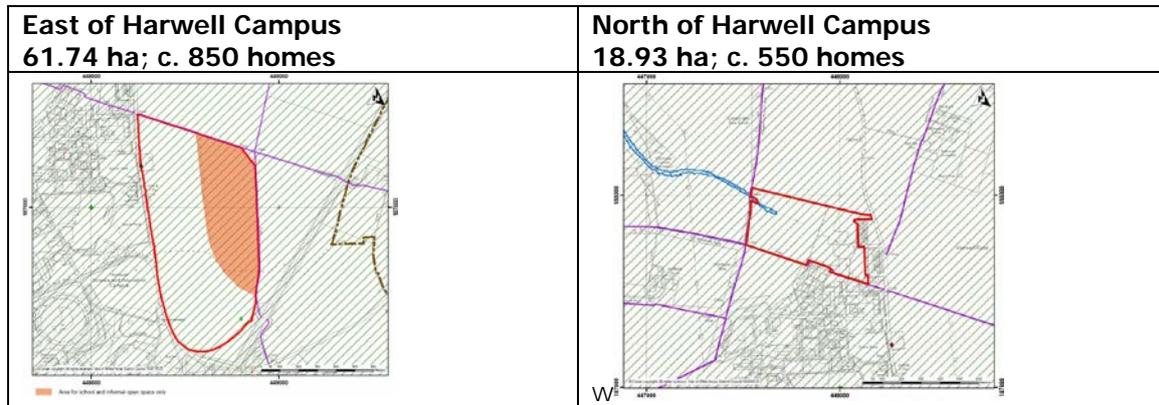
"Development outside of the existing built area of these settlements will be permitted where it is allocated by the Local Plan 2031 Part 1 or has been allocated within an adopted Neighbourhood Development Plan or future parts of the Local Plan 2031. This development must be adjacent, or well related, to the existing built area of the settlement or meet exceptional circumstances set out in the other policies of the Development Plan and deliver necessary supporting infrastructure." (LP 2031, P39)

2.2 The Vale of White Horse Residential Design Guide, December 2009 gives guidance for development densities for Larger Villages, (P59, table of indicative density ranges of settlements within the Vale). There are two appropriate density bands identified:

Outer areas of Medium/ Large Village	30-40dph	Higher density used near public transport routes & local facilities
Centre of Medium/ Large Village	40-55dph	Use upper figure of range on sites within walking distance of public transport and facilities.

2.3 The submitted Local Plan Identifies two development sites associated with Harwell Campus: North of Harwell Campus (18.93 ha) and East of Harwell Campus (61.74 ha). These are shown in detail in the VALE OF WHITE HORSE LOCAL PLAN 2031 PART 1: STRATEGIC SITES AND POLICIES APPENDICES, November 2014, P35 and 38). The Local Plan allocates 550 units and 850 units to these sites respectively. For both allocations masterplanning should take into account the strategy for growth in this area and ensure

that development positively contributes to the wider objectives of Science Vale; a vital area for UK economic growth.



2.4 There are a number of masterplanning principles, objectives and requirements identified for these sites, or to serve the combined residential increase assumed across these two sites, which arguably apply to both sites because of their proximity and inherent interconnection. These are set out in the local plan appendices and include:

- A higher than normal proportion of public open space
- Retention of the Icknield Way and its 'open character'
- Provision of a network of footpaths and cycle ways to the campus, local facilities and the countryside which connect to the retained Icknield Way and the wider footpath network.
- Provision of public open space and recreational facilities in accordance with the Vale's emerging playing pitch strategy and the emerging Science Vale Area Action Plan.
- Provision of a new 2FE primary school (on 2.22 ha land) to serve the additional population associated with 1,400 new homes
- A police presence on site (either through a neighbourhood office or as part of a community hub)
- Sensitivity to the North Wessex Downs Area of Outstanding Natural Beauty (AONB)
- Retain existing trees and hedgerows where possible.
- Campus-wide biodiversity mitigation strategy with suitable receptor site/nature reserve identified – possibly on site.
- Contribute towards redressing the identified Green Infrastructure deficit in the area surrounding Harwell.
- Incorporate Green Infrastructure within SUDs to improve biodiversity and water quality.

- 2.5 In summary, residential development will need to be sensitive to its location so as to minimise any impact on the AONB. Associated non-residential uses with a land take requirement are: primary school, police office, open space, pitches & recreation facilities, retained woodlands, hedgerows and trees, green infrastructure including possible wildlife reserve and SUDs, retained Icknield Way and appropriate open corridor.

3.0 OPEN SPACE

3.1 We have calculated the open space requirement at Harwell Campus using the projected population of 3,360 residents and FIT's revised open space guidelines. This is shown in the table below:

Type	Area (ha) per 1,000 pop	Area required at Harwell campus (ha)	
Pitches	1.20	4.03	
All outdoor sports	1.60	5.38	(includes pitches as identified in the row above)
Equipped play	0.25	0.84	(includes LAPs, LEAPs & NEAPs as shown in the rows below)
LAP	0.010	0.03	
LEAP	0.040	0.13	
NEAP	0.100	0.34	
MUGAs etc.	0.30	1.01	
Parks & gardens	0.80	2.69	
Amenity green space	0.60	2.02	
Natural & semi natural open space	1.80	6.05	
TOTAL Fields in Trust requirement		17.98	ha

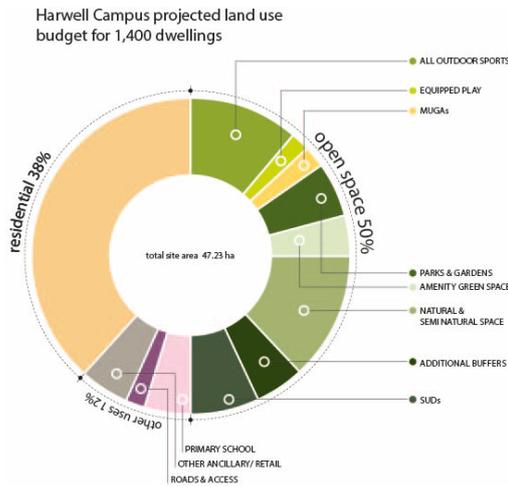
3.2 This total figure equates to approximately 38% of the total site area which is, in our experience, a typical quantum of open space provision associated with a standard 'developer product'. Depending on ground conditions, it may be possible to include SUDs within this area however it would most likely not include any abnormal open space constraints such as protected hedgerows, visual buffers, woodlands etc.

3.3 However, importantly, this amount of open space would be unlikely to meet the Vale of White Horse District Council's stated requirement for a campus character which they describe as including a "higher than normal proportion of public open space".

3.4 In our opinion, a more appropriate amount of open space would be c. 50%. This would accommodate all of the formal and informal provision outlined by Fields in Trust's guidance as well as an allowance of 7% for SUDs, (a typical average based on experience on other sites), and 5% additional buffer, which is considered to be reasonable given the site's sensitivity within the AONB. It would also enable more of a campus environment to be established that would meet the stated requirement for "the highest standards of

landscape masterplanning and urban design and exemplary modern design next to a world class science park, a unique setting that demands a unique design response.” (See submitted local plan appendices).

3.5 This scenario is set out in the table and diagram below:



Land take areas	ha	%	
All outdoor sports	5.38	11%	It may be possible to reduce this open space provision by making the existing pitch provision available to the public (it is currently private and exclusive to occupiers within the campus).
Equipped play	0.84	2%	
MUGAs etc.	1.01	2%	
Parks & gardens	2.69	6%	
Amenity green space	2.02	4%	
Natural & semi natural	6.05	13%	
Additional buffers	2.36	5%	A reasonable allowance given the site's
SUDs	3.31	7%	A reasonable average based on experience but can vary significantly with ground conditions
Primary school	2.22	5%	This requirement is set out in the local plan
Ancillary uses e.g. police/ retail/ nursery/ gym etc.	1.02	2%	A reasonable allowance for the ancillary uses are required to create a sustainable place. Permits only limited parking
Strategic roads & access	2.36	5%	A reasonable average based on experience
Total residential	17.98	38%	Developable land remaining after strategic landscape, access and POS removed
TOTAL ALL SITE	47.23	100%	

Note: this scenario does not take full account of any unseen constraints on site such as underground cabling, land conditions, ecological constraints etc. Rather it is an optimistic calculation based on available information, assumptions and experience elsewhere at the early stages of a project.

4.0 DEVELOPMENT DENSITY

4.1 When all open space and ancillary uses are accounted for, approximately 18ha remains for residential development. To provide 1,400 units on this land would require an average density of 113dph if the development is to meet the level of open space considered appropriate to comply with Local Plan standards. This falls far outside of the density parameters set by the Vale of White Horse Residential Design Guide for Larger Villages. Even if the open space is set at the lowest potential level (i.e. FIT standards are met but there is no allowance made for SUDs or additional buffers) and with no additional open space appropriate to the AONB and campus environment, the land available would be 23.65 ha and the average density would need to be 59dph, which is still above the maximum policy allowance.

4.2 The table below indicates the likely average density of development required to reach 1,400 units at different POS allowances:

113	dph	50% POS allowance – the suggested quantum to comply with Local Plan requirements
82	dph	40% POS allowance using FIT POS with additional allowance for SUDs and
78	dph	buffers
59	dph	using FIT POS with no extra allowance

All of these density scenarios fall outside the 30-55dph range set in the VoWH Residential Design Guide.

4.3 There is a local plan requirement for sensitive development which implies lower density or certainly lower impact development. High density does not necessarily mean higher rise development and it is certainly possible to design low rise development at densities of 60-80 dph. This would, however, require a very high proportion of apartments with few or no family homes, which would in turn lead to larger car parking requirements, thereby impacting on the public realm. The mix of uses, tenures and housing typologies needs to meet the needs of the campus in order to encourage job growth and meet the wider objectives of Science Vale. It is unlikely that such a “monotone” approach to housing mix would encourage a vibrant and diverse mix of people and would certainly discourage families from locating there.

5.0 CONCLUSION

5.1 It is our opinion that providing 1,400 units all on land within the Harwell Campus is inappropriate, unsuitable and potentially un-deliverable, on the basis that:

1. For the development to meet the Local Plan requirement for a “higher than normal proportion of public open space” and create a campus environment, at least 40-50% open space should be provided. This leads to densities higher than allowed in the VoWH Residential Design Guidance for Larger Villages. (e.g. 50% POS leads to a density of 113dph, see table above).
2. Development at higher densities is unlikely to lead to the sensitivity of scale and massing required to mitigate impacts on the AONB.
3. In order to meet the objectives of the Campus and positively contribute to the wider objectives of Science Vale, a mixed community should be encouraged which will attract a wide range of employees. A range of accommodation should be therefore be provided however developing at densities of 59-113 dph would lead to the majority of units being apartments so would not allow for a mix.

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