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Mike Winney 1943–2007

by David Greenfield

Many readers of the Newsletter will be aware of the sudden death on 25 March of Mike Winney, former editor of *New Civil Engineer*, and its Editor Emeritus since 1998. His contributions to technical journalism are well known and highly respected. He was passionate about all aspects of engineering, but civil engineers and their achievements were his forte. Resolute in pursuit of the truth behind a failure or a cover-up, he was just as determined to acknowledge and applaud successful projects. What may not be so well known is that Mike's interest was not confined solely to modern civil engineering practitioners and techniques. Civil engineering heritage fascinated him, and it this side of him that those of us connected with the Historic Bridge and Infrastructure Awards (HBIA) have much to be grateful for.

Having seen a number of inappropriate and expensive modifications made to several important historic bridges during the early 1990s, PHEW added its support to proposals for an award scheme aimed at encouraging bridge engineers in England and Wales to produce high-quality, innovative restoration projects. PHEW's then-chairman, Roland Paxton, agreed to chair the panel of judges for the first awards in 1998. The other judges were, and still are, Terry Girdler, English Heritage's chief engineer, and Andrew Leadbeater, then-chairman of the County Surveyors' Society Bridges Group which represented the UK's largest body of highway bridge owners. When faced with the unexpectedly high number of 24 submissions, Roland felt that an additional judge should be appointed to share the workload of site visits. His first choice, Mike Winney, accepted the invitation and immediately brought another dimension to the judging panel.



ICE President Quentin Leiper with the HBIA judges and support team at the 2006 presentation ceremony. Left to right, Quentin Leiper, Andrew Leadbeater, David Greenfield, Val Lawless, Roland Paxton, Terry Girdler and Mike Winney © ICE

During the next nine years Mike visited just about every one of the 100+ short-listed projects; he took professional standard photographs and prepared the texts which accompanied the images published in NCE of the awards and commended projects. His contributions to the judging panel's discussions were always to the point, and he was tireless and tenacious in teasing out the essence of a nominated project, large or small, no matter whether that threw a good or bad light on it. He had the knack of asking the right questions, and the knowledge and experience to be able to assess the answers, be it at a windswept and rainy site inspection, at a high-tech presentation by the 'suits' in a consultant's office, or over a coffee in a pub round the corner from a bridge refurbishment project, with the graduate trainee who cut his teeth on the scheme.

Mike's untimely death is especially poignant in this 10th year of the Awards scheme, the purpose of which was extended in 2002 to encourage, promote and celebrate innovation, excellence and authenticity in the conservation of all civil engineering structures associated with transportation in England and Wales. Our judging panel and sponsors have planned to make this year's event a special one to mark our 10 years; we are deeply saddened that Mike will not be there to celebrate with us.

Thomas Telford 250

by Robert C McWilliam

The exhibition at the London Guildhall to mark 250 years since Thomas Telford's birth has given those involved opportunity to reflect on the Institution's and their own values. Why has Professor Roland Paxton's conclusion that "Telford was undoubtedly one of the great civil engineers of all time" been shared by so many? What unites these views and also what has evolved during the various Telford exhibitions over the past century.

The quotation, which introduces the present exhibition is the Poet Laureate's: "Telford's is a happy life: everywhere making roads, building bridges, forming canals and creating harbours – works of sure, solid, permanent utility; everywhere employing a great number of persons, selecting the most meritorious, and putting them forward in the world in his own way" – Robert Southey (1774–1843).

The ICE exhibition in 1934 marked the centenary of Telford's death by concentrating on the first part of the attributes seen by Southey: "everywhere making roads, building bridges, forming canals and creating harbours – works of sure, solid, permanent utility".

The 1934 catalogue did draw attention to Telford's experience and the relics of his work and of the Institution itself. There was also passing reference to the beneficiaries of Telford's Will. For the 1957 bicentenary of Telford's birth the ICE published a catalogue, which drew some attention to Telford's gift of inspiring devotion and also identified several more of his collaborators.

In planning the Telford 250 events there was a consensus that there be more emphasis on the second part of Southey's quotation:

"everywhere employing a great number of persons, selecting the most meritorious, and putting them forward in the world in his own way".

In early discussions another phrase which surfaced was "Built to Last", which was intended as much to capture the less tangible, but more important, legacy of "Laughing Tam" as much as his constructed works.

Professor Paxton had in his conclusions to the Thomas Telford entry in the *Biographical Dictionary of Civil Engineers* summarised Telford's achievements beginning with the precedent he set for encouraging and developing his assistants noting his "sound judgement in selecting capable and reliable assistants and contractors to whom he was able to devolve responsibility without losing control", he then drew attention to Telford's many surviving works, contract procedures and the Institution of Civil Engineers as a forum of engineering excellence. In other words almost reversing the priorities implicit in 1934.

While developing the Telford 250 interpretation it became clear that the geographic extent of Telford's works ensured that exhibitions and events of varying scale and variety would be possible and able to reflect local preferences in the ICE Regions. Early discussion brought contact with London's Guildhall; Telford & Wrekin borough and in Edinburgh with the National Portrait Gallery / National Library of Scotland, etc. Telford's numerous other affiliations were intended to be cultivated in the ICE Regions.

Professor Quentin Leiper served the cause well by weaving Telford's legacy into his own Presidential Address, introducing the first three Spirit of Telford Awards and thirteen Telford Apprentices, one for each region.

It was decided not to pursue further publications, but others should be encouraged to keep Telford's name before as wide a public as possible. An agreement was made with the documentary photographer, Chris Morris. His images Telford's architecture and engineering would be used in the ICE's exhibitions and on the website, which is linked to the ICE homepage. His book *On Tour with Thomas Telford* had already gained a Second Edition by 2006.

Meanwhile the Education and Learning Department at Great George Street intend to use the Telford 250

anniversary. They are developing debating scenarios for Citizenship lessons at Key Stages 3 & 4, focusing on social and ethical issues associated with Civil Engineering, linked to the electronic teaching–aids known as "assemblies" covering both the history and legacy of Telford and Civil Engineering today. They also intend to print a number of traditional A1–size posters including an illustrated map of the UK highlighting major Telford and contemporary projects (aimed primarily at Key Stages 2 & 3) and up to four A1–size posters contrasting and comparing major Telford projects with some major contemporary projects. The majority of their activities will take place from September onwards, therefore will have little impact on the numerous Telford 250 events for the summer of 2007 now featured on the website, <http://www.thomastelford250.org/> linked to the ICE homepage.

Beyond the ICE, the *New Civil Engineer* / Engineering–Timelines website awarded their joint Telford 250 writing prize to Catherine Bottoms for her essay on Pontcysyllte aqueduct with as runners–up. Anthony Skelsey (Severn Bridge, Tewkesbury) and Jack McBride (Menai Suspension Bridge): the next generation of potential PHEW members? Further outside the ICE, the Royal Mail's 'The World of Invention' stamp issue in March 2007 comprised six self–adhesive stamps featuring landmarks in engineering and technology. Each of the inventions is illustrated by Guardian cartoonist Peter Till in his own whimsical style. On the backing paper a description of each invention is printed. The first–class stamp reads: "It took a man who thought like a bridge to transform the landscape. Thomas Telford linked places not just for convenience but with elegance and beauty." Could this be how Telford will be interpreted in 2034?

The largest of the Telford 250 summer events is the London Guildhall exhibition open to the public from 20 July until 2 September 2007. Its content is not dramatically different from that of either the 1933 or the 1957 exhibitions the difference lies in its interpretation of Telford's diverse legacy. There will be Chris Morris's excellent new images of the many surviving works: bridges, roads, canals, churches, etc. All are striking evidence of Telford's skills. These skills also include his organizational procedures for the design and construction of works, which have been adapted and developed to this day. It is also intended to show the importance he set on encouraging and developing the next generation by introducing a small proportion of those, such as John Gibb, James Jardine, Sir William Cubitt, John Benjamin MacNeil, William Mackenzie, James Davidson and George May. This concern for the next generation ensured Telford's initial support for the Institution of Civil Engineers as a forum for engineering excellence and made so many contributions possible by the others who have since followed Telford's happy profession.

Plans to Floodlight Telford's Helmsdale Old Bridge

Text from *The Press and Journal*, Monday 5 March 2007. With thanks to Lucy-Dawn MacIennan

Plans are under way for a bridge in the Highlands built by famous Scottish engineer Thomas Telford to be floodlit with hi–tech lighting on the 250th anniversary of his birth.

Highland Council has applied for listed building consent to install linear architectural floodlights at Helmsdale Old Bridge, which was built in 1811.

It is hoped that work on the project, costing about £15,000, can be carried out in July and August of this year.

The Council's area lighting engineer, Robbie Gunn, said the category A-listed bridge, in the village of Helmsdale, currently had traditional street lighting but was not floodlit in any way. "This is one of the best bridges we have in the Highlands and it is of great historical interest."

Thomas Brassey Bi-Centenary

by Brian Crossley

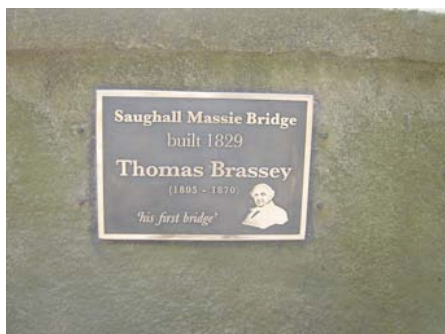


Saughall Massie Bridge © Brian Crossley

Following the surge of local and national interest in Thomas Brassey on the 200th anniversary of his birth in 1805, two projects local to his place of birth achieved completion in April 2007.

He was born on 7 November 1805 at Manor Farm in Buerton about 6 miles south of Chester, the son of a yeoman farmer. When he left school at 16 he became an articled apprentice to a local land Agent and helped to survey the new Shrewsbury to Holyhead being developed by Telford. When 21 he went into partnership with his employer in the firm of 'Lawton and Brassey' subsequently becoming the owner when his partner died.

His first civil engineering project at the age of 23, was a very modest stone bridge over the Arrowe Brook in the village of Saughall Massie near to Birkenhead. The fact that Brassey built this was discovered by Mike Chrimes' parents when they found the contract document in Chester. It was awarded by the County of Chester in 1829 *'For the building of a new bridge and forming a road at Saughall Massie in the Hundred of Wirral in the said County of Chester for the sum of two hundred pounds'*.



Saughall Massie Bridge Plaque © Brian Crossley

The bridge is now listed, is still in use without weight restrictions and has been incorporated into a conservation area. A commemorative plaque and information board have been placed at the bridge. A local primary school

really entered into the spirit of the celebrations by researching Brassey's life and achievements and putting on an excellent display.



The Brassey Tribute Stones © Brian Crossley

In the early 1840s he inherited the family estate in Bulkeley, south of Chester, from his uncle and in 1845 to commemorate his 40th birthday, the family planted an oak tree on estate land and positioned four inscribed pillars around it, secured with metal bars. Over the years the growth of the tree and the action of frost broke the tops of the stones and they lay toppled over at the foot of the tree. The family left the area many years ago and the significance of the stones was lost.



Saughall Massie Bridge Plaque Unveiling Ceremony

© Brian Crossley

However, due to the efforts Doug Haynes, the Local Councillor, they have now been recovered and erected in position adjacent to the A534 in Bulkeley Village, which is accessible to the public. An information board gives details of the stones and their significance as well as a brief description of his works. Inscriptions on the stones record Brassey's birthday, his male relations and his sons.

Both initiatives were the result of actions by local groups who are to be commended on their efforts to recognise a remarkable engineering contractor. At both events, members of the Brassey family were present and John Whittingham, a local impersonator of Brassey, was present to recount to the public some of Brassey's achievements.

75th Anniversary of the Afsluitdijk by the Editor



J J H van Mastenbroek

Steenzetters aan het werk (detail), 1931

Between 1927 and its official opening in September 1933, the Dutch constructed the Afsluitdijk (Closure-dike), running from Den Oever on Wieringen to the village of Zurich in Friesland. It was 32km long 90m wide, and had an initial height of 7.25m above sea-level. It isolated the Zuiderzee from the North sea and enabled significant land reclamation works to commence over subsequent years. The amount of material used was estimated at 23 million m³ of sand and 13.5 million m³ of till and over the years an average of around 4,000 to 5,000 workers were involved with the construction every day, relieving some of the unemployment following the Great Depression.



Map from: http://en.wikipedia.org/wiki/Zuiderzee_works



The Editor and Sheila at De Dijk Exhibition

On 28 May 1932, two years earlier than initially forecast, the Zuiderzee ceased to be as the last tidal trench of the Vlieter was closed by a final bucket of till. The IJsselmeer was born, even though it was still salty at the time. To

celebrate this achievement the Zuiderzee Museum at Enkhuisen has staged an exhibition entitled 'De Dijk' of paintings and drawings of the works in progress by the artist J H van Mastenbroek. It ran from 19 January to 3 June and was visited by your editor at Easter. Very worthwhile too, the pictures were fascinating and imaginatively mounted and provided much evidence of construction practice at the time. Unfortunately there appeared to be little additional displayed information about the works although books giving a more descriptive insight were available – regrettably in Dutch!

Bi-Centenary of John Carr 1723–1807

Information from Trevor Hodgson

Although principally known as an architect, John Carr made an important contribution to civil engineering infrastructure. There are significant engineering works in many of his “stately home” projects, but in 1761 he was appointed Surveyor of Bridges in the West Riding of Yorkshire, taking over from his father, Robert, who had died in 1760. In 1772, John Carr was appointed Surveyor for Bridges in the North Riding of Yorkshire, holding the two positions until he arranged for his brother [Robert] to officiate for him in the West Riding, and soon after resigned that post in 1773. He was responsible inter alia for many new or improved stone river bridges, most of which are still in use on important roads, especially in the Yorkshire Dales. There are several websites which give information on John Carr, including Wakefield Council's www.wakefield.gov.uk

A week of celebrations was organised at the beginning of May by a committee comprising Horbury Heritage Trust, Horbury Historical Society, Horbury Town Centre Partnership and Horbury PCC. From Saturday 5 May to 13 May an exhibition was held at St Peter's church. This comprised 100 photographs of buildings and bridges compiled by Dr Ivan Hall FSA. The exhibition included other loan items, i.e., documents, costume and other related items. Linked to the exhibition was a flower display focusing on highlights from Carr's life. Two talks were arranged. The first on the life and work of John Carr of Horbury, 1723–1807 by Ivan Hall and mid-week there was a talk on 'Horbury in the Eighteenth Century' by local historian Christine Cudworth. Finally, on Saturday 13 May, there was a concert in the church featuring flautist Sally Dover with piano accompaniment, madrigal singing and readings of diaries from the period.

Gatwick Hangar 1

by Ian Anderson

A visit was made to Gatwick in January 2007 to inspect a series of six hangars in process of being demolished at Gatwick Airport. Among them is Hangar 1, which is of interest as one of only three known prestressed concrete hangars in UK, the others being at Abingdon and London Heathrow.

Gatwick Airport was rebuilt on a new site north of the original pre-war site. Hangar 1 was built in 1958. It was the first built on the South side Maintenance Area and was to be the prestige headquarters building for Transair Limited, an early airline user at the new Gatwick. Transair merged with other airlines to form British United Airways, then British Caledonian, before being subsumed by British

Airways, who presently lease the site off British Airways Authority.



Gatwick Hangar 1 (external) © Ian Anderson

Of prestressed concrete construction, it has overall dimensions 280ft long by 110ft wide clear space. The roof comprises fourteen secondary triangular lattice concrete roof girders 8ft 8in deep at 20ft centres which span 110ft from columns at rear to the front main beams over the doors. The two top booms of each secondary beam are spaced 3ft 4in apart to eliminate the need for purlins to support the Stramit roof cladding panels. The front main beam, 10ft deep, also of prestressed concrete lattice construction, is split into two spans of 140ft, the whole supported by three main prestressed columns. The individual members of the girders look much like rectangular hollow steel sections, with which they are apparently occasionally confused. All of the members in the space frames were precast and were assembled on the floor of the hangar with mortared square butt joints. Each secondary girder was assembled under its final position and hoisted into place. At the rear of the building the lifting gear was accommodated within reinforced concrete columns of U section. The front ends of the secondaries were supported by temporary scaffolding before being built into the main beam over the doors, it being formed by fitting additional members between the ends of the secondary beams. The main beam is continuous and is prestressed with four tendons in catenary, supported by a saddle over the central column.

The original doors were of the sliding folding type, usually associated with Esavian, but not confirmed. Overall height of the hangar is 41ft, with a clear internal height of 30ft, and was designed to house either three Douglas Dakotas and two Vickers Viscounts or three Viscounts and two Vickers Vikings. Originally it was conceived with three hydraulic lifts to lower the undercarriage below floor level to bring engines to man height, although it is not known if these were built or used. Associated with the main hangar was a series of annexes using precast elements on a 6ft 8in grid to fit the 20ft grid of the hangar. One end had a single storey annexe, the other a two storey one, together with a two storey canteen and office building abutting the long rear wall, all with glazing above to the eaves, and a separate two-storey office building behind, now demolished. Architects were Clive Pascall and Peter Watson (who were also architects for the adjacent two storey engine maintenance building called Hangar 2 at 90 degrees on the south side). The engineers were Alan James Harris and J D Harris with the London Ferro-Concrete Company, the latter also making the precast units for each of the girders that were then assembled on the ground and lifted into place as construction proceeded. Main Contractors were Sir Alfred McAlpine and Son Limited.



Gatwick Hangar 1 (internal) © Ian Anderson

A study was carried out in 1992 to assess the building's condition for conversion into a vehicle maintenance facility, for which it is still in use. The external cables to the main beam had suffered deterioration over the years, leading to the 1992(?) modifications which inserted steel portal frames, the columns of which pick up the ends of the secondary triangular roof girders. The portal frames are fitted with roller shutter doors. After a load test using water had been carried out, it was decided to install a telemetry system to monitor the secondary roof girders' deflection under snow loads, and sound an alarm in the hangar if deflections become critical. A conversation with a worker during the January visit elicited the confession that an alarm had gone off that no-one including the fire brigade could find – presumably the (disused?) telemetry system! The building is still being used as a Motor Transport Maintenance Depot for British Airways, with a new offices / stores facility projecting from the middle of the door side, but possibly not for much longer.

Jericho

by R J M Carr

A recent London art manifestation – apparently tottering towers of concrete in the Annenberg Courtyard at Burlington House, Piccadilly – looked highly dangerous. However, we are assured a good structural engineer had been employed on behalf of the Royal Academy.

Jericho by artist Anselm Kiefer, Hon RA, consisted of two piles of rectangular boxes, 14 and 16.5 metres high, made from concrete units cast in the corners of old freight containers. The concrete components were arranged in tiers or floors, and the separating concrete floor pieces had a crude hole in the middle giving a view up the towers. The whole gave the impression of gutted apartment blocks demanding immediate demolition. Steel reinforcing bars poked out horizontally and the boxes were propped at crazy angles by 'books', which consisted of folded sheets of lead.

Was this in part meant to remind us of the current perilous state of the Middle East? Reference to the war-torn Middle East and the precarious state of international politics was here being pushed to the limit. Surprisingly the general public appeared to have no fear and were inspecting the twin towers at close quarters, and inside. This art installation was on display from 23 January and was scheduled to remain until 30 April 2007. Alarmingly the towers were just stacks. There was no hidden interior structure holding them up. It was a sight well worth going to see.

Similar towers have previously been erected by the Artist at Barjac in France where he has a studio, and in Milan inside a former Pirelli warehouse. The towers in Piccadilly were the first where the general public were allowed free access to inspect them at close quarters. The structures were stable and worked safely simply because of the great weights involved.

Castlefield Heritage Trail

by Paul Dunkerley

Last year after PHEW Member Paul Dunkerley published a Heritage Trail leaflet describing a walk around Castlefield in Manchester, he was pleased to discover later that market research carried out for Marketing Manchester had shown that his leaflet was one of the most used heritage trail leaflets in the north west of England.

A second edition of the leaflet has now been published by Paul and Anna Dunkerley. 10,000 copies of the leaflet were printed and are available free of charge from tourist information offices, the Museum of Science & Industry, The Great Northern leisure and retail complex, certain National Car Parks in Manchester with manned kiosks, thanks to generous sponsorship.

The Trail starts with the world's first intercity railway terminus at Liverpool Road and its Old Goods Warehouse. The tour then passes Grape Street Warehouse, the bridges at Water Street and over the River Irwell, before crossing the Bridgewater Canal basin viewing the four major railway viaducts that dominate the Castlefield skyline. There is a frequently overlooked group of five cast iron arch railway bridges, still carrying live traffic, within a stone's throw of the entrance to Deansgate Station. Turning into St Peter's Fields, sections of the Rochdale Canal and the Manchester & Salford Junction Canal can be seen, before crossing the Metrolink tracks to view the glory of the former Manchester Central Station roof, the second largest in the country. Returning via the Great Northern Warehouse and Deansgate Victorian Terrace, the walk passes the former Upper and Lower Campfield Markets as it returns to the Museum of Science & Industry.

Book Notice

***Building: 3000 Years of Design Engineering and Construction* by Bill Addis. London: Phaidon, 2007. ISBN 9780714841465, 640 pages, 800 illustrations. £45.00**

Building traces the origins of the knowledge and design skills that engineers use today when planning the construction of buildings. These include the engineering disciplines embracing the design of building structures, building services, acoustics, foundations and the building envelope, as well as fire engineering, earthquake and wind engineering and even modelling the movement of people in and around buildings. *Building* includes the key developments that have helped enlarge every aspect of the engineering designer's skills:

- materials technology
- mathematics and science
- design methods – geometric, scientific and those based on scale–model tests
- drawing – perspective, orthographic, projection and computer drafting

- calculating tools – the slide rule, graphical techniques, mechanical calculators and the computer

and also features:

- some of the many engineers who contributed to progress in building engineering, and
- some of the buildings they helped create – from Roman baths to cathedrals, fortresses, theatres, multi–storey mills, railway stations, factories, glass houses, concert halls, exhibition buildings, skyscrapers and sports stadia

Early Railways Conference

Call for Papers

The **Fourth International Early Railways Conference** is to be held in 2008 at University College, London – a most appropriate venue, as it is believed to be the site of Trevithick's public demonstration of his *Catch–Me–Who–Can* locomotive in 1808, made famous by the images of the event attributed to Thomas Rowlandson.

The conference will commence on the evening of Thursday 12 June and finish at lunchtime on Sunday 15 June 2008. The format will be similar to the previous conferences, except that the College, which is participating fully in its organisation, plans an accompanying special exhibition which will be open to the public.

Researchers into the history of early railways (defined as being *railways which were pre main–line in concept if not necessarily in date*), who would like to present their findings in 2008, are invited to indicate their intention shortly to the Conference Editorial Panel. Authors are also requested to submit a 300–word synopsis of their paper for the panel's consideration by the end of October 2007. Proposals for short (c.15–minute) presentations are also welcome.

Proposals for papers, which may be on economic, business and social history topics, as well as technical subjects, should be sent to:

Grahame Boyes, 7 Onslow Road, RICHMOND, Surrey, W10 6QH, UK

e–mail g.boyes1@btinternet.com

HEWs in the News

by Brian George

In Newsletter 111, I noted the report from *New Civil Engineer* 13 July that the Ebbw Vale to Cardiff railway line is to have passengers once more thanks to the local authorities in Wales. Now *Modern Railways* March tells us that in a valley to the west, where there is an obscure freight line, the High Court has given a ruling for the proposed Fos–y–Ffran opencast coal–field near Merthyr Tydfil. The site is intended to produce over 10 million tonnes of coal for Aberthaw power station over 12–15 years. The planning application that had had to go so far was based on haulage by rail, revitalising the line from Cwmbargoed, south to the junction at Ystrad Mynach for Cardiff onwards to Aberthaw.

According to *New Civil Engineer* 8 February, the South East Region is expected to back plans for a new £135M rail

service linking Oxford and Milton Keynes. The link, to be known as East–West Rail, is being promoted by a consortium of local authorities in the South East and East Anglia that plans to revive an existing freight line, abandoned in the 1990s, belonging to Network Rail. The route would run from Oxford in the west to Cambridge in the east, with an additional branch line to Aylesbury. The first step, costing £135m will be the restoration of the Oxford to Milton Keynes backbone. Local authorities in the area are planning for rapid growth in the next 20 years, but the corridor between Oxford and Cambridge is poorly served by public transport.

Virgin Cross Country is to run direct trains to the West Somerset Railway's station at Bishops Lydeard following last year's upgrade of the link with Network Rail at Norton Fitzwarren. Using Voyager DEMUs, trains will leave Bristol Temple Meads at 0746 on Saturday March 17 and 24 and 0945 on Sunday March 18 and 24, calling at Weston–super–Mare and Taunton. Throughout each weekend the Voyager will then run a shuttle service between Taunton and Bishops Lydeard. The dates coincide with the WSR's spring steam gala weekend and engineering works on NR lines that leaves VXC with a spare Voyager and crew.

The *Coventry Times* 14 February related the history of Coat of Arms Bridge HEW 1030. The bridge was the by–product of the increasing popularity of the railways in the early Victorian times. On 9 April 1838 the first main line through Coventry was opened which ran from Birmingham to Rugby and later to London. Two years later plans were drawn up for an eight and a half miles branch line to join Coventry with Warwick and Leamington. This line passed over a road which runs along the south side of War Memorial Park which was formerly called Cock's Lane and traversed Styvechale Common, land owned by the Gregory family, lords of the manor since the sixteenth century.

Local residents were not the only obstacle the branch line railway needed to overcome. The Gregory family also had to be appeased as it was their land over which the track and a bridge would have to run. Seven and a half acres of land and two cottages would have to be purchased and Mr Gregory was paid £8,000 for these. In addition the Gregory family insisted that their coat of arms be displayed as a permanent feature on the bridge and to this day a large stone plaque is prominent on the parapet on each side. The attractive bridge was finally built in 1844 using red sandstone. It was widened in 1853 and stands today.

Exeter Canal, HEW 529, is currently blocked at the site of the former by–pass at Countess Wear because refurbishment is taking place to the swing bridge, built when the bypass was constructed in 1936. When the Panel visited Exeter in 2002 the maritime museum exhibits had been dispersed elsewhere and since then there has been much discussion about the modernisation of the buildings around the basin built by James Green in 1830. *Express & Echo* 13 February described the old electricity power station built in 1903, standing in Haven Road adjacent to the basin, made redundant in 1955. Now, specialist developers, the Millhouse Partnership, have already begun work on its plans to turn the building into art galleries, a 10–bedroom hotel and a delicatessen–style restaurant. It is also laying the foundations for seven

apartments at the eastern end of the complex where the giant chimney once stood.

Also reported on 22 February was the council's approval to two new buildings on the side of the basin by developers Sutton Harbour Property and Regeneration Limited, and changes to the former warehouses constructed by James Green. These rather drab warehouses should not be confused with the 1835 warehouses, HEW 1395, on the quay, which were modernised as offices some years ago. Meanwhile, on 27 February the *Express & Echo* reported that the Grade I listed Custom House of 1681, which has lain idle for many years, is due to be transformed into offices for the city council's archaeological field unit, starting on 12 March, and to be finished in August. This lies closer to the quay and was built when the lighter canal was extended towards Topsham by Richard Hurd, *inginoor*, and before its first upgrade to a ship canal in 1701.

An appeal has been launched by the Welsh Highland Railway for funding to complete the restoration of the railway from Caernarfon to Porthmadog. The first half from Caernarfon to Rhyd Ddu was fully restored in 2003 and opened by HRH The Prince of Wales. Track is now being relaid on the section from Rhyd Ddu to Beddgelertt, but the job is not yet finished as it has yet to cross the roaring River Glaslyn and along a steep, wooded gorge, partly in tunnel, through scenic flatland to Pont Croesor and enter Porthmadog, by crossing the Cambrian Coast Line to pass through the streets and re–connect with the Ffestiniog Railway. This latter railway has a deserved reputation and the creation of a 2ft gauge railway 40 miles long is now well in sight. Donations should be sent to the Administrator, WHR Fund, Harbour Station, Porthmadog, Gwynedd, LL49 9NF.

A Sustrans note of April concerns the development of the one–time Midland Railway route south from Bath towards Bournemouth, which led from the centre of the city over the Western Region railway line through Oldfield Park into tunnel. The Two Tunnels project will travel through the Combe Down ridge, using the Devonshire and Combe Down tunnels, which are some 350 metres and 1700 metres in length, into the Midford Brook valley. There is already cycle route 4 along the Kennet and Avon Canal path and this is joined near Dundas aqueduct by a short length of the Somerset Coal Canal whose path provides the cycle route 24 to Midford. The Colliers Way from Midford to Wellow and towards Radstock, is already along another part of the Midland Railway line as part of the National Cycle Network route 24. The Two Tunnels Project is being promoted by the Two Tunnels Group supported by Bath and North East Somerset District Council and Sustrans.

The *Times* 20 February has drawn attention to the need for rescue work on the Corinthian Diolkos, the unique stone–paved slipway that was first built around 600BC, enabling Greek warships and merchantmen to be moved overland across the Isthmus of Corinth from sea to sea, which is progressively crumbling into the water at the western end. The Diolkos ran across the Isthmus of Corinth as a short cut close to the modern Corinth Canal and has been falling into the sea as the result of erosion and neglect. Sophia Loverdou has been campaigning for the Greek Ministry of

Culture to take action to safeguard this internationally important historic engineering work.

In the December *Newsletter No. 112* I mentioned the prospective plans to revive the Bow Back Rivers and the construction of a new £15m Prescott Lock and flood construction structure close to Three Mills to be operating by December 2007. However, *NCE* 18 January reported funding difficulties delaying this important Olympic Park project, but now in *NCE* 1 March it is reported that Ministers have finally approved plans for this lock and flood control system to allow barges to travel from the River Thames to London's Olympic Park. Construction is now due to start in late March and finish in August 2008. The main structure will consist of a 62m long by 8m wide tidal lock, two 8m wide radial flood-gates and a bypass weir. Providing access for 350 tonne barges, the lock will help the Olympic delivery authority to meet its aspirations to transport 50% of construction materials by sustainable means. An artist's impression of how the new lock and water control gates should look is contained in *Waterways* for May 2007.

The Inland Waterways Association *Bulletin* for February has reported that a £500,000 traffic survey commissioned by Swindon Borough Council funded from central government, is studying the feasibility of restoring the Wilts and Berks Canal through Swindon as part of the traffic options. This would mean closing some existing roads to enable the canal to be restored largely along its original line, for the construction of a marina in Swindon, and for the canal to return once again to the centre of the town.

Middlewich Aqueduct, which carries the Middlewich Branch of the Shropshire Union Canal, HEW 1202, over the A530 road, was struck by a skip lorry on 25 January. The impact resulted in the spandrel wall above the arch ring being lifted approximately 200mm upwards and 50mm outwards. This wall was now unstable and required urgent repair. Navigation on the canal and visitors on the towing path were unaffected and the waterway remained open. However, the A530 road was closed and remained so until works were completed to this Grade II listed structure over a period of about 4 weeks.

In February, the Association of Leading Visitor Attractions confirmed that the Falkirk Wheel on the Forth & Clyde Canal had established itself as one of Scotland's top visitor attractions. The world's only rotating boat-lift was visited by 437,399 people, a 48% increase on 2005, according to figures published by the Association. British Waterways has been concerned that the Wheel and its associated visitor centre should at least break-even during each year, and this increase in visitor numbers will help to achieve that.

A 4636 ton cargo vessel—the Portuguese registered *Tanja*—arrived at Salford Quays along the Manchester Ship Canal, from the Baltic, on 29 March with the first of a regular consignment of timber destined for the fitted kitchen trade—and the largest vessel to go through Mode Wheel Lock near the end of the Ship Navigation, and into the Quays for many years. The goods were unloaded at a quay within about 100 metres of the factory taking delivery—providing

another demonstration of the cost and energy-efficient transport that waterways can provide.

The Heritage Lottery Fund has announced a grant of £699,500 to Newport City Council, working in partnership with Monmouthshire, Brecon and Abergavenny Canal Trust, for the restoration of part of the Cefn flight of Fourteen Locks on the Crumlin Arm of the Monmouthshire Canal. The grant will enable the restoration of the lock gates in the top two waterway structures, each of which contains a pair of locks, which form part of the Cefn flight at Rogerstone. Work will also be undertaken to repair and re-point stonework as well as restore the ponds and pounds linked to the locks. The flight of fourteen locks was built in 1799 and is regarded as one of Britain's most remarkable lock systems. It rises 168 feet in about half a mile. A photograph of one of the staircase pairs at the top of the Cefn Lock Flight which will be restored under the HLF grant is shown in *Waterways* May 2007.

Northern Builder, vol.18, no.1, 2007 has a report by the Northern Ireland Environment and Heritage Service that says that in the last year it had been involved with bank refurbishment and a new opening mechanism for the Victoria Lock, Newry Canal (HEW 1870), and refurbishment of Lock 3 Lagan Canal (HEW 2117). A photograph showed a masonry inverted arch base and walls of slabs of rock laid horizontally.

Readers of this *Newsletter* are asked, whenever they read of something which they think might deserve mention here, to send it, or a copy, by about the week before the deadline, to:

Mr A B George BSc FICE
8 Clevedon Close
EXETER
Devon EX4 6HQ

Editor's Note

May I repeat my regular appeal for suitable material for inclusion. Contributions, which are both informative and appeal for further information, or publicise forthcoming conferences or the availability of recent books, etc., are particularly welcome. Contributions should be sent to the Editor **by the end of July 2007**.

Contributions on disk are acceptable (Word format). A printed copy will also be required. Diagrams or photographs and/or illustrations may be included.

Dr R A Otter BSc PhD CEng MICE
54 Southbrook Road
HAVANT
Hampshire PO9 1RN

robert.otter@port.ac.uk

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