

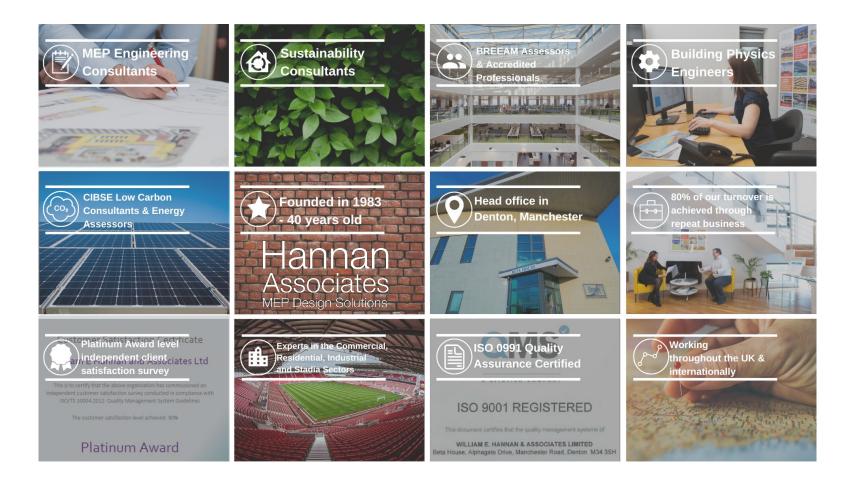
Hannan Associates MEP Design Solutions

Introductions.....

Hannan Associates is an engineering consultancy formed in 1983 to provide MEP Design Solutions to the Construction Industry.

We pride ourselves on delivering our service with a higher level of personal attention than larger competitors but providing a comparable strength of management, process discipline, expertise and creativity.

We focus on building services and deliver projects valued in excess of £500m with national and international design teams. We work in a range of sectors with projects of varying sizes, providing us with good market resilience and an exceptional breadth of track record and design competence.



Our Team.....

The Hannan team is led by long standing directors lan Joyce, Jamie Hall and John Walker.

The development of the company has been aided by a strong, long serving work force through which we have developed lasting relationships with our clients, ensuring that 80% of our turnover is achieved through repeat business.

We recognise that we cannot do this without the support and enthusiasm of all our team members and we therefore endeavour to maintain the highest levels of team work and co-operation and develop staff that possess well founded self-belief who will act with diligence and integrity on behalf of our clients.

Many of our engineers have worked together over a long period of time, some for over 25 years, completing many successful projects together. Treating each project as unique we handpick each team to collectively possess the skills and range of experience needed to succeed, whilst creating a dynamic environment that encourages creativity.



We love





What we do.....

In essence we provide MEP Design Solutions to the construction industry. We have been doing this since 1983 so we're pretty good at it. Here are some of the ways we can help you...

Α

Acoustics AV Systems

В

Building Health Checks
BREEAM Assessment
BREEAM Accredited Professional
Building Physics

C

Condition Surveys
Construction Inspection and Supervision

D

Design for Performance Modelling DEC Certification

Е

Electrical Building Services Design Energy Audits EPC Certification

Ē

Feasibility Studies Fire Engineering

I

Infrastructure Planning and Design Internal Environment Modelling IT Systems Design L

LEED Assessment
Low & Zero Carbon Strategy & Design

M

Mechanical Building Services Design

0

Operational Energy Modelling

Р

Planned Maintenance Planning Reports Public Health Building Services Design

R

Renewable Energy Technology Feasibility

S

SBEM Calculations Services Engineering Appraisal Sustainability Strategy

Т

Thermal Modelling

V

Vertical Transportation Design

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Water Conservation & Compliance Audits WELL Building Consultancy

Sustainability.....

Energy reduction, the core of sustainable design, was inherent in our building design process long before it reached the political agenda. Our sustainable credentials are therefore built upon years of experience at the forefront of low energy, low carbon solutions.

We are now at the forefront of change in relation to the way buildings are modelled to meet the demands of evolving building regulations and guidance from UKGBC and LETI, which are driving carbon targets for construction towards the 2050 net zero government commitments.

Our involvement includes pilot schemes for modelling energy and carbon in use for new buildings, such as Design for Performance (DfP) and NABERS UK and this experience enables a valuable contribution to development masterplan and individual building sustainability.

Hannans can provide sustainability advice across a wide range using in-house engineers and consultants and specialist partners where needed to define ways of achieving sustainability objectives. This includes.....

- ✓ Energy modelling and Carbon assessment of energy for building services
- ✓ Energy and carbon performance evaluation
- ✓ BREEAM assessment and BREEAM AP
- ✓ Carbon in construction
- ✓ Well Building Assessment



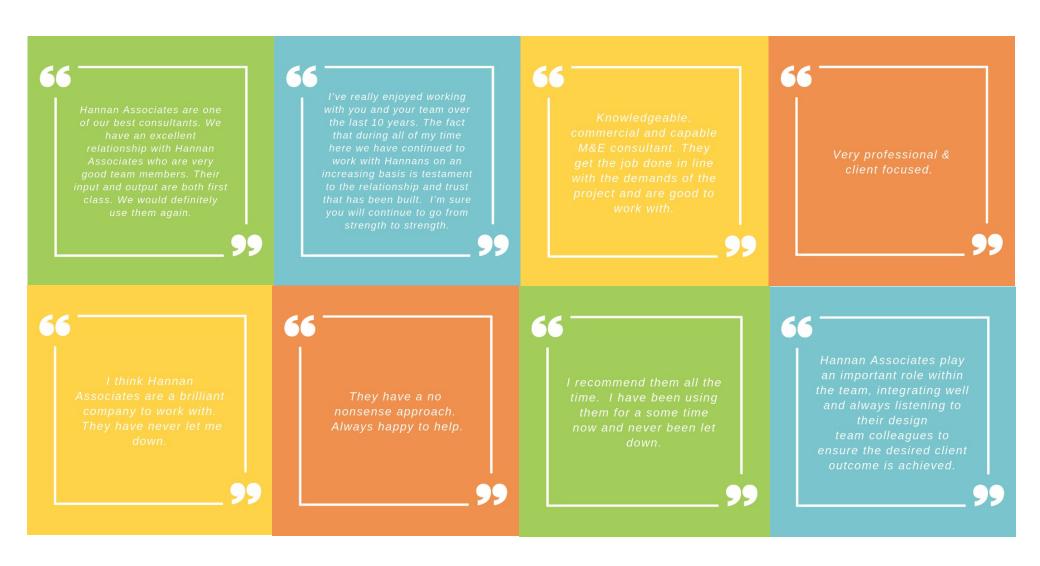




Net Zero Carbon Buildings: A Framework Definition



Our clients say.....



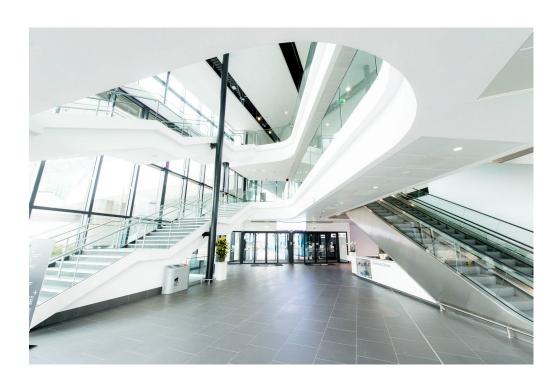
Our experience

Upholding your vision with creative thinking.

From museums to exhibition centres we understand that the key to

strengthening the performance of a venue, lies in the way the public interacts with buildings and space. By developing designs that tackle the efficiency of waste, water and energy, we can enhance a visitor's experience, as well as increasing revenue.

Our engineers create innovative results that are sympathetic to a venues character, and the goals they are aiming to achieve.



EXHIBITION CENTRE LIVERPOOL

Client: ISG and ACC Liverpool

Architect: Denton Corker Marshall

Project Value: £40M

Project Duration: November 2012 – July 2015



Hannan Associates were engaged to develop the services design for the 87,000 m² Exhibition Centre Liverpool and adjoining 216 bedroom Pullman Hotel at Kings Dock adjacent to ACC Liverpool – the home of the BT Convention Centre and M&S Bank Arena.

For this project we provided energy and sustainability advice and reports to meet BREEAM and Planning objectives. To achieve this we carried out full thermal modelling and optioneering to asses both Carbon and cost in use of the proposals.

The exhibition centre is used to hold trade and consumer exhibitions, music concerts and sport shows – attracting more than 250,000 visitors a year.

The ACC Liverpool has won numerous awards including Excellence in British Tourism at the 2014 LEP Tourism Awards, and Best UK Conference Centre at the M&IT Awards for four years in a row.







DW SPORTS LEISURE CENTRES, VARIOUS LOCATIONS

Client: JJB Sports / DW Sports
Architect: NJSR Architects
Project Value: 7.5M (per project)
Contract Duration: 1999 – 2018



Hannans have been undertaking contracts for DW Sports & formerly JJB for over 16 years. We have provided M&E consultancy for the fit out of over 60 DW Sports health clubs throughout the UK and Ireland and have also worked on a selection of 'Soccer Domes' and superstores as well as undertaking various projects at Wigan Athletic's DW Stadium.

Facilities at each health club include: swimming pool; steam rooms and spas; gym areas; group exercise studios; changing rooms; members lounge and bar.

Hannan's designs have constantly evolved, remaining up to date and at the leading edge of low-energy design. To reduce energy consumption and carbon emissions, the latest health club designs incorporate LED lighting to the majority of areas, absence and presence detection lighting control in toilet and back of house areas, displacement ventilation with free cooling when external conditions allow to the Gym area, inverter driven pumps, heat recovery on ventilation systems and a reduction in stored hot water capacity.

In addition monitoring of the pool hall conditions is incorporated onto the automatic controls system to raise alarms when internal conditions (and in turn energy usage) exceed parameters. Manual covers for the pool and spas are also now installed overnight in conjunction with night setback on ventilation plant to further reduce energy usage.







KAFD CHILDREN'S MUSEUM, RIYADH

Client: Thorton Tomasetti Architect: Henning Larsen Project Value: £20M

Project Duration: February 2011 – December 2015

As part of Spectrum MEP Consortium we worked for Thornton Tomasetti on this £20M Children's Interactive Museum which is part of the overall vision of the King Abdullah Financial District master plan intended to create a new financial district in the city of Riyadh. The development offers a wide mix of offices, residential, educational, sports and cultural facilities of different types.

Our role in the project involves the MEP services design for parcel A10, The Children's Interactive Museum based in the heart of the development. The proposed building is linked via skywalks to other adjacent attractor buildings (parcels) along with basement car park and retail units at various locations.

The multi level 14,684m² Children's Interactive Museum building has been designed to capture the imagination of the visitors and the MEP design has been progressed to ensure the conditions within the building are to the highest standard for both comfort and the visual aspects of the exhibits / attractions. The Museum exhibits are intended to be both educational and entertaining and all aspects of the installation are intended to compliment these requirements.

Thermal Dynamic Simulation Modeling is to be utilized to ensure that all associated HVAC systems achieve this high level of performance. Energy efficient systems to minimize water use and wastage will be incorporated along with high level and under floor power installations to allow flexibility as the exhibits develop and rotate during various stages. All design is being produced in line with LEED standards, Saudi Building Code and associated local regulations.







NEWBURY RACECOURSE REDEVELOPMENT

Client: Newbury Racecourse Architect: KKA Architects Project Value: £20M

Project Duration: August 2010 – ongoing



Hannan Associates have been retained MEP Consultants for Newbury Racecourse since 2010. We have provided stage 3 Developed Design, monitoring duties and utilities infrastructure for each phase of the work during the redevelopment of the racecourse.

The £20 M redevelopment includes a new 4* 120-bed hotel by 'Bespoke' Hotels, the creation of a more impressive entrance providing a real 'sense of arrival', new ticket offices, new weighing room, new parade areas, refurbishment of the stable block, new accommodation for the 'stable lads', a new building for the children's nursery at the racecourse', improved access to the racecourse via a new bridge, upgrade external lighting, landscaping and car parking.

Improvements and additions to the current racing and golfing facilities at the racecourse are also being made. The site will also have up to 1500 new homes of which up to 450 will be affordable, shared equity housing or available to rent. The site won the excellence in planning to deliver housing category at the 2015 Royal Town Planning Institute Awards.

The redevelopment of the Heartspace area is now complete and available for use by racegoers. The Heartspace scheme focused on the redevelopment of the heart of the racecourse, undertaken in phases to ensure racing has been able to continue unaffected.

Phases one and two were completed in Summer 2017 and included the construction of a new Owners Club to provide hospitality space and office accommodation, re-location of the Pre-Parade Ring and Saddling Stalls and a new East Entrance building.

The final phase of works included a new South Entrance building, 2nr. Totes, landscaping and remodelling of the Parade Ring and Winners Enclosure.







MUFC OLD TRAFFORD MUSEUM, MANCHESTER

Client: Manchester United Football Club

Architect: AFL Project Value: £4 M



One of several projects we have undertaken for MUFC during the last 25 years is the Old Trafford Museum that includes a visitor centre and the red café. We designed the complete mechanical, electrical and public health installations. The project involved the fitting out of the existing level 3 of the North Stand. Themed areas include the theatre, Red café and interactive exhibit spaces.

Designing the mechanical and electrical services for the building was a challenge due to the unique construction of the stadium and stringent requirements for public safety on Match and non-match days. Interfacing with existing systems was a major consideration during the design and installation. Existing systems had to be extended and/or modified so that they were coordinated with the exhibition stands and displays. All works were undertaken whilst the stand was occupied.

The museum won large visitor attraction of the year at the 2013 Manchester Tourism Awards, it has also been awarded an Enjoy England Quality Attraction Rose. It has achieved a Gold Green Tourism Status due to outstanding contributions to green tourism, including the use of latest technologies such as LED lighting, efficient boilers and renewable technologies.



NATIONAL FOOTBALL MUSEUM, MANCHESTER

Client: Manchester City Council & Cruden Group

Architect: AFL Architects
Project Value: £10M

Contract Duration: June 2010 – June 2012

This project involved the relocation of the National Football Museum (NFM) from Preston North End Football Stadium, to Urbis in Manchester City Centre. The NFM at Urbis is a new Museum, building on the successes of the museum at Preston and of Urbis in developing an innovative exhibition programme.

The overall project required conversion of the Urbis building, including building modifications and the design and installation of exhibition spaces, plus fixed and interactive exhibits. Mechanical and Electrical formed a significant portion of the building fabric alterations works.

The project was delivery successfully on time and in budget and the museum opened on 6th July 2012.



ST GEORGE'S HALL, LIVERPOOL

Client: Liverpool City Council
Architect: Purcell Miller Tritton
Project Value: Approximately £50m

Contract Duration: April 2000 – October 2007

We are very proud to be part of the project team that won a Civic Trust 'City of Culture Award' during 2007 for our contribution towards the refurbishment of St George's Hall in Liverpool. Hannan Associates also won a Merseyside Award for Architecture and Urban Design for 'Best Architectural Lighting Project' for this project.

St George's Hall opened its doors to the public in 1854 over 10 years after it was commissioned. It has been a central feature of Liverpool's architecture ever since, and has been called 'The best example of Neo-Classical architecture in Europe.'

The hall is a public venue capable of holding 800 people in its large concert hall and smaller capacities in the small concert hall. It also houses magistrates and Crown courts.

Commencing in 1995 Hannan Associates were engaged in three phases of the refurbishment of this Grade I listed building to fully design and integrate the services seamlessly and invisibly. After successfully completing Phase 1 of restoration works at St Georges Hall, Hannan's were awarded Phase II and III refurbishments which were completed from 2003 to 2007.

This project in particular taught us the importance of sympathetically using the original building design features to achieve more modern and efficient systems. This included setting design parameters and using systems which made best use of, took account of and maximized the benefits of the existing heavy building structure and features such as the high ceilings.

St George's Hall was reopened on April 23rd 2007 by HRH The Prince of Wales, after being carefully restored to its original glory.







CRMZ YOUTH MEGA CLUB, WIDNES

Client: Halton Borough Council Architect: Austin-Smith Lord

Project Value: £2.6M

Contract Duration: March 2009 - February 2011



Hannan Associates were employed to undertake the M&E Design for the refurbishment of the Art Deco, Grade II listed Kingsway Health Centre. The former Kingsway Health Centre underwent a significant refurbishment programme to create an environment that young people want to visit and can participate in activities. The facility has been designed to promote volunteering, education, employment and training and 'good teen health'.

A new multifunction hall has been built including a recording studio, radio room and control facilities for the audio and visual equipment. The new hall has multi function use for communal classes and live performances. The new function hall is naturally ventilated by the automatic operation of 'Monodraught' towers and opening windows.

The building has external solar shading to minimise solar gains during the summer months to the south façade and the structure is of medium weight construction to help reduce peak temperatures within the hall. The intention of the ventilation strategy in the new main hall is to reduce energy consumption and CO2 emissions.







ROCHDALE RIVERSIDE

Client: Genr8 Developments & Arcadis **Architect:** T P Bennett Partnership

Project Value: £80M

Contract Duration: October 2014 – Ongoing

We are part of the team working to deliver Rochdale Riverside, one of several projects undertaken as part of Rochdale Council's town centre masterplan. The scheme is part of a joint venture between Genr8 Developments and Kajima, in collaboration with Rochdale Development Agency and Rochdale council. The main contractor for the development is Willmott Dixon.

Completed in April 2020, the first phase of Rochdale Riverside includes a new 200,000 sq ft retail and leisure quarter where occupiers include Marks and Spencer, H&M, JD Sorts, River Island, Next, New Look and Boots. The retail complex also features a six-screen Reel Cinema and Hollywood Bowl Puttstars.

Submitted plans for phase 2 include two apartment blocks of nine storeys, a 147-bedroom hotel and 43,000 sq ft of offices.

Our engineers are providing MEP design consultancy services for the base build shell and core elements and landlord's areas, including thermal modelling and Part L analysis for each of the buildings. We are also providing BREEAM Assessment duties for the project.

Hannan Associates have worked closely with other members of the design team to develop innovative, landmark buildings, with effective and efficient building services solutions to meet the needs for each particular building. Due to the nature of the development and location of the site, our role has also involved extensive dialogue and negotiations with all utility providers in the area, to deal with the extensive major utility diversions that will be necessary on and around the site, as well as dealing with the new supply connection requirements.

Hannan Associates are extremely proud and excited to be working with Genr8 and the rest of the team on this project which is transforming Rochdale's retail and commercial landscape and giving its residents a town centre they can be proud of.







EUREKA CHILDREN'S MUSEUM, HALIFAX

Client: Clove Duffield Foundation

Architect: BDP Project Value: £9M

We designed the complete mechanical, electrical and public health installations for this multi-award winning venue that attracts more than 300,000 visitors a year. The project involved refurbishing an old railway station into an open plan themed museum targeting those aged 4-16 years. Themed areas include TV studios, mind & body, and search & rescue areas.

Designing the mechanical and electrical services for the building was not just about creating a comfortable, practical environment, but also concerned enhancing the visitors' interactive experience, with the various themed areas and displays.

Our designs were to become an integrated part of the main themes surrounding Eureka. The various interactive displays relied upon the use of relevant services to complement the particular themes. In particular, the lighting schemes that we designed were of great importance to the success and appeal ability of the displays available; encouraging visitors of the museum to look, listen, touch and feel. Permeable membranes were incorporated in the scheme and coloured for interest.









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