

Case study

Solar Powered Park & Ride

Leeds City Councils Stourton Park and Ride is the UK's first solar powered, zero emission park and ride, situated just off junction 7 of the M621/A61 to the southeast of Leeds city centre.

The new park and ride facility includes waiting room which has capacity for 1,200 vehicles, with 30 EV charging points and bus services running every 10minutes to Leeds City Centre.

Challenges involved converting a previously traditionally designed scheme into two different methods of both offsite volumetric construction and traditional methods of construction together to result in a seamless interface between the modular built ticket office/retail unit and the traditionally built plant room, clocktower and bike store. The geometric constraints involved with modular offsite construction required a series of bespoke design solutions, specifically in providing cantilevering steel support to the external canopy from the modular roof beams. In addition, due to the constraints within the modular structure, the clocktower needed to act independently and cantilever un-propped to the finished height.

Alan Wood and Partners role involved the superstructure design of the bus terminal which combined both offsite volumetric modular construction for the ticketing, welfare, and retail units, with the traditional elements consisting of the bike store, enclosed plant area and Corten clad cantilever clocktower, formed from two braced universal beam sections.



Location:
Leeds



Client:
Modular – AR Ltd



Architect:
NPS Group



Value:
£38.5m



Structural
Engineering

Modern Methods
of Construction
(MMC)

Engineer/
Manage/
Deliver/