

# 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

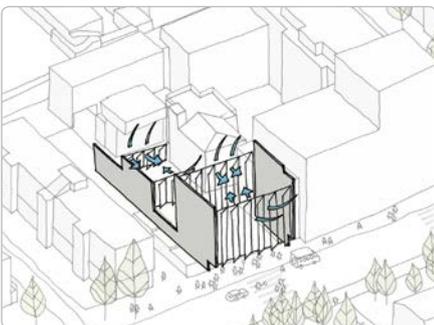




## Leading-edge 'BREEAM Excellent' Sustainable Design

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

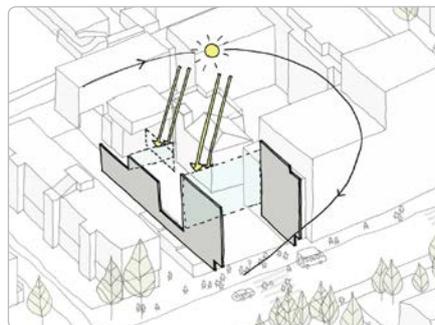
During the summer the buildings will operate in a predominantly natural ventilated mode through enhanced automated natural ventilation combined with night purge ventilation



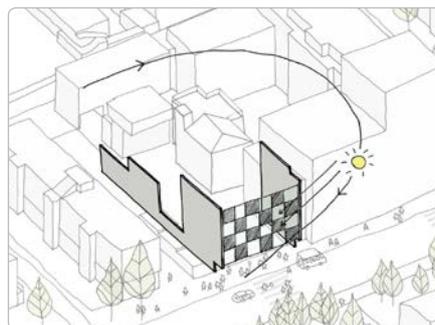
During the winter the building will be ventilated through Heat Recovery Ventilation saving approximately 75% in heating energy

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%

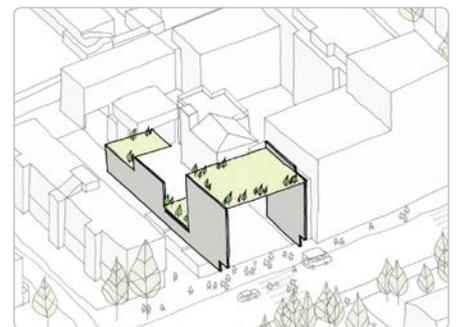


High natural daylight levels are achieved throughout minimising the need for artificial light



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