

Bradford Council
Development Services
4th Floor
Britannia House
Hall Ings
Bradford
BD1 1HX

10th October 2023

Application for determination of permission to install solar panels at Clayton St John C of E Primary School

Dear Sir/Madam

Re: Application for planning permission for the installation of Photovoltaics (PV) equipment on the roofs of Clayton St John C of E Primary School, Bradford Rd, Clayton, Bradford BD14 6DD.

Please find attached our Planning Application for the installation of solar panels on the roofs of Clayton St John C of E Primary School, Clayton St John C of E Primary School, Bradford Rd, Clayton, Bradford BD14 6DD.

We are aware that whilst the Town and Country Planning (General Permitted Development) Order 2015 under Part 14 Class J allows for permitted development of solar PV panels with a generating capacity of up to 1 megawatt on the roofs of non-domestic buildings, there are a number of restrictions, limitations and conditions.

The criteria have been considered and whilst the proposed development of solar panels meets some of them it fails to meet one of these conditions, so we are seeking full planning consent for the installation.

Below we have addressed the following:

- *To show that the proposed installation does constitute permitted development in terms of much of its design.*
- *To highlight why planning permission is being sought and*
- *To illustrate how the proposed installation meets with the national policy to encourage decarbonisation but maintains the integrity of the area.*

To assist in the planning approval process, this application is also accompanied by supporting documents, including:

- 01 Supporting statement
- 02 Proposed design
- 03A Site location plan
- 03B Building location plan
- 04 Scaled map

- 05 Supporting images
- 06 Cross section
- 07 Arrangement of Panels
- 08 Example of a standard panel data sheet

Site location:

Clayton St John C of E Primary School is located in the west of Bradford, it is settled well away from most public highways. The school premises is not very large and occupies less than 1.5 hectares of land and the only entrance into the school is 80 metres away in the north. There are a few residences on the west and south of the school, the residences to the south are at least 50 metres away from the south facing roof slopes considered for installation. The west residences, although close by, have very little chance of being affected by the proposed installation as the panels used are coated with anti-glare. Any sort of glint and glare experienced, if at all, will be much less than the irradiance from the sun on a daily basis, which has been noted in many analyses we have previously conducted.

Under normal circumstances, such an installation could be considered as Permitted Development: Prior Notice Application, but the proposed development does not meet the one-meter margin rule and so for this reason, planning approval is being sought.

The site is not within a scheduled ancient monument and the buildings, to which it is proposed to add panels, are not listed or within the curtilage of a listed building. Nor does it fall within a conservation area.

National policy for decarbonisation

The proposed installation is in keeping with the school's ambition to install solar panels which will deliver zero-carbon electricity and an energy literacy educational programme. This is in line with the government's drive to encourage public sector decarbonisation and the installation of solar panels to publicly owned buildings.

Description of the proposed development

The proposed development is for around 470 panels on the pitched and flat roofs with a total install capacity of around 200kWp. To meet government targets for decarbonisation and to maximise the ambitions of the school to generate as much zero-carbon solar electricity as possible, the panels on the proposed development are as close to the edges as is possible. Under permitted development criteria on a non-residential building there is a requirement for a 1 metre margin. This requirement does not exist for residential properties with similar pitched and flat roofs as the school. The proposed development therefore follows permitted development criteria for residential properties with panels that go less than one meter to the edges of the pitched and flat roof plane, a system that maximises the opportunity for the school on the pitched south, east and west facing roofs. (04, 05,06 & 07).

How the development would fit with Permitted Development:

The solar panels which will be installed on the school's pitched roofs (Roof Cross section 06), can be considered under Part 14, Class J (c,) as "the installation, alteration or replacement of other solar PV equipment on the roof of a building".

In terms of design, the arrangement of the panels meets with most of the criteria for permitted development.

On the pitched roofs, the panels will be mounted on seam clamps to fasten a series of rails to the roof, with panels then being mounted on to these rails. As shown on the Roof Cross Section Drawing (06), the panels of the proposed installation will not protrude more than 0.2 meters beyond the plane of the existing pitched roof slope when measured from the perpendicular with the external surface of the roof, so Part 14 (J.1.) (a) will be complied with.

For flat roof areas, the panels will be mounted on ballasted frames that rest on padding to protect the underlying roof membrane at an angle of 10 degrees. At no point are the panels higher than 1 metre above the highest point of the roof (excluding chimneys); in fact, according to the proposed tilt of the panels they will be less than 0.5 metres high (see Roof cross section 06).

Why Planning Permission is required:

To comply with permitted development the layout of the panels on the pitched areas would need to be spatially arranged in such a way that the solar panels would be offset by at least 1 metre from the external edge of the roofs (Cross section 06 and Scaled map 04) to comply with J1. Part (c) and with no equipment within 1 metre of a roof junction for Part 14 (J.2.) (b) to be complied with and this is where the design fails to meet the criteria for permitted development on a non-domestic building.

For the flat roofs as well, the solar panels would need to be off-set by at least 1 metre from the external edges (Cross section 06 and Scaled map 04) to comply with J1. Part (C) and with no equipment within 1 metre of a roof junction, although it is not as close to the edges like for a sloped roof, there will be a minimum distance of 0.6 metres from the edges since the mounting system cannot support edge distances less than this. This is where the design fails to meet the criteria for permitted development on a non-domestic building.

The proposed panels on Clayton St John C of E Primary School will not have the 1 metre margin to a roof junction or edge. The roofs of the school are being treated like a residential property solar installation under permitted development where there is no 1 metre-margin rule. So, like a residential property, the maximum roof area possible can be used for the benefit of the residents of the building, in this case the school. But given that this is a non-domestic property, we are seeking planning approval for the installation.

The exact number of the panels and total capacity will depend on the panels and their wattage at the time of installation, but the project will involve the roof areas indicated in the Proposed design (02). Any changes from this proposal will be 'de minimus' i.e., of a such a small scale to not be materially different to this planning application.

The solar panels are of standard design and are proposed to run in rows, positioned on the roof, the panels will be mounted on seam roof clamps to fasten a series of rails to the roof, with panels then being mounted on to these rails on the pitched roofs. For flat roof areas, the panels will be mounted on ballasted frames that rest on padding to protect the underlying roof membrane at an angle of 10 degrees. As shown on the Roof Cross Section Drawing (06), the panels of the proposed installation will not protrude more than 0.2 meters beyond the plane of the existing pitched roof slope when measured from the perpendicular with the external surface of the roof and will not be higher than 1 metre above the highest point of the roof (excluding chimneys).

It is considered that the proposed solar panels would be complementary to the character of the school. The visual appearance of the solar panels is considered appropriate for the school building enhancing the visionary appearance of the site as an up-to-date centre for learning, creating responsible citizens for tomorrow's world with an appreciation for their surroundings and a duty of care for the environment. It is considered that the panels could have a positive impact on the character of the building and no overall detrimental impact on the surrounding area.

Adding positively to the school's image - The panels will provide a sustainable and "green" future that the school community wants to adopt. The panels enable the school to further improve its decarbonisation journey and teaching and learning about how to live more sustainably. It is therefore considered that the panels would have a positive impact on the school's image and its goals to use its buildings.

Impact on Neighbouring Land uses

Although, the school site is on a lower level compared to the residences, the school roofs are at least 50 metres away and the presence of large trees makes it very difficult to identify the school roofs along the south. In the west there is less tree coverage and a higher possibility of the proposed installation being seen but if the panels were to be seen they are coated with anti-glare, where any sort of glare will be minimal and overshadowed by the existing irradiance from the sun. The irradiance of the sun experienced daily is much higher than what can be possible from the proposed installation so the likelihood of glint and glare affecting the amenity of the area is extremely low.

Summary

Although the proposed scheme to install 470 solar panels on the roofs of Clayton St John C of E Primary School meets most of the criteria for permitted development under Part 14 Class J (c) of the Town and County (General Permitted Development) Order 2015, there is no 1 metre margin on the pitched and flat school roofs (just like residential solar power permitted development so the potential to generate solar electricity can be realised). So given the design of the panels on the school roofs, planning permission for the installation is being sought.

In terms of the design and appearance, the solar panels to be installed on the roof areas of the buildings are of standard design; they will have no adverse impact on either the character of the surrounding area or residents; nor on the amenities of the occupiers of adjacent properties to the site (neighbouring land uses).

In addition, the installation would be in keeping with the character and goals of the school, helping it build its ambitions to use its buildings and land, as a centre of learning and beacon of sustainability and student wellbeing helping decarbonise its activities and reduce its impact on the local environment.

We would be grateful for your written confirmation that the proposed installation could be granted planning permission so the panels can start to generate low-carbon electricity for the school, which in addition to cutting carbon, is supported by an energy literacy programme for students.

Yours Sincerely



Charles Ahenda-Bengo
Project Manager
Solar Options for Schools Ltd