

## Land at Culham Science Centre

3.67 Culham Science Centre (CSC) is owned by the United Kingdom Atomic Energy Authority (UKAEA) and is located within 'Science Vale'. The site hosts the Culham Centre for Fusion Energy which includes the Joint European Torus (JET) project. It is the leading UK centre for fusion research and technology and is of international importance. The site also hosts a number of related businesses. The UKAEA aims to redevelop the CSC buildings within the next five years as the current stock is outdated. The Government is committed to this world renowned technology innovation enclave with high levels of investment planned. CSC cannot expand without necessary infrastructure, including the Didcot to Culham River Crossing and Clifton Hampden Bypass.

3.68 The Council recognises the key role of the CSC site and supports and encourages its redevelopment. This site has been inset from the Green Belt as a result of this Plan. A masterplan should be prepared and agreed with the Local Planning Authority that will consider the future of the whole site. This approach to Culham is consistent with the objective to increase the number of high quality jobs in the district.

The Local Plan proposes development here that will have access to employment opportunities as well as public transport at the railway station

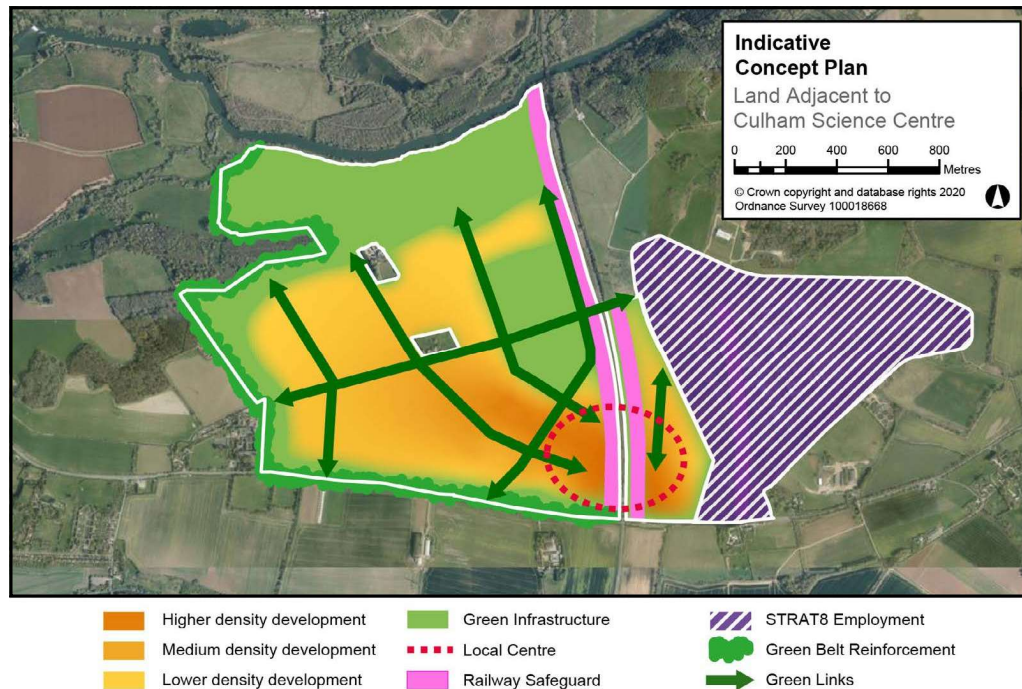
3.69 The Council will continue to support the redevelopment and intensification of the Culham Science Centre for research and science based business. At the adjacent 'No. 1 site' and land west of the railway the Council expects a mixed use development to be brought forward including the retention of employment land, but with improved premises, comprehensively across the allocated site and Culham Science Centre. This provides an opportunity to provide significant development in a sustainable location. The Local Plan proposes development here that will have access to employment opportunities as well as public transport at the railway station. This will be a community within Science Vale that can make the most of advancing technologies such as clean heat and power generation and autonomous vehicles. This development will include a variety of services and facilities to support a new community including schools, health care and retail. Development in this location will also help enable much needed road infrastructure in the area through part-funding. The road infrastructure is being forward funded from government in anticipation that there will be contributions from the developers benefitting from the infrastructure.

3.70 This Local Plan has inset Culham Science Centre and land adjacent to it from the Green Belt. The site is at the outer edge of the Green Belt. This location is also at a distance from the special historic setting of the City of Oxford and

does not make a significant contribution towards the purposes of including land in the Green Belt to check the unrestricted sprawl of Oxford City. The exceptional circumstances justifying a release of the Green Belt through the Local Plan in this area are:

- To enable the Culham Science Centre to realise its full potential as a science campus where publicly funded science research and commercial technology growth can flourish.
- The additional land provides an opportunity to deliver housing adjacent to one of the major employers in southern Oxfordshire.
- Development in this location is at the heart of Science Vale and supports the delivery of much needed significant strategic infrastructure.

- 3.71 The Council supports delivery of a new Thames crossing between Didcot and Culham as well as the Clifton Hampden Bypass, as identified in Policy TRANS1b. This crossing has strategic transport benefits and is required to support development allocated in this Local Plan, as well as development allocated in the Vale Local Plan Part 1 and Part 2. It is also part of a package of transport infrastructure in this area as identified in the Science Vale Area Transport Strategy in the Oxfordshire Local Transport Plan 4.
- 3.72 The delivery of the following infrastructure is expected to be complete in 2024, as it is to be forward funded by the Government's 'Housing and Infrastructure Fund' and other existing funding:
- the Didcot to Culham River Crossing; and
  - the Clifton Hampden Bypass.
- 3.73 The Culham Brake Site of Special Scientific Interest (SSSI) is located to the north west of the STRAT9 site allocation. The Culham Brake SSSI is protected due to its national importance as one of the largest populations of the summer snowflake *Leucojum aestivum*. High level assessments suggest that strategic development at Culham is unlikely to have any negative hydrological effect on the Culham Brake SSSI, as the SSSI is watered directly by the Swift Ditch. Appropriate consideration should be given to the SSSI in developing detailed proposals for this site which should be in compliance with the indicative concept plan below.
- 3.74 STRAT9 covers part of a minerals safeguarding area as identified in Oxfordshire County Council's Minerals and Waste Core Strategy and the Policies Map identifies the location of other minerals safeguarding in the vicinity.



## Policy STRAT8: Culham Science Centre

**Site area: 77 hectares**

1. Proposals for the redevelopment and intensification of the Culham Science Centre will be supported where this does not have an unacceptable visual impact, particularly on the character and appearance of the surrounding countryside and the Registered Parkland associated with Nuneham House.
2. In combination with the adjacent strategic allocation (Policy STRAT9) this site will deliver at least a net increase in employment land of 7.3 hectares (with the existing 10 hectares of the No.1 site retained but redistributed across the two strategic allocations). The exact siting and phasing of the employment development must be agreed through the master planning and subsequent planning application process including addressing any heritage assets and their settings in accordance with Policy ENV6 and the NPPF.
3. Proposals for development on the site should seek to achieve a net gain in biodiversity. Any residual biodiversity loss should be offset through a recognised offsetting scheme.

4. Opportunities that support job growth and appropriate diversification or enterprise “clustering” will be supported to complement the wider development proposed in the area. Working proactively with the UK Atomic Energy Authority and development partners a masterplan for the site that facilitates this growth must be prepared and agreed with the Local Planning Authority.
5. Proposals will be expected to deliver low carbon development and renewable energy in accordance with STRAT4.
6. The Culham Science Centre is removed from the Green Belt and inset as shown on Land inset from the Green Belt Boundary (Appendix 4) to enable this development to be brought forward.

This policy contributes towards achieving objectives 1, 3 & 8.

## Policy STRAT9: Land Adjacent to Culham Science Centre

Site Area : 217 hectares

1. Land within the strategic allocation adjacent to Culham Science Centre will be developed to deliver approximately 3,500 new homes, with approximately 2,100 homes within the plan period, a net increase of at least 7.3 hectares of employment land in combination with the adjacent Science Centre, 3 pitches for Gypsies and Travellers and supporting services and facilities.
2. Proposals to develop Culham will be expected to deliver:
  - i) in combination with the adjacent Science Centre a net increase of employment land of at least 7.3 hectares (with the existing 10 hectares of the No.1 site retained but redistributed across the two strategic allocations). The exact siting and phasing of the employment development will be agreed through the planning application process;
  - ii) affordable housing provision and mix in accordance with Policy H9;
  - iii) sufficient additional education capacity, likely to be a total of two new 2 form entry primary schools and one new 8 form entry secondary school with sixth form on site and appropriate

- contributions towards Special Education Needs (SEN);
- iv) sufficient health care capacity, likely to be a total of one new GP surgery on site to serve existing and future demand in this area in accordance with the Infrastructure Delivery Plan;
- v) provision of convenience floorspace that meets the day-to-day needs of the local community only without impacting on the vitality and viability of existing centres in accordance with Policy TC2 – Retail Hierarchy;
- vi) all necessary infrastructure, referring to the Infrastructure Delivery Plan, which is likely to include:
  - a. new junctions onto the A415 and significant contributions towards the Clifton Hampden Bypass, the Didcot to Culham River Crossing, and upgrading the A4074/B4015 junction at Golden Balls;
  - b. provision for excellent sustainable transport facilities including, but not limited to, new and improvements to existing cycle and footpaths including contributions towards a 'Cycle Premium Route' that is proposed between Didcot and Culham; provision of a new cycle bridge and associated connectivity and paths across the River Thames to connect appropriately with Abingdon on Thames to the north of the site; bus improvements including provision of a scheduled bus service, with a minimum of two buses per hour between Berinsfield, Culham and Abingdon, with options to extend or vary services to locations such as Cowley, Chalgrove and Didcot;
  - c. contributions to Culham station improvements including longer platforms, public realm, new station building, and potentially car parking.
- vii) the provision of appropriate communal parks and gardens and amenity greenspace allotments, children's playspace and open space in accordance with the Infrastructure Delivery Plan; and
- viii) low carbon development and renewable energy in accordance with STRAT4.

3. The proposed development at Culham will deliver a scheme in accordance with an agreed comprehensive masterplan taking into consideration the indicative concept plan. The masterplan must be prepared in collaboration and agreed with the Local Planning Authority in consultation with Oxfordshire County Council. The proposals will be expected to deliver a masterplan that demonstrates:
  - i) a layout that recognises plans for improvements to Culham

- railway station and any associated future rail capacity upgrades, recognising its importance and potential to support growth and development at the adjacent Science Centre;
- ii) a layout that delivers higher density development (a minimum of 50 dph) along the principal internal transport corridors, adjacent to the local centre and adjacent to the railway station, provided it does not adversely impact any existing heritage assets. Density should then gradually reduce from these locations outwards to provide a transition across the site, with lower density development located on the northern, southern and eastern edges of the site, to create a permanent defensible edge to protect the Oxford Green Belt;
  - iii) a layout that recognises the overhead power lines on the site and avoids the built form beneath these where possible;
  - iv) appropriate landscaping and an integrated network of Green Infrastructure throughout the site and in particular along the boundaries of the strategic allocation, which would allow limited through views, creating a permanent defensible edge to protect the Oxford Green Belt. This shall be based on landscape character, including historic landscape characterisation, considering the contribution of the site to the setting of Oxford, that preserve and enhance the surrounding Green Belt Way and River Thames long distance footpaths;
  - v) a layout and form that respects the setting of the heritage assets within and beyond the site; in particular the listed buildings and structures (the Culham railway station and rail bridges and "Schola Europaea") and the Registered Park and Garden associated with Nuneham House;
  - vi) a layout that has land which remains undeveloped to the northern border of the site and that should be utilised for flood plain storage, protecting the physical boundary features on the site;
  - vii) a layout and appropriate mitigation measures that protect Culham Brake Site of Special Scientific Interest (SSSI) which lies to the north-west of the site, the Biodiversity Action Plan (BAP) priority sites to the north of Culham, and that within the Culham Science Centre and numerous BAP priority habitats, including the BAP priority habitat south of Culham Railway station;
  - viii) high quality walking and cycling routes within the site;
  - ix) provision of infrastructure to support public transport through the site; and
  - x) a net gain in biodiversity which is integrated into the masterplan

through the creation of new woodland habitats along the river escarpment and ecological enhancements of the floodplain habitats, including a complex of new wetland habitats and species rich floodplain meadows. Any residual biodiversity loss should be offset through a recognised biodiversity offsetting scheme.

4. Archaeological evaluation will need to be undertaken ahead of the determination of any planning application in order to assess the significance of deposits in line with the NPPF. A scheme of appropriate mitigation will be required following this evaluation including the physical preservation of significant archaeological features and their setting where appropriate.
5. Proposals will need to take account of Policy EP5: Minerals Safeguarding Areas. This policy encourages developers to extract minerals prior to non-mineral development taking place, where this is practical and environmentally feasible.
6. The number and phasing of homes to be permitted and the timing of housing delivery linked to the planned infrastructure needs to be informed by further evidence as per the requirements of other policies in the Plan including Policy TRANS4. This will be agreed, (and potentially conditioned) through the planning application process, in consultation with the relevant statutory authority.
7. Land adjacent to Culham Science Centre is removed from the Green Belt and inset as shown on Land inset from the Green Belt Boundary (Appendix 4) to enable this development to be brought forward.

This policy contributes towards achieving objectives 1, 2, 3, 4, 5, 6, 7 & 8.

