
Hampton Prep School

BREEAM (Education 2008) MAN 09 Credit: Publication of Building Information

1. **A brief description of the project and building:** A new build preparatory school which will provide learning facilities to support learning for young people aged 7-11 years, ancillary outbuildings and landscaping.
2. **BREEAM rating and Score:** 'Excellent' (targeted)
3. **The key innovative and low-impact design features of the building.**
 - Renewable technology Ground Source Heat Pump (GSHP) installed below Multi-Use Games Area (MUGA) to heat/cool the building via an air heating system and warm water supply.
 - Planting of additional native shrubs and trees to increase the biodiversity of the site.
 - Staff/minibus/accessible parking spaces on site to take pressure off residential roads.
 - Cycling/ scooter facilities on site for students and staff.
 - Sedum Roof to store rainwater, increase biodiversity of the site, reduce dust and improve air quality.
 - The building position has been carefully considered to optimise use of natural light and avoid overlooking, whilst also opening up the site as much as possible to views to/from Carlisle park.
 - Sedum Roof to help improve thermal performance, urban heat effect, improve noise and sound insulation and storm water amelioration.
 - Ecology garden with log pile to encourage fungi, mosses, lichens and insect life.
 - Bat & bird boxes within canopies to improve upon biodiversity of the existing site.
 - External teaching area with allotments to encourage pupils to grow plants and vegetables.
 - A Sustainable Urban Drainage System (SUDS) has been provided to attenuate the water run-off to a soak away.
 - Airtight, highly insulated building fabric to reduce energy losses from within the building and improve acoustic performance for teaching and learning.
 - Water saving devices and proximity detection have been installed to reduce water and energy usage.
 - Artificial lighting on presence/daylight sensors to reduce unnecessary usage.
4. **Basic Build cost:** £1273/m²
5. **Service cost:** £1009/m²
6. **External works cost:** £730/m²
7. **Gross floor area:** 1442m²
8. **Total area of site:** 0.83 hectares
9. **Function areas & size:** Hall – 153m²
10. **Area of Circulation:** 313m²
11. **Area of storage:** 138m²
12. **Potential Percentage of building to be used by community:** 85%
13. **Potential Percentage of grounds to be used by community:** 85%
14. **Predicted electricity consumption:** 50 kWh/m² / Annum
15. **Predicted fossil fuel consumption:** Gas 23 kWh/m² / Annum
16. **Predicted renewable energy generation:** 30 kWh/m² / Annum
17. **Predicated water use:** 1.7m²/person/year
18. **Percentage predicted water use to be provided by rainwater:** None
19. **The steps taken during the construction process to reduce environmental impacts, i.e innovative construction management techniques:**
 - Monthly targets set and monitored for the consumption of water, fuel and electricity used on site. Low energy lighting and self-closing percussion taps fitted in in site accommodation.
 - Plant "switch it off" policy.
 - Regular site inductions and toolbox talks on environmental issues.
 - Monitoring of off-site fuel consumption – encouragement for the use of local public transport or van sharing actively encouraged.
 - Energy consumption levels and advisory posters displayed around site.
 - Implementation of waste reduction plan - resulted in less than 10% of waste and packaging going to landfill.
 - Use of recycled aggregates and soils.
 - Regular communication with the neighbouring residents and shopkeepers regarding parking and vehicle movements and managed accordingly.
 - Independent Auditing by the Considerate Constructors Scheme – resulting in a "Performance beyond Compliance" award.
 - Tree and root protection fencing to the boundary trees.
 - Planting of temporary wildflower beds within the site.
 - Implementation of best practise in Dust and Pollution control measures.
20. **Social/economically sustainable measures achieved:** As above