The vision taking shape

We are developing the overall design for the Centre of Excellence, but here are some early illustrations on how we think the Centre will take shape. Our focus is on creating a wonderful place for children and their families to spend time, with all the services, support, research and training facilities blended into a transparent, open and supportive environment.

Design team consultants
Project Managers: GVA Acuity
Architect: Penoyre & Prasad
Structural Engineer: Webb Yates
Mechanical & Electrical: Clearsprings Energy Solutions
Quantity Surveyor: Gardiner & Theobald
Building Services: Clearsprings
Audio Visual: Cobalt Communications
Rights of Light: GVA SB
Planning Consultants: Turley
Party Wall and Oversailing: Silver Developments
A vision for a National Centre for Excellence

Leading-edge ‘BREEAM Excellent’ Sustainable Design

41% carbon reduction compared to a typical similar building, achieved through high performing building fabric, passive building design, energy efficient systems and Photovoltaic Solar Generator and Combined Heat and Power Generator.

The minimal requirement for space heating is provided by a small scale Combined Heat and Power Unit (CHP) creating both heat and electrical energy to serve both buildings.

The energy generated for the building reduces the total carbon emission by 22%.

Lighting is provided via LED luminaires which are highly efficient and are switched on and off in line with daylight levels and presence detection.

Rain water from the site is reduced to less than 50% during major storms through the use of green roofs and attenuation tank, thus reducing the impact upon the local drainage network.

A rainwater recycling system is incorporated to flush toilets and for irrigation of the green roofs.

During the summer the buildings will operate in a predominantly natural ventilated mode through enhanced automated natural ventilation combined with night purge ventilation.

High natural daylight levels are achieved throughout minimising the need for artificial light.

During the winter the building will be ventilated through Heat Recovery Ventilation saving approximately 75% in heating energy.