Dorney Lake is British Canoeing’s main on-water training venue and was a competition venue for the London 2012 Olympic Games. However, in contrast to the excellent water conditions, the venue lacked suitable indoor support accommodation - Olympic medallists were dependent on an old, leaky shipping container for changing and meeting space.

The new state-of-the-art facility builds on the success of London 2012 and provides paddlers with an improved daily training environment to support preparation for the Rio 2016 Olympic Games, Tokyo 2020 and beyond. It was constructed using modular, off-site construction techniques. This overcame challenges posed by the relatively remote location within a flood plain area that also suffers from low water and gas pressures.

Sport England worked in conjunction with British Canoeing and UK Sport to design and deliver a World Class, purpose built facility, embracing Sport England’s Design Guidance.
“...What we have created here will have an immediate positive impact on training and will assist us greatly to deliver our best performances in Rio...”

John Anderson MBE
Performance Director of British Canoeing
Facility Case Study

Features

- Utilises off site construction techniques
- 6 weeks off site factory build
- 6 weeks to install substructure and main service connections
- Facility delivered as 10 bays, hoisted on to foundations and connected together in 1 day
- On site build completed in 10 weeks compared to 14 weeks for traditional construction approach
- 20% cost saving compared to traditional construction approach
- Location remote from storm and foul sewers, utilises septic tank, drainage fields and soakaways for drainage disposal
- Liquified petroleum gas source in lieu of natural gas as location remote from adequate source of mains pressure
- Boosted water supply solution to overcome low mains pressure
- Constructed 600 mm above ground level to manage flood risk
- High quality internal specification to provide world class environment for Elite athletes training
- Custom built changing room seating and storage space
- Strengthened floor to training areas
- Includes adjacent custom built canoe and cycle storage facility.

Environmental Sustainability

- Low maintenance timber cladding
- LED lighting
- Building Regulations part L2A compliant for energy use

Procurement / Programme

Project Manager QMP
Designer Williams Architects
Contractor Integra Buildings Limited
Contract JCT Design & Build 2011
Programme 17 weeks

Schedule of Areas

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Internal Floor Area (training facility)</td>
<td>256 m²</td>
</tr>
<tr>
<td>Circulation Area % of Gross Floor Area (training facility)</td>
<td>27 %</td>
</tr>
<tr>
<td>Gross Internal Floor Area (canoe and cycle storage facility)</td>
<td>141 m²</td>
</tr>
</tbody>
</table>

General Accommodation (training facility)

<table>
<thead>
<tr>
<th>Description</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training/Coaches/Treatment/Lounge</td>
<td>84 m²</td>
</tr>
<tr>
<td>Changing Rooms, Showers and Toilets</td>
<td>70 m²</td>
</tr>
<tr>
<td>Kitchen</td>
<td>13 m²</td>
</tr>
<tr>
<td>Office Space</td>
<td>11 m²</td>
</tr>
<tr>
<td>Plant</td>
<td>9 m²</td>
</tr>
<tr>
<td>Circulation/Meeting Space</td>
<td>69 m²</td>
</tr>
</tbody>
</table>

General Description of Key Specifications and Materials

Frame

Steel frame

Cladding

Proprietary timber cladding to main elevations, metal to rear

Roofing

Single layer insulated deck

Internal Doors

Encapsulated doors generally, floor to ceiling glass door and partition to training areas

Wall Finishes

Plasterboard and painted generally including feature walls with digital images. Fully-tiled showers and glass-tiled splashbacks

Floor Finishes

Combination of carpet, non-slip vinyl and non-slip tiling in changing/wet areas

Environmental Sustainability

- Low maintenance timber cladding
- LED lighting
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Summary of Elemental Costs

<table>
<thead>
<tr>
<th>Element</th>
<th>Total cost (£)</th>
<th>Cost (£) per m²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a Substructure</td>
<td>37,000</td>
<td>144</td>
</tr>
<tr>
<td>1b Superstructure</td>
<td>236,000</td>
<td>921</td>
</tr>
<tr>
<td>1c Finishes</td>
<td>53,000</td>
<td>208</td>
</tr>
<tr>
<td>1d Fittings and Furnishings</td>
<td>54,000</td>
<td>209</td>
</tr>
<tr>
<td>1e Services</td>
<td>135,000</td>
<td>528</td>
</tr>
<tr>
<td>1f External Works and Services</td>
<td>76,000</td>
<td>298</td>
</tr>
<tr>
<td>1g Preliminaries</td>
<td>28,000</td>
<td>110</td>
</tr>
<tr>
<td>1h Training Facility Construction Cost</td>
<td>619,000</td>
<td>2,418*</td>
</tr>
<tr>
<td>2 Canoe &amp; Cycle Store Construction Cost</td>
<td>61,000</td>
<td>432**</td>
</tr>
<tr>
<td>3 Total Construction Cost</td>
<td>680,000</td>
<td>-</td>
</tr>
<tr>
<td>4 Professional Fees</td>
<td>70,000</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL PROJECT COST</td>
<td>750,000</td>
<td>-</td>
</tr>
</tbody>
</table>

Notes:
- Costs are rounded and reflect the out turn cost at 1Q15
- Costs exclude loose furniture and equipment
- Costs are exclusive of VAT
- * Cost/m² for the Training Facility is based on the Gross Internal Floor Area of the Training Facility - 256m². It does not include the Gross Floor Area of the Canoe and Cycle Store
- ** Cost/m² for the Canoe and Cycle Store is based on the Gross Internal Floor Area of the Canoe and Cycle Store - 141m². It does not include the Gross Floor Area of the Training Facility which is an adjacent, but standalone structure