# Finbarr Taylor BSc (Hons) CEng, MICE,

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Nationality : British

Profession : Rail Project Manager/Civil Engineer

#### **PROFILE**

Highly experienced professional rail engineer and project manager, with a demonstrable track record of delivering a variety of challenging, engineering projects against demanding key performance indicators; possessing strong technical expertise and commercial acumen. A proven team leader possessing well developed organisation, planning, problem solving and project management skills, with keen focus on the effective management of key stakeholder and commercial/contractual relationships.

### **Key Achievements**

- Successfully completed a range of rail projects, gaining a well-deserved reputation
  with clients for innovative solutions to engineering challenges that optimised
  commercial value which resulted in long-term relationships with clients as subject
  matter expert and trusted partner in their development of their projects.
- Delivered a critical project for vetting and evaluation of a number of schemes valued at £300m that released land for development adjacent to the full length of the channel tunnel rail link between London and the coast, requiring comprehensive impact and risk assessment of its usage in relation to the railway operations, and essential to realise the optimal value from that land.

## **OVERALL EXPERIENCE**

- Experienced rail design and project Manager
- Experienced Project Manager in the rail sector, responsible for major modifications to stations and rail infrastructure.
- Leading design and construction teams in a multidiscipline environment.
- Preparation of contract documentation e.g. Drawings, Specifications, Bills of Quantities, etc.
- Carry out site inspections, surveys and, reports on existing station plant.

# **EDUCATION & TRAINING**

- Dundee University BSc. (Hons) Civil Engineering,
- ICE Training Agreement.
- Institution of Civil Engineers C.Eng. M.I.C.E.
- SMSTS Managing Site Safety (5 Day Course)
- BE Nominated Competent Person and other associated training
- 'How to Pitch and Present' (1day)
- 'On the Right Track', I.C.E. Northern Counties, Railway Seminar (1 day)
- International Railway Conference, Commonwealth Institute, London (2 days)
- CDM Regulations (½ day)
- Quality Assurance for the Construction Industry (5 days)
- Contract Law (5 days)
- Ground Investigations (2 days)
- Tunnel Ventilation (1 day)
- Concrete Structure Repair Design Approach (1 day)

#### **EXPERIENCE RECORD:**

Feb 2009 to Present Balfour Beatty

**Senior Project Manager** 

**Nuclear Power Station Modifications.** Technical Support on civil/structural projects across EDF fleet of Nuclear Power Stations on behalf of Balfour Beatty Group. The support covered a variety of tasks on a wide range of stations. The work was carried out to EDF technical specification (BEG specs and COP documents) and to safety procedures under EDF's Passport safety scheme.

June 2008 - Feb 2009 Alstom Power Services - Newcastle

Civil/Structural Designer - power station projects

# Staythorpe CCGT Power Station, Independent Design Check Engineer

Responsible for the Independent check of the civil/structural design all the major structures for a new 1650 MW combined cycle gas turbine power station project.

Nov. 2000 – June 2008 Maritime and Rail Consulting Engineers

**Practice Principal** 

Principal responsible for analysis and design of a range of commercial and industrial structures including, geotechnical schemes, commercial offices, warehouses, bridge modifications, pipe gantries, crane rail structures, drainage schemes, and condition reports.

## **Network Rail -Third Party Procedures**

Responsible for drafting of Network Rail standards for use on HS1. The standards were needed to take account of the distinct nature of the railway from the rest of the Network both in its modern nature and the length of tunnels under the capital. The standards were split into two parts; a light version aimed at developers and planners wishing to construct over and adjacent to the railway and a more comprehensive version targeted at safety managers, programme planners, project managers, designers, contractors and site engineers.

#### **Network Rail -Third Party Checks**

Checking of a range of developers submissions that interfaced with the HS1, issuing approvals and as required, signing-off requisite forms as the 'Designated Project Engineer' for HS1.

### Woolley North, Pipe Gantry-Form 'A' Design

Hydraulic design of overall scheme and structural design of a 35m long pipe gantry in two spans to convey land drainage from one side of the railway to the other. Project included 75m of twin 450mm dia. steel turning chambers, twin castellated beams and raised walkways to form the deck, reinforced concrete abutment, steel frame supports, fencing, lined ditches and cascade overflow to trackside drainage.

# Waverley Station Signalling Centre - Form 'B' Design

Detailed design of steel framed building to accommodate new signalling centre for Waverley station. The building 17.5m x 40m acted as an extension to the existing structure spanning a single storey plant room, containing sensitive signalling equipment, with a series of portalised steel frames supporting a 'rib deck' reinforced concrete floor. The project involved design and detailing of members and connections design of the foundations, steel frame, secondary steelwork and cladding, concrete floor and linkspan structure.

## West Coast Mainline, Milton Keynes- Drainage Form 'B' Design

Required to take a Form 'A' drainage scheme and develop into a detailed Form 'B' design. The redesign was part of a widening project for the railway with the new drainage accommodating trackside drainage that discharged to a series of extended through culverts under the embankment. The drainage also accommodated a major adjacent highways surface water runoff along with that from a temporary haul road built for the project.

#### Doncaster Goods Yard - Culvert Relining Form 'A', 'B' and 'C'

Required to design a scheme to strengthen an existing 750mm dia. storm drain in a poor state of repair running under a goods yard. The scheme involved the hydraulic design of the drainage run and suitable lining works along with the design of a series of brick, pre-cast and reinforced concrete chambers to suit the tight site conditions. The project also involved the design of the temporary works, detailing and scheduling of the reinforced concrete elements.

# Doncaster Bridge - Raised Walkway form 'A', 'B' and 'C'

Provision of a Form 'A' and 'B' raised walkway design to facilitate railway operative access across a bridge. The scheme involved the replacement of rotten timber bearers that formed a cess walkway, with an open mesh steel system. The system was fully detailed with the production of fabrication drawings to ensure that it could be placed as quickly as possible.

### River Sheaf Bridge Repair - form 'A' and 'B' repair

Repair of sections of a wrought iron bridge that had corroded. Work involved matching exactly the sections concerned, to allow the bridge to be repaired as quickly as possible. Re-detailing of the bridge drainage to provide a long-term solution was also proposed and implemented at the same time.

## Shields Road Bridge - Vehicle impact protection Form 'A' and 'B'

Design of vehicle impact protection measures to protect the Tyne and Wear Metro line from road vehicles leaving the highway and dropping into the deep railway cutting. Scheme involved extending the parapet wall on the bridge and introducing double and single row open box highway safety fences. Required to liaise with landowners and detail schemes that included accommodation works to satisfy same.

# Sunderland Station Tunnel - Drip Canopies Form 'A' and 'B'

Survey, design and detail a series of drip canopies to redirect water away from OHLE that has led to corrosion. The tunnel housed the Sunderland Tyne & Wear Metro Station. The tunnel roof incorporated a range of constructions from wrought iron beams to spray concrete to precast and insitu beams and brick arches that required an array of fixing arrangements and routes to ensure that water was directed away from the overheads.

### **Outwood Station - Gauging Survey**

Platform gauging survey to establish 'as built' edge positions of decking units that had been placed as part of a redecking scheme of timber trestle platforms.

#### **Burley Park Station- Platform Conceptual Design**

Survey and conceptual design of timber trestle platform. Involved design of a series of options to allow realignment of trestles and deck panels to suit front and back end constraints of platform. On completion carried out gauging of same to check compliance.

## Selby Station Footbridge- Form 'A' and 'B' Design

Analysis and design of footbridge leading to the replacement of wrought iron bearers and ribs of the station footbridge. Project involved the replacement of timberwork, paintwork, brick repair and application of tie details to a listed structure.

#### Herringworth Viaduct brick arch repair- Form 'C'

Design of temporary works to facilitate localised brick arch repair.

#### Prudhoe Station - Platform Rebuild Form 'B' and 'C'

Design of the replacement of No.1 platform station. Project involved replacement of platform to specification clearances, standards and incorporation of drainage regime to facilitate adequate surface runoff. The platform site was subject to a 3.5m drop at its rear; the wall was of masonry construction and had already been subject to patress plate repair. Care was taken in the design to ensure that the loadings through the wall and anchors did not change throughout construction of the new platform.

## Helpringham Bridge - Vehicle Impact Protection Measures Form 'A' and 'B'

Design of vehicle impact protection measures to protect railway from road vehicles leaving the highway and dropping on to the railway. Scheme involved introducing double and single row open box highway safety fences. A significant feature was the use of a tie bar and concrete block foundation under the highway to prevent overloading of the wingwalls of the structure in the event of an impact. Required to liaise and seek approval at all stages with the County Highways Authority.

## Floating Trestle LUL Bridge D141

Scheme design of a floating trestle utilising pontoons and falsework to facilitate the floating-in of 914mm deep universal beams to form the main span members of a temporary work scheme over the river Lea and the neighbouring canal to allow shrouding of the LUL bridge to facilitate a full refurbishment. The scheme also involved generating a stability model to establish the integrity of the proposal as a floating structure.

#### **Burton-le-Coggle - Bridge Report**

Following a series of brickwork repair to an east coast mainline bridge a series of further issues were uncovered which required investigation and attention.

Additional Maritime and general civil, structural and project management commissions were also carried out throughout this period.

June 2000 - Nov. 2000 Mowlem Engineering Projects - Billinghan Senior Civil Engineer

Senior Civil Engineer responsible for design and supervision of technicians in the preparation of all civil engineering aspects of a process plant to be constructed in the far east. Design elements included slope stabilisation, ground improvement, pile design, foundation design, drainage works including extensive outfall and interceptor structures.

# Nov 97 - May 00 White Young Green Consulting Engineers - Principal Engineer

Duties involved preparing capability documents, raising the profile of the company, searching the technical press for potential business opportunities. Planning resources, preparing fee proposals, dealing with the client, ensuring customer satisfaction and securing follow up work.

# Oct 96 - Nov 97 Babtie Group, Maritime Division, Exeter - Project Interface Manager

Engaged by Babtie Consulting Engineers to liaise between the client consultants including BNFL, Devonport Dockyard, Rolls Royce, Kier Construction and others in the vital role of establishing where potential delays in the project were likely to occur and reporting to the board on the implications of the delays and potential solutions.

# Jan 95 - Oct 96 Ports Division, Posford Duvivier, Peterborough - Senior Engineer

As Senior Engineer for an established Maritime designer projects included a variety of maritime infrastructure designs.

# Dec 92 - Dec 94 Mecca Ring Road, Highway Department, Dar Al Riyadh Consultants, Saudi Arabia - Project Engineer

Responsible for the design of 8km or urban expressway through the Holy City of Mecca.

#### **Duties included:**

- Conceptual and detailed design of the scheme.
- Responsible for the presentation to ministerial level.
- Answering to the Assistant Minister and Deputy Minister on the technical merits of the design.
- Co-ordinating and liaising with other departments in connection with the project.

# Mar 92 - Dec 92 Ring Road Upgrade, Highways Department, Kirklees Metropolitan Council, Huddersfield - Temporary Senior Engineer

Responsible for the production of contract documents for the Ring Road Upgrade.

#### **Duties included:**

- Preparation of the Bill of Quantities to DOT method of measurement for highway works.
- Co-ordinating statutory undertakers input into the system.
- Designing the new highway alignment using MOSS.
- Responsible for the design of minor structures on the scheme.
- Producing accommodation works plans and liaising with land vendors.
- Instructing and analysing the site investigation.

## Nov 91 - Mar 92 M 5 Widening -Laing Construction - Temporary Works Designer

Duties included carrying out temporary works design, contract administration and advising on claims procedure.