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Queen Margaret University College’s Sustainable, Community Campus

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The new campus of Queen Margaret University College in the United Kingdom is designed to be a sustainable educational and community resource. Early consultation with students and staff on the campus design revealed a strong desire for a sustainable environment, with plenty of green space for all to enjoy. In response to this, the design focuses on maximising biodiversity, encouraging green transport, and making the most of natural daylight and ventilation in interior spaces. The Queen Margaret RE:LOCATE project will transform 35 acres of low grade farmland into diverse wildlife habitats to provide the parkland setting. The campus will be open to the public for leisure, education and recreation.

Currently based on three sites around Edinburgh, the university is moving to these larger premises at nearby Craighall to take account of continued growth and to replace its estate. Its current facilities are inflexible, no longer suitable for modern teaching and learning, and in some cases nearing the end of their functional life.

Facilities for students and the community

Students, staff and local residents have been involved in the project from the outset. The site plans were drawn up following initial consultation with the community, and a community forum has been meeting since then. Current students have been consulted throughout the relocation project, from involvement in the choice of site and input into the design of buildings, to decisions on the types of catering services on campus. Students were surveyed on the facilities to be provided for them and how they would like to see them operated, as well as on green travel planning.

Local residents will be encouraged to use the facilities, creating opportunities for student/community partnerships. As well as having a high-tech learning resource centre at the heart of the campus, there will be sports facilities, student residences, a student union building, a shop, cafés, biodiversity gardens, ponds, walks and a trim track. Parts of the resource centre will be open 24 hours a day, seven days a week, and self-service technology will allow users to issue and return books themselves. Sports provision at the new campus will be completely accessible for the disabled, and there will be appropriate disabled access to residences and academic buildings.

Sustainable campus

The RE:LOCATE project is designed to exceed current environmental standards and to set a new benchmark in sustainable design.

Water conservation and management systems have been integrated into the new site, while biodiversity is being encouraged through plans that include the creation of wetland, woodland, hedgerow and meadow habitats, and the provision of roosting boxes for indigenous wildlife. A sustainable urban drainage system (SUDS pond) will capture rainwater draining off roofs and paved areas, holding it
back on site rather than contributing to downstream flooding. As well as providing a solution to the problem of excess surface water, the pond will be an attractive feature of the campus, and will provide an excellent habitat for wildlife. Special wildlife corridors will reduce conflict between wildlife and human traffic.

A green travel plan is already being developed to encourage students, staff and visitors to make a smooth transition to a car free campus. One idea incorporated into the design is situating the bus stop directly beside a welcoming café, putting an end to students waiting for buses in the cold and rain. A national cycle route runs right through the site from Edinburgh, and there will be secure bicycle parking facilities on campus plus changing and showering facilities for cyclists.

Energy use will be minimised through intelligent design that incorporates air tightness and maximises daylight and natural ventilation through the use of energy efficient technology. The campus’ computer network will have no hard disk drives but will rely on “thin client” technology and central servers which generate less heat and require less ventilation and less space. The campus’ carbon emission is expected to be the lowest of any higher education organisation in the United Kingdom through the use of a biomass heating system; a woodchip boiler will generate heat for distribution around the campus, with a projected 75% reduction in carbon dioxide emission compared with traditional gas fired heating.

The Queen Margaret project was awarded the country’s BREEAM (Building Research Establishment’s Environmental Assessment Method) rating of “excellent”, a first for a higher education institution.

By September 2007, the Craighall campus will be home to around 4 500 students and 500 staff. The construction phase of the GBP 50 million contract covering most of the new buildings started in November 2005. A not-for-profit housing provider will build the 800-bed hall of residence under a GBP 30 million contract.

Queen Margaret University College provides courses in the fields of business and enterprise; health studies; social sciences, media and communication; and drama and the creative industries.

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