



# CIOB Construction Leaders

Caroline Collier



# **CIOB Construction Leaders**

**By Caroline Collier**

**Foreword by Roger Flanagan**

“When we build, let us think that we build forever. Let it not be for present delight nor for present use alone. Let it be such work as our descendents will thank us for.”

**John Ruskin, 1849**

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As with buildings, so with books: even very small projects are a team effort.

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**Caroline Collier**  
**January 2007**

# Foreword

To the wider public, construction managers are somewhat mysterious figures. Unlike architects and surveyors, they are almost wholly absent from the ordinary processes of home purchase and improvement, their achievements generally taking place in an arena far removed from the domestic sphere. Our media are interested in architecture, and in the vilification of specific projects, but the construction manager is rarely given the spotlight, and almost never in a spirit of congratulation. Not only does this affect public perception, it does little to inspire our future leaders or, indeed, our own community of practice.

Therefore, it is a particular pleasure to be asked to introduce a work that profiles some of the most exceptional leaders of our industry and our Institute. From the great builders of the Victorian era to the leading construction managers and policymakers of today, they have helped to shape an industry which is a creative, energetic force for change. It has built breathtaking landmarks around the world, but, more importantly, it produces the fabric of our everyday lives. The first innovators represented here created our railway system, which enabled the development of national newspapers, holidays for ordinary people and standardised timekeeping. Now, with technical capabilities unimaginable to our nineteenth-century forbears, their modern counterparts meet society’s complex needs in an age of instant global communications and unprecedented standards of living.

Despite their achievements, our current leaders are unassuming people, who prefer to get on with the job in hand. Their projects may be of historic importance

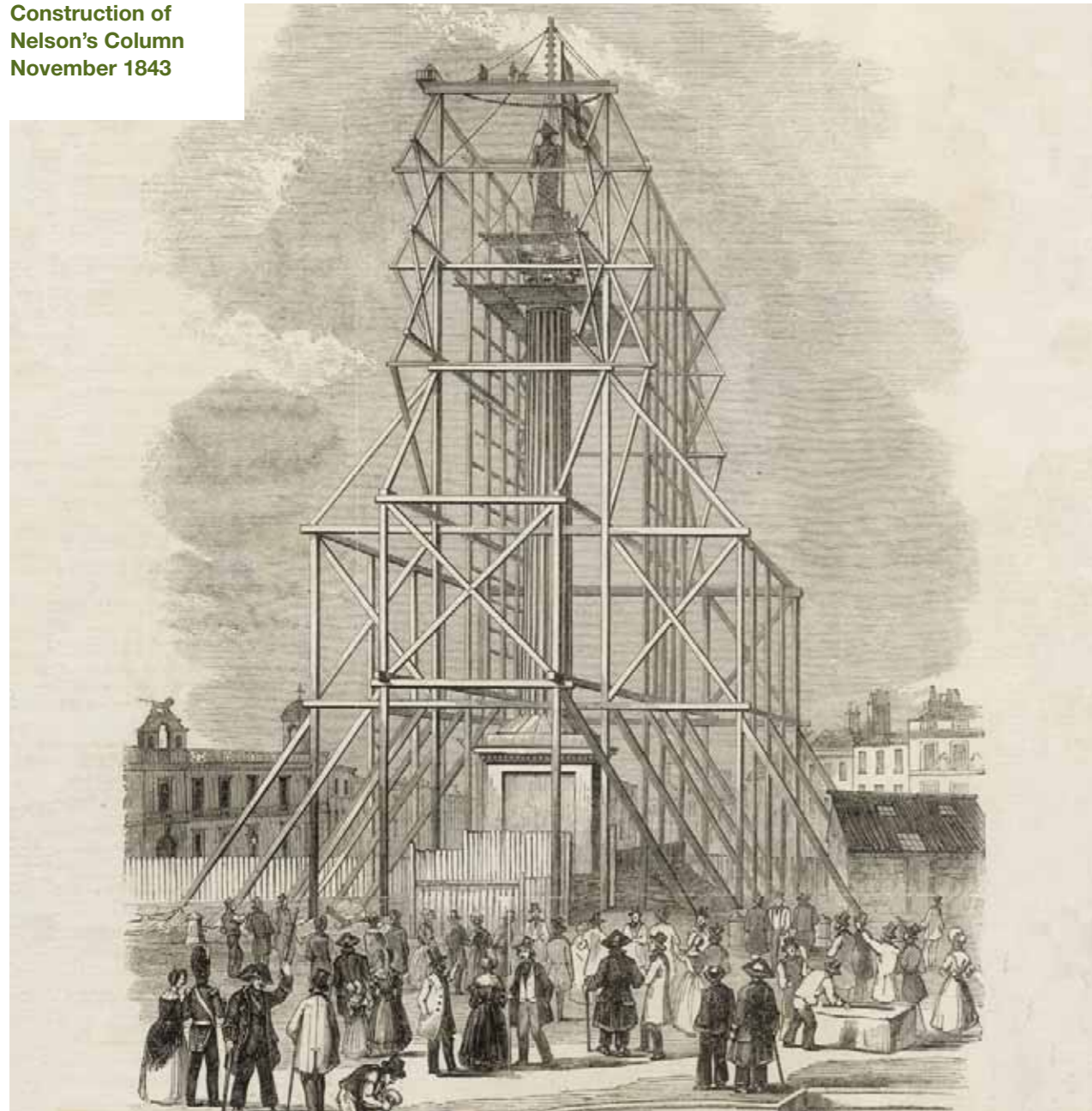
or critical political sensitivity, but their pragmatism and focus allows them to deliver results in the most difficult circumstances.

Furthermore, despite our industry’s macho reputation, they emphasise the importance of people over technology. They are collaborative and caring, and their stories demonstrate that truly gifted leaders succeed with their team, not at the expense of their team. Their personal histories also demonstrate how our industry offers opportunities to able people from almost every conceivable background. Some knew early that they were destined for a career in construction, whereas others joined our ranks through pure chance. All of them display the energy and commitment that is the hallmark of our industry at its best.

Not only can these leaders be personally proud of their achievements; we, as an industry can be proud of what these stories represent. For every exceptional personality featured here, there are thousands of gifted people working to deliver a better built environment. Some are working on mega-projects, or national policies, but great work can be done on even the smallest site. This tribute to some of our leaders, therefore, is also a testament to the contribution of every man and woman who brings professionalism and commitment to their career in construction.

**Roger Flanagan**  
**CIOB President 2006-07**

Construction of  
Nelson's Column  
November 1843



## Introduction

The achievements of such early leaders as Morton Peto and the Cubitt brothers would be staggering even today, if they were effected with the assistance of modern technology. Instead, the railways of Britain and large swathes of London were created with intensive manpower, high-risk speculation and almost inhuman energy and self-belief. Both Thomas Cubitt and Morton Peto had to break with their more cautious business partners to fulfil their vision, and both left lasting bequests to society.

With the exception of Hobhouse's groundbreaking biography of Thomas Cubitt, the men who formed the original Builders Society have been little studied. It could be convincingly argued that Morton Peto and his navvies did far more to alleviate the suffering of British troops in the Crimea than Florence Nightingale and her ladies, yet he has not been well-remembered by posterity. Such is, too often, the lot of the contractor. This booklet is a small step towards addressing that gap in our cultural memory, as the achievements of many of our leaders, past and present, are worth remembering with pride.

Those records which do remain, however, paint a picture of determined business leaders and innovators, carving immense success in a highly competitive environment. How did these fiercely individualist, often autocratic, early pioneers come to meld into a co-operative organisation?

The society of the early 1830s already displayed many of the characteristics we now think of as "Victorian". Whilst it was the great age of "laissez-faire", it was also an age of energetic civic involvement and voluntary organisation. Forming societies was in vogue. The professions began to usurp the church within the structure of society – matters

once organised by the parish were slowly becoming subjects of municipal concern and specialist involvement.

Another major current was the emergence of a new phenomenon – the urban working class. This newly-radicalised stratum of society was a source of considerable disquiet to the more prosperous. The French Revolution was still within living memory, and a politicised and organised workforce was perceived by many as a threat. Trade Unions were highly active in 1834, and employers had to learn to deal with a new era in industrial relations.

Finally, in an age of rapid and unprecedented industrial development, Britain was becoming the first predominantly urban society of the modern world. The men of the Builders Society were creating the fabric of a new society, and would become involved in the large-scale provision of prosaic but vital technologies, such as sewers and pavements, which had not previously needed to be organised by committee.

This is the backdrop against which the Builders Society was formed. Seventeen prominent builders who had all declined to tender on a specification which did not contain an arbitration clause met, probably in February 1834, to discuss matters of mutual interest. The early Society was numerically small, but highly influential. Primarily concerned with lobbying and contractual arrangements, it tried to keep at arm's length from industrial disputes. The RIBA, which was formed in the same year, met with them to discuss forms of contract, and Parliament recognised them as the voice of the industry. When there were serious industrial disputes the Society would assist in the creation of other bodies to resolve them, but resisted direct involvement where possible.

This principle was so well established by 1861 that a submission to the Society to consider the adoption of a nine-hour day (there was at that time a movement dedicated to this reduction in hours) was rejected following perusal of the Society's minutes – they had not passed resolutions on such matters over the past two decades, and did not propose to start now. The editor of *The Builder* was enraged because they would not even comment.

They also engaged in benevolent activities, vital at a time when “friendless” meant “at risk of destitution” rather than “socially unpopular”. Their benevolence was not confined to members – they saved one fellow builder from incarceration in a workhouse he had built himself when he was bankrupted by an adverse arbitration ruling.

The status of the fledgling Society was confirmed in 1884, when they received permission to incorporate as the Institute of Builders. Early presidents included Sir Herbert Bartlett Bt. He was a retiring man who nevertheless combined business success with support of wider societal developments of the time, generously funding education and exploration.

Traditionally a society for influential owner-managers, in 1923 the Institute took the important step of introducing membership examinations. Although it had previously taken a sporadic interest in craft education, this was an important departure. The centenary year of 1934 was marked with a re-articulation of policy – honourable conduct, education and the establishment of a library featured prominently.

By the Sixties, the requirement for corporate members to be employers had been abolished, and membership grew. Sir Peter Shepherd's influential presidency ushered in a new name: henceforth, it would be the Institute of Building. This was by no means a purely semantic change;

it reflected a real determination that the work of the Institute should be to further the standards of the industry, rather than the interests of individuals.

This was the real groundwork for the day in 1980 when the IOB became the Chartered Institute of Building. Finally, the industry which underpins almost every professional endeavour in society was a fully-fledged profession in its own right. Now boasting a global membership base, the CIOB is developing as rapidly as at any time in its long history.

It is a simple thing to find discontinuities between the exclusive Builders Society and the growing modern Institute – the world has changed profoundly. It would not have occurred to our forbears to champion the cause of women on sites at a time when benevolent efforts were concentrated on removing them from dangerous occupations. Today, seven fatalities would no longer be seen as an exemplary record for a major project such as Tower Bridge. Change has been a positive force.

So, where are the continuities between then and now? At an institutional level, there has always been a concern with probity in business and professional standards. There is a longstanding involvement with education and training, and an ability to exert influence on behalf of the industry.

At the level of the individual leaders there is, perhaps, even more continuity. Generalisations are always dangerous, but patterns of success emerge. The great leaders of our industry combine dynamism, thoughtfulness and concern for their team. They rarely seek the spotlight, but their buildings are monuments to the aspirations and achievements of an entire civilisation.

For as long as the Institute has been in existence, building has had an uneven reputation in society at large, exulted and vilified by turns. Many Victorians, reeling from the future-shock of industrial progress and mechanised

production, romanticised the notion of the solitary craftsman, expressing his individual creativity for the greater glory of God, but locked their doors when the navvies were in town.

Now, we have our own mythology of building. Professionals rightly reject the popular vision of the man in the van who was definitely going to finish the patio a week last Thursday, but they often use other, well-worn descriptors when talking about the industry: macho, adversarial, backwards, dangerous.

A glimpse at the profiles of our current leaders tells a different story. Despite what we tell ourselves about construction, at its best it is innovative, courageous and responsible. The energy of the early leaders is still apparent, but it is tempered with a deep concern for the environment, for staff, and for society at large.

It is this ability to produce focused results without losing sight of the bigger picture which is the hallmark of our great industry leaders. Tireless advocates for teamwork, their influence is apparent in the unparalleled inclusivity of the Institute. Any worthy construction professional can claim a place in the CIOB. Sir Edwin Lutyens founded the Architecture and Surveying Institute (ASI) to realise his vision of inter-professional co-operation; the ASI merged with the CIOB in 2003.

Lutyens was, despite his enormous talents, often criticised. His work was not fashionable. However, another conspicuous characteristic of our leaders is their ability to set their own course and stand by their beliefs. Sir Michael Latham produced a report which was little short of revolutionary, although he could not know how it would be received. Spencer Hodgson was prepared to leave his native South Africa rather than condone the Apartheid government. Sir Ove Arup survived the disappointment of ill-tempered public wrangling over the Sydney Opera

House, and went on to produce an enduring mission statement, the Key Speech. This embraced humanitarian values, the dignity of work and a pragmatic blend of idealism and expediency.

Because our leaders are so firm in their beliefs, and so focused on their work, they often leave public comment and speculation to those with more time on their hands. Many of the leaders represented here have received little public attention, despite the enormity of their achievements. However, their careers are a testament to the power of ethical and reflective practice to underpin great work, and their stories are a necessary antidote to a celebrity-obsessed and cynical age. Perhaps it is time that the builders took the spotlight, and spoke for themselves.



**Osborne House**  
Isle of Wight  
UK



“A better, kind-hearted or more simple, unassuming man never breathed and Osborne must ever be bound up for us with the memory of this excellent man.”

**Queen Victoria on Cubitt's death**

## Thomas Cubitt

### 1788-1855

#### Founder Member

Thomas Cubitt was the eldest son of a Norfolk carpenter, who moved the family to London at the start of the nineteenth century. When his father died in 1806, Thomas took a job as a ship's joiner, travelling to India. With the money he saved, he founded his business.

His first important commission, re-roofing the Russell Institution, won him glowing reports. This led to the commission to build the new London Institution, which, as his biographer Hobhouse notes, was an important contract in the history of building, as well as in Cubitt's career.

There was a stiff penalty clause for late completion, and Cubitt concluded that subcontractors were too unreliable. He needed his own men. Traditionally, this project is held to mark the advent of the major contractor. He still had to rely on an external architect, however, who failed to spot problems with the foundations. The cost spiralled.

Clients down the ages will sympathise with the plight of the Institution's managers, who found that “one charge involves another; and neither the vigilance of the Managers, nor their anxiety to economise...has enabled them to avoid expending a sum far beyond any expectations they were able to form.”

From then onwards, Cubitt would also avoid reliance on external professionals, as well as external labour, wherever possible. By this time, his younger brother William had joined the firm, and they would both be founder members of the Builders Society.

The London Institution contract also introduced Cubitt to wealthy backers, who provided him with capital for the immense speculative building projects which followed. He developed a site in Bloomsbury before renting nineteen acres in Pimlico. This site was marshy, and needed capital expenditure to drain. He also took sites in Clapham and Camden, building well-drained, desirable housing, and doing much to develop the London we know today.

William was more cautious, and managed the contract side of the business. After 1827, they formed separate companies. Thomas speculated, William preferred contracts. He also showed far more interest in civic issues, becoming MP for Andover 1847-1861 and Lord Mayor of London in 1860 and 1861. When he signed his name, he wrote “William Cubitt, Gentleman”. Thomas, in contrast, would always style himself “Builder”.

Thomas also worked on Buckingham Palace, which led Queen Victoria to ask his opinion before purchasing Osborne House, her retreat on the Isle of Wight. He was subsequently employed to rebuild it, a decision which attracted considerable comment because he was a builder, rather than an architect. The client was more than satisfied, however; “Mr Cubitt has done admirably”, the Queen enthused.

As Hobhouse observes, despite the fact that he was a highly successful speculator in an age of unchecked capitalism, who left a fortune of over one million pounds, he was clearly well-liked.

Although the Builders Society was primarily for contractors, he was a prominent member, and was held in such regard by his fellows that in 1848 they commissioned a portrait of him as a testimonial.



Nelson's Column  
London  
UK



“A building business is a very good one if a man thoroughly knows it.”

**Sir Samuel Morton Peto Bt**

## Sir Samuel Morton Peto Bt

1809-1889

Founder Member

Apprenticed to his uncle at the age of fourteen, Samuel was given a thorough schooling in the crafts as well as the theory of construction. In 1830, he and a cousin, Thomas Grissell, inherited the business, just as he came of age.

They worked together on many prestigious projects and secured the contract for Nelson's Column. This must have been a difficult project, as the column was being funded by public subscription, and the money ran out during the construction. There was widespread concern that the unfinished memorial might be a threat to public safety, or perhaps even collapse on the new National Portrait Gallery, and the government was obliged to step in with funding.

The partners also built part of the Houses of Westminster before agreeing an amicable split. Samuel wanted to expand his involvement with the burgeoning railway system, but it was too risky for Thomas's taste.

Samuel built a close working relationship with Robert Stephenson, and would go on to construct railways all over the world. His work revolutionised trade from Argentina to Algeria. Such was his influence, the King of Denmark travelled some distance to meet him in order to save him time.

Equally importantly, he provided the impetus to construct the first military railway. British troops were beleaguered and starving in the Crimea, and the situation was becoming a national disgrace. Then MP for Norwich, he convinced

the Duke of Newcastle to approve the building of the Crimean railway before resigning his parliamentary seat and undertaking to build it at cost.

The future General Gordon, then a young lieutenant, wrote: “No relief that could be named will be equal to the relief afforded by a railway.”

In early 1855, seven miles of track were laid in as many weeks. They built at unprecedented speed, cutting corners where necessary, as the line was intended to be temporary. Soon, supplies were travelling up the line, and the sick were being evacuated to the hospital ships bound for Scutari. The British were able to transport heavier guns and mortars, and so the railway proved decisive. Previously desperate forces were victorious and the age of industrial warfare had, for better or worse, been born.

In recognition of his achievements, Sir Samuel was made a baronet, and he also regained a seat in parliament. His career was illustrious until a massive speculation on the Metropolitan extension of the London, Chatham and Dover railway destroyed his business. Although there was no imputation on his character, and he was discharged as “technically bankrupt”, being owed more than he owed, he had to resign from both Parliament and the Builders Society. Luminaries such as Disraeli extended their sympathies, but his business was fatally damaged.

However, posterity will remember him both for engineering achievements and his commitment to welfare. The provisions made for his navies in the Crimea were the envy of the troops, and, in an age of exploitation, he always paid his men weekly in real money. His good name survived even financial ruin.

**Tower Bridge**  
**London**  
**UK**



“The design of every detail bears evidence of the great care and ability which has been bestowed on it and the work itself has been executed in a manner which reflects great credit on all concerned.”

**The Engineer, 15 December 1893**

## **Sir Herbert Henry Bartlett Bt**

**1842-1921**

**President 1892-93**

Like many bright young men of his time, Herbert Bartlett abandoned rural Somerset for London to pursue his ambitions. He took rooms in Cheapside and initially gained an apprenticeship with an architect. In 1865, he joined a building firm run by John Perry, a successful East End carpenter. He became a partner in 1872, and by 1888 was sole proprietor.

A modest and retiring man, he had a talent for business, but little appetite for the civic honours he might have acquired through his success. His activities outside of business – the endowment of the Bartlett School of Architecture, funding for the Shackleton expedition to the South Pole – were usually enterprises which could be effected without attendance at a formal dinner.

Accordingly, Messrs Perry and Co traded out of modest offices in Victoria Street. But the heart of the company was their five-acre yard in Bow, adjoining the Great Eastern Railway. Whilst the administrative operation was unassuming, the company works were state-of-the-art. By the beginning of the twentieth century, the Bow site boasted one of the largest mills in London. The smiths’ yard had a ten-foot steam crane, and the stoneyard two electric gantry cranes. The woodworking yard also benefited from the best available technology. According to a company history of 1907:

“It is very completely equipped, and contains all the machinery necessary for dealing with the rough logs of timber, converting them into planks, boards and scantlings, and performing all the operations which can now be done by machinery, which has replaced the old-fashioned hard labour until practically nothing is left for the joiner now to do beyond actually putting the finished pieces of the work together and cleaning them up.”

However, despite this commitment to technological advance in business, Sir Herbert never embraced the advent of the motor car, travelling to work in a horse and carriage until the end of his life.

Under Perry, the company had won such lucrative contracts as St Thomas’s Hospital, Great Ormond Street, and the Victoria Barracks at Portsmouth. By the time Bartlett was constructing the masonry of Tower Bridge, the company was also widely involved with the railways, and tunnelling under the Thames to create the Bakerloo line and many of its most famous stations.

By the standards of the time, the health and safety of the construction of Tower Bridge was exemplary.

In the words of the project engineer, “It is gratifying to note that the loss of human life during the construction of the bridge has not, considering the magnitude and the nature of the works, been great. In all, seven men have met with fatal accidents, and at least one of those was the result of sudden illness, or of a fit.”

Tragically, Sir Herbert would himself lose his eldest and most promising son in 1920. It is possible that if he had not been swept overboard the ferry to Ostend whilst travelling to oversee a major project, Perry and Co might still be a major force in the industry.



Whitehall Cenotaph  
London  
UK



“Architecture, with its love and passion, begins where function ends.”

**Sir Edwin Lutyens**

## Sir Edwin Lutyens

1869-1944

### Founder, Architecture and Surveying Institute

Sir Edwin preferred to be known as Ned, and was reputed to adopt the same cheerful attitude whether talking to queens or cigarette sellers. Nevertheless, this witty but thoughtful man had eminent artistic influences from birth. His father was studying under Landseer when Ned, his tenth child, was born. The artist had ambitions to adopt a child of his own, but Mary, Ned’s mother, refused to even let him be godfather. They did, however, baptise the baby Edwin Landseer Lutyens in his honour.

When Ned grew older, he went to study at the South Kensington School of Art before being articled to the architectural practice George and Peto. The junior partner, Harold Peto, was the son of Sir Samuel Morton-Peto, and their practice was eminent in the field of late Victorian domestic design. Ned, however, didn’t feel he was learning, and went into practice on his own after six months. He was not yet twenty.

Before long, he was introduced to the garden designer Gertrude Jekyll, which was the beginning of a long-standing collaboration. His first major commission was the design of her house, Munstead Wood. His reputation grew, and he received commissions for a number of country houses, as well as remodelling Lindisfarne Castle.

In 1912 he was elected to the Delhi Planning Commission, and began designs for the Viceroy’s House. The following year he was appointed joint architect for New Delhi with Herbert Baker. He received his knighthood for this work,

and, on his return from India, he was summoned by the Prime Minister, Lloyd George.

Lutyens had already served as one of the principal architects on the Imperial War Graves Commission. In 1919 Lloyd George informed him there was a requirement for a catafalque (temporary construction to hold a coffin) for the peace celebrations. It was to be a non-denominational construction, to mark the contribution of all the fallen, and it was needed in a fortnight.

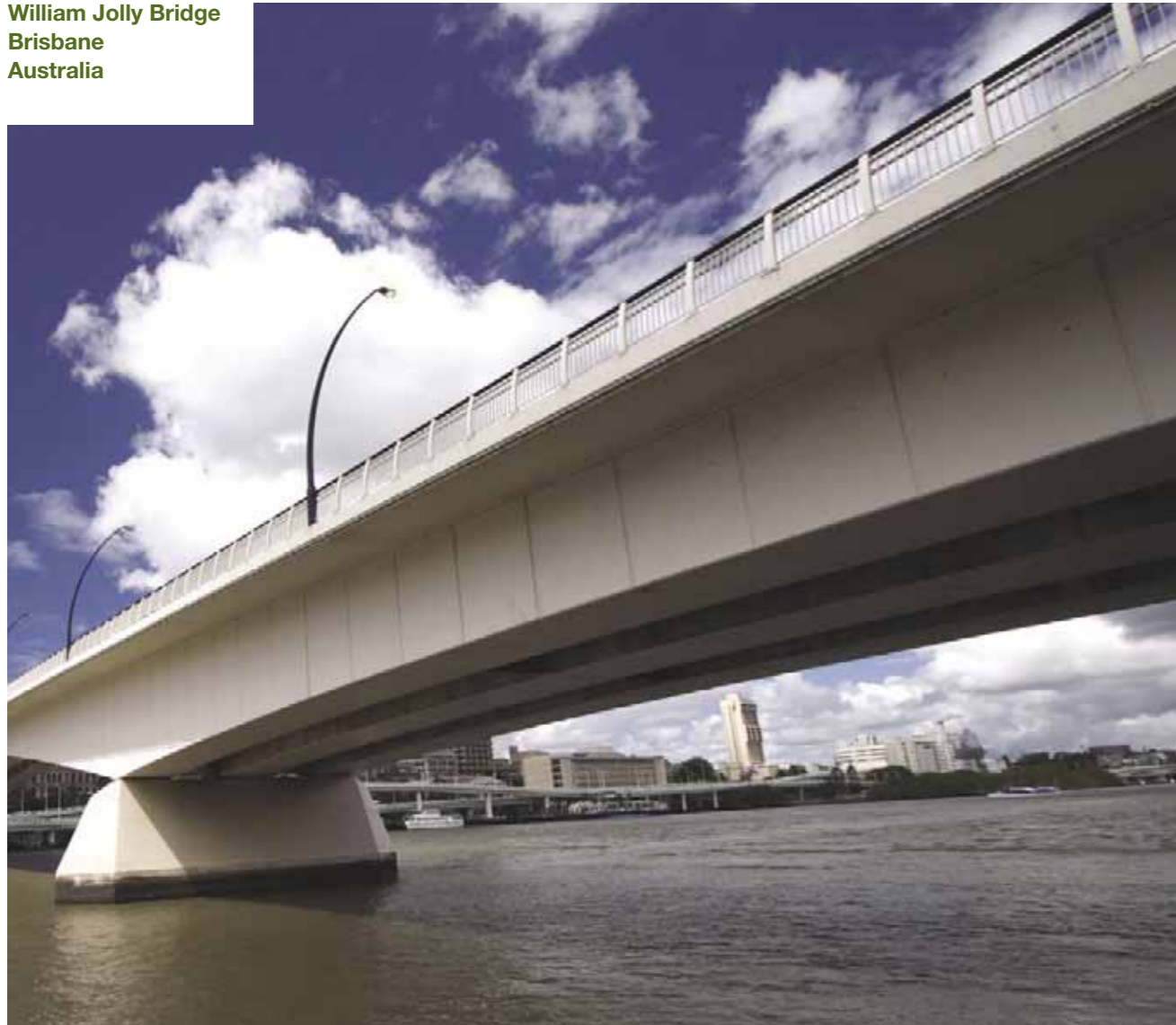
The Whitehall Catafalque would have been commissioned on the spot, had Lutyens not immediately suggested that, in fact, what was wanted was a cenotaph – i.e. a monument to someone buried elsewhere. The new name was agreed and, according to Hussey, Lutyens’ biographer, “The commissioning, conception and rough through finite design of the Cenotaph took place within six hours; probably less.”

His design was so well received that it was decided to build a permanent version of the monument, which was completed in 1920. If there had been any doubt, he was now established as a great architect.

One of his greatest designs, that for Liverpool Cathedral, was never built aside from the crypt. However, he is remembered for prosperous country houses and for the classical city buildings of his later period. He also designed for London housing schemes, trying always to bring light to depressing locales through his designs.

Hussey notes that he would be criticised by younger architects for lack of interest in such issues as economics and social planning. These were the foundations he took for granted, whilst he concerned himself with his “absolute values – beauty, truth and human dignity”.

**William Jolly Bridge  
Brisbane  
Australia**



“It’s the jobs you finish that count, not the things you start.”

**Sir Manuel Hornibrook OBE**

## **Sir Manuel Hornibrook OBE**

**1893-1970**

**Honorary Fellow (1969)**

The “Father of the Australian Building Industry” was a man of large stature, both literally and metaphorically. Six feet two inches tall and seventeen stone, he is remembered as a man of limitless energy, great vision, and boundless optimism.

A native of Queensland, he was apprenticed to a local builder at the age of thirteen. By his late teens he was pricing jobs and by the age of nineteen he felt ready to go into business on his own account. He entered into a short-lived partnership, and at twenty-one landed his first solo contract to build a house, labour only, in his home town. The business grew, and in 1918 he expanded into civil engineering. In 1925, he commenced construction of his first major bridge, a reinforced concrete structure for the Queensland Main Roads Board. He would go on to build over one hundred bridges, the work for which he is best remembered.

In 1927, he won the commission to build the William Jolly Bridge in South Brisbane. To do this, he devised the “sand island” method of pier construction. The city council’s consulting engineer considered it unconventional, and insisted that each set of river pier foundations be completed prior to any progress payment. The method worked. Instead of floating precast cylinders into place, artificial islands were built over the pier sites, forming an enclosed area with steel sheet piling which were filled with sand. The cylinders were then lowered into position by open-dredging through the

sand island and river bed. They were then embedded into the rock and sealed with concrete by workmen using airlocks. All workers were issued with special cards to ensure speedy and effective treatment if they should suffer from the “bends” and a medical officer was employed on site. When one unfortunate worker fell into the river, injuring his spine, Manuel dived in to save him himself and provided extra financial compensation to the family. There were no fatalities, and the accident record was extremely impressive for a job of that complexity at that time.

In addition to building numerous bridges and tunnels, his firm made a major contribution to utilities provision in Queensland, before extending the business into New South Wales. As well as working on other major bridges – the Maryland River Bridge, Northbridge, Iron Cove Bridge – the company won phase two of the Sydney Opera House, the construction of the shells. At the age of seventy-one, Sir Manuel climbed one hundred and fifty feet for a progress inspection.

He was knighted in 1960, and continued to expand the business, extending operations into Victoria and New Guinea. He retired in 1966, and busied himself with his final construction project, building a doll’s house for his granddaughters.



Sydney Opera House  
Sydney  
Australia



“If we are going to discuss the shortcomings of the building and allied industries...[we need] a critique of our kind of society, our whole civilization.”

**Sir Ove Arup CBE**

## Sir Ove Arup CBE

1895-1988

Honorary Fellow (1976)

Sir Ove Arup had a rare combination of talents. As an engineer, he would enable some of the most innovative designs of the twentieth century to be realised. The business he founded was both professionally and commercially successful. However, Ove Arup was also deeply interested in philosophy, which he had studied for his first degree. During his working life, he displayed both a faculty for specific, technical problem-solving and an unsurpassed ability to engage with the deeper questions which surround the process of construction.

Although born in Newcastle-upon-Tyne, Ove was educated in Germany and Denmark before returning permanently to England in 1923. The breadth of his education – philosophy, mathematics, engineering – and the influence of the intellectualism of the continent gave him a perspective beyond that of most of his peers. Even as a young man, he was publishing papers which challenged traditional views on the division of architecture and engineering.

He learnt to think holistically through his experience as a bridge builder – both literally and metaphorically – which made him rethink the traditional roles of the professions. During his early career, he had a keen interest in prefabrication, and also worked to develop air raid shelters during the war. In 1935, Ove and his architectural collaborator, Lubetkin, won first prize in a competition inspired by the Great Slum Clearance, to design “working-class flats in reinforced concrete”.

He founded the consultancy that would become Ove Arup and Partners in 1946. Through the Fifties, they set up offices across Africa and the UK and in 1963, they opened their Sydney office. The firm had been working on the Sydney Opera House since 1957, and would remain involved until the official opening in 1973. During the course of the project, the firm of one hundred permanent staff had become a truly global presence, with fifteen hundred employees.

The Opera House, whilst a breathtaking technical achievement, took its toll on Ove. He argued bitterly with the architect, Utzon, who accused him of wanting control of the project: “How can a consulting structural engineer dare to encroach on the architect’s work in such a fantastic damaging way?”

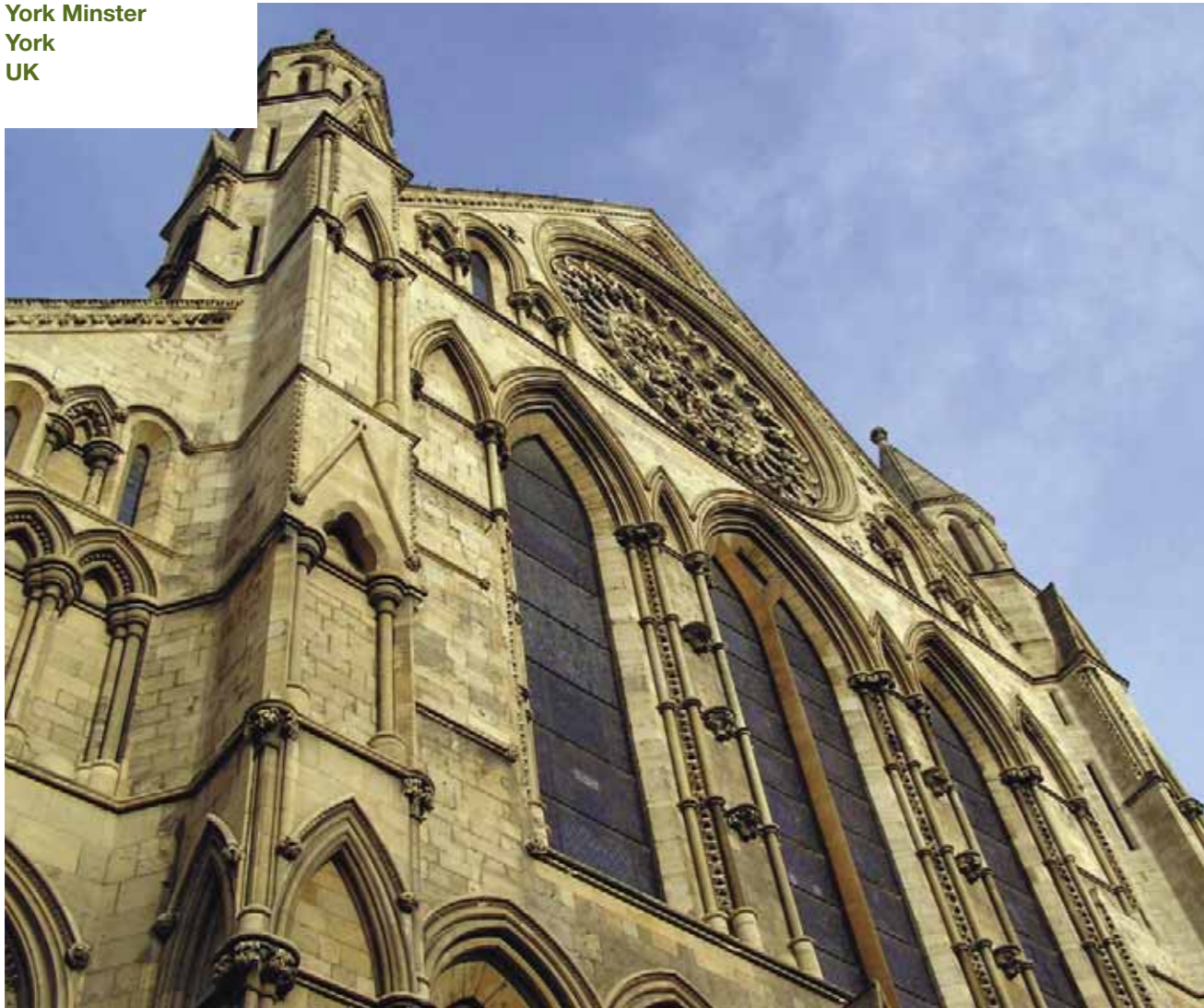
Utzon ultimately left the project, which was finished under Peter Hall, but the public rift was deeply hurtful to Ove: this consummate individualist was a life-long advocate for teamwork. According to Peter Jones, his biographer, the experience left him shaken – he never again worked so closely with an architect outside of Arup’s. He had always trusted the senior partner on a project, but now he found him doubting both others and himself – why hadn’t he been able to detect where the relationship was headed?

Nevertheless, he continued to preach holism, to promote a humanitarian and thoughtful ethos and to strive for truth in his life and work. His Key Speech of 1970 remains the Arup philosophy to this day. Despite setbacks, he never stopped searching for answers to the challenges of the industry.

As Peter Jones records, he recognised that “choosing not to think is the ultimate immoral act.”



York Minster  
York  
UK



“There’s one word that describes the Institute’s reason for being: standards.”

**Sir Peter Shepherd CBE**

## Sir Peter Shepherd CBE

1916-1996

President 1964-65

Honorary Fellow (1987)

It is impossible to discuss the legacy of Sir Peter Shepherd without mentioning that he is affectionately remembered as the “Father of the Modern Institute”.

He was pivotal in the move to transform the Institute, once more renowned for its dinners than its erudition, into a credible professional body. Thanks to his excellent working relationship with Dennis Neale, the chief executive, he was able to lead several important changes during his long involvement with the Institute. These included the development of the branch and centre structure, involvement with the burgeoning university courses, and the renaming of what was once the Institute of Builders. Although by no means a lone voice for change, his contribution was pivotal. Outside of his business, it was his abiding interest. Why?

Sir Peter absolutely believed that the Institute was the instrument by which builders could achieve parity with the other construction professions, ending their former deference to the “educated man” – i.e. the architect. His true goal was the development of educational opportunities and professional standards.

Whereas his father was prone to giving ad-hoc demonstrations if a bricklayer’s work was not to standard, Peter was always more cerebral than practical. His talents were for modern commercial management rather than

for crafts, although he believed the gold-standard for all endeavours was a “thorough, workmanlike job”.

Peter’s career commenced with something of a baptism of fire. After only a year at boarding school, he was obliged to come home and assist in the family business, which was struggling in the Great Depression. He spent his first morning at work sitting by the bedside of his father, who had influenza, surrounded by unpaid bills. Working out which ones they might be able to pay was his first step on the road to his expertise in planning and financial control.

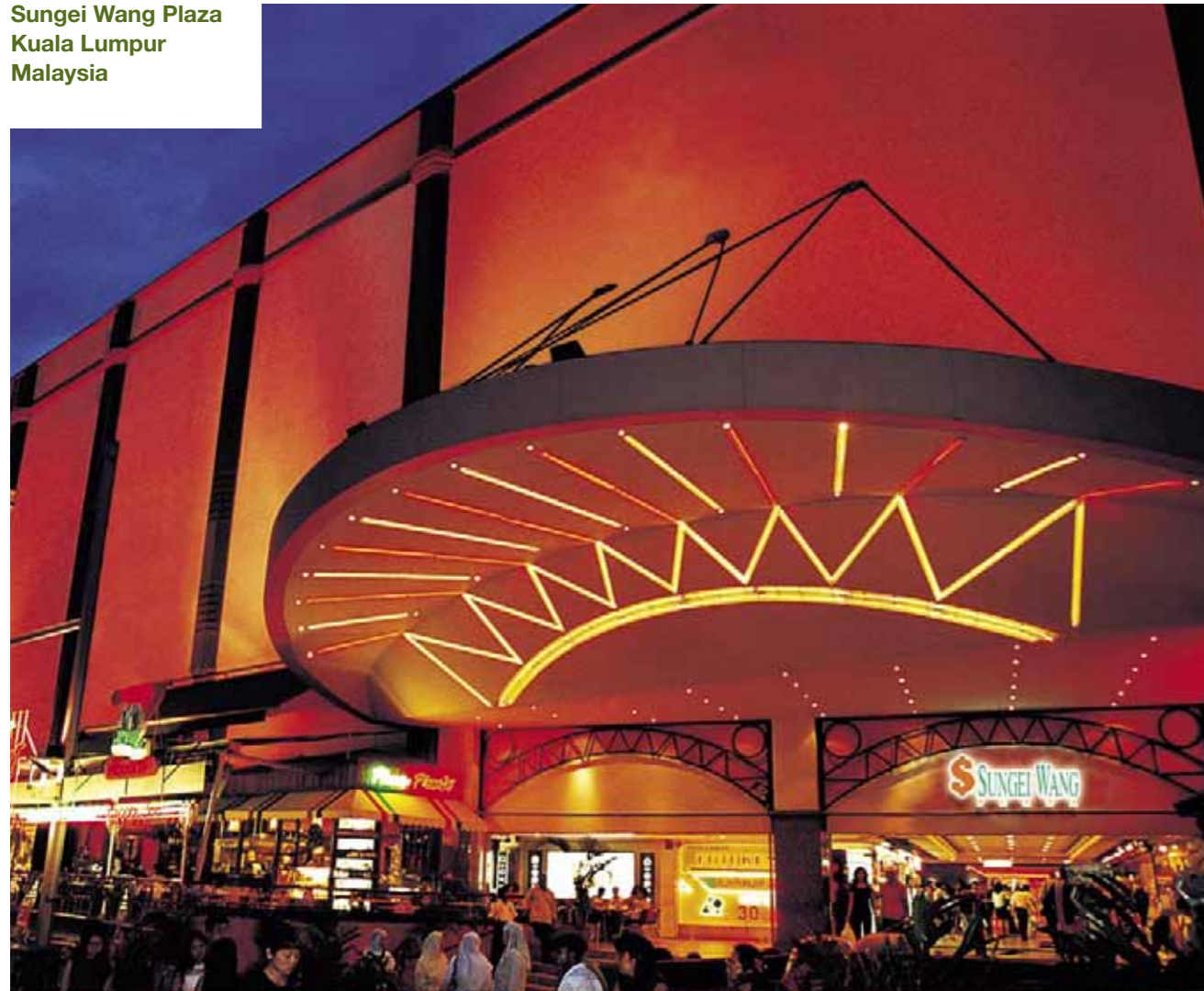
The business, of course, recovered, and went on to notable success. Particularly memorable was the restoration of York Minster. Shepherd Construction worked with an excellent cross-disciplinary team, including architect Bernard Fielden and engineer Ove Arup, to restore the ancient building. The water table had dropped in York, destabilising the timber foundations. Radical intervention was needed to make the building safe, and in the course of what must have been a fascinating project they found the northern headquarters of the Roman Empire buried under the crypt.

It was of particular pride to Peter and the firm that the work never necessitated the postponement or cancellation of a single religious service during five years’ restoration. When it was completed, the Dean presented him with a commemorative goblet depicting the building work, which he received on behalf of all who worked on the project.

Similarly, he spent much time and energy leading the CIOB and, later, the CITB on behalf of all those who worked in the industry. A modest and patient man, he maintained a lifelong commitment to the “ladder of opportunity”, believing that everyone had the potential to achieve and must be given that opportunity, regardless of their background.



Sungei Wang Plaza  
Kuala Lumpur  
Malaysia



“Malaysia has come a long way from the days when the construction field was for the brave or the foolhardy and fortunes could be made or lost in a single project.”

**Datuk Dr. Bernard Wang**

## Datuk Dr. Bernard Wang

1919-  
Honorary Life Member (1989)  
Fellow

Looking back in life, we can often find a pivotal moment which shapes our future career. For Bernard Wang, this came in the early 1950s, when, as a young accountant, his employers asked him to go to their New York office for further training. He had to make a crucial decision. His father had intimated that he would prefer him to join the family’s construction business, although he was not formally trained as a builder. He decided not to go to New York for the training and took up employment with the family construction business.

From his first assignment, he says, there was no question of turning back. He studied for his professional qualifications. At the time, most building companies in Malaysia were family-owned enterprises with unqualified staff, but Bernard quickly saw that it was essential to have good management practice.

As he says, “The construction industry was and still is very challenging, and there is a need to embrace new ideas and technology to improve productivity, efficiency and quality.”

The most interesting project he worked on was the Sungei Wang Plaza Project, in the late Seventies. It was the largest shopping complex in the area at that time, situated in the heart of the Golden Triangle, Kuala Lumpur’s centre for business and commerce.

“Due to its size,” he explains, “we utilised design build and fast-tracking systems to meet the time and cost constraints, which was uncommon for commercial projects at the time. We also had to ensure that the complex was planned to have a good mix of tenants to avoid too much duplication of business types. We wanted to enable the public to do all their shopping under one roof.”

Aside from his contribution within the industry, he has worked tirelessly for the public good, working on Royal Commissions, chairing boards, and serving on committees too numerous to mention.

Perhaps his most important contribution, however, is in the field of education. He established the School of Building at the Tunku Abdul Rahman College (TAR), which provides a diploma course in building.

According to Bernard, “The diploma from the school has been widely accepted by the building industry and also serves as a stepping stone for those seeking to further their qualifications in related fields. In the 1970s there were few building courses. Only the traditional engineering, architecture and surveying courses were usually offered at the universities. I took temporary leave from my own business for two years to lecture at the school, as there was a dearth of suitable lecturers at the time. Today the TAR College has many campuses all over the country.”

Like so many of our industry’s leaders, when he perceived a problem he threw his energy into finding practical solutions. When there were no qualified lecturers, he took time out from business to lecture himself. When there was a need for a technical book on building, he wrote one. His contribution to professional construction education in Malaysia is incalculable.

Broadgate  
London  
UK



“There is a difference between leadership and management. A leader needs understanding, vision and personality.”

**Sir Frank Lampl**

## Sir Frank Lampl

### 1926- Fellow

At this distance in time, one can forget the connotations that certain terms once carried. This great industry leader was once judged to be a “bourgeois undesirable” – words which are now quite anodyne, but which were disastrous for a Czechoslovakian in the mid-twentieth century.

Already a survivor of Auschwitz and Dachau, the young Frank Lampl was sentenced to imprisonment in Jachymov’s uranium mines. He was released in the amnesty which followed Stalin’s death in 1953, but told that he was only permitted to work by labouring in either mining or construction. He chose construction; he had spent enough time in the mines.

The eighteen months he spent as a labourer were not wasted, he says. “It’s a great advantage, particularly in construction, because it helps you understand what motivates people.”

This insight is central to Sir Frank’s leadership style.

“People at the top can have large egos,” he says, “but you must never say ‘I’: it’s always ‘we’. You lead by having a vision, but you win with the whole team. It has to become their vision as well if you want to succeed. So you have to like people – a good leader can’t be a misanthrope.”

Once embarked upon his career in construction, he never considered changing. He rose to be a foreman, then a site manager, and had become a director in a state construction company by the time of the Prague Spring of 1968. Then the Russians invaded. Frank Lampl and his wife packed a

single suitcase and left for England – their only son Tom had won a scholarship to Oxford University and was already in the UK.

Despite starting again in a new country at the age of forty-two, by the early Seventies this indomitable man was a project manager with Bovis. He showed initiative, clinching the contract to refurbish Pergamon Press after seeing news of the fire and making a cold call to his compatriot Robert Maxwell.

He was asked to head up a new overseas division. Its performance outdid all expectations, and Bovis International was formed with Lampl as its leader. By the late Eighties he was head of Bovis Construction, working on landmark projects such as the Broadgate development. He is particularly proud of this project, where collaboration with American advisors and client innovation led to a step-change in British construction.

Now lifelong president of Bovis Lend Lease, he is still very much involved with developments in the industry and its management.

“The world has changed. Today you need to be a graduate, you need knowledge and the ability to take in information. But the danger is that people may not have time to understand what the workers do.

“And people confuse management with administration and targets, which can be disastrous. Under Socialism, we used to waste enormous amounts of steel – you couldn’t get the material to build slender designs because the steel industry had to meet its performance targets in tonnes. You have to be careful with targets. The industry improves through competition. Environmental and social responsibility have come to the fore, so you need good reputation. It’s amazing how profitable a good reputation can be.”



Forbidden City  
Beijing  
China



“It’s a major challenge, but we have to be more careful with our effective use of energy and materials to protect our environment for future generations.”

**Dr. Xu Ronglie**

## Dr. Xu Ronglie

### 1931- Honorary Fellow (2001)

Dr. Xu has contributed to the development of the science and practice of building in China at the highest level. Following a long and illustrious career, he is well-placed to comment on matters of construction, and the challenges facing his chosen industry in China.

Although he stresses the need to understand construction’s long tradition and once slow and organic development, he is clear that the current climate necessitates a step-change in the way we embrace technology.

“In China, we have to meet the challenges of a fast-developing economy, and produce innovative mega-projects efficiently,” he says. “The development of new materials, new structures and new techniques is crucial. Working in a system undergoing rapid change, we need to develop fresh ways of working. Innovation has to be our focus. At the same time, more attention should be paid to sustainable development.”

After graduating from the Department of Civil Engineering at China State Nanjing Institute of Technology in 1953, he went on to further study at the Academy of Architecture and Construction in the Soviet Union. He then spent many years at the China Academy of Building Research, studying soil mechanics and foundation engineering.

From there, he went on to develop a successful career in government departments, finally becoming the chief engineer of the Ministry of Construction in 1986. By this time he had responsibility for all construction research and development in China. He organised the creation of the

first national policy for construction technology, popularly known as The Blue Book. His achievement was recognised with the award of first prize for Science and Technology Advancement by the Ministry.

This is far from being his only publication – during his long career he has authored more than one hundred and eighty papers published abroad and at home. He also played a leading role in many construction projects, particularly recalling the achievement of creating a one-million-square metre factory and workshop for nuclear shipbuilding. His work has led to honours from institutions around the world, including Brighton University and the Royal Swedish Academy of Engineering Sciences.

He retired in 1994, but for many lifelong achievers retirement does not equate to a cessation of professional activities, and Dr. Xu is no exception. He served a three-year term as the first president of CIOB China, and strongly believes in the role of education in professional practice.

“Good basic knowledge is essential for problem-solving. On site, you seldom meet the same problem twice,” he says. “You need basic study, and then you need to learn from experience. It’s also important that, as an industry, we continue to learn from technical advances in related disciplines.”

He is currently president of the China Association for Construction Mechanics, advisor of the Architectural Society of China and the China Civil Engineering Society, and Professor of the Xi’an University of Architecture and Technology.

“Retirement hasn’t ended my concern for the development and progress of the construction industry,” he says. “I still want to help my friends in the field.”

The City of London  
Academy  
Southwark  
UK



“People can’t be expected to know the answer if they’re not told. You’ve got to give people a chance.”

**Sir Ian Dixon CBE**

## Sir Ian Dixon CBE

1938-2001

President 1989-90

With a father and seven uncles in the business, it was perhaps inevitable that Ian Dixon would choose construction at an early age. During a lifetime of achievement in his chosen field, he only considered a change of tack once.

As a successful local politician, who rose to become deputy leader of Bedfordshire County Council, he could have been selected for a safe parliamentary seat. John Major had great respect for him, once saying: “The thing I like about Ian is he gets things done.” He gave the opportunity due consideration before concluding that parliament wasn’t dynamic enough for him. At heart, he was always a constructor.

However, his focus was never confined to the transient concerns of company business. He had a strong commitment to education, reflected in his appointment as pro-chancellor of Luton University in 1999. He also had a strong sense of the direction the industry needed to take to improve. He felt that the industry should be more holistic, and approved of the Construction Industry Council bringing the professions together. He served as their chairman from 1991-94.

He received many honours over the course of his career, including a knighthood in 1996. But one distinction which gave him particular pleasure was his appointment as one of the special advisors on the Latham report. His commitment to the partnering approach was such that every one of Willmott Dixon’s twelve hundred staff received a day’s training so that it was understood across the business.

As a great advocate for technical education, he would have been particularly proud of Willmott Dixon’s City Academy in Southwark. The school was sponsored by the City of London Corporation and built on a full partnering contract. Both the school – orientated towards business and enterprise – and the manner of its construction – collaborative, on time and on budget – would have given him immense satisfaction. He would doubtless also have been gratified that the project received a Prime Minister’s Award.

His commitment to education is also reflected in the scholarship that bears his name. Every year, a young professional is given the opportunity to produce a paper on a topic related to the industry and present it to an industry audience.

Sir Ian himself began his career as an estimator before switching to surveying. He achieved positions of responsibility at a young age, joining what is now Willmott Dixon as general manager in 1967. In 1976, they sponsored him to study on Harvard’s Advanced Management Programme, which he found immensely valuable.

In recognition of his outstanding contribution to the company’s success, John Willmott Construction Ltd became Willmott Dixon in 1987. But his influence extended industry-wide, due to his talent for lobbying and influencing.

According to his son Steven, “He could turn on the eloquence, but he had no airs and graces – he never forgot what was important to people on site. He knew how to talk other people’s language, and that made him a great communicator.”



## The Channel Tunnel



“I’ve loved every minute of every day I’ve been in the construction industry. It’s not without problems and anxiety, but it’s a wonderful experience which I would recommend to any aspiring youngster.”

**Sir Joseph Dwyer**

## Sir Joseph Dwyer 1939- President 1998-99

It is not surprising that Sir Joseph is particularly keen to stress the opportunities afforded by a career in construction. Although he left school at fifteen to become a chain boy (i.e. surveying assistant) with Wimpey, he would become chairman of the company. Involved with some of the most prominent projects of the twentieth century, he is also legendary for his business deals. The asset swap with Tarmac, which he brokered, is well remembered. He also recalls reaching a deal to sell a waste company for a record price whilst at dinner with the Princess Royal in Buckingham Palace.

His early involvement with the world of work allowed him to become a site manager by the age of twenty-four. Early encouragement from the engineer he worked for led him to night school, and hard work over many years allowed him to qualify as an engineer at what is now Liverpool John Moores University. He rose steadily through the ranks of the company, and also made a major contribution to the wider industry; uniquely, he has been president of both the CIOB and the ICE.

“I’m proud to be called both a professional builder and civil engineer,” he says.

The Channel Tunnel, perhaps his greatest project, was widely discussed in the media, but he finds it sad that they were more interested in reporting the commercial arguments than the project itself. The challenges of his relationship with Eurotunnel’s Sir Alistair Morton were comprehensively documented, but the wider public heard little of the technical achievements.

Of more interest to Sir Joseph were the learning opportunities afforded by this international construction project, particularly the difference between the French and British in terms of methodology.

“For instance,” he explains, “when we extracted the chalk, on conveyor belts a quarter of a mile long, we tipped the spoil into the Channel. The French, using the same machines, tipped the spoil into a mixing chamber, suspended it in water, and pumped it overland to an inland lagoon, re-circulating the water. It was a much more technical solution, but it cost no more to do.”

The project also set a new world record for speed of spoil extraction.

On the subject of world records, the largest concrete oil drilling platform in the world at the time of its construction – one million tonnes deadweight – also seems worthy of mention as another of Sir Joseph’s projects.

“It was built to withstand passing icebergs,” he says. “As well as the technical challenges, the Canadian government required that we employ the local fishermen on the project. There were moments of great difficulty – but it worked out okay in the end.”

Sir Joseph is now leading Construction for Merseyside, a local scheme which is attracting national attention for its innovative approach to training. He is also chairman of the regeneration company Liverpool Vision charged with the regeneration of the City Centre and Waterfront. The industry has changed profoundly in the years since he started at Wimpey, but he is passionate about ensuring that opportunities, in one form or another, remain for future generations.

**Kingsmead School  
Northwich  
Cheshire  
UK**



“I wasn’t confident that people would buy into Constructing the Team – I just wrote what I believed.”

**Sir Michael Latham**

## Sir Michael Latham

1942-

**Honorary Fellow (1995)**

Sir Michael Latham started his working life in 1965 as a researcher for the Conservative Party, after studying at both Cambridge and Oxford where he read History and completed a diploma in Education. At the end of his first week a cabinet shake-up resulted in Ted Heath becoming Party leader and Sir Michael being appointed to take over the housing, local government and construction desk.

Having only a weekend to learn the subject of his appointment, Sir Michael was instantly hooked, reading every spare minute to get to grips with his new brief. This induction sparked a life-long interest and inspired him to stay in the field, moving to the National Federation of Building Trades Employers in 1967. By 1971 he had become the director of the National House Builders’ Federation.

Sir Michael entered Parliament in 1974 as a member for Melton (subsequently Rutland and Melton), serving for eighteen years. He was knighted in 1993. Among his many continuing roles and responsibilities, he is chairman of the Construction Industry Training Board (CITB) and deputy chairman of Willmott Dixon.

He retained links with the industry throughout his political career, and in 1994 Constructing the Team, the government and industry collaboration, perhaps better known as The Latham Report, was published.

Sir Michael describes construction as “real projects, where real people build real things. It’s hard work, but it has a practical result, providing people with places to live and

work in, to be cured and taught in. It’s a historic industry, but a modernising one. The industry is very conservative, but best practice and clients are now driving change.”

Sir Michael has himself been a major force for change. The publishing of Constructing the Team has had a significant impact on the industry, providing people with a fresh approach to construction projects: “At that time we just had to concentrate on getting people to accept that there was another way of doing things. I would say much more if I were writing it now.

“A lot of people think talk about partnering is all cosy hot air. Believe you me, it’s not. Where taken seriously, good quality buildings arrive on time or early for a price agreed by all parties, and sometimes they’re under budget as well. It’s not cosy: it’s jolly hard work and a lot of people can’t handle it. They’ve grown up in adversarial mode, and are used to coming to the table with too low a tender, seeking to recover money by either screwing subcontractors or by looking for variations and claims. The loser is always the client. There may be others as well, but it’s always the client. The other way is a better way. With integrated teams working openly, everyone will win.”

Sir Michael believes that Willmott Dixon’s Kingsmead School is a good example of a project successfully completed utilising the principles of the Latham Report.



Canary Wharf  
London  
UK



“The industry has given me constant opportunity to do exciting things. There’s no ceiling. Construction is a people industry – about sixty per cent of the value of what we do is contributed by people. Materials only account for forty per cent.”

**Alan Crane CBE**

## Alan Crane CBE

1945-  
Fellow  
BMYA Winner 1981

One might be forgiven for imagining that the project director of Canary Wharf and the Petronas Towers and, later, chairman of the Movement for Innovation would have had some kind of ambition to work in the construction industry. But no. Alan Crane was between jobs and fed up when he was offered some temporary work as an industrial painter.

Luckily, his boss felt he had an aptitude for the business of painting electricity pylons and nuclear reactors, and trained him in surveying and estimating, putting him in charge of increasingly large contracts. He started to study in his spare time, and had worked his way up to area manager when a company client, Bovis, offered him a job.

This led to a career which gave him the opportunity to work in eighty countries around the world and, whilst he might not have intended to become a construction manager, he was neither reluctant nor unappreciative when the chance came along.

According to Alan, “I’m one of the luckiest men in the world. There are few industries with such job satisfaction. I can say: ‘I had a hand in building that.’ We leave a lasting legacy. There are dozens of industries where you can make more money and have a more stable existence, but what does a financial services advisor leave behind?”

One of the most exciting projects, Canary Wharf, started as “a blank sheet of paper.” The scale and logistical challenges of the project were unprecedented. Working on phase one,

they didn’t even have a road into site, let alone gas or water. As Alan says, “We might as well have been in the desert – at least we could have flown things in.” But the situation required a different kind of thinking – a senior logistics specialist from the army who had worked on getting supplies into the Falklands was co-opted in.

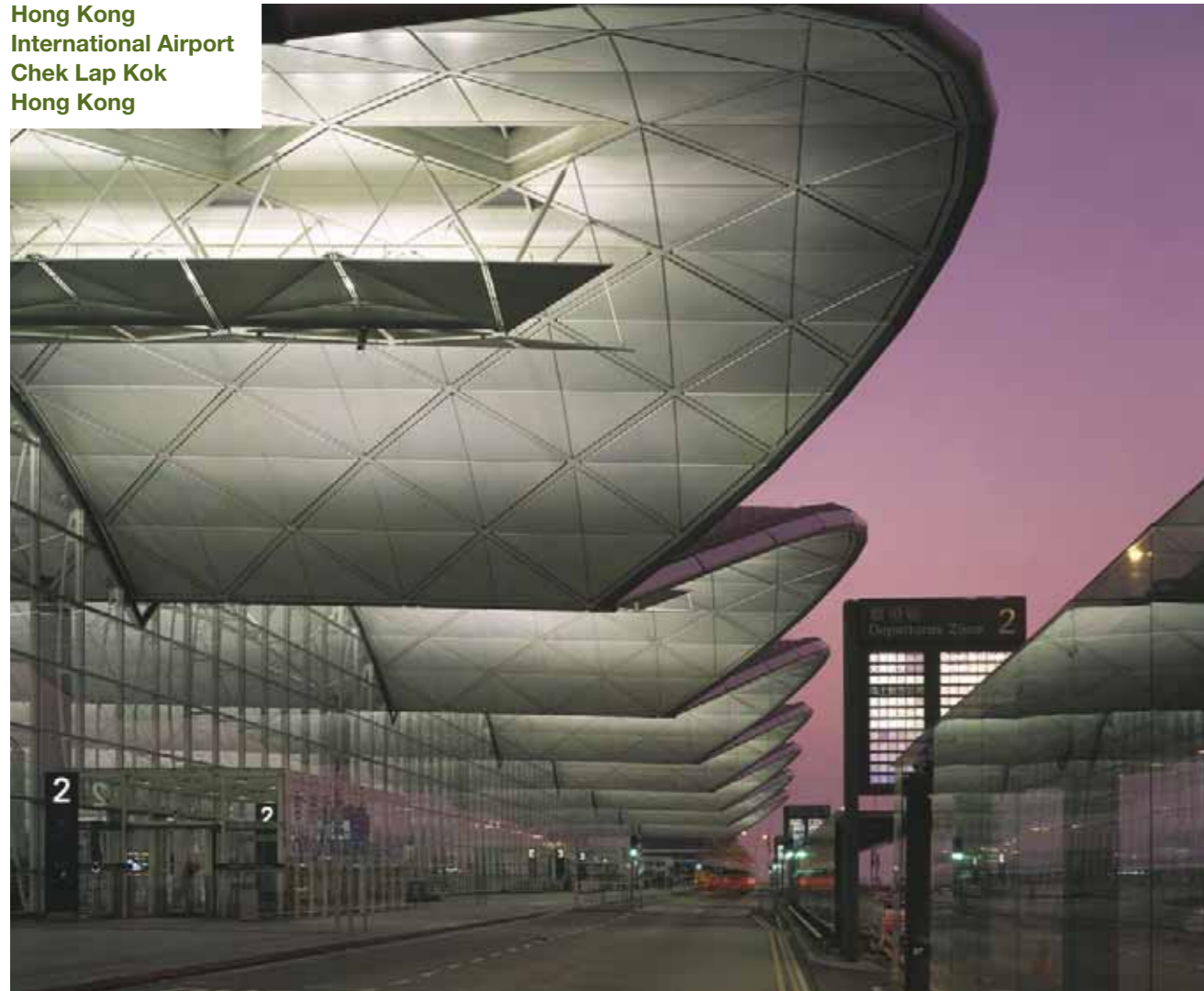
Alan thrives on these kinds of challenges, which perhaps explains why his name was put forward to lead M4I. Alan saw this as a fabulous opportunity, and took it on in addition to his day job as chief executive of Christiani & Nielsen International Group.

“People don’t understand what innovation means,” he says. “They confuse it with invention. All it means is ‘doing things differently’, which is what construction is all about anyway. I love it – you think on your feet all the time. Every morning, I wake up wondering what I’m going to do today. There’s so much opportunity and choice. What a privilege for a cigar-smoking kid from Dorset.”

He is passionate about keeping those opportunities open for future generations, and regularly gives talks to schools about the industry.

“We have a responsibility to look at maintaining ways of bringing the best people forward. We can’t write people off as teenagers. There have to be opportunities later in life. In construction, there is so much opportunity for advancement – there’s no limit to what you can achieve.”

Hong Kong  
International Airport  
Chek Lap Kok  
Hong Kong



“It’s a great industry, with tremendous people at every level, and it doesn’t get the recognition that it rightly deserves. But there’s good work going on every day of the week.”

**Howard Shiplee**

## Howard Shiplee

1946-

Fellow

BMYA Winner 1994

As the director of construction for the Olympic Delivery Authority, the burning question often asked of Howard Shiplee is: “Will we be ready?”

“It will happen – because it’s got to happen” is the matter-of-fact response. With the ultimate in immovable deadlines to contend with, it’s a good thing that Howard enjoys a challenge.

And he’s no stranger to demanding projects. With a CV that includes Hong Kong International Airport at Chek Lap Kok, Manchester’s Terminal 2, GCHQ Cheltenham and Thameslink 2000, this is one man, at least, who is unlikely to be overawed by the size of the task in hand.

Like many industry leaders, he knew early in life that engineering or construction would be his vocation (“I always enjoyed building and putting things together”) and started training at technical school in his teens. He became a student engineer at McAlpines – his “first interesting job” – and concluded that it was a tough environment, but that he liked it and wanted to progress.

Following what he describes as a “circuitous” route through university and further industry experience, he spent eleven years in the Middle East as an engineer working for the oil and gas industry, an experience he values.

“It’s an enlightened industry – client and contractor melded into one co-operative team,” he says.

Having had a taste of alliancing, he was delighted to be involved with the pioneering Broadgate project on his return to the UK, describing the non-adversarial approach to the delivery as “fantastic”. He then spent eleven years at Amec, winning the Building Manager of the Year Awards in 1994 for the Manchester terminal. This success was followed by his appointment as Amec’s project director on Chek Lap Kok airport, delivering an international terminal in forty-two months.

Chek Lap Kok was built on a tough, lump sum contract, representing a huge risk to the contractor. How did he feel about that, as a convert to collaborative working?

“It’s just another way to manage the process,” he says. “Whatever the contract, you have a responsibility to deliver value for money to the customer. I had an excellent relationship with my opposite number on the client side, Douglas Oakervee, and an exceptional team. It was a pressured and intense project, but the right elements were there to make it a success. Construction might be complex commercially, but at heart it’s a straightforward industry. Much relies on personal credibility, respect and trust.”

After Chek Lap Kok, Howard worked on a variety of high profile projects such as Thameslink 2000 and Ascot Racecourse before accepting the challenge of London 2012.

“It’s an extremely complex programme,” he says, “and it will test our industry to deliver. It needs clarity, so that everyone – at company and individual level – knows what they need to do to get it right first time.”

And Howard has every faith in the industry’s capacity to meet challenges and make progress.

“We’ve changed massively, and done many things well. Safety and quality have improved and innovation is seen more widely. Most importantly, in my eyes, we’ve moved on from adversarial relationships.”



Millennium Dome  
London  
UK



“You need to find mentors in life – and you need to be one yourself. Take time to understand people; if you find out what they really want, you can match that to what you want to do. Then you’ll get the best out of them.”

**Bernard Ainsworth**

## Bernard Ainsworth

### 1947- Fellow

Whilst most construction managers have multiple challenges to deal with on site, few have to deal with the intensity of debate which surrounded the construction of London’s Millennium Dome. Rarely, if ever, has such a major technical feat been so widely disparaged. So, how did Bernard Ainsworth cope?

“It was an intensive political football, but we just got on with it,” he says. “It was on-time and on-budget and it taught me how to get the best out of a team. I did a bit in front of the cameras, and I enjoyed it – I knew we were doing well. I went round it six months ago, and it still looked pristine. The media coverage was annoying, but once the press get their knife into a project there’s nothing you can do.”

Luckily, the experience left Bernard’s enthusiasm for the industry undiminished:

“I’ve always enjoyed it,” he says. “Something always challenges me. I’m also very lucky because whatever I’ve done, my family have always supported me. If you want an exciting life and work hard, it’s a stunning career.”

After taking a sandwich course in the Sixties, he spent many years at Laings, managing his own projects from the late Seventies. His seminal project came in 1989, building a £200 million Toyota car plant. He learned greatly from working with a Japanese client, becoming familiar with their approach to holistic problem-solving and team-building.

“It changed the way I work,” he says. “My mantra is: it’s about the team. Clear the boulders from in front

of the team and they’ll produce anything.”

This philosophy enabled him to build on his success with the Dome by leading the delivery of the 2002 Commonwealth Games. Attracted by the idea of “something different”, he took leave of absence from Laings. His construction experience stood him in good stead, and he forged a strong team. As he points out, any project that requires one thousand taxis is potentially a logistical nightmare, but the games were a success.

He retired from Laings, but it was not in his nature to stay retired for long. After a spell managing phase three of the trams project in Manchester, he spent time working for Atkins. He is now seconded to T4M, on a major project delivering civil works and underground stations. He might have officially retired, but Bernard is still enjoying new challenges, and clearly gives every ounce of energy to a project.

During his days on the Dome, he mentioned during the course of an interview with the Sunday Times that he did not know if he would be going to the grand opening, and was gratified to receive a letter from Peter Mandelson assuring him that “I’m sure we can find a ticket for you.” At the event, he and his family were all in the front row for the big gala night. But it was a long evening, and it had been a long project, and his eyes started to close. The man who built the Dome was destined to miss the dawn of the new Millennium. Bernard Ainsworth was sound asleep.



**Solomon Mahlangu**  
**Freedom College**  
**Mazimbu**  
**Tanzania**



“I have always looked to work with people who are about more than just themselves and making money – people who have a desire to create something more important.”

**Spencer Hodgson**

## **Spencer Hodgson**

### **1947- Fellow**

People end up in the construction industry for many reasons, but Spencer is perhaps the only high achiever to attribute his career path to indolence. He was quite happily “enjoying the Sixties” when parental pressure obliged him to see a careers advisor. The verdict (on the man who would go on to be an industry leader) was that he didn’t lack ability, but seeing as he was inherently lazy he had better settle for architecture, rather than attempt a really demanding course at university.

This suited Spencer, as he was passionate about drawing and painting, and he found that he could also use his skills in the service of his other passion – the anti-apartheid movement.

This other passion led to a twenty-seven-year exile, departing from his native South Africa on a one-way exit permit. He went to Germany on an ANC scholarship to study for an MSc in Architecture before settling in London to work on a community housing association project. That, he says, is when he really became an architect. He enjoyed interacting with people, seeing buildings go up and making a difference to society.

After the 1976 Soweto uprising, the ANC set up a school in Tanzania to receive pupils leaving South Africa. Spencer was called to join the team responsible for building the school, including roads and bridges, hospital, factories, housing and farm buildings. It was a huge learning curve: “We were building a society, not just a school,” he says. It was an exciting time, and the project had supporters from all over the world.

By that time, he says, “I was really starting to work hard. I was taking ownership, and working with a superb project manager. I learned a lot about how to involve people in the construction and decision-making process.”

Returning to South Africa in 1991, he worked for an organisation dealing with housing for the urban poor in the townships around Durban. When 1994 brought a new, democratic government, he became a director in the Department of Public Works. Using his consultative skills to draft key industry legislation – Creating an Enabling Environment for Reconstruction, Growth and Development in the Construction Industry – he then decided to apply for a job which would involve him in the implementation of the Act. CEO of the Construction Industry Development Board (CIDB) since 2001, he is now taking a leading role in the effort to transform the industry.

Working in an environment where public sector spending has doubled in five years – and is expected to double again – and the 2010 World Cup is on the horizon, the CIDB is addressing capacity constraints and building a more equal and efficient industry. Effective and ethical procurement is a priority, and the organisation has developed Procure 2010 to enable this.

“We’re very aware that our ability to grow the economy is closely linked to our ability to put infrastructure in place,” he says.

He attributes his success to an outstanding board and chairman, able staff, and active stakeholders: “It’s all about the people.”



“Change takes time, commitment and effort. You can’t give up on the first hurdle.”

**Zara Lamont OBE**

## Zara Lamont OBE

### 1960- Fellow

Zara Lamont always knew she didn’t want to be stuck in an office and, since she enjoyed maths and physics, civil engineering seemed an obvious choice. She went to Queen’s University in Belfast to study, and found her chosen course “interesting and dynamic”.

In her job as a resident engineer, she remembers working on a culvert infill scheme. Due to the dye they were putting down, pink and green fluorescent rats would scurry past them as they worked in thigh waders. She recalls it as a fun project – and she learnt a lot.

“When we got on site, I quickly realised that what we’d designed in the office was not the best way,” she says. “It taught me about the difference between design and buildability. With the contractor and pipe manufacturer we worked out a quicker and cheaper system on the ground.”

Moving to Tarmac, she was involved in the launch of a new service, Tarmac Total Build, which offered everything from assessment of building requirements to facilities management. The recession was at its height, and it wasn’t successful but, she says, “It opened my eyes to what’s possible. It was just way ahead of its time.”

Another key learning experience occurred when Tarmac purchased PSA Projects. Responsible for the newsletter circulated to staff whilst the transition was taking place, she discovered a lot about what really matters to people when they’re going through a cultural change, learning “the importance of good, clear, precise information”.

Clearly a highly reflective worker, Zara is very clear about how she developed her professional practice through her experiences – building the Bank of England at Gloucester, for instance, taught her about supply chain management, and the results that can be achieved if you work proactively with local suppliers.

When she was invited to interview for the job of director of the Construction Best Practice Programme (CBPP), she wasn’t at all sure that she was interested. But the more she found out, the keener she got. Ultimately, she got a secondment from Carillion that would last for almost five years, going on from CBPP to head up the Confederation of Construction Clients.

A tireless advocate for industry improvement, she also used her secondment to achieve a step-change in her own performance: the woman who once hated public speaking addressed a RICS annual dinner after publicly castigating quantity surveyors in Building magazine (“There was hissing, but I used humour, got the message across and escaped unscathed”).

Now back at Carillion, she’s enjoying putting the change she preached into practice. She describes change as “rewarding, but not easy” and is now in the role of performance improvement director.

So, has the industry really changed?

According to Zara, “We do beat ourselves up, but change takes time, and we’ve changed considerably in the last ten years. The old-style practices are diminishing. Even many of the small builders have changed – they don’t wrap it up in the same language, but they work with their supply chain and understand about customer care. We’ve come a long, long way.”



# Bibliography

ANON. c.1907. *Record of the Works of Perry and Co. Builders and Contractors. Founded AD 1837*. No details available. Photocopy in Kings College London Archives.

BARTLETT, B., 1984. BARTLETT, Sir Herbert Henry. In: D J Jeremy (Ed) *Dictionary of business biography: a biographical dictionary of business leaders active in Britain in the period 1860-1980*. London: Butterworths

BARTLETT, B., 1978. *Jam Tomorrow*. London: Paul Elek Ltd.

BROOKS, E. C., 1996. *Sir Samuel Morton Peto Bt, 1809-1889: Eminent Victorian, Railway Entrepreneur, County Squire, MP*. Bury: Bury Clerical Society.

BROWNE, W., 1974. *A Man of Achievement: Sir Manuel Hornibrook Kt, OBE, Hon FCIQB, FIAB, FR Hist SQ*. Brisbane: P. E. P. Enterprises.

COOKE, B., 1997. *The Grand Crimean Central Railway: the railway that won a war*. (2nd Ed) Knutsford: Cavalier House.

COOPER, P., 2000. *Building relationships: the history of Bovis 1885-2000*. London: Cassell and Co.

FEILDEN, B., 1976. *The Wonder of York Minster*. York: Cerialis Press.

HOBHOUSE, H., 1995. *Thomas Cubitt, Master Builder*. (2nd Ed). Didcot: Management Books 2000.

HOULDSWORTH, H. K., 1982. *The Builders Society 1834-1884: A Study of the Origins of the Chartered Institute of Building*. Unpublished postgraduate dissertation, Trent Polytechnic, Nottingham.

HUSSEY, C., 1953. *The Life of Lutyens*. London: Country Life.

HUNT, T., 2004. *Building Jerusalem*. London: Weidenfeld and Nicolson.

JONES, P., 2006. *Ove Arup: Masterbuilder of the Twentieth Century*. New Haven: Yale University Press.

PETO, H., 1893. *Sir Morton Peto: A memorial sketch, printed for private circulation*. London: Elliot Stock.

POWELL, C., 1997. *Diligently and Faithfully*. Ascot: The Chartered Institute of Building.

SUMMERSON, J., 1973. *The London Building World of the Eighteen-Sixties*. London: Thames and Hudson.

WELCH, C., WOLFE BARRY, J., 1894. *Short Account of the Tower Bridge with a Description of its Construction*. London: The Corporation of London.

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