



## RECRUITMENT BRIEF

Associate / Principal Engineer

MANCHESTER



# Introduction



Adept is an award winning, rapidly growing, strongly established civil and structural engineering consultancy with an excellent reputation for the delivery of complex and specialist projects.

Adept Consulting Engineers Ltd was founded in January 2007 by business partners Erol Erturan, Richard Parker and Matthew Ramsden, who work to engineer better together using BIM.

Our clients choose us because of our reputation as a customer focused, personal and responsive company that employs the best staff who use the latest technology to deliver the best value service on time. We have a loyal client base and almost 90% of our work is generated from repeat business.

## Our Sectors:

- **Commercial**
- **Distribution**
- **Education**
- **Energy**
- **Extra Care**
- **Food Processing**
- **Healthcare**
- **Hotel & Leisure**
- **Listed buildings**
- **Residential**
- **Retail**
- **Warehousing**



# Our Services

Our mission is to provide high quality civil and structural engineering services to our clients within the construction industry.

Our specialist areas of work include:

- Preparation of conceptual schemes
- Feasibility studies
- Flood Risk Assessments
- Desktop studies, site investigations
- Drainage
- External works and highways for new build and refurbishment projects
- General civil and structural advice
- Structural surveys and reports for existing properties
- Superstructure
- Detailed designs and drawings of foundations
- Project management and lead consultant services
- Building Information Modelling (BIM) including providing data rich 3D models
- Laser point cloud surveying
- BIM consultancy, converting laser point cloud to BIM

# Flood Risk and Drainage Impact Assessments

We can help our clients understand the potential risk of flooding when designing and developing a new site and can offer the following services:

## **TYPES OF ASSESSMENT:**

- **Basic Flood Risk Assessment:** for outline planning (and high level drainage strategy).
- **Full Flood Risk Assessment:** to accompany full planning applications and detailed drainage design).
- **Localised Assessment of Flood Levels:** using Product 4 data and topography, utilising LidaR data where necessary, to challenge the broader flood risk maps from the EA.
- **Flood Management & Scheme Optimisation:** Through managed Integrated Catchment Modelling (3D for short) to help identify optimum areas of development.
- **Drainage Impact Assessments:** to include detailed drainage strategy. We will advise on suitable SuDS proposals where required to accompany full planning applications.

Where a viable solution exists, we can resolve flood risk and drainage impact objections to developments quickly and cost effectively. This can be carried out by entering into negotiations with the Environment Agency, Lead Local Flood Authority, Internal Drainage Board or planners, to agree viable solutions.



# Digital Innovation

We understand that Building Information Modelling (BIM) is key to our industry's shared future. We see this as self evident and have modelled our business around this

We are a forward thinking, technologically advanced company and use the latest tools to deliver our projects, resulting in increasing productivity, efficiency and better service to our customers. Despite our extensive experience, we are always looking for new and innovative ways to improve and develop. Exploring new software and processes are part of our working day. Our staff are continually encouraged and inspired to implement cutting edge solutions.

Our focus and expertise in BIM is rather unique. Having achieved BIM Level 2 accreditation in 2015 we became the first civil and structural engineering consultancy in the UK to receive such an award. This validated our advanced capability in modelling, analysis exchange and process maturity beyond compliance with UK standards, and we haven't stopped progressing.

We embrace trust based collaboration and recognise that working together creates benefits far greater than the sum of its parts. Clients, staff and design partners have gravitated towards this approach and the positives have been numerous.

Reduced rework, clash detection on site, intelligent data exchange, improved accuracy and greater transparency are just some of the quantifiable benefits we continue to share.

At the end of our projects all parties are more knowledgeable, experienced and better equipped for the future and we see this as a great achievement. We openly share knowledge, models, processes and ideas and actively encourage our clients and sub-contractors to do the same.

Adept's attitude to Digital Innovation has been our unique selling point since our early days. BIM is integral and fundamental to the delivery of all our projects. There are no exceptions, it just makes eminent sense.

In practice we go beyond what is traditionally seen as BIM for Civil/Structural Engineers and routinely deploy our Laser Scanner, UAV and VR equipment.

All of our models are workshared for data segregation, most contain analysis data and other intelligent features beneficial to the digital twin envisaged for the lifecycle of the facility. This is our modus operandi. Our current interests lie in mesh feature recognition from point clouds, LEAN processes and practical Virtual Reality.

We are members of Cyber Essentials Plus, a government backed cyber certification scheme.

For project delivery Adept uses a wide (and often changing) array of technical software, bespoke solutions and modules.



# The Growth of Adept

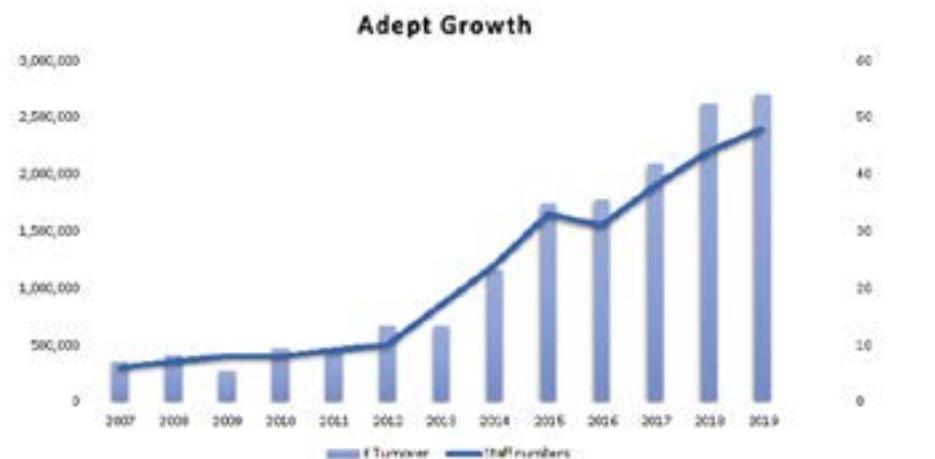
We have invested a significant amount of time and money into the development of our business, BIM and staff training and now recognise that this is the right time for Adept to develop and grow our Manchester office. Recently appointing a director to our existing office in the heart of Manchester was the catalyst for this growth, enabling us to expand our client base and opportunities.

Appointing Directors in London and Manchester in 2019 is part of our long-term growth strategy. The two new Directors will become key in sustaining our business growth.

Within our industry we are recognised for leading service excellence and professional development. This has created a loyal client base and a healthy, continued stream of repeat business.

We are now involved in a wide range of schemes nationwide, with many based in and around Manchester and London.

Other long-term plans include the diversification of Adept's services to include project and information management, lead consultancy and geo-environmental site investigations, including setting up associated companies with motivated key individuals.



# Growth in the North West Region

Adept's Manchester office is run and managed by newly appointed Director, Neil Brown. The office, based at Sevendale House in the city centre, is the hub for projects in the North West region.

## Manchester Office

We opened an office in Manchester's Grade II listed building Sevendale House several years ago, following several high-profile contracts in the North West. Until now, the office has been staffed by team members from the company's Leeds office.

Neil said: "After spending the last decade working at large, multi-national organisations, I was keen to return to an owner managed business, similar to where I started my career, that is fast moving, entrepreneurial and very agile. Adept is continually growing and is a very forward-thinking firm, so this is an opportunity to move at a really exciting time and continue building the company's presence and reputation in the North West."

Erol Erturan, Managing Director at Adept, said: "Since expanding into Manchester at the end of 2015, we've worked on a vast range of residential, industrial, education, retail, office and hotel developments throughout the region.

Appointing Neil will help elevate us to the next level, as we continue expanding our client base and winning new work. He's local to the area and brings a wealth of experience to the role, as well as having a successful track record working on a wide range of high profile projects, which makes him the ideal person to lead our next phase of growth in the North West."

## North West Frameworks

Adept are currently on **The Innovation Chain North West Framework** as a preferred engineering consultancy. The framework, led by **Great Places Housing Group**, is designed to provide support to anyone looking to deliver mixed use housing and associated social infrastructure across the North West and Yorkshire.

The framework aims to deliver high quality, sustainable housing and promotes a culture of innovation and continuous improvement whilst adding social value to the delivery of work. We have worked with **Adactus Housing Association, Rochdale Boroughwide Housing, RBM Design and Build, Great Places Housing Group, Engie, and Brewster Bye** under the framework.

Adept has recently worked with **ASDA** on a three-year framework agreement, from February 2016 to February 2019.

We successfully delivered the civil and structural engineering elements on 40 PFS schemes throughout the UK with a total value of approximately £40m. Several of the schemes were situated in the North West region (Runcorn, Bootle, Huntscross, Arrow Park and Pwllheli).



# Growth in the North West Region

Adept's Manchester office is run and managed by newly appointed Director, Neil Brown. The office, based at Sevendale House in the city centre, is the hub for projects in the North West region.

## Current and Recent North West Contracts

Working closely with Eric Wright Contractors, Adept is delivering the civil and structural engineering services on two new large-scale industrial units at Lancashire Business Park in Leyland near Preston.

Adept is currently working on a project at Yesoiday HaTorah Girls' Academy in Prestwich. Part of the school will be refurbished, alongside the construction of a modern new extension.

Recent and previous contracts include:

### Gateway House, Piccadilly Station, £20m

Adept were appointed by Marshall Construction for a mixed use development comprising the refurbishment of offices into a 182-bedroom aparthotel above ground level retail premises. The scheme also includes a new 40,000 sq ft office block and 8,000 sq ft of retail space.

### Primrose Gardens, Chorley, £9.2m

Adept worked with Eric Wright under the Lancashire Regeneration Property Partnership framework for Chorley Council, to design and construct a new 65 apartment Extra Care development.

### MAN Diesel, Stockport, £9m

Adept provided the demolition details and site enabling works designs that had to be agreed with MAN, as they were still using the site for their operations whilst their new headquarters were being constructed. The redevelopment included MAN's new office, totalling 20,000 sq ft, as well as a 90,000 sq ft production unit with associated access roads, service yards and car parking - also home to MAN Diesel's first UK Academy.

### JCA Automotive Warehouse, Speke, £6.5m

Appointed by Marshall Construction, Adept provided the civil and structural design element of the scheme for a new manufacturing facility to be utilised by Jaguar and Land Rover. Appointed prior to planning, Adept played an integral role throughout the construction of this 13,000 m<sup>2</sup> industrial unit and 2000 m<sup>2</sup> office facility.

### Reddish Vale School - £1.6m

The provision of a two storey steel frame extension to the existing dining hall to create an additional 150m<sup>2</sup> double height dining area space and additional 720m<sup>2</sup> of classroom/offices at the school.



A photograph showing the silhouettes of two men in business suits shaking hands in a modern architectural space. The ceiling is a large, multi-layered glass roof, and the floor is a polished surface reflecting the light. The background shows the structural framework of the building.

# Testimonials

“Further to your specific assistance with all the elements of Structural and Drainage works carried out over the past two years at the Kirkgate Market Refurbishment in Leeds, in particular due to the regional award we have recently received of “Project of the Year” I would like to thank you personally and to express our appreciation for a most excellent and professional service we have received from yourselves, well done!”

**Eamonn Cahill,  
Interserve Construction**

“Without Adept’s help through value engineering proposals, Sewell would not have secured the project. [Adept are] always in touch and responsive.”

**Josh Donnelly, Sewell Construction**

“Friendly, helpful and efficient service. We will recommend your services where possible.”

**Tim Clayton, HTC Architects**

# The Opportunity

Dynamic and optimistic in their approach, we are looking for an ambitious and well-rounded Associate/Principal Structural Engineer who can identify innovative and cost effective strategies and design solutions and manage a team of engineers and technicians.

As an Associate/Principal Engineer you will have the opportunity to contribute to the development and growth of the future Manchester Adept team.

## THE PERSON

- In depth building construction knowledge
- Motivated, collaborative and passionate
- Reliable and enthusiastic
- An analytical and detailed approach to work
- A confident team player with superb interpersonal skills
- A creative innovator with a technical approach to projects and tasks
- Unquestionable integrity, experience, confidence, and the stature to effectively address major client needs and challenges
- Detailed knowledge and understanding of the principles of Building Information Modelling (BIM)
- A hands-on approach to projects
- A natural trouble-shooter who can find simple, efficient solutions to identified challenges or complications

## SKILLS AND EXPERIENCE

- Six or more years' experience in the industry
- Chartered or near Chartered with the IStructE or ICE
- The ability to manage a team of engineers and technicians
- Good problem-solving skills
- Sound understanding of physics and mathematics
- Three-dimensional conceptual skills
- Extremely strong communication, presentation and negotiation skills
- Diagrammatic skills
- The ability to work effectively and efficiently within a team
- Impeccable attention to detail
- The ability to liaise well with professionals from other disciplines
- Excellent knowledge of relevant software (please refer to our Digital Innovation section for further details)
- The ability to work on multiple projects simultaneously



# The Role

The work is office-based in Manchester, with occasional visits to construction sites. The role itself is both technical and creative. The successful candidate will have experience in delivery of projects from inception through to completion, and an ability manage resources, and effectively manage all aspects of projects.

## OBJECTIVES AND KEY RESPONSIBILITIES

- The preparation of reports, specifications, designs and drawings, briefing documents, feasibility studies and options appraisals
- Leading a variety of projects to completion; undertaking integrated 3D modelling and design
- Structural analysis with a particular focus on calculations in relation to loads and stresses
- Assessment, monitoring and integration work undertaken by specialists
- Administering contracts
- Managing projects from inception through to completion
- The consideration of the strength of various materials, e.g. timber, concrete, steel and brick, to evaluate how their inclusion may necessitate a change in structural design
- Liaison with other designers, including architects, to agree on safe designs and their fit with the aesthetic concept of the construction
- On-site inspection and testing
- Fire protection of structures
- The examination of structures at risk of collapse and advise how to improve their structural integrity, such as recommending removal or repair, of defective parts or rebuilding the entire structure
- Work collaboratively with geotechnical engineers to investigate ground conditions and analyse results of soil sample and in-situ tests
- Liaison with construction contractors to ensure that newly erected buildings are structurally sound
- Apply expert knowledge of the forces and their subsequent effect on various structures
- Site appraisals and surveys
- Material investigations
- Ground improvement studies
- The structural design and detailing of foundations, retaining walls buildings, for example
- Assessment of special loads
- Building regulations submissions
- Defect assessment and the development of re-mediation solutions





# Why consider this opportunity?

This is a fantastic opportunity, which will allow the right individual to build on the existing track record and reputation of Adept. The successful individual will work closely with the Manchester Director. They will play an integral role in the growth and development of the business in the imminent future and in the years to come.

## BENEFITS

We are offering a competitive salary with a range of benefits including a contributory pension, healthcare scheme, tailored training opportunities and the opportunity to attend a range of employee social events.

The finer details of the remuneration package will be discussed in person, but there will be a range of options available to suit you.

## THE ADEPT DIRECTORS

Adept's directors are supportive, dynamic, personable, enthusiastic and respected with a wealth of industry experience in project work, management and business development. They have a strong appetite for growth and success and are very well equipped to help you through the process.

In 2012 our Managing Director, Erol Erturan, attended the Goldman Sachs 10,000 Small Business Growth Programme.

The programme was a combination of formal learning, mentoring, and peer-to-peer support and brought together leaders of small businesses from across industry sectors to create unique networking and peer learning opportunities.

During the programme Erol developed a customised Growth Plan to direct Adept's business strategy and expansion. The strategy was later implemented which helped the leadership team to facilitate Adept's continued success and growth.

Adept is an Equal Opportunities Employer

# The Adept Culture and Team

We know that a happy workforce leads to increased morale, productivity and efficiency. Our extremely high retention rate and annual appraisal feedback demonstrates Adept's employee satisfaction.

## CULTURE AND TEAM

Our culture is based on being entirely staff and customer focused. We invest in tailor made training programmes (apprenticeship schemes, degrees, software and technical training and sales and management training) for our staff, to help them develop and progress in their career. Our staff have a wealth of experience, talent, skills and industry knowledge.

We also have a Social Committee who organise and run a number of social events every year. The events for 2018 include an American pool tournament, a bowling tournament, a Krypton Factor Challenge, a team building weekend away, a virtual golf tournament, a bingo event, a casino night out and monthly sponsored pub outings. Each member of staff receives a £100 birthday bonus.

Our staff have taken part in a number of charitable events over the years, to raise money for different charities including Action Medical Research and Barnados:

- Yorkshire 3 Peaks
- York Cycling 100km Route
- Windermere 20 Challenge

A number of staff also provide 'volunteering days' to Lineham Farm Children's Centre in Leeds (who aim to enhance the lives of local children by organising respite breaks and holidays) to help out with improvements to the facilities. All Adept staff are provided with two days paid volunteering leave per annum.

## APPRENTICESHIP SCHEME

Adept promotes social responsibility, growing our own talent, and promoting engineering and construction to young people.

Adept runs a successful Apprenticeship programme, employing students from Leeds College of Building and Barnsley College. Every year new apprentices are recruited and developed, enabling them to learn and thrive. We are proud of our ability to support the engineers of tomorrow and have employed at least one apprentice every year since 2008.

Nine members of our team have come through this route, and we continue to support Higher Apprenticeships to degree level. Our very first apprentice is now a senior engineer, having graduated from a university degree funded by Adept, and is now running his own complex scheme. A number of other Adept apprentices are currently studying at university

## EXECUTIVE TRAINING

Management training is offered through a number of professional organisations and business mentors who we have developed strong relationships with over the years. We draw upon their qualified experience to reflect on our methods and guide our business development strategy forward.

Our continued involvement with the Goldman Sachs 10KSB scheme, gives access to a variety of leadership level training and development courses.





## KEY STAFF AND CASE STUDIES



JOHNSONS CONTROL AUTOMOTIVE, LIVERPOOL BUSINESS PARK



## EROL ERTURAN | MANAGING DIRECTOR

BSc, MSc, CEng, MInstE, MICE

Erol is a BRE Accredited BIM Professional with over 25 years in the industry. He is an experienced Chartered Civil and Structural Engineer with hands on experience in the design and project management of multi-storey steel and concrete framed buildings, large warehouses and major refurbishment projects.

Erol set up Adept in 2007 and the organisation has grown over the years and now employs 40 staff. Erol has a very 'hands on' approach to projects and specialises in client liaison, management and co-ordination of projects from the very early stages to completion.

### Client testimonial:

"I have worked with Erol and his team on a number of occasions and have always been impressed with Adept's quality of work and professionalism. I would not hesitate in recommending Adept to new clients."

**Chris Austin**  
Director, Brewster Bye Architects

## EXPERIENCE

### NEXT Warehouse, Doncaster

Value: £55m

Client: Next

New automated warehouse with 60,000m<sup>2</sup> footprint and 8,500m<sup>2</sup> offices plus a link bridge to an existing warehouse



- Adept were responsible for both the concept and detailed design for the project situated at IDI Gazeley's 115 acre G Park.
- A steel structure was the ideal solution for this build, as it was quick to construct, cost effective and accommodated the long span qualities needed
- Adept engineers designed flexibility into the steel frame so that it not only meets the demands of the business now, but there is flexibly for further expansion in the future.

### Gateway House, Piccadilly Station, Manchester

Value: £20m

Client: Marshall Construction

Mixed use development to include the transformation of Gateway House into a hotel together with a new 40,000 sq ft office block over 8,000 sq ft of retail space



- The strategy for the refurbishment was one of conservation rather than reconstruction. The building was stripped back to its existing concrete structure and reload to meet current envelope requirements whilst retaining the horizontals and fine grain of the existing fenestration
- The new structure is generally steelwork beams craned in to trim new openings in the existing RC structure. Simplicity and economy were the main requirements overall.

### Drax Biomass, Selby

Value: £10m

Client: Drax

Biomass conversion facility. The construction of the domes was achieved through the application of air form technology that utilises an inflated PVC membrane permanent shutter which is sprayed internally with shotcrete



- Close liaison with the U.S. based engineering and construction team was achieved through the creation of clear lines of dialogue which were maintained throughout the build
- Feedback from Dome Technology recognised the efforts of Adept's engineers to neutralise barriers which existed due to differences in the cross continental standards and procedures.



## RICHARD PARKER | DIRECTOR

BEng (Hons)

Richard is an experienced Civil Engineer with over 20 years experience in the construction industry. Richard specialises in feasibility studies, drainage, highway design, ground modelling and flood risk assessments and generating new clients.

He has extensive experience in the design and project management of all civil works including external works/ highway design and Section 38/102/104, agreements for adoptable works and Health and Safety (including CDM regulations).

His responsibilities include running large and medium scale projects from conceptual design stage through to completion.

### Client testimonial:

"Adept Consulting always offer STG proactive advise Pre tender and the extend this professional approach throughout the construction process I would recommend Adept and Richard Parker for future works."

**Andy Coates**  
Construction Director, Strategic Team Group

## EXPERIENCE

### GEFCO, Liverpool

Value: £10m

Client: Marshall CDP

New purpose built £10m state-of-the-art supply chain hub. It is now helping to optimise supply chains for a number of GEFCO's customers including Jaguar Land Rover's Merseyside factory in nearby Halewood.

- The construction of a 132,000 sq ft warehouse with two-storey integrated offices, as well as a 50,000 sqft warehouse with two-storey integrated offices
- Works carried out on the 12m high warehouse included design of the steel framed buildings with pad foundations on improved ground.
- External works involved cut and fill analysis which was lime stabilised to provide a suitable piling platform. Drainage was attenuated.



### New Lodge Extra Care Village, York

Value: £20m

Client: Joseph Rowntree Housing Trust

Facilities for retired living comprising 105 one and two bedroomed Extra Care suites and 45 one bedroomed residential care suites, as well as useful community facilities

- The new buildings have been modelled using 3D software which has been used to generate 3D views to aid co-ordination with the site and design team.
- The size of the development site has required the design for a large volume of surface water storage which has been accommodated by a 90m long Tubosider storage pipe positioned to suit a narrow corridor of available space on the site.



### Park Road, Telford

Value: £9m

Client: Wrekin Housing Trust

81 unit affordable housing development for main contractor STG

- Civils 3D BIM technology was used to undertake a successful cut and fill exercise.
- The scheme was built over a former colliery leading to a difficult and challenging pile and foundations design.
- Colliery spoil deposits unsuitable to bear traditional foundation were found up to 5.2m depth. Therefore a total number of 658 piles was used as a foundation solution.





## MATTHEW RAMSDEN | DIRECTOR

BEng (Hons), CEng, MInstuctE

Matthew is a Chartered Structural Engineer with 20 years of experience in the design and project management of residential, historical and educational schemes, multi-storey construction and refurbishment work. He has worked on a number of projects where additional protocols were required such as in working health centres, working schools (DBS checked) and rehabilitation homes.

Matthew is a very focused Director with experience in the design and project management of both large and small schemes. He is responsive to the client's needs and has a strong track record of gaining repeat work.

### Client testimonial:

"Thank you for a most excellent and professional service. The work was within an extremely challenging environment within exceedingly tight time schedules and with several major constraints in a 100 year old Grade 1 Listed Building."

Matthew and his team had an excellent attitude, were very respectful and understanding of the project requirements.... Exemplary service - an outstanding advertisement for Adept."

**Eamonn Cahill,  
Senior Project Manager, Interserve Construction**

## EXPERIENCE

### Rotherham Interchange

Value: £12m

Client: Sheffield Combined Authority

The upgrade and refurbishment of this important town centre asset will improve the concourses with upgrades to flooring, plinths and glazing.

- Adept designed a steel beam solution to strengthen the platform, saving significant time and money.
- We were responsible for verifying that the structural stability of the building is not compromised by the revised cladding.
- Adept's BIM Level 2 capabilities have ensured smooth design solution progress throughout



### Kirkgate Market, Leeds

Value: £12m

Client: Leeds City Council

Extensive refurbishment, significant roof works and new internal structures



- Major refurbishment to a Grade I Listed building required sensitive engineering
- Re-design of the original drainage system saved the client valuable time and money
- Provided condition surveys to both historical roofs
- Coordinated an analytical survey enabling Matthew to advise the council on remedial strategy.

### Primrose Gardens, Chorley

Value: £9.2m

Client: Chorley Council

The new 65 apartment development will house residents aged 55 and above with shared facilities for use by residents and the general public. These include a large sprung dance floor, a multipurpose community hall and a restaurant.



- The development was built on a brown-field site which had numerous former uses.
- Adept looked to improve the poor ground using vibro stone columns. This meant that a ground bearing slab and concrete strip footings could be used in the foundation solutions, saving the client money.
- The site sloped significantly which required extensive remodeling and remediation, including in situ concrete retaining walls to ensure level access throughout the whole site.



**NEIL BROWN | DIRECTOR  
BEng(Hons) MSc CEng MIStructE**

Adept Civil and Structural Consulting Engineers has appointed experienced chartered structural engineer Neil Brown as a director, to head up the company's Manchester office and spearhead its growth throughout the North West.

Neil is an experienced Chartered Structural Engineer with over eighteen years' experience in the construction industry. He has worked on a variety of projects in the UK, Ireland, Europe, North Africa and the Middle East. During this period, Neil has been involved in the Civil/ Structural design, management and construction of projects across a range of sectors,

Neil specialises in overall project delivery, commercial performance and the management of multi-discipline project teams. He is proficient in effectively co-ordinating project disciplines utilising 3D modelling (BIM).

"Since expanding into Manchester in 2015, we've worked on a vast range of residential, industrial, education, retail, office and hotel developments throughout the region.

Appointing Neil will help elevate Adept to the next level, as we continue expanding our client base and winning new work. He is local to the area and brings a wealth of experience to the role, as well as having a successful track record working on a wide range of high profile projects, which makes him the ideal person to lead our next phase of growth in the North West."

**Erol Erturan, Managing Director, Adept**

## EXPERIENCE

### Lancashire Business Park, Leyland

Value: £6.5m

Client: Eric Wright Group

Adept is providing civil and structural engineering services for two new large-scale industrial units at Lancashire Business Park near Preston.

- Two industrial blocks will comprise GIFA approx 36,000sqft and 23,830sqf
- The development comprises eight business units, with mezzanine first floors levels to provide additional office space.
- Use of 3D modelling techniques in close collaboration with the architect will ensure efficient progress of the building design.



### Dimlington Freon Replacement Project (DFRP)

Value: £75m

Client: Perenco

DFRP was the modification of the existing dew pointing system within the gas processing terminal to eliminate the use of Freon R-22 based refrigeration.



- The project raised significant challenges when incorporating the additional buried and above ground infrastructure into a congested site whilst still operational.
- This was overcome successfully by close coordination with the project disciplines, site team and the use of 3D (BIM) modelling.

### Compressor Stations, Peterborough/Huntingdon

Value: £75m

Client: National Grid

National Grid project to incorporate two new compressors into Huntingdon and Peterborough compressor stations.



- The two projects, running in tandem, incorporated a significant amount of buried infrastructure for the compressors, associated pipework and new operational buildings which needed to be coordinated within the existing site infrastructure
- This was achieved by close coordination with the project disciplines, client, and site operational teams and the use of 3D (BIM) modelling.
- The upgrades support EU legislation and meet the sustainability and biodiversity elements of project delivery.

# Gateway House, Piccadilly Station

MIXED USE



## SUMMARY

### Client

Marshall CDP

### Location

Manchester

### Project value

£20m

### Architect

Building  
Management  
Services

### Contractor

Marshall  
Construction  
West Yorkshire

### Project brief

This mixed use project comprised the refurbishment of the iconic Gateway House into a 182-bedroom hotel above the existing ground level of retail (and basement level public car park) together with a new 40,000 sq ft office block over 8,000 sq ft of retail space facing Ducie Street.

The £20m redevelopment of the Gateway House and Station Approach was delivered by a D&B contractor led team. Adept were appointed as civil and structural engineer for the scheme.

Simplicity and economy were the main requirements overall.

## SOLUTION

Gateway House is one of Manchester's finest surviving buildings from the 1960s. As a result, the strategy for the refurbishment of Gateway House was one of conservation rather than reconstruction.

The building was stripped back to its existing concrete structure and reloaded to meet current envelope requirements whilst retaining the horizontals and fine grain of the existing fenestration. New service provisions required new voids to be threaded through next to existing lift core areas, reusing some existing risers where possible. This aspect presented some challenges due to

opening up and coordination requirements. Adept engineers studied the existing undercroft car park areas including altered Victorian barrel vaults. The new structure was generally steelwork beams craned in to trim new openings in the existing RC structure. Partial historical construction information was available but not complete, however the breadth of Adept's team experience allowed good coverage of all aspects of the project.

# Primrose Gardens, Chorley

EXTRA CARE



## SUMMARY

### Client

Chorley Council

### Location

Chorley

### Project value

£9.2m

### Architect

Brewster Bye

### Contractor

Eric Wright Group

### Project brief

The team was instructed by Chorley Council as part of the Lancashire Regeneration Property Partnership framework to design and construct a new 65 apartment development in Chorley.

The new council led scheme will house residents aged 55 and above and includes shared facilities for use by residents and the general public.

These include a large sprung dance floor, a multipurpose hall and a restaurant. The development was built on a brown-field site which had numerous former uses.

## SOLUTION

Traditional masonry was predominantly used for the construction of residential sections to aid acoustic performance, thermal mass and energy efficiency.

The dance hall required large structure free areas was therefore constructed using a steel frame with long span beams. Communal facilities and atrium areas were also constructed using a steel frame to allow larger open spans. A ground investigation survey was undertaken and plans developed to manage the ground conditions. Adept looked to improve the poor ground using vibro stone columns. This meant that a ground bearing slab and concrete strip footings could be used in the foundation solutions, saving the client money.

The site sloped significantly which required extensive remodeling and remediation, including in situ concrete retaining walls to ensure level access throughout the whole site. The development included S278 works.

The surrounding buildings vary in form but are predominantly two storey traditional construction with pitch roofs.

We collaborated with the design team to produce inventive solutions to assimilate the three storey roof space and façade into the area.

# Rudding Park, North Yorkshire

## SPA REDEVELOPMENT SCHEME

Rudding Park is a privately owned luxury five star hotel in 300 acres of gardens and woodland and is situated in Harrogate, North Yorkshire. The existing hotel has been developed and extended over a number of years. We were appointed to carry out specialist structural designs for Rudding Park's new, state of the art, contemporary £9.5m spa expansion. The spa was designed to be spacious, light and airy. Adept worked with main contractors Henry Boot and Howard Civil Engineering on the project which included a 17 metre swimming pool, a hydrotherapy suite, thermal rooms, treatment complex, restaurant and bar as well as a feature rooftop garden.

Designed by Leeds based Architects, Enjoy Design, the three storey structure features basement level treatment rooms, with the main pool on the ground floor. The sauna and steam rooms are contained within a glass structure at first floor level. From the outside, the true scale of the building is deceptive as many of the facilities are submerged below ground.

Adept designed and detailed the civil and structural elements of the project, including the reinforced concrete structures for the main building and basement areas, the swimming pool and suspended first floor level hydrotherapy pool. The spa extension is the latest addition to the hotel's impressive range of facilities which include a 90-bed four star hotel, the AA Rosette Clocktower Restaurant, golf course, cinema, conference.

*"This was a stunning project to work on, however, it was also a very complex project because of the vast weights involved. The roof garden alone has a loading requirement of over a tonne per square metre in places, once it had been landscaped. To overcome this, we designed a reinforced concrete frame which has the added benefit of being extremely water tight and very good acoustically, which means parts of the building are very quiet to enhance its relaxed ambience."*

**Erol Erturan, Managing Director,  
Adept Consulting Engineers**

*"Our new Spa surpasses anything else in the north of England. The whole project was designed to recapture Harrogate's Spa heritage, by providing a range of superb facilities in tranquil surroundings, and we were delighted to work with such an experienced team of consultants to deliver the scheme."*

**Peter Banks, Managing Director,  
Rudding Park**



# Leeds Kirkgate Market

PROJECTS

## REFURBISHMENT AND IMPROVEMENT SCHEME

Situated in a prime city centre location, on Vicar Lane, Leeds, the Grade I Listed building had a major £12.3m refurbishment and improvement scheme by Leeds City Council. Leeds Kirkgate Market is one of the largest indoor markets in Europe and is of significant local and historical importance, having enormous relevance to the diverse communities of Leeds and the wider Yorkshire region.

Adept's role was key to the success of the development scheme. Appointed by the contractor Interserve, we provided a full range of civil and structural engineering services on the project. Our services included designing the structures for the Market's new retail units and service areas, as well as creating a brand new event space that will become one of the Market's key focal points. We were also responsible for verifying the adequacy of the roof structure, designing a replacement floor slab and upgrading the market's drainage system.

The work to the roof areas provided a large proportion of the work and Adept were able to provide condition surveys to both the historic roofs and the more recent 1976 and 1981 space frame roofs. These roof inspections were coupled with coordinating an analytical survey which proved the loading capacity of the existing structures and together enabled Adept to provide direct advice to the council on matters pertaining the roof.

*"This was a complex project because the Market was mostly constructed in four main periods dating back to 1875, 1904, 1976 and 1981 and each section has its own history and challenges. Large parts of the building are in need of repair and the drainage system is antiquated by today's standards".*

**Matthew Ramsden, Director, Adept Consulting Engineers**

*"Adept's team has a wealth of experience working on other large-scale and historical buildings and immediately understood the project's requirements, which made them the ideal engineers for us to work with."*

**Eamonn Cahill, Senior Project Manager, Interserve**



# Next Distribution Centre, Doncaster

## WAREHOUSE AND DISTRIBUTION

Adept worked with main contractor Bowmer & Kirkland and steelwork contractor Billington Structures on the 58,000 square metre, 25 metre high distribution centre and offices for retail giant Next.

Almost 5,000 tonnes of steel was used to create the impressive and modern structure. We were responsible for both the concept and detailed design for the project situated at IDI Gazeley's 115 acre G Park in Doncaster. The project value totalled £55m.

A steel structure was the ideal solution for this build, as it was quick to construct, cost effective and accommodated the long span requirement. The structure measures 380 meters in length and has spans of up to 37 meters. We designed flexibility into the steel frame so that it not only meets the demands of Next Plc now, but it allows the option for further expansion in the future. We modelled 800 tonnes of rebar using Revit software and this generated error free information.

One end of the distribution centre has a four storey office block attached. To the opposite end, a conveyor link bridge ensures that stock can be transferred to another existing Next warehouse, across Holme Wood Lane.

The bridge is a four span, 120 metre long structure formed with a series of trusses to accommodate the double deck configuration. The lower deck features conveyors, for transporting goods and the upper deck is a pedestrian thoroughfare for staff.

*"Our firm has been responsible for both the concept and detailed design for the project and we were delighted to be working on this exciting project for Next."*

**Erol Erturan, Managing Director,  
Adept Consulting Engineers**

*"We chose to work with Adept and Billington Structures as both firms are specialists in their fields. It was a large scale complex project that demanded skilled design teams who were highly experienced and professional and we were confident with the joint efforts of everyone working on this project."*

**Ben Howard, Project Manager,  
Bowmer & Kirkland**



# Our Clients

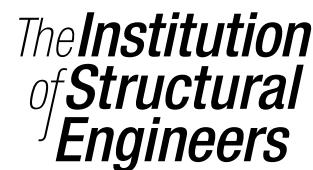


next



# Industry Recognition and Accreditations

We are proud of our accreditations which represent industry recognition of our expertise, service delivery and exceptional standards.





# Build your future

## **INTERESTED?**

If you are interested in this opportunity and would like to discuss it further, please contact Neil Brown:

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**Adept is an Equal Opportunities Employer**