

DESIGN AND ACCESS STATEMENT FOR SOLAR PANEL INSTALLATION GOATHAM COTTAGE, GOATHAM LANE, OSBASTON, CV13 0DR.

This purpose of this statement is to explain the design and access considerations for the proposed solar photovoltaic (PV) system installation at Goatham Cottage, Goatham Lane, Osbaston, Nuneaton. CV13 0DR.

Design

The proposed solar PV system will consist of 20 panels and will be installed using a ground mounting system. The panels will be spread in 2 rows of 10 and will be mounted at 35 degrees from horizontal, in a position which will ensure greatest solar gain.

The panels to be installed are manufactured by Shanghai JA Solar Tech Co Ltd. The panels specifically come from the JAM72S20 445-470/MR range. The panels are distinguished by monocrystalline solar cells with high cell efficiency optimising the space available. The panels each measure 1052 (W) x 2112(H) mm and comprise an anodised silver aluminium frame with toughened safety glass covering the cells. The chosen panels are classified as *Tier 1* panels and are renowned for their product quality and 25-year performance warrant.

The Solar PV ground mounting equipment is designed by BDS and is constructed from galvanised tubular steel driven into the ground. This design allows for minimal impact to the ground and surrounding environment as no permanent structures such as concrete bases are required. This design also allows the system to be removed without any trace at the end of its lifespan.

Given the height and proposed location of the panels, they will not be visible from any public viewpoints.

This project works in hand with Hinckley and Bosworth councils long term sustainability plans that were declared in July 2019. This solar PV system works towards the council's goal of improving the green building standards of the borough and promoted sustainable building practices. Small scale domestic solar systems enhance the energy grid by decentralizing energy generation and reducing the risk of power outages during extreme weather events or other disruptions.

Regarding the disposal of waste produced by the installation of this system, it can be broken into two parts. Firstly, during the erection of the ground mounted solar system, there will be no waste produced through the installation as the system has been designed to not cause any removal of earth. Any packaging and materials that arrive with the installers, will be recycled by Quantum Energy Systems who ensure that all byproducts are handled accordingly. Secondly, solar panels have a minimum lifespan of 25-30 years or more, after which they may need to be replaced or decommissioned. This will be done in an environmentally responsible manner to minimize the impact on the environment through recycling and manufacture take-back programmes.

Access

The solar PV system will be installed at ground level and does not require access to the general public. There are no proposed changes to current access points or routes, and the proposed development will not affect any highway scenarios, transport authorities or members of the public. As there is no public access required there are no issues of inclusive access to consider. The installation process will not cause any obstructions and there will be no on-road contractor parking, as there is an adjacent area of domestic driveway available.

Quantum Energy Systems (installers) will bring all the equipment to site and remove the byproducts using their own light good vehicles which will reduce the environment and social impacts of the works. No heavy-duty vehicles will be visiting site and therefore no obstruction to local traffic ways will occur.

Trees / Bushes

There are three trees/bushes which will need to be removed. Two are apple trees (planted 2006) and one is a Filbert (cob nut) bush (planted 2012). These are young trees which are not growing well and not fruiting well due to the heavy wet underlying clay. They are not of environmental significance. None of these trees / bushes has a diameter greater than 75mm when measured at 1.5m above the ground, so no separate tree works permission has been applied for.

Heritage

The site is located in the Osbaston Conservation Area. The conservation area of Osbaston was designated by the council in October 1992. This tiny settlement is characterised by a stand of fine trees set in rolling countryside. Hall Lane is a narrow single lane track which enters the village from the west passing Osbaston Hall, a fine Georgian House set in open parkland. To the south it is lined with tall mature trees which frame the roadside in a tunnel effect. It continues slowly winding its way towards the junction with Osbaston Lane. This is the heart of the village and is enclosed by the buildings of Home Farm, White Boar and Bloomfield Barns with the village notice board and the red cast iron post box at its centre. Osbaston Lane from the south and Goatham Lane from the northeast, although slightly sunken, are more open to the countryside and the sky which gives a brighter appearance to the buildings.

The Conservation Area Appraisal for Osbaston particularly mentions to “Ensure important views of the Hall and out into the countryside are protected”. One of the views that is marked on the Appraisal Map (2009) is that from Goatham Lane through the gates of Goatham Cottage in a southerly direction, across land adjacent to the conservation area. The proposed development has been specifically sited to ensure that it does not interfere with this view.

The proposed development does not affect any parts of the “*OSBASTON CONSERVATION AREA MANAGEMENT PLAN – ADOPTED 10 MARCH 2009*”. The proposed development does not affect any part of the *OSBASTON CONSERVATION AREA MANAGEMENT PLAN – MID TO LONG TERM STRATEGY – ADOPTED 10th MARCH 2009*”.

Therefore, the proposed development will not have any adverse impact on this designated heritage asset.