

<b>APPLICATION NO.</b>	<u>P21/V0430/FUL</u>
<b>SITE</b>	Avon Road Car Park Rutherford Appleton Laboratory Harwell Campus, OX11 0QX
<b>PARISH PROPOSAL</b>	CHILTON Solar Photovoltaic Carport System (as amplified by plans received 20 April 2021, and additional supporting information (arboricultural impact, landscape and visual impact, glint / glare report, lighting scheme, car port visualisations) received 20 April 2021, and as amended by plans showing updated layout and landscaping, and additional supporting information (updated glint / glare report, lighting scheme, landscape and visual impact report) received 17 June 2021.
<b>WARD MEMBER(S)</b>	Hayleigh Gascoigne Sarah Medley
<b>APPLICANT OFFICER</b>	Science & Technology Facility Council Katherine Canavan

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## **RECOMMENDATION**

**It is recommended that planning permission is granted subject to the following conditions:**

### **Conditions**

1. Work to commence within three years
2. In accordance with approved plans
3. Implementation of landscaping scheme
4. Tree and planting replacement, in the event of any landscaping is lost within 5 years of planting
5. Restriction on hours of lighting
6. Lighting columns to be removed prior to first use of the solar car ports

## **1.0 INTRODUCTION AND PROPOSAL**

- 1.1 The application is referred to Planning Committee as Chilton Parish Council object to the proposal.
- 1.2 Avon Road Car Park is located within the Rutherford Appleton Laboratory area of Harwell Campus and is accessed via the perimeter road skirting the

Diamond Light Source synchrotron. Dwellings along Severn road are located to the east, separated by an existing smaller car park, and the Chilton Fields residential development is located to the south. The site falls within the North Wessex Downs AONB. A site location plan is attached at Appendix 1.

- 1.3 The Avon Road Car Park provides approximately 502 car parking spaces and covers an area of land measuring 1.55 hectares. The proposals involve the erection of metal framed structures over existing car parking bays onto which solar photovoltaic panels would be attached. The structures are designed as a mix of 'Duo Pitch' gullwing frames and 'Mono-Pitch' frames, measuring 3.7m at their highest point, and 2.9m at their lowest point. The Solar Photovoltaic Carport is designed to generate electricity for use on the campus with any additional generation exported to the National Grid. No changes to the access or any increase in number of parking spaces are proposed.
  
- 1.4 Following comments from technical officers, amended plans and additional information were submitted to address AONB, visual, lighting and amenity concerns and to enhance proposed landscaping. A copy of the latest plans is attached at Appendix 2.

## 2.0 **SUMMARY OF CONSULTATIONS & REPRESENTATIONS**

- 2.1 A summary of the responses received is below. Full comments can be viewed online at: [www.whitehorsedc.gov.uk](http://www.whitehorsedc.gov.uk).

Chilton Parish Council	<p>June amendment – Objection</p> <ul style="list-style-type: none"> <li>• The amendments do not address previous concerns.</li> </ul> <p>April amendment – Objection</p> <ul style="list-style-type: none"> <li>• It is good that the Glint &amp; Glare assessment was carried out, however it only takes into account the ground floor of the affected properties. There needs to be further mitigation of the glare for the upper stories of the houses in Severn Road and Chilton Field. Further consideration must be given to reducing the glare to the first floor of the affected houses. More screening needs to be provided.</li> </ul> <p>Original proposal – Objection</p> <ul style="list-style-type: none"> <li>• A detailed Glint and Glare assessment should be carried out to assess the impact on residents on Severn Road and Chilton Field.</li> </ul>
Residents	<p>34 letters of objection have been received. The concerns raised are summarised as:</p> <ul style="list-style-type: none"> <li>• Residents do not object to the principle of alternative methods of generating electricity, but to a location that adversely affects the AONB.</li> </ul>

	<ul style="list-style-type: none"> <li>• Too large an area of the car park is covered by solar car ports, leaving insufficient space for planting.</li> <li>• The height and scale of the car ports, and insufficient screening / planting, would result in an adverse visual impact on nearby dwellings.</li> <li>• Adverse impact on amenity from glint and glare reflecting into properties from the solar panels. The report only considers the impact on ground floor rooms, not upper floor rooms. Lack of information on any cumulative impact from the glint and glare.</li> <li>• Loss of outlook, and loss of views from residential properties towards the Ridgeway.</li> <li>• Risk of amplified engine noise underneath the structures.</li> <li>• Disturbance from lighting scheme and light spill.</li> <li>• Loss of biodiversity, and impact of the lighting scheme on wildlife.</li> <li>• Existing drainage runs will no longer be effective with the solar panels draining differently to a single car park.</li> </ul>
Oxfordshire County Council – Highways Team	<p>June amendment – No further comment</p> <p>April amendment – No objection subject to a CTMP condition</p> <ul style="list-style-type: none"> <li>• I am uneasy that work has commenced on site but this a planning matter rather than a highways matter.</li> </ul> <p>Original proposal – no objection subject to a Construction Traffic Management Plan condition (CTMP).</p>
Oxfordshire County Council – Local Lead Flood Authority	No objection
Contaminated Land Officer	No objection
Corporate Energy Officer	<p>Support</p> <ul style="list-style-type: none"> <li>• I support the proposals to generate electricity for use on campus and reduce electricity demand from the national grid, as well as the provision of underground infrastructure to meet future demand for electric vehicle charging.</li> </ul>
Countryside Officer	No objection
Drainage Engineer	No objection
Environmental Protection Team	June amendment – No further comment

	<p>April amendment - No objection</p> <p>Original proposal - No objection</p>
Forestry Officer	<p>June amendment – No objection subject to condition</p> <ul style="list-style-type: none"> <li>• Original comments still apply.</li> </ul> <p>April amendment - No objection subject to condition</p> <ul style="list-style-type: none"> <li>• Original comments still apply.</li> </ul> <p>Original proposal - No objection subject to condition</p> <ul style="list-style-type: none"> <li>• Condition recommended to secure the replacement of any planting that fails in the first five years following completion.</li> </ul>
Landscape Architect	<p>June amendment – Holding objection</p> <ul style="list-style-type: none"> <li>• The scheme has been revised but the layout of solar panels still does not accurately reflect the layout of the car park.</li> <li>• There are some inconsistencies across the plans. Clarification is required with regards to the location and size of the TX2 building in relation to planting.</li> <li>• Not all the tree planting and buffer planting in the car park is retained.</li> <li>• The solar panels would also overhang the south eastern tree planting area, and the whole of the western planting buffer. The western edge buffer planting is important in softening the views of the solar panels from elevated ground including the National Trail Ridgeway.</li> <li>• The installation of the proposed solar panels would not reduce the impact of the car park and would have a slightly greater impact when viewed from the Ridgeway and BOAT. The removal of this internal planting is not mitigated by transplanting trees to the boundaries of the site.</li> <li>• The proposal also results in loss of planting on the northern and southern edges of the site, from the previously approved car park landscaping scheme.</li> </ul> <p>April amendment – Holding objection</p> <ul style="list-style-type: none"> <li>• The development does not minimise impact on the AONB. The key mitigation planting secured as part of the car park permission is to be removed and not replaced in a similar manner.</li> <li>• Clarification is required with regards to the service runs in relation to landscaping, lighting scheme, and glint and glare.</li> </ul>

	<ul style="list-style-type: none"> <li>An update to the base plan is required to reflect the approved car park layout and landscaping scheme.</li> </ul> <p>Original proposal – Holding objection</p> <ul style="list-style-type: none"> <li>The current information is not comprehensive enough to comment on – awaiting further information.</li> <li>The proposal does not acknowledge the planting implemented as part of the car park scheme to help mitigate its impact.</li> </ul>
North Wessex Downs Area of Outstanding Natural Beauty	No response received.

### 3.0 RELEVANT PLANNING HISTORY

[P20/V3298/FUL](#) - Approved (22/04/2021)

Variation of conditions 2 (approved plans - amendment in relation to the housing for the lighting) & 8 (hours of lighting) on application P20/V0734/FUL.

[P20/V0734/FUL](#) - Approved (20/05/2020)

Variation of Conditions 2 (Approved Plans) and 12 (Surface Water Drainage) of application P19/V0926/FUL to amend the drainage details and replace approved documents. (As amended by plans received 12 May 2020)

[P19/V0926/FUL](#) - Approved (30/08/2019)

Erection of a car park with associated landscaping and lighting.

### 3.2 Screening Opinion requests

[P21/V0284/SCR](#) - Not EIA development (22/03/2021)

Solar car ports on the Avon Road Car Park

[P18/V1852/SCR](#) – Not EIA development (30/07/2019)

An extension to R100 and a new building to create a National Satellite Test Facility with associated car parking (remote from the building, located on Severn Road).

[P18/V1492/SCR](#) – Not EIA development (02/07/2018)

Car Park – West of existing car park on Severn Road

### 4.0 ENVIRONMENTAL IMPACT ASSESSMENT

4.1 The site is located within the North Wessex Downs Area of Outstanding Natural Beauty, which is classed as a sensitive area. A screening opinion was issued on this basis. No significant environmental impacts were identified during the assessment, and the proposal does not constitute EIA development.

## 5.0 MAIN ISSUES

5.1 The main issues in this case are:

1. The principle of development
2. AONB and Visual Impact
3. Residential Amenity
4. Technical matters

### 5.2 The principle of development

Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires applications for planning permission to be determined in accordance with the development plan unless material considerations indicate otherwise. Section 70(2) of the Town and Country Planning Act 1990 provides that the local planning authority shall have regard to the provisions of the development plan, so far as material to the application, and to any other material considerations.

- 5.3 The development plan for this proposal comprises the adopted Vale Local Plan 2031 Part 1 (LPP1) and the adopted Vale Local Plan 2031 Part 2 (LPP2). A draft neighbourhood plan is currently being prepared for Chilton Parish but this excludes the campus site.
- 5.4 Harwell Campus is allocated in the adopted Local Plan for employment use (policies CP15 and CP15b) and part of the campus is in the Science Vale UK Enterprise Zone. Designated in 2011, it is an area of designated economic growth focussing on becoming a global hotspot for innovation and is already home to many scientific, research and development and high technology firms. Core Policy CP41 encourages schemes for renewable energy generation, and the promotion of renewable energy schemes are priorities for this council in response to the Climate Change Emergency.
- 5.5 The proposed solar car ports are to be located on Avon Road Car Park, which is classed as previously developed land within the campus. Development Policy 10 of the Local Plan: Part 2 (LPP2) sets out that '*proposals for uses other than B1, B2 and B8 business uses on existing employment land will be permitted as long as the proposal is primarily designed to provide for users of the employment site, and the use is ancillary to the main business or employment function of the wider site.*'
- 5.6 The solar car port proposal is set well within the campus and use of the car park will continue to be for staff and student directly connected with the campus. The principle of the proposal is therefore supported by local plan policy and is acceptable unless material considerations indicate otherwise.

### 5.7 AONB and Visual Impact

The site lies within the North Wessex Downs Area of Outstanding Natural Beauty (AONB). Core Policies 41 and 44 of the LPP1 require high priority be given to conservation and enhancement of the natural beauty of the North Wessex Downs AONB. The NPPF also seeks to enhance the natural and local environment by protecting and enhancing these valued landscapes (paragraph

170) and confirms great weight should be given to conserving the landscape and scenic beauty of such areas (paragraph 172). More crucially, Section 85 of the Countryside and Rights of Way Act 2000 places a statutory duty on the Local Planning Authority to have regard to the purpose of conserving or enhancing the natural beauty of an AONB.

- 5.8 It is acknowledged that the landscape buffers within the site are narrower than indicated in the landscaping scheme previously approved for the car park, and the proximity of the car port structures may limit the growth of the landscaping over coming decades. The Landscape Architect has raised an objection on the basis that these deficiencies do not provide the same level of conservation towards the AONB that was achieved under the original car park landscaping scheme.
- 5.9 Officers recognise that the coverage of the site with solar car ports has diminished the existing planting to some degree. However, the revised planting scheme has introduced smaller areas of planting dispersed among the structures, which visually breaks up the continuous lines of the solar panels. This method was considered necessary under the car park proposal to minimise the impact on the AONB and has been replicated here.
- 5.10 While the request to increase the space around the planting beds is desirable, the solar scheme has an anticipated life of 25 years, and the trees and planting would only begin to fully mature and maximise the space at that point. The lack of buffer space would not in itself have a harmful effect on the rural character or the AONB landscape.
- 5.11 Viewed from the AONB, the proposals would not be seen in isolation but would be seen together with the existing campus buildings and adjacent residential properties. Such buildings would remain the dominant and more prominent visual elements, and in this regard the setting of the AONB would not significantly alter from that of the current car park. Officers consider the rural character and amenity of existing views and the natural beauty of the AONB landscape would be conserved, and the development complies with policies CP41 and CP44 of the LPP1.
- 5.12 *Landscape and trees*  
Core Policy 15b of the LPP2 requires proposals for new development and redevelopment on Harwell Campus to provide a high quality of landscaping.
- 5.13 Buffer planting around the borders of the car park has been enhanced to provide natural screening to soften the impact of the solar scheme.
- 5.14 The landscape architect has highlighted a number of areas that would benefit from increased planting but would require loss of solar car ports to achieve this. The forestry officer has raised no objection to the loss of 3 of the trees, subject to a condition to secure replacement planting in the event that any of the landscaping fails within 5 years of completion.

- 5.15 In considering the impact of a reduced landscaping scheme over that of the renewable energy proposal, regard has been had to national and local policy. The National Planning Policy Framework (NPPF) sets out the Government's commitment to the provision of sustainable energy solutions. Supporting the delivery of sustainable energy solutions is central to the economic, social and environmental dimensions of sustainable development (paragraphs 149 -154). This is drawn through to Core Policy 41 of the LPP1, which emphasises the local and national need to bring forward schemes for renewable and low carbon energy generation. Such proposals will be supported, provided that they do not cause a significantly adverse effect to landscape (both designated AONB and locally valued).
- 5.16 The assessment above sets out that the proposal can be achieved while conserving the natural beauty of the AONB. Having regard to the weight afforded to renewable energy schemes at national level and in line with the council's climate emergency, there are insufficient grounds to require additional landscaping and the retention of 3 trees in this case when it would result in the loss of solar car ports and infrastructure for 12 of the electric vehicle charging points.
- 5.17 Overall, the landscape scheme (as amended) is generally acceptable and the benefits being delivered by the solar car port scheme outweigh the need for an enhanced landscaping scheme that would otherwise be required under policy CP15b.
- 5.18 **Residential Amenity**  
Policy DP23 of LPP2 requires proposals to demonstrate they will not result in significant adverse impacts on the amenity of neighbouring uses.
- 5.19 While the car park primarily forms part of the science and research campus at Harwell Campus, dwellings along Severn Road and on the Chilton Fields development border the site and residents have raised concerns over glint and glare from the solar panels, loss of view and outlook and potential disturbance from lighting.
- 5.20 *Glint and glare*  
Pages 99 – 114 of the Glint and Glare Study show which dwellings are likely to be affected by some form of glint and glare from the Avon Road proposal. Cumulative impact is also considered. The findings are set out on pages 27 – 31 of the report.
- 5.21 The study concludes that there will be a low level of glint and glare, amounting to less than 60 minutes per less for less than 3 months of the year, for 32 properties on Severn Road, Potteries Lane, Baths Road and Chilton Field Way. These points also coincide with when sunlight would in any case be directed towards properties, which would have a greater impact over any low-level glint or glare. This is also considered in the context of the existing car park, where an element of glint and glare is currently experienced from parked cars.

- 5.22 The assessment also acknowledges that many properties are already screened by existing fencing, and that the enhanced landscaping scheme (drawing no 03 Rev A) will provide sufficient natural screening so that ground floor rooms are largely unaffected. Where upper floor rooms are shown to experience some glint and glare these are likely to be bedrooms and would not generally be occupied in the late afternoon or early evening, or curtains would be drawn while occupants are sleeping. This is an accepted methodology for assessing the levels of glint and glare and considering any cumulative impact from the two solar car port schemes.
- 5.23 While a low level of glint and glare has been identified, the proposed mitigation ensures effects would not be possible towards observers on the ground floor, existing screening would reduce effects, and solar reflections would occur within 2 hours of sunset and therefore effects would have no greater impact than direct sunlight. The impact is not at a level where it could be considered to be so harmful to amenity to warrant a refusal of permission. This conclusion is supported in the consultation response from the Environmental Protection Officer.
- 5.24 *Outlook and visual intrusion*  
The solar car ports would be separated from the dwellings on Severn Road by a smaller car park, border planting and a fence (approximately 1.5m high). The structures, measuring between 3m and 3.7m high on this edge of the site, would be set back 65m to 90m from the fronts of these dwellings. The backs of properties in the Chilton Fields development are separated from the car park by fencing (approximately 1.8m high), an access road and recently planted landscaping associated with the car park. The separation distance is typically 35m. The edge of the structures adjacent to these properties measure 2.6m high along this edge of the site.
- 5.25 Given the set-back distances, and the existing boundary treatment, the structures would not have a dominant or intrusive impact on neighbouring occupants. While there will be a change to the outlook and view, the amenity of residents would not be adversely affected. Similarly, views towards the Ridgeway from properties on Severn Road would be obscured but there is no right to a view under the planning system, and this would not constitute a material planning consideration. Overall the proposal is acceptable in terms of outlook and complies with policy DP23.
- 5.26 *Lighting scheme*  
Core Policy 15b and Development Policy 21 of the LPP2 require external lighting schemes to have a minimal impact in terms of light pollution, to ensure there is no adverse effect on the amenity of neighbouring uses or on local biodiversity. The proposed lighting should be the minimum necessary to undertake the task for which it is required. This is of particular importance given the site's location within the AONB.
- 5.27 The existing lighting scheme comprises a series of lighting columns across the car park and was considered acceptable.

- 5.28 The solar car port scheme proposes the removal of the lighting columns to be replaced with individual lights fitted on the underside of the supporting frame structures. The submitted lighting report demonstrates that a light control zone E2 can be achieved, which is appropriate for rural settlements and economic hubs. Harwell campus is identified in this category in the North Wessex Downs AONB's Guide to Good External Lighting 2021. This approach is consistent with the lighting scheme approved under planning reference P20/V3298/FUL. The layout and arrangement of the structures succeeds in minimising light spillage beyond the site. This is achieved through locating the lighting under the car port structures, angling the structures away from the AONB and dimming the lighting later in the evening.
- 5.29 In terms of hours of illumination, lighting will continue to operate in line with the planning condition tied to the car park:
- sunset to 21:00 - 100% lighting,
  - 21:00 - 22:00 - dimmed to 66%,
  - 22:00 - 23:00 – dimmed to 33%, and
  - 23:00 - sunset - 0% (no lighting)
- 5.30 The North Wessex Downs AONB has not raised an objection to the scheme, and the proposal broadly follows the principles set out in the North Wessex Downs AONB's Guide to Good External Lighting 2021.
- 5.31 This approach is acceptable in minimising impact on the AONB, residential amenity and biodiversity, ensuring the impact is no greater than the existing lighting, and providing a safe and accessible area for car park users. The lighting scheme complies with Core Policy 15b and Development Policy 21 of the LPP2.

### 5.32 **Technical matters**

- 5.33 *Biodiversity*  
Policy CP46 of LPP1 requires development to avoid losses in biodiversity and actively seeks net gains. The solar car ports are to be installed on the existing car park, and do not extend into undeveloped land. The landscaping plan indicates that the previously approved landscaping is to be retained. While there are protected species elsewhere on the campus, none have been identified on or close to the application site. On this basis the development would not adversely affect wildlife and the biodiversity of the area and no objection has been raised by the Countryside Officer. The proposal accords with policy CP46.
- 5.34 *Traffic, parking and highway safety*  
Policy CP33 of LPP1 actively seeks to ensure that the impacts of new development on the strategic and local road network are minimised, to ensure that developments are designed in a way to promote sustainable transport access and to promote and support improvements to the network that increase safety and improve air quality. The car park is set well within the campus and delivery of construction equipment would not block or add pressure to the highway network. While the request for a Construction Traffic Management

Plan by the Highway Officer is noted, officers consider it cannot be justified in this instance due the small-scale nature of the proposal. Officers are also aware that materials have already been delivered to site at the applicant's own risk, prior to a planning decision being made. The proposal is therefore considered acceptable in highway safety terms and as outlined elsewhere in this report existing parking spaces are retained. The proposal is considered to comply with policy CP33.

5.35 *Flood Risk and drainage*

Core Policy 42 of Local Plan part 1 seeks to ensure that development provides appropriate measures for the management of surface water as an essential element of reducing future flood risk to both the site and its surroundings. The drainage strategy was reviewed and approved by the council's drainage engineer when the original car park application was considered. This has since been implemented. The introduction of solar car ports across the car park would not compromise the drainage strategy and accords with policy CP42.

5.36 *Financial contribution requests*

The development does not meet the thresholds for needing to provide S106 contributions. The impact of the car park has been previously accounted for. No new residential or retail floorspace is proposed, and therefore the development would not be CIL liable.

## 6.0 CONCLUSION

- 6.1 This application has been assessed against the development plan, the National Planning Policy Framework (NPPF) and all other material planning considerations. In considering the application, due regard has been given to the representations received from statutory and other consultees. These have been taken in account in assessing the overall scheme.
- 6.2 The development contributes positively to national and local priorities to promote and deliver sustainable energy solutions in the form of the solar photovoltaic panels and the infrastructure for Electric Charging in the future. The scale of the solar car port scheme is appropriate to the site and its surroundings, and by virtue of the retained and enhanced landscaping scheme, would safeguard the landscape and visual sensitivities of the AONB.
- 6.3 Sufficient information has been provided to demonstrate that any glint and glare from the solar panels would be limited to very short, specific periods and would be classed as 'low impact'. The lighting scheme has been designed to the same standards as the existing lighting columns, and to minimise light spill beyond the site. Consequently, the development in combination with existing screening and enhanced landscaping, would not adversely affect residential amenity.
- 6.4 Officers consider the development is acceptable and does not conflict with the Local Plan and should be approved.

The following planning policies have been taken into account:

**7.1 Development Plan Policies**

*Vale of White Horse Local Plan 2031 Part 1 (LPP1) Policies*

CP1 – Presumption in Favour of Sustainable Development

CP3 – Settlement Hierarchy

CP7 – Providing supporting infrastructure and services

CP15 – Spatial Strategy for South East Vale Sub-Area

CP33 – Promoting Sustainable Transport and Accessibility

CP37 – Design and Local Distinctiveness

CP41 – Renewable Energy

CP42 – Flood Risk

CP43 – Natural Resources

CP44 – Landscape, including AONBs

CP45 – Green Infrastructure

CP46 – Conservation and Improvement of Biodiversity

*Vale of White Horse Local Plan 2031 Part 2 (LPP2) Policies:*

CP15b – Harwell Campus Comprehensive Development Framework

DP16 – Access

DP21 – External lighting

DP23 – Impact of development on amenity

**7.2 Neighbourhood Plan**

*Draft Chilton Neighbourhood Plan*

The site borders the Chilton Neighbourhood Plan area but is not located within the designated area. The Chilton Neighbourhood Plan was submitted to the Vale of White Horse Council in February 2021. The consultation has ended and the draft plan has now been submitted for independent examination. At this stage the draft policies carry limited weight.

**7.3 Supplementary Planning Guidance/Documents**

Vale Developer Contributions – Delivering Infrastructure to Support

Development SPD 2017: The SPD was adopted on 30 June 2017 and provides guidance on how planning obligations will work alongside CIL to deliver the infrastructure needed to support development in the Vale.

North Wessex Downs AONB – A Guide to good external lighting (2021)

**7.4 National Planning Policy Framework and Planning Practice Guidance**

The National Planning Policy Framework (NPPF)

The National Planning Policy Guidance (NPPG)

**7.5 Other Relevant Legislation**

Human Rights Act 1998

The provisions of the Human Rights Act 1998 have been considered in the processing of the application and the preparation of this report.

Equality Act 2010

In determining this planning application, the Council has regard to its equality obligations including its obligations under Section 149 of the Equality Act 2010.

**Other Relevant Legislation**

- Planning (Listed Buildings and Conservation Areas Act) 1990
- Community & Infrastructure Levy Legislation
- Section 149 of the Equality Act 2010
- Provisions of the Human Rights Act 1998
- Section 17 of the Crime and Disorder Act 1998
- Natural Environment and Rural Communities (NERC) Act 2006
- The Conservation of Habitats and Species Regulations 2010
- Localism Act (including New Homes Bonus)
- Countryside and Rights of Way Act 2000
- Environment Act 1995

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