

Description

- ◆ Baytree Special School is the only school in North Somerset designated to provide education to children with severe and profound learning difficulties. The school needs to be able to offer more places to meet this increasing need
- ◆ SDS are providing mechanical and electrical services to enable the school to expand from 72 to a 120-place school, located across two sites: Weston-super-Mare and a new site, on land next to Brookfield Walk in Clevedon. The second site will open from September 2022
- ◆ The new-build single-story site will include 11 classrooms, an early year's classroom, therapy rooms, sensory rooms, administration, hydrotherapy facilities and staff areas and a recreation and dining hall
- ◆ The school will provide a stimulating learning environment for children from 3yrs to 19yrs as well as cater for their specialist care and treatment.



Involvement

- ◆ SDS have been involved throughout the design team process from initial inception through to planning and RIBA stage 4a design (contract tender)
- ◆ We have worked closely with the design team, main contractor, North Somerset Council and the existing school at Baytree to ensure all processes and items for the M&E and thermal engineering for the school have been discussed and agreed in details with all parties
- ◆ SDS have been instrumental in providing information for planning and ensuring the building achieve the correct balance of simplicity, function and practicality for the end uses, whilst achieving the relevant Building Bulletin Guidance for SEND Schools and local council guidance for main stream schools and

Benefits Delivered

- ◆ SDS have ensured within our design the building incorporates efficient, low energy and sustainable building services systems technologies, that focuses on the health and well-being of its end users, in compliance with local planning requirements
- ◆ The proposed school will be designed as a sustainable development utilising low energy and passive means of heating, cooling, ventilation, lighting and controls. To achieve this, our design team has worked with the wider project team and adopted a three-tier approach to the proposed design. Firstly, building loads have been reduced through effective fabric design that go above and beyond the U-values and air tightness values stated within 2013 Part L2A 2 of the Building Regulations and those recommended within the National Calculation Methodology Non-Domestic Modelling Guide. Secondly, systems have been designed to maximise their efficiencies so that resources are not wasted. Finally, we have considered the production of energy from low or zero carbon technologies in line with North Somerset Planning Policy (CS2). Finally, we have considered the production of energy from low or zero carbon technologies in line with North Somerset Planning Policy (CS2)
- ◆ A SBEM model has been used to calculate the required amount of PV panels to support the North Somerset policy on Sustainable Design and Construction (CS2) by achieving 15% of regulated energy demand through renewable sources. A total of 100 panels has been calculated as required to satisfy a performance of 23,771 kWh. To ensure optimum performance, the proposed PV array has been located on the South facing area of the plant roof
- ◆ An Electrical vehicle charging point + future provisions have been allowed for in car park locations for the SEN school. Each location will have a duct provision to allow the connection of an Electrical Vehicle Charging (EVC) point back to the schools main electrical switch room. From this provision, the school can provide Type 1, 2 or 3 EVC single or dual pedestal EVC chargers to provide electrical charging provision to the schools or local community vehicles.

A new £13m school providing a stimulating learning environment