

**SOUTH OXFORDSHIRE DISTRICT COUNCIL  
LOCAL PLAN 2034  
SECOND FINAL PUBLICATION VERSION**

**CONSULTATION RESPONSE  
ON BEHALF OF  
CEG**

**FEBRUARY 2019**



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**ANNEX 1: CULHAM SCIENCE VILLAGE VISION DOCUMENT**

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## 1.0 INTRODUCTION

- 1.1 This submission is made in response to the South Oxfordshire Local Plan 2034 Second Final Publication Version (January 2019) (“the Local Plan”) consultation. It is submitted on behalf of CEG. It adds to and should be read alongside the submissions that CEG made in response to the ‘Issues and Scope’ (2014), the ‘Refined Options’ (2015), the Preferred Options Plan (June 2016), the Second Preferred Options Plan (May 2017) and the First Publication (October 2017) versions of the Local Plan.
- 1.2 CEG is promoting the land identified under STRAT9 - Land Adjacent to Culham Science Centre as a strategic development area for approximately 3,500 new homes (1,850 in the plan period) with associated services, facilities and infrastructure. CEG supports this proposed allocation.
- 1.3 In support of this submission a *Culham Science Village Vision Document* (February 2019) has been prepared by CEG and its consultant team. That document, which can be found at **Annex 1**, sets out how the site can deliver new homes and employment opportunities, new infrastructure and significant social and environmental benefits. The *Vision Document* also provides information in the following key areas:
- Accessibility, Transport and Highway Impact
  - Landscape Character
  - Visual Amenity
  - Ecology
  - Archaeology
  - Built Heritage
  - Flooding and Drainage
  - Noise and Air Quality
  - Ground Conditions
  - Services
- 1.4 Having reviewed the contents of the Local Plan and its supporting documentation and evidence, CEG is of the view that the Local Plan is generally sound. There are, however, elements of the Plan that would benefit from some redrafting so as to ensure that the Plan conforms to national policy and that the policies are fully effective.
- 1.5 The Local Plan will be tested against the National Planning Policy Framework (NPPF) 2018 and the comments set out hereunder reflect this fact.
- 1.6 Soundness is dealt with at paragraph 35 in the NPPF (2018). For completeness, that paragraph is reproduced below:

*Local plans and spatial development strategies are examined to assess whether they have been prepared in accordance with legal and procedural requirements, and whether they are sound. Plans are 'sound' if they are:*

- a) **Positively prepared** – providing a strategy which, as a minimum, seeks to meet the area's objectively assessed needs; and is informed by agreements with other authorities, so that unmet need from neighbouring areas is accommodated where it is practical to do so and is consistent with achieving sustainable development;
- b) **Justified** – an appropriate strategy, taking into account the reasonable alternatives, and based on proportionate evidence;
- c) **Effective** – deliverable over the plan period, and based on effective joint working on cross-boundary strategic matters that have been dealt with rather than deferred, as evidenced by the statement of common ground; and
- d) **Consistent with national policy** – enabling the delivery of sustainable development in accordance with the policies in this Framework.

- 1.7 In April 2014, the Oxfordshire Authorities produced a joint Oxfordshire Strategic Housing Market Assessment (SHMA) for the Oxfordshire Housing Market Area. It was concerned principally with determining how many homes are needed across Oxfordshire in the period to 2031 (i.e. the Housing Market Area's (HMA) 'Objectively Assessed Need' (OAN); what mix of homes is needed; and the housing needs of specific groups within the population.
- 1.8 The SHMA revealed that SODC and the other Oxfordshire authorities had been undersupplying housing annually and that the housing need was significantly higher than had been planned for previously. This led SODC to embark on a new Local Plan to find land to accommodate its additional OAN as well as a proportion of Oxford City's unmet housing need (Oxford City Council (OCC) does not have capacity within its boundary to meet its OAN). This approach is also consistent with the position agreed by the Oxfordshire Authorities under the Oxfordshire Housing and Growth Deal.
- 1.9 CEG notes that Government guidance regarding housing need has changed with the publication of the National Planning Policy Framework (NPPF) 2018 and that paragraph 60 now states that (with our emphasis) "[t]o determine the minimum number of homes needed, strategic policies should be informed by a local housing need assessment, conducted using the standard method in national planning guidance..." and also that "...any needs that cannot be met within neighbouring areas should also be taken into account in establishing the

*amount of housing to be planned for.*” The guidance that supports the NPPF regarding housing need (ID: 2a-010-20180913) states also that:

*“...Where additional growth above historic trends is likely to or is planned to occur over the plan period, an appropriate uplift may be considered...”*

*“...Circumstances where this may be appropriate include, but are not limited to:*

- where growth strategies are in place, particularly where those growth strategies identify that additional housing above historic trends is needed to support growth or funding is in place to promote and facilitate growth (e.g. Housing Deals);*
- where strategic infrastructure improvements are planned that would support new homes;”*

1.10 CEG supports SODC’s decision to produce a new Local Plan and welcomes the opportunity to engage in the plan-making process. For ease of reference, the comments set out below follow the order and headings used in the Plan.

## 2.0 VISION AND OBJECTIVES

### Paragraphs 3.4 – 3.8

<b>Legally compliant:</b>	<b>Yes</b>	<b>Sound:</b>	<b>Yes</b>	<b>Compliant with the Duty to Co-operate:</b>	<b>Yes</b>
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2.1 CEG notes the Council’s overall vision as set out at paragraphs 3.4 – 3.8 and supports the following key points:

*“3.4 By meeting our housing and employment needs and the creation of new, sustainable and vibrant places, we will have provided enough homes and jobs for those wishing to live and work within South Oxfordshire. New development will meet the highest standards of design with necessary associated infrastructure...”*

*3.6 Science Vale will have continued to grow as a world-renowned science, research and innovation led hub that attracts business, creates job opportunities and delivers housing growth. Road and rail links will have been improved and pedestrian and cycle networks will have made it easier for people to get around, in particular to major employment sites...”*

3.7 *Through careful management of the Oxford Green Belt we will have made provision towards Oxford city's unmet housing needs whilst protecting the important setting of Oxford and also making appropriate provision for housing, business growth and urban and rural regeneration....”*

3.8 *We will plan for new development at seven strategic locations; Grenoble Road, Culham, Berinsfield, Wheatley, Northfield, Chalgrove, and North of Bayswater Brook. We will exceed people's expectations in terms of healthy living, sustainable travel and the design of buildings, homes and public spaces...”*

(our emphasis)

2.2 To achieve “sustainable and vibrant places” and “sustainable travel” housing needs to be built in locations with good access to employment opportunities and where there is a choice of modes of travel and/or where the scale of development is such that it can support the provision of alternative modes of transport. Culham performed well in this regard in the Sustainability Appraisal (SA) of the Publication Draft Version of the Local Plan (see SA Table 7.6: Summary of Performance against SA objectives for Strategic Sites).

### Strategic Objectives

<b><i>Legally compliant:</i></b>	<b><i>Yes</i></b>	<b><i>Sound:</i></b>	<b><i>Yes</i></b>	<b><i>Compliant with the Duty to Co-operate:</i></b>	<b><i>Yes</i></b>
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2.3 CEG supports, in particular, the following Strategic Objectives:

#### ***Objective 1 - Settlements***

- OBJ. 1.3: meeting identified housing needs by delivering high-quality, sustainable, attractive places for people to live and work;
- OBJ. 1.4: focusing growth in Science Vale through delivering homes and jobs, retail and leisure facilities and enhanced transport infrastructure;

#### ***Objective 2 - Housing***

- OBJ. 2.2: Support the regeneration of housing and facilities to strengthen communities and address deprivation issues;
- OBJ. 2.3: Support meeting the economic and housing needs of the county as a whole [while] reflecting the special character of South Oxfordshire;

**Objective 3 - Economy**

- OBJ. 3.1: improve employment opportunities and employment land provision, providing high quality local jobs to help retain more of its skilled residents in the local workforce;
- OBJ. 3.2: Aim to reduce commuting distances by supporting business growth in locations close to existing business areas, transport connections and broadband provision.;
- OBJ. 3.3: ensure economic and housing growth are balanced and facilitate sustainable journeys to work;
- OBJ. 3.5: create the conditions whereby world-renowned and cutting edge industries choose to locate and grow their businesses [in South Oxfordshire], contributing to a strong and successful economy, consistent with the Strategic Economic Plan for Oxfordshire (SEP);

**Objective 4 - Infrastructure**

- OBJ. 4.1: ensure that essential infrastructure is delivered to support existing residents and services as well as growth;
- OBJ. 4.2: make sustainable transport, walking and cycling an attractive and viable choice for people, while recognising that car travel and parking provision will continue to be important in this predominantly rural district.

(our emphasis)

- 2.4 CEG supports SODC's intention to retain Science Vale as a focus for major new development. The proposed STRAT9 allocation is consistent with this objective in that the land Adjacent to Culham Science Centre is located in the heart of Science Vale and adjacent to Culham Science Centre. It also has, or will help deliver, good transport links northwards and southwards along the 'knowledge spine', westwards to Abingdon and the A34 and eastwards to and from the other strategic housing locations in Berinsfield and Chalgrove (see the plan at **Annex 2**).



### 3.0 SPATIAL STRATEGY

#### Strengthening the Heart of South Oxfordshire

##### Policy STRAT1: The Overall Strategy

<b>Legally compliant:</b>	<b>Yes</b>	<b>Sound:</b>	<b>Yes</b>	<b>Compliant with the Duty to Co-operate:</b>	<b>Yes</b>
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- 3.1 CEG supports the Council's "preferred strategy" as set out at paragraph 4.9 and in Policy STRAT1 – The Overall Strategy. In particular the continued commitment to:

*"Focusing major new development in Science Vale including Didcot Garden town and Culham so that this area can play an enhanced role in providing homes, jobs and services with improved transport connectivity"*

#### Meeting Housing and Employment Needs

##### Policy STRAT2: South Oxfordshire Housing and Employment Requirements

<b>Legally compliant:</b>	<b>Yes</b>	<b>Sound:</b>	<b>No</b>	<b>Compliant with the Duty to Co-operate:</b>	<b>Yes</b>
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- 3.2 CEG supports the Council's commitment to the Oxfordshire Housing and Growth Deal (as set out in Policy STRAT2) and the collective commitment along with other district councils and the County Council to plan for 100,000 new homes between 2011 and 2031.
- 3.3 CEG also supports part six of STRAT2 that commits to monitoring and plan review. This is a sensible and necessary approach to ensuring the delivery of larger development sites. This is likely to be of particular value in the phasing of development across the major site especially at the edge of Oxford.
- 3.4 CEG would, however, question whether it is appropriate and fully effective, given modern methods of working and the increasing mismatch between job creation and the amount of floor space required to support a given number of jobs, to express the required employment in terms of the amount of space required.

#### **Necessary Modification**

- 3.5 It may be more appropriate and effective to refer, in Policy STRAT2, to a target number of jobs i.e. the 12,403 new jobs projected in the *South Oxfordshire Employment Land Review Addendum*. Alternatively the policy could contain

some flexibility to consider matter on a 'case-by-case' basis especially on sites adjacent existing sources of employment.

### Didcot and Science Vale

#### Paragraphs 4.42 – 4.44

<b><i>Legally compliant:</i></b>	<b>Yes</b>	<b><i>Sound:</i></b>	<b>Yes</b>	<b><i>Compliant with the Duty to Co-operate:</i></b>	<b>Yes</b>
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- 3.6 CEG notes from paragraph 4.42 that one of the priorities for Science Vale is to provide an environment in which science-led business can flourish and that part of this is ensuring that “we have an attractive and diverse housing offer, set in an area with good transport and communication networks, links to university of research, ‘big science’, the space sector and cutting edge technology.” CEG notes also the reference to “clustering development in one area”, which “gives a critical mass of economic, social and cultural activity to support the delivery of infrastructure and sustained vibrant town centres” and that “[Science Vale] has well established road and rail networks” which “are already driving investment and supporting job growth”.
- 3.7 In addition, CEG notes and agrees with the Council’s strategy for Science Vale as set out at paragraph 4.44. In particular, the Land Adjacent to Culham Science centre will:
- a) Assist in providing a range of new homes to balance the new jobs;
  - b) Provide opportunities for new innovative housing linked to Culham Science Centre;
  - c) Facilitate and contribute to measures to improve and transform Culham railway Station in to a focal point for the new community;
  - d) Contribute to convenient bus services throughout the area; and
  - e) Provide more and better cycling and walking links, including northwards to Oxford, to encourage reliable, active and healthy travel.

### Land at Culham Science Centre

#### Paragraphs 4.69 – 4.75

<b><i>Legally compliant:</i></b>	<b>Yes</b>	<b><i>Sound:</i></b>	<b>Yes</b>	<b><i>Compliant with the Duty to Co-operate:</i></b>	<b>Yes</b>
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- 3.8 CEG supports the references to Culham Science Centre (“CSC”), ‘No.1 site’ and land west of the railway at paragraphs 4.69 – 4.75. It also strongly supports

Policy STRAT8: Culham Science Centre and Policy STRAT9: Land adjacent to Culham Science Centre. In particular, CEG welcomes:

- at para. 4.70: The Council’s recognition of the “key role of the CSC site [in terms of the National, regional and local employment strategy]” and its “support and encourage[ment]” for its redevelopment;
- at para. 4.71: The support for “significant development in a sustainable location” to the west of the railway line that “will have access to employment opportunities as well as public transport at the railway station” that will be “a community at the heart of Science Vale that can make the most of advancing technologies...”;
- at para. 4.72: The proposal to ‘inset’ Culham Science Centre and the land adjacent to Culham Science Centre from the Green Belt; and
- at para. 4.73: The support for the development and delivery of a new Thames Crossing between Culham and Didcot.

#### Paragraph 4.71

<b><i>Legally compliant:</i></b>	<b><i>Yes</i></b>	<b><i>Sound:</i></b>	<b><i>No</i></b>	<b><i>Compliant with the Duty to Co-operate:</i></b>	<b><i>Yes</i></b>
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- 3.9 CEG notes the Council’s approach to employment provision and the references at paragraph 4.71 to planning for a mixed use “at the adjacent ‘No 1 site’ and the land west of the railway” and the intention to retain employment land, “but with improved premises, comprehensively across the [STRAT9] allocated site and Culham Science Centre”. ‘No 1 site’ and the ‘land west of the railway line’ are not separate allocations; they are part of the same STRAT9 allocation. It is therefore misleading and unnecessary to seek to distinguish between the two in the supporting text, especially when that text refers to the distribution of the employment provision “comprehensively across the [STRAT9] allocated site and Culham Science Centre” and when policies STRAT8 and STRAT9 refer to the net increase in employment provision of 7.3 hectares “with the existing 10 hectares of the No.1 being retained but redistributed across the two strategic allocations”.
- 3.10 As CEG has suggested in response to Policy STRAT2, it is considered more appropriate, given modern methods of working and the increasing mismatch between job creation and the amount of floor space required to support a given number of jobs, to express the required employment in terms of the amount of space required. It may be more appropriate to refer instead to a target number of jobs i.e. a proportion of the 12,403 new jobs projected in the *South Oxfordshire Employment Land Review Addendum*.

### ***Necessary Modification***

- 3.11 Accordingly, CEG would suggest that paragraph 4.71 is amended, to ensure effectiveness, as follows:

“The Council will continue to support the redevelopment and intensification of the Culham Science Centre for research and science based businesses. ~~At the adjacent ‘NO. 1 site’ and land west of the railway we will plan for~~ The Council would also support new a employment development on the Land Adjacent to Culham Science Centre as part of a comprehensive mixed used development planned including the retention of employment land, but with improved premises, comprehensively across the allocated STRAT9 site and Culham Science Centre”.

- 3.12 CEG would also suggest that all references in the Plan to a net increase in the amount of employment land to be provided jointly by Culham Science Centre (STRAT8) and the STRAT9 site are replaced by a target number of new jobs.

### **Paragraph 4.72**

#### **Green Belt: Exceptional Circumstances**

<b><i>Legally compliant:</i></b>	<b><i>Yes</i></b>	<b><i>Sound:</i></b>	<b><i>No</i></b>	<b><i>Compliant with the Duty to Co-operate:</i></b>	<b><i>Yes</i></b>
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- 3.13 CEG notes the ‘exceptional circumstances’ justifying a review of the Green Belt set out at paragraph 4.72. CEG’s view is that there are a number of other matters that can be added to that list.
- 3.14 To stimulate economic growth, to contribute properly to the provision of housing necessary to meet Oxford’s unmet need and consistent with the Council’s overall vision and strategic objectives, CEG’s view is that the majority of development should be steered towards strategic sustainable locations close to Oxford in the Green Belt and Science Vale, which have good transport links to Oxford and Science Vale.
- 3.15 The Planning Policy Framework (“the Framework”) states at paragraph 136 that once established, Green Belt boundaries should only be altered in exceptional circumstances through the preparation or review of a Local Plan and that at that time, local authorities should consider Green Belt boundaries having regard to their intended permanence in the long term. It then goes on state at paragraph 138 that when drawing up or reviewing Green Belt boundaries, local authorities should take account of the need to promote sustainable patterns of development.

- 3.16 As confirmed by the Inspectors appointed to conduct the Examinations in to the Cherwell Local Plan and Vale of White Horse Local Plan, the level of Oxford's unmet housing need and the lack of suitable sites within the City is such as to constitute an exceptional circumstance sufficient to justify a review of Oxford's Green Belt. In the context of such a review, the Land Adjacent to Culham Science Centre, which has good transport links, and which can be developed without affecting the City's landscape setting, would be a suitable and sustainable site in terms of both a contribution towards Oxford's unmet housing need and the provision of housing in Science Vale, which is a cornerstone of the Council's preferred strategy. Development at Culham would also reduce pressure on other settlements in South Oxfordshire thereby allowing them to better retain their existing character.
- 3.17 CEG is also aware that the UKAEA has plans for further growth at Culham Science Centre, which are consistent with these objectives and with the strategic vision in the Strategic Economic Plan (March 2014) ("SEP"), a cornerstone of which is to prioritise interventions in key locations along the 'Oxfordshire knowledge Spine'. Culham Science Centre is one of those 'key locations'. This is evidenced by the recent SMART Oxford – Culham City Local Growth Fund bid by the UKAEA's Remote Applications in Challenging Environments ("RACE") business at Culham Science Centre for the phased deployment of autonomous vehicles along the Oxfordshire Knowledge Spine to create an operational autonomous transport service as part of the Science Transit Network. CEG supports this initiative and will work with RACE to embed autonomous vehicle technology in the Culham Science Village project.
- 3.18 The RACE bid was predicated on there being sufficient housing adjacent to CSC to provide the economies of scale necessary to support investment in a long-term 'test bed' where integrated intelligent mobility can be tested in a range of real environments. It also assumed that the 'Culham Smart Community' initiative will be part of an integrated package of sustainable transport measures that also includes improvements to Culham Railway Station, a new Thames Crossing and the Clifton Hampden By-pass, the purposes of which are to release pressure on the A34 and create and support new jobs and growth in Science Vale.
- 3.19 Further justification for the Land Adjacent to Culham Science Centre allocation is provided by recent research commissioned by the University of Oxford and Science Oxford with support from the Oxfordshire Local Enterprise Partnership (OxLEP), which has identified the need for significant further growth around Oxford to support the city's function as an internationally significant knowledge and science hub.

***Necessary Modification***

- 3.20 Taking all of the above in to account, CEG would add the following 'exceptional circumstances' to the list at paragraph 4.72:

- the Objectively Assessed Need (OAN) for housing in South Oxfordshire;
- the requirement to contribute to Oxford's unmet housing need;
- Science Vale's position as a world-renowned science, research and innovation hub;
- Culham Science Centre's central role in maintaining and growing that 'hub';
- the economic, social and environmental benefits that can be derived from co-locating housing and jobs at Culham in the heart of Science Vale;
- the 'Culham Smart Community' initiative, Culham Science Centre's location on the Oxfordshire Knowledge Spine and the symbiotic relationship between housing and jobs along that spine; and
- the contribution that a strategic housing development at Culham can make towards planned strategic improvements to public transport (rail and bus) provision and new road infrastructure in the heart of Science Vale (see below).

- 3.21 CEG notes that on the Green Belt Proposed Changes Map at Appendix 4 in the Plan part of the frontage to Culham Science Centre and the northern-most part of Culham No.1 Site have been left in the Green Belt i.e. they are not 'inset'. This is nonsensical.
- 3.22 The Culham Science Centre frontage land is likely to be the location for a new roundabout serving the Science Centre and that part of the strategic development area located east of the railway line; it is also the obvious location for new 'gateway' uses linked to the Science Centre and the strategic development area.
- 3.23 The northern-most part of Culham No.1 Site 'reads' as part of that site. Moreover, the logical and defensible boundary is the footpath that marks its northern boundary.
- 3.24 Neither site was identified in the Council's Green Belt Study as being essential to the purposes of the Green Belt or as being important in terms of maintaining 'openness'.
- 3.25 Consequently, the Strategic Allocation map at Appendix 2 and the Green Belt 'inset' plan at Appendix 4 should be amended in accordance with the Plans at **Annex 3** and **Annex 4** to this submission.

### Proposed Strategic Allocations concept plan: Culham Science Centre

<b><i>Legally compliant:</i></b>	<b>Yes</b>	<b><i>Sound:</i></b>	<b>No</b>	<b><i>Compliant with the Duty to Co-operate:</i></b>	<b>Yes</b>
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3.26 Consistent with the changes suggested above regarding the split of employment requirement across both the Culham Science Centre and adjacent land allocations, the 'concept plan' at page 51 in the Plan should also be changed. There are discrepancies between the provisions of the proposed policy text in STRAT8 & STRAT9, the 'concept plan' and 'Strategic Allocation' map at Appendix 2. These are in addition to the erroneous identification of employment land, but include:

- The title of the concept plan is 'Culham Science Centre' but the Science Centre itself is not identified on the concept plan – but is on the allocation map.
- The proposed "Green Belt reinforcement" is not defined, and does not follow the proposed inset boundary around the Europa School. Furthermore, its purpose alongside the road and existing tree belts is unclear.
- There is a large green buffer to the railway line, and a safeguarding area, which would make cohesive planning and development a challenge
- The constraints on the allocation map are not effectively transferred into the indicative concept – e.g. the setting of listed buildings

#### ***Necessary Modification***

3.27 CEG has produced an alternative plan, which can be found at **Annex 5**, to properly reflect the proposed policy position.

### Policy STRAT9: Land Adjacent to Culham Science Centre

<b><i>Legally compliant:</i></b>	<b>Yes</b>	<b><i>Sound:</i></b>	<b>Yes</b>	<b><i>Compliant with the Duty to Co-operate:</i></b>	<b>Yes</b>
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3.28 CEG is strongly of the view that the allocation of land adjacent to Culham Science Centre, as proposed in Policy STRAT9, is sound. The detailed submissions that CEG has made during the course of the Local Plan drafting demonstrate that the site is suitable, available and deliverable. Furthermore, there are strong exceptional circumstances to review the Green Belt boundaries in this location to provide for development; there is a comprehensive infrastructure package to support development; and, – in combination with the associated policy (STRAT8) at Culham Science Centre -



the site provides a cornerstone to the continued success of the Science Vale strategy.

### **Infrastructure Delivery Plan**

- 3.29 CEG has reviewed the latest iteration of the Infrastructure Delivery Plan (“IDP”), which has been informed by viability information provided by CEG, and is confident that its scheme for the Land Adjacent to Culham Science Centre can deliver infrastructure identified in this Plan and the IDP.

### **HIF Bid**

- 3.30 The County Council submitted its Didcot Garden Town Housing Infrastructure Bid to the Ministry of Housing, Communities & Local Government in January 2019. The funding request sought £218m towards the delivery of the following schemes, the estimated delivery cost of which is £234m:

- A4130 widening from A34 Milton Interchange towards Didcot;
- A new Science Bridge over the A4130, Great Western Railway Line and Milton Road into the former Didcot A Power Station site;
- A new Culham to Didcot river crossing between the A4130 and A415;  
and
- A Clifton Hampden Bypass.

- 3.31 The package of measures will help to support and unlock more than 13,500 new homes in and around the Didcot Garden Town area, while also supporting economic growth and job creation. Together with the Housing and Growth Deal, in total HIF will support more than 17,500 new homes in the immediate area including strategic development on land adjacent to Culham Science Centre.

- 3.32 Since lodging its bid, the County Council has received a number of early requests for clarification on elements of its submission. The speed with which these requests are being made is being viewed extremely positively and taken as an indication that an early announcement as to the success of the bid is likely to be made.

- 3.33 Recognising the importance of the delivery of these pieces of strategic highway infrastructure, CEG and its appointed consultant team have been engaged with both the County Council and the District Council over the past two years in seeking to advance the baseline and initial high level design work associated with both the river crossing and the Clifton Hampden bypass. This has resulted in a preferred alignment and geometry for the bypass having been agreed. Agreement has also been reached in principle on the form of the junctions that will serve the bypass, the on-going expansion of Culham Science Centre and the development of the land adjacent to Culham Science Centre. The work



undertaken by CEG's consultant team has also assisted in narrowing the options for the delivery of the river crossing, providing a springboard for the Council's consultants to progress more detailed work in respect of its delivery.

- 3.34 CEG continues to actively engage with both the County Council and the District Council in order to establish how best it can assist in facilitating early delivery of the river crossing and Clifton Hampden bypass, including looking at delivery programme and phasing, in an effort to ensure that existing acknowledged highway constraints are addressed in a timely manner thereby allowing traffic growth associated with the implementation of sites identified in the Local Plan, including that at Culham, to be affectively managed.
- 3.35 In this regard, CEG is aware of the on-going work, jointly commissioned by both Councils, which is being undertaken to help more closely define the timing of housing delivery and planned infrastructure needs associated with Local Plan growth.
- 3.36 In this regard, CEG is seeking to utilise the detailed micro-simulation model that is being prepared for Didcot Garden Town in order to define in detail the local area impacts associated with development on land adjacent to Culham Science Centre, which may reveal the need for mitigation beyond that delivered by the planned strategic infrastructure improvements. As such, CEG is pre-actively seeking to agree with the Highway Authority baseline traffic modelling assumptions associated with the development of land adjacent to Culham Science Centre, in order that these assumptions be duly reflected in the more detailed modelling exercise to be undertaken. This work will help in providing the evidence required to inform any limitations on the number of homes that can be built ahead of the delivery of strategic highway infrastructure.
- 3.37 CEG therefore acknowledges, accepts and supports the need to work alongside the Councils to understand the infrastructure requirements associated with delivery of development at Culham (STRAT9) and remains confident that it can facilitate significant timely housing delivery alongside delivery of the necessary highway infrastructure.

## **Rail**

- 3.38 Discussions with Network Rail has identified industry plans for enhancement of the rail corridor between Oxford and Didcot that include the potential four-tracking of the route to provide additional capacity. The proposals are at a very early stage of development and are influenced by the desire to minimise disruption to the existing services. This requirement coupled with the aspiration to provide grade separation of westbound services travelling towards Oxford at Didcot East Junction has created the need to consider provision of additional tracks on a separate alignment to the existing railway.

- 3.39 CEG has actively engaged with Network Rail and Great Western Railway to discuss opportunities for rail service improvements on the rail corridor between Didcot and Oxford. Initial discussions with Network Rail revealed potential plans to increase the capacity of this particular section of the rail corridor by doubling the existing track to a four-track railway. A report was commissioned to assess the feasibility of a number of rail alignment options, and culminated in Network Rail's acceptance of safeguarding land along the existing corridor for future rail duplication.
- 3.40 The safeguarding of land for rail is also being considered with respect to the Thames crossing development work, in which CEG are assisting the Council to understand the total land requirement and engineering constraints for the road and associated structures.
- 3.41 Further discussions with Great Western Railway, the Department for Transport and Network Rail will be had to secure commitment to a level of service improvement for the railway in terms of service frequency and timing.

***Suggested additional modifications***

- 3.42 CEG has, however, raised concerns above regarding the text outlining the amount of employment required on the two proposed allocations. In addition to concerns already cited, within the proposed text for Policy STRAT9 there are additional or 'minor' modifications that CEG respectfully suggests that the Council should consider at the submission of the Plan. These are as follows:
- The need for Gypsy and Traveller pitches within the allocation is not explained
  - There is significant repetition of text in bullet points '1' & '3 i)' and also bullet points '2' & '4'
  - Bullet point '3' refers to proposals to develop "Culham" and should instead refer to Land Adjacent to Culham Science Centre
  - The order of the bullet points is confused and switches between opportunities, constraints and requirements.

## 4.0 DELIVERING NEW HOMES

### Policy H1: Delivering New Homes

<b><i>Legally compliant:</i></b>	<b>Yes</b>	<b><i>Sound:</i></b>	<b>Yes</b>	<b><i>Compliant with the Duty to Co-operate:</i></b>	<b>Yes</b>
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- 4.1 CEG is aware that some of the workforce at Culham Science Centre, particularly young graduates, are finding it increasingly difficult to secure appropriate accommodation at an affordable level in the vicinity of the site. Locating new homes adjacent to Culham Science Centre could help to ease this situation but only if the quantum of development is such that it can support a range of house types and tenures. If the site is to continue to grow in line with the commitment in the Core Strategy and the emerging Plan, it is essential that any new homes at Culham include for example an element of private rented sector housing and campus-style accommodation suitable for scientists and others who may be visiting/working at Culham Science Centre on a short-term basis.
- 4.2 Much of the baseline work pursuant to an application has been completed and has been shared with the Council. CEG has also secured an EIA Scoping Opinion from the Council.
- 4.3 CEG is committed to working with the Council, Oxfordshire County Council (in its role as Highway Authority and Education Authority) and other statutory and non-statutory bodies and its neighbour, the UKAEA, to develop and bring forward a site-wide masterplan and a site-specific infrastructure delivery plan. It is also committed to engaging in an iterative design-led approach to the scheme design.
- 4.4 CEG anticipates that Culham Science Village will start to deliver new homes in 2022 – 2023.

### Policy H9: Affordable Housing

<b><i>Legally compliant:</i></b>	<b>Yes</b>	<b><i>Sound:</i></b>	<b>No</b>	<b><i>Compliant with the Duty to Co-operate:</i></b>	<b>Yes</b>
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- 4.5 CEG welcomes the acknowledgment in Policy H9: Affordable Housing policy that in circumstances where it can be adequately demonstrated that the level of affordable housing being sought would be unviable, consideration “may” be given to alternative tenure mixes and levels of affordable housing. However, consistent with the approach in the First Regulation 19 Plan (Policy H11), and in the interests of clarity, the policy should be amended to ensure the policy is effective and consistent with national policy.

**Necessary Modification**

- 4.6 To ensure that the policy is compliant with national guidance to not undermine the delivery of the Local Plan and to demonstrate that the policy is fully effective it is recommended that the policy should confirm that the provision of affordable housing will be subject to the viability of provision on each site.

**Policy H14: Provision for Gypsies, Travellers and Travelling Showpeople**

<b>Legally compliant:</b>	<b>Yes</b>	<b>Sound:</b>	<b>No</b>	<b>Compliant with the Duty to Co-operate:</b>	<b>Yes</b>
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- 4.7 CEG notes the continued identification of “3 pitches for Gypsies and Travellers at Land adjacent to Culham Science Centre” in Policy H14, which has been carried forward from the previous publication version of the Local Plan (November 2017). Indeed, the reference in Policy H14 refers to “STRAT7” the previous notation for the allocation of land adjacent to Culham Science Centre.
- 4.8 The justification for the allocation of pitches as Land adjacent to Culham Science Centre is reported at paragraph 5.80 of the Local Plan:

*“...The remaining six pitches will be delivered at our strategic sites at Chalgrove and Culham. Allocating pitches at strategic sites allows us to consider the needs of Travellers at the outset of the design process and properly integrate the pitches into the design of the development.”*

- 4.9 CEG agrees in principle that the proper integration of pitches at an early stage is a reasonable objective, but the reasons for choosing Chalgrove and Culham are not clearly set out in the Local Plan, especially now that there are other “strategic sites” available for the Council to consider.

**Necessary Modification**

- 4.10 CEG suggests that the Council reappraises the opportunities available to them for allocating Gypsy and Traveller pitches and properly justifies their site selections. If it transpires that Land adjacent to Culham Science Centre remains the most suitable location, the cross reference to allocation policy “STRAT7” will need to be updated to “STRAT9”.

## 5.0 TRANSPORT

### Policy TRANS1b: Supporting Strategic Transport Investment

<b><i>Legally compliant:</i></b>	<b>Yes</b>	<b><i>Sound:</i></b>	<b>Yes</b>	<b><i>Compliant with the Duty to Co-operate:</i></b>	<b>Yes</b>
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- 5.1 CEG notes from Policy TRANS1b: Supporting Strategic Transport Investment that the Council will work with Oxfordshire County Council (OCC) and others *inter alia* to support sustainable transport measures; the delivery of safeguarded transport improvements; and to support the development and delivery of a new Thames road crossing between Culham and Didcot Garden Town.
- 5.2 As CEG has outlined in support of proposed policy STRAT9, its consultant team has worked closely with a range of relevant stakeholders including Network Rail to support the provision of transport schemes in connection with Land adjacent to Culham Science Centre and around Didcot Garden Town. It is also likely that funds from the positively progressing “HIF Bid” will enable the delivery of some vital elements of the necessary strategic infrastructure in this Local Plan.

### Policy TRANS2: Promoting Sustainable Transport and Accessibility

<b><i>Legally compliant:</i></b>	<b>Yes</b>	<b><i>Sound:</i></b>	<b>Yes</b>	<b><i>Compliant with the Duty to Co-operate:</i></b>	<b>Yes</b>
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- 5.3 Policy TRANS2: Promoting Sustainable Transport and Accessibility states that the Council will work with OCC and others *inter alia* to ensure that where new development is located on or close to existing public transport corridors, bus and/or rail services can be strengthened; to plan positively for rail improvements; to encourage walking and cycling; and to improve public transport, including Park & Ride.
- 5.4 CEG supports the Council in its objective to work with Oxfordshire County Council in order to help support the development and delivery of a new Thames road crossing between Culham and Didcot Garden Town (Policy TRANS1b) and in this regard CEG acknowledge that development on Land Adjacent to Culham Science Centre will be required to contribute significantly to both the Thames road crossing and the Clifton Hampden bypass (Policy STRAT9).
- 5.5 South Oxfordshire District Council has been working with the County Council and consultants Atkins, who undertake the strategic modelling, to test the impacts of a number of updated Local Plan development scenarios that could meet the required number of new homes needed for the District. This work has used the updated transport model for Oxfordshire, with a base year of 2013, and a forecast year of 2031, with the modelling having been completed in stages.

- 5.6 Stage 1 was undertaken to support Local Plan consultation at Regulation 18 in Spring 2017, Stage 2 to support Regulation 19 consultation in Autumn 2017, and the latest Stage 3 work done to support the Regulation 19 Version 2 consultation in January 2019.
- 5.7 The ETI Stage 3 tested the forecast transport impacts of a number of different development scenarios following the decision to review all potential SODC Local Plan sites following the last Regulation 19 consultation. The quantum of housing at the individual sites used in the scenario testing is based on information available on potential site capacities in mid-2018, and it is acknowledged that the final housing numbers proposed for sites in the publication version of the plan are lower for two of the sites adjacent to Oxford (Land north of Bayswater Brook which was previously referred to as Wick Farm/Lower Elsfield, and Northfield) and therefore the modelling is based upon a worst case scenario.
- 5.8 Moreover, the modelling assumes that all 3,500 units at Culham will be constructed by the end of the modelled period of 2031, which we acknowledge is unlikely to prevail.
- 5.9 As with the previous transport modelling work (ETI Stage 1 and 2), the assessed scenarios were compared against a 'do-minimum' scenario, which included committed growth, both within South Oxfordshire, and in surrounding districts and includes the delivery of a number of strategic highway schemes, including Clifton Hampden Bypass and the Culham to Didcot Thames Crossing (eastern alignment). The transport mitigation for the 'do-minimum' scenario was consistent with that included in the previous work (ETI Stages 1 and 2).
- 5.10 As part of ETI Stage 3, a number of scenarios were tested, with the last scenario (5B) including those strategic sites within the Regulation 19 Publication Version 2 of the Plan and therefore it is this scenario which is of most relevance to evaluation of the Plan's soundness. The assumptions made in this scenario are as set out below:
- 5.11 The results of the modelling for Scenario 5B demonstrate that although there is a reduction in forecast network performance when compared to the 'do-minimum' scenario, the mix of housing and mitigation gives rise to far better forecast operating conditions than other combinations of development and mitigation also tested at Stage 3.
- Development Quantum: Northfield (2,000), Grenoble Road (3,000), Chalgrove (3,000), **Culham (3,500)**, Wick Farm/Lower Elsfield (2,036), Berinsfield (1,700), Wheatley (300), Neighbourhood Plan commitments and targets.
  - Assumed Mitigation: Benson Bypass, Chiselhampton Bypass, Stadhampton Bypass, Watlington Bypass, **Culham Didcot Thames River Crossing, western alignment, Culham Site Access Links,**

**Culham Didcot Thames River Crossing alternative (Western alignment), A40 Link Road (40mph single carriageway), Berinsfield northern access, Speed reductions to Dorchester/Stadhampton Road to 20mph, Golden Balls roundabout enlargement, capacity increase for north- and southbound movements and additional filter lane from Clifton Hampden bypass to A4074 northbound, Accesses to Culham site improved.**

- 5.12 It is acknowledged that there will be further, more detailed work required to help refine the package of highway and sustainable transport mitigation measures to support future housing and employment growth, both at Culham and more widely in the area to ensure that the Plan contributes towards the delivery of sustainable development. This further assessment will include on-going partnership work between CEG and the County and District Councils.
- 5.13 On the basis of the foregoing, CEG is confident therefore that upon delivery of the planned and modelled strategic infrastructure towards which development at Culham will contribute significantly, as well as localised mitigation, the scale of which will be determined through more detailed modelling, the road network will perform well despite the increase in travel demand which arises from planned strategic development.
- 5.14 CEG notes also that the overall conclusion of the ETI stage three is that the SODC Local Plan is deliverable with additional mitigation.

## **6.0 CONCLUSIONS**

- 6.1 CEG welcomes the proposal to 'inset' the Land Adjacent to Culham Science Centre from the Green Belt and to allocate it as a strategic development area for approximately 3,500 new homes with associated services, facilities and infrastructure with approximately 1,850 homes within the plan period.
- 6.2 The land Adjacent to Culham Science Centre is unique in being located:
- next to Culham Science Centre;
  - roughly at the mid-point of the Oxfordshire Knowledge Spine;
  - on one of the two main rail routes between Oxford and London;
  - on the main east -west road to the south of Oxford;
  - at the point where the Council is proposing to link the proposed Thames Crossing and Clifton Hampden bypass back in to the existing road network.

- 6.3 Its development as proposed will be wholly consistent with Oxfordshire SEP and will deliver the homes and infrastructure necessary to ensure that Science Vale continues to develop as a world-renowned science, research and innovation led hub. It will also facilitate transport connections northwards to Oxford and between Science Vale and the other strategic housing sites, in particular at Berinsfield and Chalgrove.
- 6.4 In short, the land Adjacent to Culham Science Centre is central to the success of the Council's strategic vision and objectives.