

The Dragon's Heart Hospital

Winner of
Integration & Collaborative Working Award

Project Details

Location	Cardiff
Contract value	Confidential
Type of work	Project management
Construction type	Council offices
Client	Local Health Board
Start date	31/03/2020
End date	12/04/2020
Area	15,000m ²



Project Requirements

The Coronavirus pandemic was the health crisis that spread globally and became our greatest challenge since World War Two. As 2020 became a year like no other, working together and resilience was more important than ever. Mott MacDonald offered the NHS support, mobilising resources across the UK, stepping in to provide multiple services across England, Wales, and Scotland. In Cardiff, this required converting the iconic Principality Stadium into a functioning hospital. Time was a major challenge on this project as they had to deliver rapidly, providing the NHS with what they needed quickly.

The Solution

Overall, this project involved 1340 staff working under enormous pressure with tight time constraints due to COVID-19 regulations. Ensuring that abidance to all safety regulations remained strict while delivering to the compressed programme was made easier by their strong health and safety culture that was championed by Mott MacDonald staff on site.

Pace

Time was a major challenge on this project as we had to deliver rapidly, providing the NHS with what they needed quickly. In order to achieve this, efficiency became key with strong collaboration and communication between all teams, ensuring all were fully informed of the daily ongoingings.

Project Outcomes



Delivered without disruption



Maintenance of a healthy working environment



Over 300 beds were available in just 11 days, with a total of 1,500 by final handover

Project Enablers



Innovative approaches



Collaborative working



Solution-driven attitude



Maintenance of a healthy working environment



The Mott MacDonald team was on-site within 24 hours of receiving the request, acting as project manager, lead designer, and cost consultant for the project. Quick delivery was critical to the success of this project, but Health and Safety was always at the forefront of delivery, with social distancing and PPE being strongly implemented. They were able to overcome problems that arose by working together efficiently and innovatively, allowing them to keep the incredible momentum created by the workforce. These key aspects of the project, including, collaboration, innovation, efficiency, and resource management all contributed to the success of the hospital being completed quickly, supporting the NHS at a crucial time.

One Team

In practice, the level of interaction between partners was absolute. A 'one team' mentality quickly emerged, with all staff co-located together and present every day on site. Throughout this process we have been able to respond to a crisis like no other in our lifetimes, with an intense focus on

pulling together for the benefit of society, collaboratively managing the time and resources required. The first 300 beds were available in just 11 days, with a total of 1500 by final handover. This excellent technical delivery of such a tight programme allowed us to rapidly and innovatively provide the support required to care for those severely in need of the NHS.

Getting access to project capital was also challenging, as it is not usually required so quickly upfront. To overcome this, we collaborated with Welsh Government to streamline funding to help maintain programme while also abiding by all required due diligence requirements.

Technical Integration

The technical requirements were also extremely complex. By fostering a one-team approach that was without hierarchy, our options appraisal and delivery processes saw team members of all levels of experience, background and seniority quickly developing innovative solutions for an unusually complex project. For example, the pitch needed to be decked and platforms built over the lower seating terrace as a priority, to accommodate temporary buildings that would house patients. The team identified a novel approach; by "slinging" the system into the open roof of the stadium using a series of chains, they could then close the roof, lowering the system perfectly into place.

The integration of all teams on this project became key to the success of completion and to see the engagement of so many organisations and staff from all different backgrounds working collaboratively with a strong and coherent dynamic to complete the hospital on time was a very rewarding outcome.