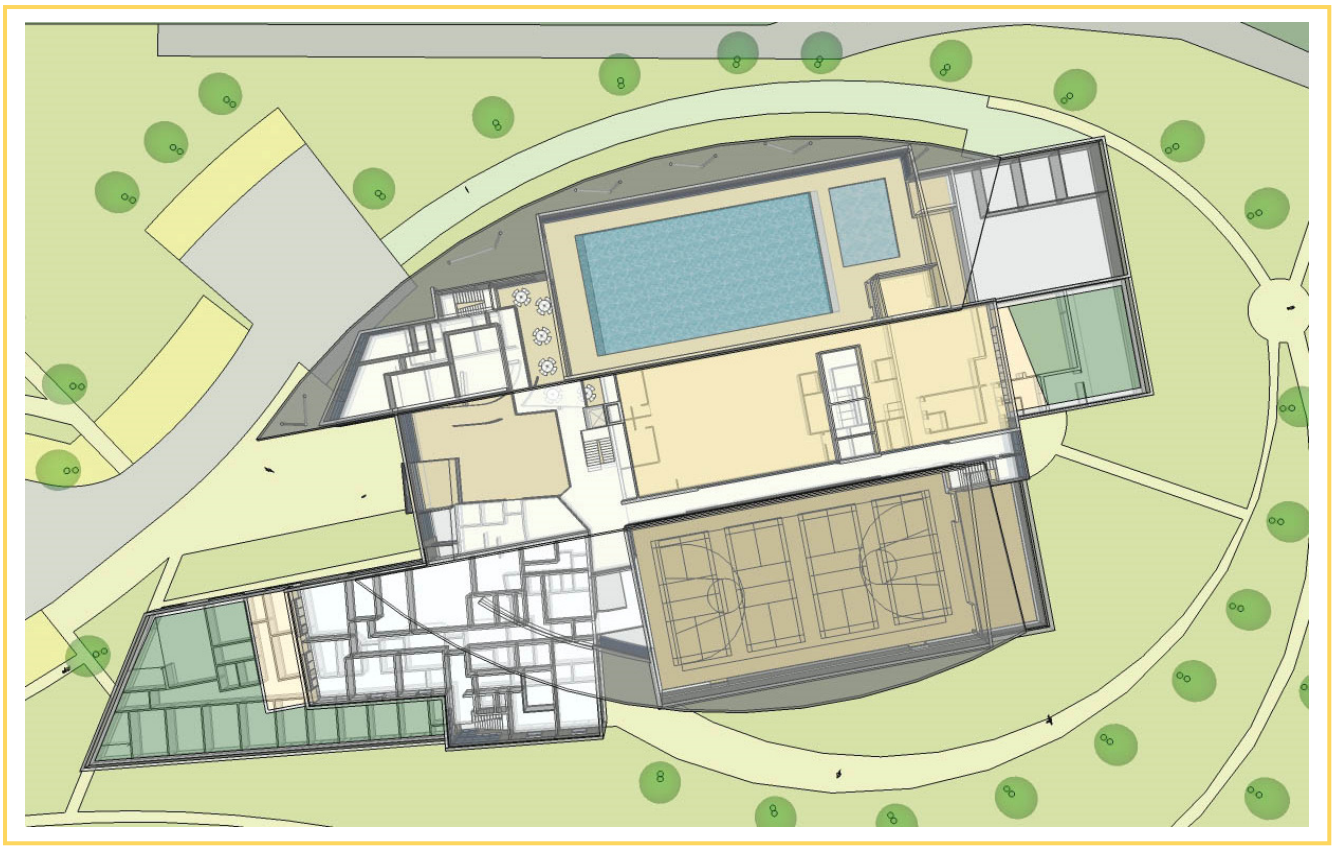
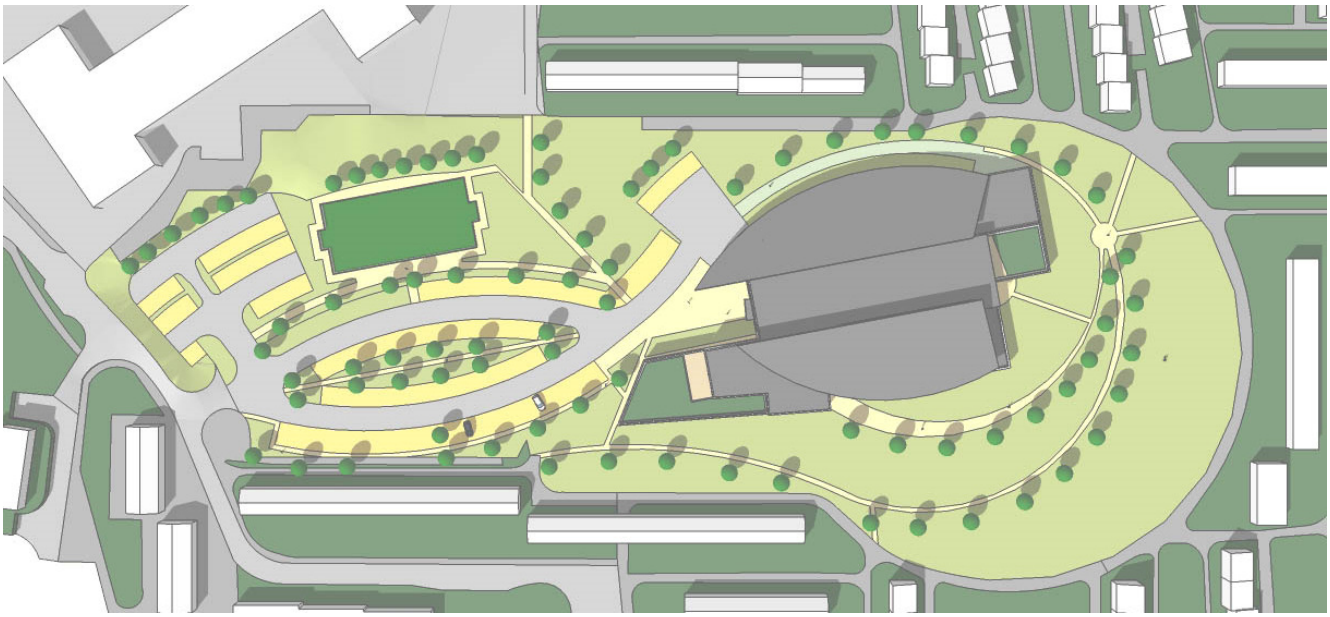
CASE STUDY: LEISURE
PLAS MADOC LEISURE & HEALTH CENTRE

AINSLEY GOMMON ARCHITECTS





Sustainability Strategy

All options implemented various renewable and sustainable technologies. Ground source heat pumps would be used, taking advantage of the large open spaces on site, and combined heat and power, an approach often used in modern swimming pools. Valuable excess heat gains could be shared with neighbouring buildings via a local district-heating scheme.

Water run off over any hard landscaped surfaces will be conserved and used. Rainwater harvesting systems could be adopted with photovoltaic panels and solar thermal panels and would be particularly easy to implement in a new build.

Native species tree planting will increase biodiversity, compared with the low level of planting currently on this brownfield site. Maximum possible use of A and A+ rated materials would be encouraged, in keeping with the aim for a highly sustainable overall scheme.

Sustainability Overview

- Ground source heat pumps
- Conservation of water run off, especially on hard landscaped areas
- Rainwater harvesting
- PV panels and solar thermal panels
- Tree planting to encourage greater biodiversity
- Optimisation of natural lighting
- Local district-heating scheme to distribute excess heat gains

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PLAS MADOC LEISURE & HEALTH CENTRE

Name of Building
Plas Madoc Leisure & Health Centre

Date Completed
Feasibility Option Study 2010

Project Cost
Feasibility Options Vary

Building Type
Leisure Facilities and Health Centre

Location
Wrexham, North Wales

Client
Wrexham County Borough Council

Building Overview

Ainsley Gommon Architects were approached by Wrexham County Borough Council to undertake a feasibility option study surrounding the redevelopment of the existing Plas Madoc Leisure Centre in Wrexham. Over the years the once 'state -of-the-art' building had undergone a number of cosmetic improvements but the building still retained its original plant and equipment. Servicing was very inefficient, expensive to run and was reaching the end of its lifespan.

As well as looking to improve the sports facilities provided, the brief also required that a new health centre for the local community was included on the site. Sustainability was high on the agenda and the Council aimed to achieve financially feasible low carbon redevelopment strategy.

Our Feasibility Studies looked at three main options: complete refurbishment of the existing building; hybrid options including partial refurbishment combined with areas of new build, and a complete new purpose designed building. All options proposed new plant and servicing, with various levels of .... within the existing shell of the building.

The New Build Feasibility study culminated with a detailed design study proposing a purpose built facility including a six lane 25m Swimming Pool with adjacent Learner Pool, 4 court Sports Hall, Fitness Suite, Dance Studio and Health Centre. The integration of a Health Centre into this layout required a solution that would allow the two primary functions to sit comfortably side by side, while maximising access and clear way finding.