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Allford Hall Monaghan Morris' £4.5 million Jubilee School in Lambeth, south London, was the backdrop for the launch of Architecture Week on Friday. The project, due for completion by September, is designed to set benchmarks for the building of inner-city primary schools. The design includes innovative multi-levelled play areas and bigger classrooms than the government's recommended minimum. The architect hopes it will provide a model for sustainability, with a grassed roof and the use of natural ventilation. For details of Architecture Week events visit www.architectureweek.org.uk

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'The Angel of the North already has the status of the Statue of Liberty or the Eiffel Tower. It used to be reviled as the Gateshead Flasher; now people call it Gabriel.'

Simon Clugston, programme director of Gateshead's new Music Centre. *Guardian*, 24.6.02

'There is a huge challenge for us to make the city more attractive. It's not enough just to do something a bit clever in terms of construction; it has got to be something really beautiful to live in.'

Peabody Trust director Dickon Robinson. *Guardian*, 19.6.02



news

BUILDING FOR LIFE ACCOLADE

Proctor Matthews Architects has won CABE's first 'Building for Life Award', for the best development by a volume house builder. The practice won the prize for the 6-25 Mile End Road development in east London, which comprises six houses, 49 flats and 10 maisonettes.

RIBA'S HOUSE PROUD

The RIBA was tonight expected to announce its Housing Design Awards at an exhibition in the Institute's Florence Hall. The awards, presented by CABE chief Jon Rouse, were expected to include Burrell Foley Fisher's New Pym House in London's Lambeth, already a winner of a full RIBA award (AJ 13.6.02). +

URBAN DESIGN FIRST

The Urban Design Group North West will hold its first two-day conference in Liverpool at the end of the summer at the Crowne Plaza Hotel, next to the Royal Liver Building. The conference, themed 'Creating Successful 21st Century Cities', will be held on 3-4 September. For further details call 0151 236 6605.

THAMES STRATEGY

Minister for local government and the regions Nick Raynsford has launched a planning policy for a stretch of the River Thames in west London. The document - 'The Thames Strategy, Kew to Chelsea' - outlines the planning processes that will be used in the future to 'enhance one of the capital's greatest assets'. +



Livingstone London Plan 'unrealistic'

London mayor Ken Livingstone's 20-year vision for the capital, the £100 billion London Plan, could prove unachievable, according to his critics.

Livingstone launched the draft plan last week, which sets out a major programme of infrastructure, housing and office developments for the city (see page 6). But critics have claimed that without the political will and financial resources, it could be impossible to implement.

Tory Greater London Assembly member Tony Arbour, who chaired the scrutiny committee which followed the progress of the plan, criticised it as 'unrealistic'. And he said the high targets for affordable housing would be a disincentive for developers - the plan relies heavily on private investment to fund the programme of work. 'Ken may see himself as a Sir Christopher Wren,' he said, 'but he doesn't have a king for a patron as Wren did. A lot of it is motherhood and apple pie. I'm not sure who in London will bring the plan into reality.'

Business lobby group London First agreed that deliverability was the main worry - particularly affordable housing. And CABE chief executive Jon Rouse, though widely applauding the objectives set out, agreed that 'deliverability is the key'.

However, deputy mayor Nicky Gavron defended the plan against the criticisms. Gavron told the AJ that fears that the financial resources would not be available to implement the plan were unfounded. Urgent discussions are under way with planning minister Lord Rooker for an extra £150 million a year, she said, adding that it was in central government's own interest to back the plan. 'I expect central government support to be there.'

Gavron said she was confident that developers would invest in the housing programme: 'I can't imagine that developers, the construction and investment industries would throw away the massive opportunities that will be presented over the next few years.' And she added that delivery mechanisms were spelt out in the plan, principally through partnerships between the GLA and its family organisations, Transport for London and the London Development Agency. And the mayor will use his powers to influence the boroughs through their UDPs, she said. 'It is such an exciting time for architects,' Gavron added. And she pledged that quality of design would be a central priority in the implementation of the vision.

Zoë Blackler

27 June 2002

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architecture turn
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'Calatrava's extraordinary architecture is problematic in one sense, because to experience it is to find one word turning over and over in the mind: beautiful.'

Jay Merrick visits Calatrava's new Museum of Science in Valencia. *Independent*, 24.6.02

'We are extremely concerned about the secret nature of the Mayor's decision-making. He appears to be totally disrespectful to community groups who may hold views in opposition to his.'

Jill Cove, Spitalfields Community Association. *Evening Standard*, 18.6.02

'You know, we do 2,000 drawings of everything, but after 2,000 drawings, there is always still something you can't get. There is always an element of surprise.'

Zaha Hadid. *Independent*, 20.6.02

+ FOR A DAILY NEWS FEED ON THE LATEST ARCHITECTURAL STORIES GO TO AJPLUS.CO.UK



Nicholas Grimshaw & Partners has submitted a planning application for its radically redesigned £350 million Minerva Tower on St Botolph's Street in London's Aldgate. The new 43-storey, 217m speculative skyscraper is substantially taller than the original 159m scheme (AJ 13.9.01). Floor space has not increased greatly, remaining at a proposed 100,000m². The scheme is less bulky than the original design, though the slightly misleading image, left, conceals the true scale of the building, which the architects describe as like 'four open books'. It will also include ground floor retail space and a roof top garden. Timothy Garnham, director of developers Minerva, said he anticipated opposition to the revised scheme, which he said 'would not go unnoticed'. However, CABE has praised the tower's 'elegant architecture'.

Palaces quango promises fight against tall buildings

Historic Royal Palaces (HRP), the quango that runs many major landmarks in London, has pledged to join English Heritage in its fight against skyscrapers.

The organisation – which manages the Tower of London and Kensington Palace among others – has adopted a new policy to oppose all tall buildings that 'endanger' the strategic views of its monuments. The stance amounts to a blanket opposition to the many tower proposals under consideration in the capital, including Nicholas Grimshaw & Partners' 217m St Botolph's House unveiled last week (see picture, above).

The new policy coincides with the publication of the draft London Plan, in which mayor Ken Livingstone reiterates his support for building tall. According to HRP, it and the mayor's positions are irreconcilable. HRP also claims the large number of tall buildings being backed by both the mayor and by CABE has forced it to assert its hostility.

A member of the conservation department at HRP, Natasha Woollard, said: 'Livingstone has his agenda and we have ours. We are determined to oppose his policy because we are worried about the impact these buildings will have on our con-

servation areas.' She added that HRP now opposes many of the planned buildings in London, in particular Renzo Piano's 60-storey London Bridge Tower. The secretary of state is currently deciding whether to call in the 'shard of glass' for public inquiry. Woollard said: 'This will impact upon the view corridors of the Tower of London and we want to stop it going up.'

She also warned: 'There is no geographic limit on where we will object to new buildings. For example, even though the Guy's and St Thomas' Hospital development in Waterloo is a long way from the Tower, we oppose it because it will spoil the view.' HRP has additional influence as a consultant in the planning process because of its responsibility for the Tower of London, a designated World Heritage Site.

The Corporation of London, the planning authority most affected by the new policy, said: 'We have had to work with [HRP] on proposed projects such as Grimshaw's £70 million St Botolph's House development because of the UNESCO status of the Tower of London.'

Woollard denied rumours that HRP had entered into a formal collaboration with English Heritage, but admitted they were looking to work together with increasing regularity.

Ed Dorrell

ARCHITECTURE WEEK REVIEW

Rumours that this year's Architecture Week could be the last have been dismissed as 'nonsense' by those holding the purse strings. The RIBA and the Arts Council both stated that the week had grown in popularity in the past two years and that there were no plans to kill it off. Fergus Muir, head of architecture at the Department of Culture, Media and Sport, said there will be a review at the end of this year's event but he added that this happened every year.

HANIKA EXHIBITION AT RIBA

Friends, family and colleagues of the late Nick de Paula Hanika, partner in Price & Myers Consulting Engineers, have organised a exhibition of his work to be held at the RIBA on 5 and 6 July.

GONG FOR MOGGRIDGE

Hal Moggridge OBE, a past president of the Landscape Institute, has won the Landscape Institute Medal. It was presented to him by current president David Jarvis at the Institute's annual dinner on 14 June. Moggridge was also chair of the institute's International Committee from 1981-1992.

Q&A

53%

... of voters in a poll on the AJ's website say none of the nine projects on the AJ's shortlist should win the Stirling Prize. Of those making a positive choice, 13 per cent voted for Munkenbeck + Marshall's Mount Stuart Visitor Centre. Respondents: 968

This week's question:
Will Ken Livingstone's London Plan ever come to fruition?
+ Register your view at
www.ajplus.co.uk

BUNGALOWS 'TOP CHOICE'

A new MORI poll, commissioned by CABE, has revealed that bungalows are the most sought-after homes in England. The two most desirable housing types were the bungalow at 30 per cent and the village house at 29 per cent. +

WALTHAMSTOW REVAMP

BDP has submitted plans to the London Borough of Waltham Forest for the £1.3 million regeneration of Walthamstow town square and gardens. The project – part of a £50 million redevelopment of the area – will upgrade and redesign the thoroughfare between the station and the main retail area. +

PRP LANDS CHINA CONTRACT

The Chinese government has appointed PRP Architects to masterplan a 42,000m² residential development near Shanghai following a fact-finding mission to China in May. It will work on the design with China's Design Institute on the project. +

CASTLES IN THE SAND

RIBA Northern Region has invited architects and construction professionals to take part – with local children – in a sandcastle building competition. The event, held to raise money for a local children's charity, is on 12 July at Druridge Bay. For further details call 0191 232 3741. +

LSE PLEA FOR BUILDING TALL

A London School of Economics report, 'Tall buildings: Vision of the Future or Victims of the Past?', says that to remain a 'competitive world city' London needs to 'radically rethink its planning policies' and accept more tall buildings. +



The Richard Rogers Partnership got into the swing of Architecture Week by inviting children from local schools to take part in a workshop in the courtyard of the practice's Hammersmith studio. The children made an 'ideal room' under the guidance of RRP's in-house modelshop team. The practice also offered guided tours of the studio to the general public and a lecture on sustainability.

£100 billion London Plan puts focus on intensifying land use

Mayor Ken Livingstone has outlined his comprehensive plan for development of the entire capital in the London Plan, published this week. It promotes a massive programme of investment, estimated at £100 billion, in transport infrastructure, office space and housing.

The draft plan, which is based on predictions of major economic and population growth, attempts to guide what Livingstone sees as the inevitable development of London. The plan proposes a more intense use of available land, higher densities and the re-use of brownfield sites.

Key to the plan is the 'intensification' of development, both within the city centre and suburban town centres. It identifies key areas for development – in central London and the Isle of Dogs – and additional areas of opportunity including Paddington, Waterloo, London Bridge, Stratford, Elephant and Castle and Croydon.

In order to meet the predictions that 700,000 more people would be living in London by 2016 – equal to absorbing a city the size of Leeds – the



Livingstone: increased density key to growth

plan proposes 6.4-8.6 million m² of extra office space by 2016. It calls for 23,000 new homes to be built per year, at least 50 per cent of which will be affordable.

However, with its commitment to protection of the Green Belt and ban on construction on open green space, the proposals rely on a major increase in densities. In certain areas, this will be through building tall. Livingstone has identified key areas for tall buildings at transport interchanges including Paddington, London Bridge and Croydon.

Through Crossrail 1 and Crossrail 2, trams and improved pedestrian and cycle links, the plan aims to improve transport infrastructure. And it intends to restrict the use of cars through congestion charges.

Livingstone is also committed to affordable housing and the plan insists on a target of 50 per cent – although it admits more public subsidy will be needed.

Livingstone has consistently spoken out in favour of tall buildings, which he believes are crucial to the aim of increasing population density and the plan further outlines the planning policies that he will use to encourage development. +

Ed Dorrell

INTENSIFICATION – DESIGN FOR A COMPACT CITY

According to the draft plan, the mayor and boroughs will encourage, support and require developments to:

- Maximise the potential of sites
- Create or enhance the public realm
- Provide or enhance a mix of uses
- Be accessible, usable and permeable for all users
- Be sustainable, durable and adaptable
- Be safe for occupants and passers-by
- Respect local context and communities
- Be inspiring, exciting, delighting, practical and legible
- Connect with the natural environment

The draft plan states that these principles should be used in assessing planning applications in drawing up area development frameworks and UDP policies. Urban design statements showing how they have been incorporated should be submitted as part of proposals that have significant design impacts.

PROMOTING WORLD-CLASS ARCHITECTURE AND DESIGN

The draft London Plan states that the mayor will seek to promote the world-class design the capital needs, by collaborating with partners, to:

- Prepare design guidelines for London
- Prepare supplementary guidance on an inclusive and accessible environment
- Prepare supplementary guidance on sustainable design and construction
- Produce a public realm strategy for London to improve the look and feel of London's streets and spaces
- Promote improvements to London's public realm through the mayor's 100 Spaces for London programme
- Promote community involvement, competitive selection of designers and design-led change in key locations through the involvement of the GLA Architecture and Urbanism Unit

TALL AND LARGE-SCALE BUILDINGS – LOCATION, DESIGN AND IMPACT

The report says tall buildings will be particularly appropriate where they create attractive landmarks enhancing London's character or help to create a coherent location for economic clusters.

All large-scale buildings, including tall buildings, should be of the highest quality design and in particular:

- Be appropriate in terms of their impact on managed views and historic monuments
- Be suited to their wider context in terms of proportion and composition and in terms of their relationship to other buildings
- Be attractive city elements as viewed from all angles and where appropriate contribute to an interesting skyline
- Illustrate exemplary standards of sustainable construction and resource management
- Be appropriate to the transport capacity to the local area
- Contain a mix of uses with public access such as ground floor retail and cafes

RIBA wins Commons hearing to improve school architecture

The RIBA has secured a hearing with the House of Commons Education Select Committee to argue for a commitment to good architecture within schools. It is the first time the institute has won the right to speak at such a meeting.

The RIBA delegates, president Paul Hyett and chief executive Richard Hastilow, will tell the committee there should be more impetus put on the standard of design of schools. And they will argue that the built environment in education has a significant impact on levels of achievement by pupils.

Hyett and Hastilow hope the outcome of this 'oral submission' – due for early autumn – will be a full inquiry by the committee into the effect of building design on standards in education.

They will also take the opportunity to argue for more design in the national curriculum in order to enthuse young people in the design process and increase intake of architecture courses.

The hearing was first mooted when Paul Hyett took Barry Sheerman MP, chair of the committee, on a walkabout in the City of London in April (AJ 25.4.02). The guided tour of exemplary modern architecture, an effort to demonstrate the successes of the British profession, followed the MP's controversial comment that 'all architects ought to be shot'.

The RIBA's head of government relations,

Jonathan Labrey, said he was 'delighted' about the breakthrough: 'We are really pleased to have the opportunity to get out argument to decision-makers in the House of Commons.'

Ed Dorrell

Group pledges to promote innovation in product design

A group with the aim of bringing architects and product designers closer together was launched at the RIBA in London on Monday.

Called Product Innovation in Architecture (PIA), its stated aim is 'to encourage and facilitate innovative product development in architecture'. Membership of the group is open to architects working in practice or in industry. It is also open to manufacturers committed to innovative development and to those interested in how architects and manufacturers can collaborate to improve materials and design.

The PIA aims to operate through cluster groups organised around materials and processes that can exchange ideas within themselves and with other groups. It will also organise visits and promote members' products and innovations.

The launch was introduced by RIBA president-elect George Ferguson, who said: 'This is exactly the sort of development that I want to see under my presidency.'

For further information contact PIA on 020 7377 2090 or e-mail info@piaforum.org

£200M SWANSEA VISION

The Welsh Development Agency has unveiled a new £200 million masterplan for the Swansea waterfront, by RPS Planning, Transport and Environment. It sets out designs to change the area into an 'innovation village'.

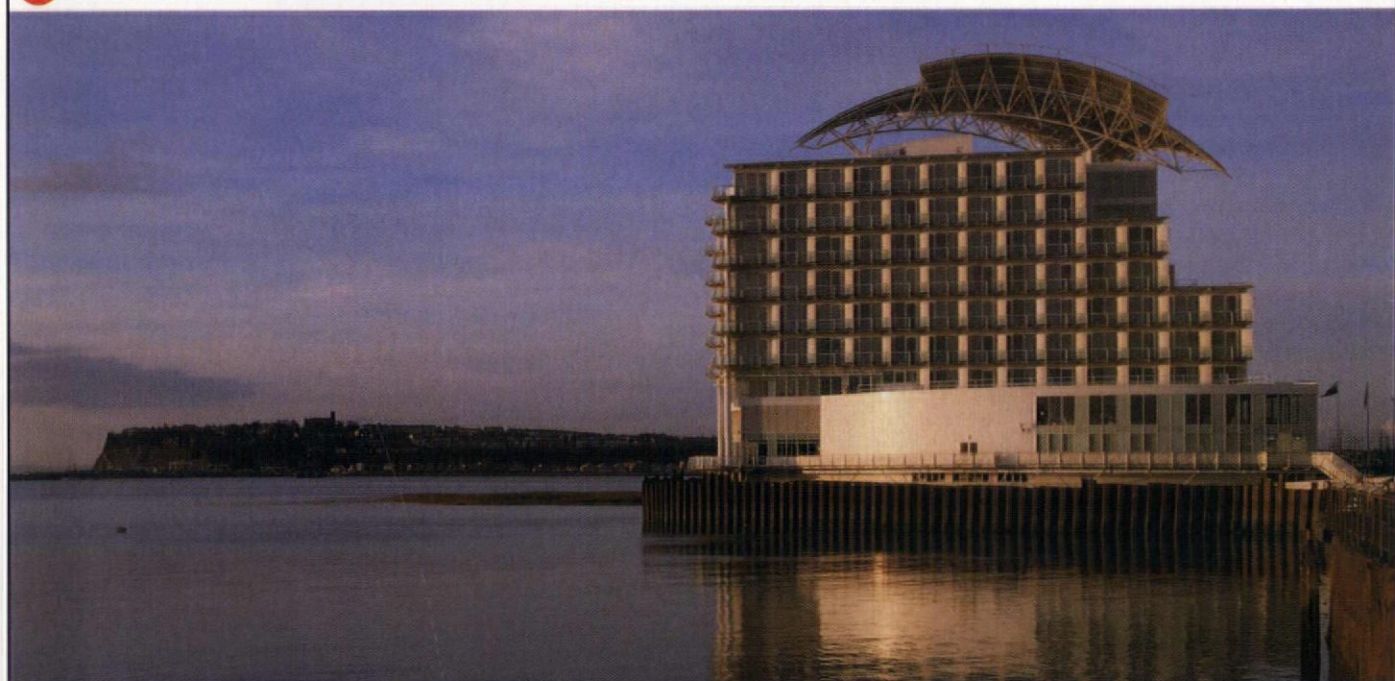
£5K SITE ACCESS PRIZE

Janet Street-Porter has launched a new Arts Council initiative to reward the best public access to a construction site. The Building Sights Award, worth £5,000, is open to any building, private or public, which was completed or under construction in 2002. Application forms can be downloaded from www.buildingsights.org.uk

BEST IN HOTEL DESIGN

The European Hotel Design Awards will take place in conjunction with the AJ/Tim Battle & Associates' hotel design conference on 29 and 30 October at The Savoy in London. For entry forms for the awards call 01322 660070. To register for the conference, entitled 'Hip or Hype: does design really matter to hotels?' call 020 7505 6600.

aj hotels offer



The Architects' Journal has teamed up with Rocco Forte Hotels to bring you the chance to stay in top-notch hotels across Britain as part of a summer celebration – for a fraction of the normal price. Simply quote *The Architects' Journal* when you book at any of the four participating five-star hotels.

The first in our series of offers is for the St David's Hotel & Spa (above), designed by Patrick Davies Architecture, on Cardiff's Millennium Waterfront. Olga Polizzi – Sir Rocco Forte's sister – was behind the hotel's minimalist interior design. Normally it costs up to £365 per night for a suite with a balcony overlooking the bay, but thanks to the AJ you and your partner can take a room for just £75 per

person Sunday to Thursday, or £85 on Fridays and Saturdays. The offer is based on two sharing (a single supplement of £30 applies) and runs from 1 July to 12 September, subject to availability.

For that, readers get a full Welsh breakfast plus use of the hotel's health spa, with an upgrade to a suite or a Mastersuite with a lounge and two balconies subject to availability.

The hotel has a swimming pool, 14 treatment rooms for therapies from China, Bali, India and Europe, and the award-winning Tides Marco Pierre White Restaurant. For more details or to book, call hotel reservations on 02920 454045 quoting *The Architects' Journal*. Watch out for other offers in the series throughout the summer.



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vital statistics

- The UK construction industry is expected to grow by 3.7 per cent in 2002, continuing at 3.8 per cent in 2003 with the increase slowing to 2.9 per cent in 2004, according to Construction Products Association forecasts.
- Homebuyers spend on average just 18 minutes choosing a new home, compared with 22 minutes for a new item of clothing. The Fish4homes.co.uk research found that people are more likely to look twice at clothes than take a second viewing of a property.
- The 11 September terrorist attacks will cost property insurers £13.55 billion (\$20.3 billion), an increase on the original forecast of £11.08 billion (\$16.6 billion), US research company The Insurance Service Office claims.
- British Cost Industry Service research shows that wage rates in construction jumped by 6.7 per cent in the first quarter of 2002.

Clare Melhuish reviews... differing opinions on the house of the future

The very idea of 'the future house' is premised on an essentially linear idea of history in which the future, shaped by technology, must grow ever more distant from the past.

But for Sarah Wigglesworth, 'the e-revolution has not really altered people's lives... their basic physical desires within the home'. She questioned how far 'the house can be a legitimate vehicle for experimentation', suggesting that most architects' efforts in that direction could only take place in the realm of mass housing, where 'you're never dealing with a user' and inevitably face accusations of 'experimenting with other people's lives'. Or, alternatively, in projects intended for personal occupation, such as her own 'sustainable' Straw Bale house. For individual clients, for whom property is an investment, there is little incentive to experiment. In any case, Wigglesworth says, 'we don't live very differently' and the house in its received form 'doesn't necessarily need revisiting'.

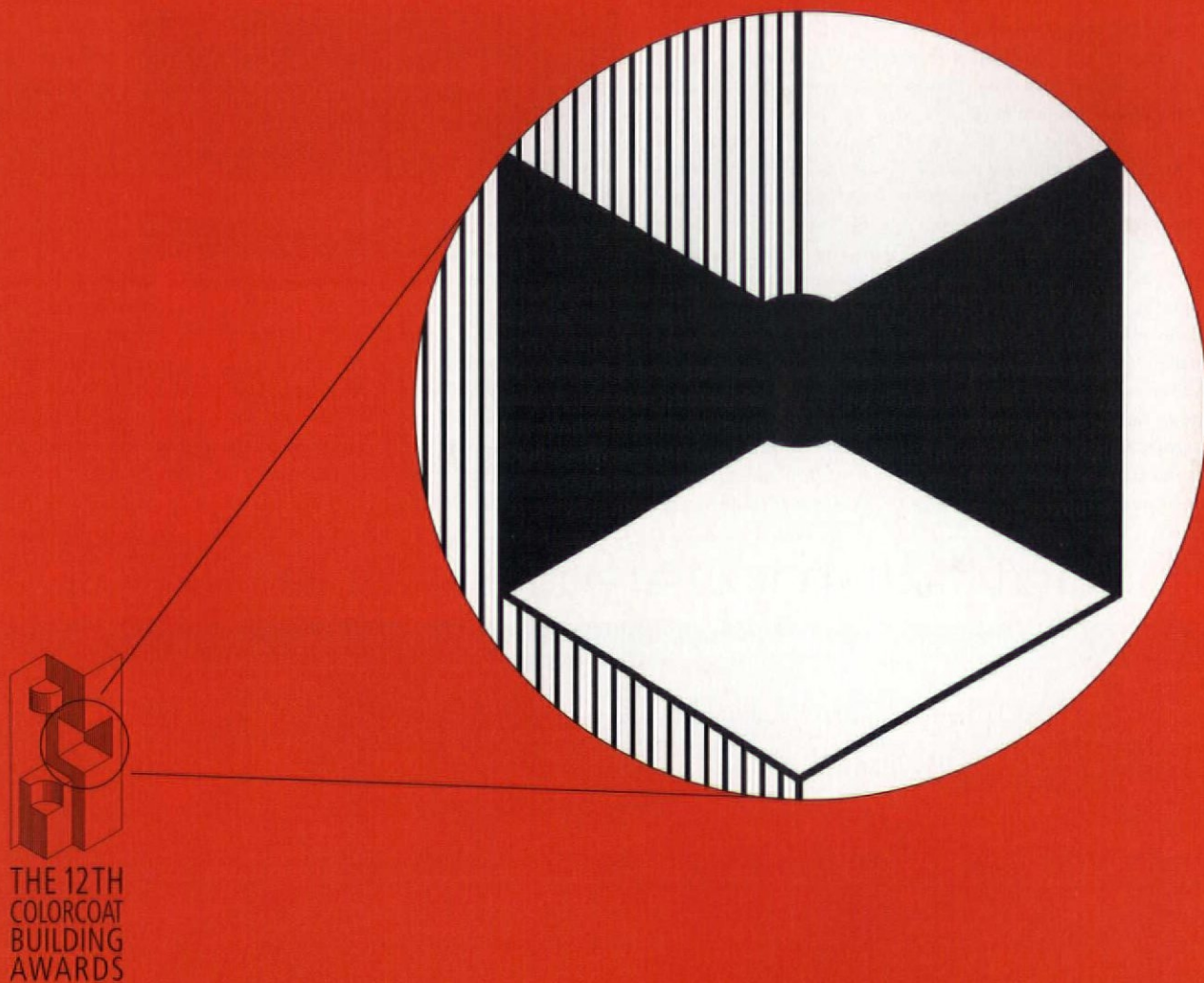
By contrast, Tom Verebes of OceanD took the platform to declare the end of 'the century of endless repetition', the pressing need for a 'revision of the generic products of Modernism' and the dawn of a new era of 'parametric variation', where digital design offers 'numerically-controlled free-form constructs', realisable through 'iterative modes of production' to accommodate different lifestyles. He said: 'We have a fundamental responsibility to

rethink domestic space,' in view of the dismal state of present-day house design and production.

The third speaker, David Adjaye, defined the contemporary house as 'the vessel that's left over' when the industrial designers have finished their work on the technology that goes into it. He traced the beginning of the erosion of the architect's role back to the Modern Movement and its invention of kitchen and WC, with the 'incredible impact on our lives' that had. For Adjaye, the house as a vessel means a fundamental reassessment of the importance of functional issues, and a liberation of the architect to address the emotional dimension of architecture: 'What kind of house do we want in emotional terms?' he asked.

Sadly, it was Verebes' digital presentation that broke down, leaving the rhetoric high and dry, without any convincing manifestation in architectural terms. The use of 158 controllable light fittings in a reworking of a domestic space wasn't a particularly impressive manifesto for 'responsivity of environment' as a principle of the new architecture – architecture as 'an interconnected set of temporal phenomena'. Wigglesworth and Adjaye's work came across as stronger statements of material culture. Yet all three presentations were lacking in any real appraisal or analysis of the cultural conditions of our time – or even an acknowledgement of the architect's need for a framework within which to do so. To talk about the future house we need to think about future society.

'The Future House' debate took place at the ICA. Next at the ICA: 'Hal Foster on Postmodernism's Aftermath', with Andrew Renton and Jonathan Glancey, 4 July, 6.45pm

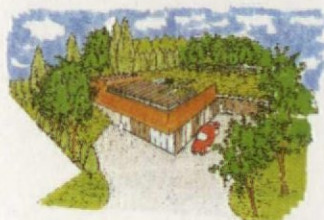


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Call 0207 534 0800 or 01633 464857 for the show of the year.

At Le Meridien Grosvenor House Hotel, Park Lane, London. 9th July 2002.



De Metz Architects has submitted a planning application for this design for a house in Oakham Road in Totteridge, north London. The project aims to form a low-profile building with only the top storey above ground level and a private courtyard as the focal point. It aims for minimal environmental impact through a grassed roof and the use of solar power.

MASTERPLAN FROM RUMMEY Rummey Design Associates has produced an £18.8 million masterplan for the regeneration of the former Betteshanger Colliery site in Kent. The plan, for English Partnerships, includes a mixed commercial site, a community centre and an educational facility.

CABE calls on Brighton to reject KSS's West Pier plan

CABE has called on Brighton's planners to deny permission for KSS Sport and Leisure Design's £34 million revamp of the Grade I-listed West Pier, unless the design changes significantly.

The project, to refurbish the existing structure, also includes plans for the construction of several glazed retail buildings designed to improve the long-term 'financial viability' of the pier.

CABE's design review committee said the practice's solution was 'not a success'. It said: 'At the moment we feel that the design is being pulled in too many different directions, not just because it is a difficult site, but

also because of the emotive subject of the refurbishment of the pier. We think there have been too many unsuccessful compromises in the design.'

CABE also highlighted a 'failure' to blend the new buildings in with the distinctiveness of the Brighton waterfront. The committee said: 'There is no sense that the new buildings are contributing

to this site or that they are reflecting the design of the existing buildings.'

CABE insisted, however, that it did not oppose the scheme outright, but that it wanted to see significant design improvements before it got the go-ahead. 'While we fully support the aims and principles of the project and are mindful that the refurbishment of the pier is the goal of the scheme, we do not think that planning permission should be granted until these issues are resolved,' the committee added.

James Budd, an associate at KSS, said the critical report had not dampened the practice's commitment to the project. 'We are looking on the comments in a positive way and are talking to the local borough over the changes we need to

make. Most of the project's fundamentals will remain and there is no problem with the massing and the bulking,' he said.

'We are undergoing a revision exercise over the next few weeks and we will be able to publish the changes very soon,' Budd added.

Ed Dorrell



KSS' design for the West Pier failed to satisfy CABE

aj football focus: acl league

WEEK 9

Calford Seadon	11	v	9	Sidell Gibson
Watkins Gray	6	v	18	SHCA
Systech	24	v	11	Fitzsimon
AYH	7	v	4	Alan Conisbee
Buro Four	1	v	7	WATG
HOK	1	v	16	RHWL

WEEK 10

Calford Seadon	13	v	2	Fitzsimon
Sidell Gibson	6	v	9	NGP
Systech	0	v	14	RHWL
AYH	3	v	9	WATG
Buro Four	3	v	1	Alan Conisbee
HOK	0	v	10	SHCA

WEEK 11

Fitzsimon	0	v	10	WATG
Calford Seadon	5	v	7	RHWL
Watkins Gray	0	v	10	NGP
Systech	0	v	17	Sidell Gibson
AYH	3	v	15	SHCA
HOK	6	v	6	Alan Conisbee

WEEK 12

Calford Seadon	8	v	21	SHCA
HOK	7	v	11	AYH
RHWL	8	v	3	Alan Conisbee
Watkins Gray	3	v	12	Fitzsimon
Buro Four	9	v	14	NGP
Sidell Gibson	6	v	4	WATG

WEEK 13

Calford Seadon	8	v	6	NGP
Buro Four	5	v	12	RHWL
Systech	11	v	10	WATG
SHCA	5	v	5	Alan Conisbee
HOK	5	v	7	Fitzsimon
Watkins Gray	0	v	10	Sidell Gibson
WATG	5	v	2	Watkins Gray

As World Cup football fever continues to grip the nation, RHWL Architects has emerged triumphant in the AJ-backed Architects and Construction London five-a-side league. RHWL pipped its nearest rival, Swanke Hayden Connell Architects, to win the championship and a series of engraved trophies, which will be awarded on 6 July when a further cup competition will take place. The practice is also taking part in the Gold Cup competition, which is open to the top four teams. Free-scoring RHWL put 16 past HOK, 14 past Systech and 12 past Buro Four on its way to the trophy, losing only one game in the process. Unsurprisingly RHWL's Stef Zito was named manager of the month. Sick-as-a-parrot SHCA was unbeaten and actually scored more goals (141 in 12 games) than RHWL – but conceded more too, while former league leader Nicholas Grimshaw & Partners slipped up in the final encounter against Calford Seaden. Sadly, Watkins Gray International failed to notch up a single point. The organisers say they may be back next year with two divisions, due to the popularity of this season's event.



The champions: RHWL's victorious squad

TEAM NAME	Pld	W	D	L	F	A	GD	Pts
RHWL Architects	12	11	0	1	114	48	66	33
Swanke Hayden Connell Architects	12	9	3	0	141	67	74	30
Nicholas Grimshaw & Partners	12	9	1	2	114	56	58	28
Calford Seaden	12	8	0	4	134	92	42	24
Sidell Gibson Architects	12	6	0	6	101	79	22	18
Buro Four Project Services	12	6	0	6	95	84	11	18
Wimberly Allison Tong & Goo	12	6	0	6	62	67	-5	18
AYH	12	5	0	7	83	100	-17	15
Systech Group	12	4	2	6	100	124	-24	14
Alan Conisbee and Associates	12	3	2	7	52	69	-17	11
HOK Sport+Venue+Event	12	3	2	7	63	118	-55	11
Fitzsimon	12	3	0	9	56	132	-76	9
Watkins Gray International	12	0	0	12	31	117	-86	0

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Asylum seekers with a difference

With mental health care high on the NHS agenda, the approaches not just of the old asylums but of much more recent care programmes are being rethought. Barrie Evans reports from last week's 'With Design in Mind' conference at the RIBA

Mental health is now one of the NHS's four care priorities, alongside heart disease, cancer and care of older people. This is a significant change for what architect John Wells-Thorpe said has been the 'Cinderella of the health service'. It has been felt that 'there are no votes in mental healthcare', yet, currently, one in three referrals to surgeries and local health centres relates to mental health or distress.

Louis Appleby, national director for mental health in England at the Department of Health, told delegates at last week's 'With Design in Mind' conference at the RIBA that change is on the way. He said the strategic planning phase was over and that mental health had designated funding. Money had started to flow for refurbishment – many facilities were constructed before 1947 and 10 per cent of beds are still provided in asylum-type buildings. As with other areas of the health service, there is a move towards care in the community where possible. But with this transition comes the need for therapeutic day care and more acute residential facilities of varying levels of security, which may all be provided in adjacent buildings.

So what should the service offered in these buildings be like? The core issue is to help build people's self-esteem, according to Robin Ford, for many years a 'service user' (what used to be called a 'patient'). Dignity and support are needed, a service that says that you are still a valued member of society. People in residential care also need something to do, and Ford praised the growing range of therapeutic arts and other activities often available.

As architect Mike Nightingale pointed out, the Victorian asylums got two things right, albeit for the wrong reasons – they often offered people contact with attractive landscapes, and also gave them things to do. He suggested current trends in activities could be more ambitious, not just therapeutic but sometimes more vocational.

Nightingale noted that today's building norms are very different from those of the Victorian era – units for about 45 people, in single, en suite rooms, hotel style, local, rather than remote. Even 10 years ago it seems we were still getting it very wrong. In a 2000 user survey by mental health charity MIND, which included recent buildings, 45 per cent said service buildings were depressing and bleak, and 30 per cent found them frightening. The survey also found 68 per cent of people believed that visits from friends and family was the most important factor in their recovery, hence the value of the smaller, local, hotel-style approach. The wish list of those in residence, in addition to visits and activities, included interaction with staff, privacy, access to outside information (the internet, for example), security and gender separation (wanted especially by women). This latter wish, plus a desire for groupings on the

grounds of ethnicity or other causes, and the need for different levels of care and secure segregation, all put a very high premium on designing flexibility into these buildings. We got it wrong even 10 years ago. Beyond today's more civilised approach, who can predict the exact care regimes in these buildings in 10 years' time?

For now, Ford cautioned architects to avoid big architectural statements. Some of the stigma of the 'loony bin' still exists, on which the not-in-my-back-yard tendency thrives.

In procuring these buildings, increasing emphasis is being put on user involvement in briefing, sometimes with specific local groups, sometimes with people who have developed more of an overview, such as Brian Ford. As Richard Brook of MIND pointed out, if you want anyone to give their time to working at shaping a building brief, you should be paying them for that time, that design input.

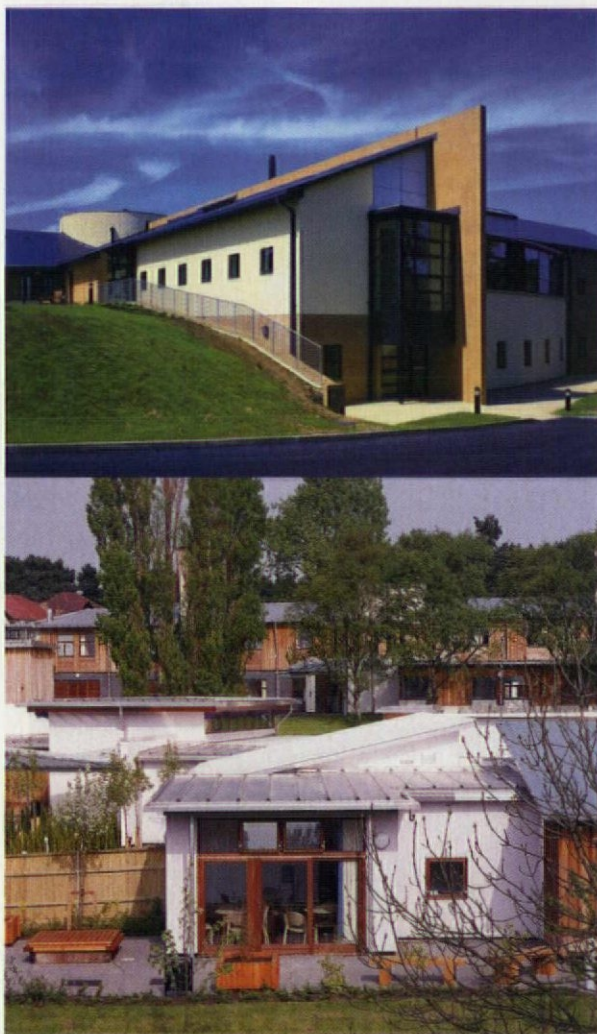
From the NHS side, chief executive Nigel Crisp admitted that the NHS 'needs to get better at being a customer'. As part of learning from experience, something he sees the NHS as being poor at, he is considering the approach of having strategic partnerships with a smaller number of suppliers, including designers.

Two case study schemes featured – Sevenacres on the Isle of Wight by Nightingale Associates and an old hospital site redevelopment under way in Birmingham by MAAP Architects. Sevenacres is on the St Mary's Hospital site on the Isle of Wight – though separate from the main buildings – surrounded by its own gardens and with some longer views. It demonstrates clear legibility, small areas to meet and eat, it is single storey with relatively high ceilings and rooflighting, while having effective but not dominant surveillance, including a central staff station. MAAP's Birmingham site comprises large grounds in an urban setting. Much of the land has been sold off for housing. 'We took the best bits and gave the rest to the developer,' said MAAP's Mungo Smith. By putting

care units on the site perimeter, location in the community is achieved at a stroke.

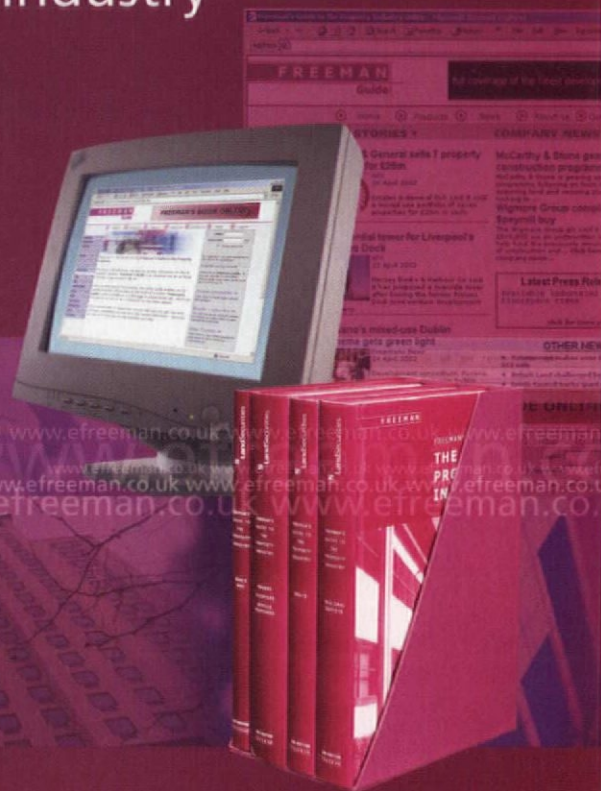
As Susan Francis of the Medical Architecture Research Unit wrote of Sevenacres, it is 'not just about making new buildings with less obtrusive surveillance, it is about bringing normal life into the building'. Of mental health service users, think tank director Julia Neuberger suggested 'the esteem in which we hold them is a test of a civilised society'.

The MIND survey, 'Creating Accepting Communities', is at www.mind.org.uk/information (click on About Government Policy and scroll down to the Social Inclusion sub-head). The NHS plan is at www.nhs.uk/thenhsexplained/priorities.asp



Nightingale Associates' Sevenacres scheme (top) and MAAP Architects' Birmingham redevelopment

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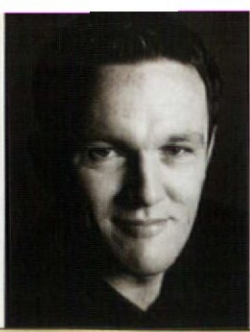
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editorial

It is a depressing sign of the times that Ken Livingstone's £100 billion draft vision for the development of London garnered fewer column inches than whether he had three or more glasses of wine at a private party and what happened next. But the London Plan is well worth close inspection, if only to see a kind of Lord Rogers Urban Task Force report for the 32 London boroughs and Corporation of London being worked slowly into reality. Rogers, as Livingstone's adviser, is getting his chance to put his urban renaissance/brownfield/sustainable/transport nodes thinking into action, where Blair's New Labour lacked conviction and real drive to take his vision nationally. As Rogers says in his foreword, co-written with deputy mayor Nicky Gavron, a city cannot be sustainable without good urban design, and it is design that makes the difference between density and cramming.

Much is familiar. Improving the public realm, the streets, the places between buildings. Encouraging office development at 'opportunity areas' near transport interchanges, and shifting activity east to take advantage of the Channel Tunnel rail link. But there's a new acceptance that well-designed tall buildings have their place in London, with public access to their upper floors. This is the big picture – an attempt to nourish the capital via desperately needed transport improvements, better education, health care and housing. And with design, they say, central to all objectives. With the 460,000 new homes needed, architects can wrestle housing design away from the developers, or at least join them in creating a better product. Small practices could take that requirement and make it their own, working from a new matrix the plan provides on required density levels.

But, as ever, deliverability is key, with Livingstone admitting that most of the funding will have to come from the private sector – it is difficult, for example, to see many of the 130 schools going any way other than PFI.

The 400-page document is the first statutory strategic plan for London for two decades, in the tradition of Wren's 17th century masterplan and Abercrombie's 1944 Greater London Plan. Encouraging, then, that an architect is still at the helm. Now comes the hard part.

David Taylor

letters

Third way represents the reality of our cities

Martin Pawley's continuous bashing of Lord Rogers' regeneration vision is a convenient tool to let his own fancies fly (AJ 20.6.02).

Most people's views of our cities are far distant from both Pawley's 'decrepitude' and Lord Rogers' 'magnificent city spaces' conception.

In reality, the 'third way' mentioned is one of the most common to us all urban dwellers and is probably closer to Burnley, with its share of abandoned dwellings.

Extremists of all sorts, not just far right neo-fascists, are bound to feed off what is conveniently available, and this is normally the benchmark for official action, however late.

Today this type of situation is worst in urban areas, but it does not destroy our eco-systems – mainly our realities. It is not greenhouse gases that are undermining society.

The reality is that social problems are related to human behaviour and to housing, jobs and how and where you live.

The third way is the only way to make our cities work and we logically cannot have Venice in our backyard.

The sidewalks, cafes, parks and the great architecture would be a bonus and will have to wait until politicians realise more than architects that you provide the basics in life and frills might come later.

Rex Hawkesworth, Portsmouth

Credit where credit's due for Who Did What

Sandy Benson is right to raise the question of design credits (AJ 20.6.02), but not quite correct in his comments 'that nothing much came' of the Salaried Architects Group 'Who Did What' exhibitions in the late 1970s. Quite a lot came of them.

At the time, SAG felt it was important to establish who the real designer of a project was. The reason for showing the work and naming the designers was to aid future researchers. No one was ever excluded, though I did receive some veiled threats from some offices threatening dire retribution over 'copyright'. It never came.

As the curator of the three exhibitions, I became the recipient of some wonderful pieces of work, which had never been hung in an exhibition at the RIBA. The oldest exhibitor was a brilliant Classical architect who had served as a young officer in the First World War. He sent me a page from the *Studio*, which showed him going off to war in September 1914 with other more notable Edwardian architects. I mounted this page of photos and the rest of his work for him. He came to the opening and was met by architects who had worked for him half a lifetime and more before. He was 93 when the exhibition opened.

Those three simple 'Who Did What' exhibitions were the very first exhibitions of ordinary members' work ever seen in the RIBA.

The last was a rather special one hung in tribute to the work of Sidney Cook's Camden Architects Department 1965-72. Sadly, Sid died of cancer before the exhibition opened.

The idea did not fade away with the last exhibition. I spoke to Peter Murray, who had helped me organise them, about having an exhibition for young architects. That's how Peter's 'Forty under Forty' exhibitions started, although by the time the first one opened I was excluded on age grounds!

Maybe Sandy Benson should resurrect the idea of 'Who Did What' and maybe then reform SAG.

Sam Webb, Canterbury

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Where was the female 50:50 perspective?



50:50 – but only one female voice

Why out of the 50 'experts' chosen to comment on the most important, interesting or treasured buildings, innovations, products and engineering projects of the past 50 years (AJ 6.6.02) was only one female?

Shouldn't the AJ have tried a little harder to get a better gender balance? There are plenty of women 'experts' in their own fields (if not necessarily household names) who would have had equally interesting and valid views to express about the past and the future.

Neither does this type of article encourage women to take up careers in architecture and engineering. (I also read your editorial expressing a need for greater diversity in a sector that is still disproportionately male.) Perhaps this article should have been titled 'Back to the Past'?

Elizabeth Bennett, architect,
Sheffield, South Yorkshire

Informed discussion is needed on design

There's a great many excellent conferences and seminars for architects and designers but most are attended by only a small fraction of the profession. It would be very valuable if the press could tell us more about their content.

The article 'RIBA confronts the future' (AJ 20.6.02) omits such details, which is important for the following reasons:

- At the IHBC conference recently at Oxford, Robert Adam, John Winter and Ted Cullinan demonstrated very interesting approaches to Modern design without pastiche in the historic environment, an area where many architects lack skill, and some seriously damage historically significant places.

- Sustainability calls for greater reuse of old buildings (more than 60 per cent of architects' output). More than 50 per cent of London is in historically significant conservation areas.

- Within the past few years the RIBA council appears to have a head-in-the-sand attitude to the conservation of historic buildings and areas, which seems driven by dangerous prejudice, derived from outdated early Modernist attitudes. This has led it to reject accreditation of architects in conservation, leaving it to a distant private body. The surveyors are well aware of the huge amount of work in this area, and are fast cutting a wedge out of architects' traditional work, by organising their own excellent and thorough RICS conservation course and employing architectural skills.

To quote *Power of Place*, English Heritage's review of the historic environment: '[the public] are not resistant to change', and it also talks of 'the very best of the new ... with proper understanding of the historic environment ... sensitivity to the quality of place, excellent new building and design will both complement and enhance the historic environment'.

See Tate Modern, Dulwich Picture Gallery, Maritime Museum, V&A, Wallace Collection, British Museum, etc.

Now that English Heritage has demonstrated a changed

and enlightened attitude to contemporary design, can we have more informed discussion about Modern design within the historic environment?

Tony Edwards, London NW5

Modernism: it's on the ropes, but still with us

It was interesting to read that Modernism today is both dead and ubiquitous (the retrospective views of Paul Hyett and Robert Adam – AJ 20.6.02). Whence this conundrum?

Certainly there is a tremendous plurality of architectural styles today. Those designers working at the edge make great efforts to articulate and justify their personal visions. I suspect it is these designers Hyett has in mind when he summarises the state of architecture: certainly, the extremists (of whom Adam is surely one) do not collectively constitute a corps of Modernists. Far from it.

However, there is a middle ground, and I suspect it is this consensus mainstream Robert Adam has in mind when he rails against 'official Modernism'. Certainly, the current consensus is to be feared. In the hands of the state (English Heritage and local planning authorities) the consensus seems alarmingly Orwellian. But Modern it is not.

Although Modernism represents the broadest church yet conceived, there are two tenets which define it. First: the recognition and celebration of that which is essential to making a building; Frampton's 'poetics of construction'. A steel column is not concealed to suggest a load-bearing masonry structure. A sun-breaker actually breaks sunlight before it enters a space and is not a pseudo-cornice. Some have attacked shortcomings of implementation (Mies' details being the usual target). But who said it would be easy?

The second tenet is assigning

priority to spatial configuration. If there is money to be spent, it is best spent on shaping pleasing configurations, as opposed to decorating cheap space.

The issue of whether the inside should be 'the inside of the outside' is secondary: designs may follow the two fundamental tenets yet derive great richness by nesting dissimilar envelopes, as Utzon has done.

So what is our new 'official Modernism'? The new Paternoster Square will showcase it, as will some developments on Oxford Street. Money is spent on facades, not spaces. 'Giant order' pilastered bases or colonnades appear frequently, as do north facing brises-soleil. These are framed buildings, but the framed elements are subsumed by masonry. Attic storeys ('set-backs'), with further ornament, complete tri-partite facades. This is 19th century architecture, albeit with less ornament second time around. We might call it set-back culture.

And where in today's discussions is the social dimension? Modernism doesn't require a social dimension in its definition but surely Modernity is still a powerful tool for serving the majority: if delight truly lies in sophisticated configuration and tectonic honesty, then much more can be achieved for little. Design is cheap. Without Modernity, now as before, there can only be one type of building: the house.

So is Modernism dead? It is on the ropes, certainly. Hegel, though he has taken a pummeling over the years, looks good for a comeback. For surely the recent unconscious proliferation of set-back culture buildings provides evidence that Weltgeist exists. Our return to 19th century values as a society – our reinvention of stratified wealth – is producing an architecture to match.

Charles Whitaker, London SW13



will also

Mapping out the future brings out the explorer in all of us

The wise traveller will prepare for a visit to a strange land. Off to the bookshop for guide books, maps and gazetteers describing things to do, things to see, and things to distract.

Holidays are too precious to be squandered, and an ill-prepared trip can lead to disappointment, arguments and broken marriages. After the purchase it's time for a suitable glass of wine and a table-top exploration of the impending destination. Everything is spread over the kitchen table and the search begins. A quick flip through the plethora of literature quickly reveals that not only have you bought far too much, but that there is much duplication of information.

After 30 minutes I often find myself staring at a map, looking for clues for interesting roads to drive and strange geographical features to find. The reading of the map is an activity I find fascinating. All those physical geography lessons suddenly become relevant as you observe the contours, scarp faces and river patterns on the piece of paper. Looking at a good map of an area you do not know is one of the most enjoyable occupations available to us. This apparently simple device contains all the possibilities of wonderful picnic locations, spectacular scenery and extraordinary times. This experience of looking extends to the individual's maps of the various towns and cities. These often sketchy plans contain the same interpretation that give rise to initial speculation of a visit and, later, actual comparison.

We relish visiting new places, and the more odd or unusual features on the map, the more we are attracted to it. There are examples, such as Venice, where the absence of roads, when seen by the uninitiated, is bound to raise both the imagination and curiosity of the observer. You feel compelled to visit if you are in the vicinity. Less obvious examples

include the 40 miles of straight road to the north of Lincoln. If you drive south you can see Lincoln Cathedral from miles away. This can be discerned from a good map.

Barcelona, with its grid dissected by a diagonal, looks extraordinary on the map, but in one of those examples which does not translate into one's perception on the ground. Yes, there are pitfalls in the map game.

We tend to judge maps by the map of our own town or city. The more unfamiliar, the better. Grids do not often appear on UK maps as they do in other places, such as Melbourne. Most of these grid iron patterns originally related to a plan laid out by the military, which is unusual in this country, so they become pattern of the attraction.

I have observed this act of map reading over a number of years, as I repeatedly make for new destinations, but more recently I have looked at it in a different way. A flash of recognition started while I was working on the Rotterdam Centraal masterplan. I realised that we were making significant changes to the map; the very map that a tourist might be poring over at the kitchen table. For me, this added a dimension I had not considered previously, and which I do not think I fully exploited in Rotterdam. The city is not perceived as a tourist destination (although I think it should be), and here in my hands I had the opportunity to redraft the map. My plan does include new streets and connections but does not offer anything unusual to the casual map reader. Recently, I have exploited the idea of the map in Barnsley, by placing a living wall around the town centre. This will look intriguing on the map as it defines the town.

Change the map, change the place and change the perception. Barnsley will be on the 'must do' list for every UK visitor.

WA, from seat 7K, flight VQ009 Heathrow to JFK

people

Ideas and influences can keep coming around. As a student of architecture at Glasgow's Macintosh School, Nicholas Grimshaw & Partners (NGP) director Andrew Whalley was struck by the Kibble Palace, a building that was later to inform his thinking about the Eden Project.

Kibble Palace, a glasshouse, was first used as a winter gardens, before becoming a botanic garden. Originally built at his home by engineer John Kibble, it was dismantled and then re-erected on the present site in 1873, with some reshaping. It is a lesson in light, flexible technology, and a 'from first principles' approach to a building.

After the 'party' of three years at the Macintosh, followed by a year out with Spence and Webster, Whalley worked three days a week to finance an AA diploma, as part of Ron Heron and Jan Kaplicky's unit. He then joined the Grimshaw office and has been there ever since.

Now one of four NGP directors, with responsibility, broadly, for the US, arts and transportation buildings, you might think having to get qualifications would be a thing of the past. Not so. In order to lead projects in the US, you have to be qualified in the relevant state.

The Donald Danforth Plant Science Center, as client, wanted NGP to take the lead across the board, to achieve vertical integration of the project team. And so started a two-month process of proving that Whalley's work was good enough for Missouri. He had to put together syllabuses and exam results for all periods of his education, including school exam results, to demonstrate his general education.

The buildings he chose to make his case with were the house he designed with his wife, Fiona Galbraith, his Paddington Station design and the Eden Project. Whalley now has his seal (though day-to-day US practice is not to physically stamp and seal drawings).

Once accredited, NGP could set up its team for Missouri, including Arup and HOK. Most of the work up to detailed design stage was done by NGP and Arup in the UK, with construction documentation done in the US, supported by Arup's US operation.

Before Missouri, NGP's reputation for transportation buildings had led to invitations to be part of consortia, notably from HNTB, a large US engineering group. The first pitch was for a replacement for the

'Looking at a good map of an area you do not know is one of the most enjoyable occupations available to us'

Nicholas Grimshaw & Partners' Andrew Whalley had to prove himself to be able to work in the US. Having done so, he's discovered kindred spirits at work on his latest project, Missouri's Donald Danforth Plant Science Center
by barrie evans. photograph by robert greshoff

reborn in the USA



Bay Bridge in Ohio – after the original was destroyed by an earthquake – and another Ohio road bridge proposal is now being worked on. The practice aims to bring a heightened aesthetic agenda to the party, ranging from the setting down to the details of joints and connections.

Towards the end of 2000 the practice decided to more systematically explore the US. At the time, Vincent Chang was resident in the US, the NGP project architect overseeing the Plant Science Center in Missouri and responsible for developing the NGP presence. But the practice was aware of the need for a permanent base and started by taking space in New York. Chang is now

there. Someone will have to go through the accreditation process for New York State too – but not Whalley this time.

As a way of gaining entry into local markets, NGP is looking at competitions. Much public work is openly let, somewhat similarly to the use of the EU's *Official Journal*. An invitation went out to 20 practices from Rensselaer Polytechnic Institute for an Electronic Media and Performing Arts Center. Having reached a shortlist of four, Whalley took a presentation team to the US. He was a little unnerved to find all four teams were presenting together, in effect in open competition. The Center, at pre-schematic stage, is an intriguing looking

proposal – a building merged into the slope of the site with the concert hall like a violin body. At \$95 million (£65 million) it is a big project, with a completion date around 2005. It is currently being run half in the UK, half in the US, but is soon to be all in New York.

Like the Kibble Palace, the Plant Science Center has been approached in a first-principles way, the first focus being on the community of scientists, using the atrium in particular to foster interaction and, Whalley hopes, the sharing of ideas. Another theme is the environment, a theme that runs through the practice's work. It met a like mind in the Donald Danforth Plant Science Center, an independent, not-for-profit research centre focused on applying new knowledge to benefit human nutrition and health and to improve the sustainability of agriculture worldwide.

Whalley has also sought to bring some urbanity to the Center, or at least some of the human scale of the better science parks to what is, location-wise, a roadside building. A porte cochere suggests a street and creates an axis for future development, though Whalley accepts that users will arrive from the car park at the rear. Even so, the client has tried to put the building on the St Louis map by making the atrium available for public events. If the whole set-up isn't ideal, Whalley finds a meeting of minds with the client.

More prosaic issues of working in the US have arisen from the technologies and traditions of US construction. Though the facades have been 'value-engineered' into something simpler than the original intent, finding cladding firms with a capacity for any sort of customisation was difficult. The obvious choice, Cupples – of Hong Kong and Shanghai Bank fame – no longer exists. NGP eventually went to Josef Gartner, which has now set up locally. Similarly, getting steelwork good enough to expose is hard, and wet trades are expensive. It is a difficult environment for a practice interested in the integrity of how things fit together, and in marked contrast to the UK, where NGP has now set up its own industrial design unit within the practice for custom design of, for example, lighting or information systems.

Challenged by such national differences, Whalley retains his enthusiasm for the flow of new projects as he travels from prospect to prospect. His prize may be NGP's biggest collection of frequent-flyer air miles.

● See *building study*, page 20



martin pawley

Country houses or hospitals? It is simply a question of priorities

It was the Czech artist Karel Teige who coined the aphorism 'Buildings should be instruments, not monuments'. But that was in the 1920s when at least some people must have believed it. Were Teige to rise from the grave today, he would be appalled at the supremacy of monuments in the contemporary scheme of things.

In the 20th century, when giant dams were built, whole seas drained and the flow of mighty rivers reversed, no government would ever have approved a plan to reinstate miles of wetlands first drained by the Romans just to recreate a habitat for wild birds. But in the 21st century, you bet!

This is not to begrudge wild birds their first lucky break in 2,000 years. Rather it is an attempt to understand the mentality of those who oppose the introduction of latter-day prefabs as a means of fulfilling the housing needs of essential workers, while recklessly betting the heritage farm on the roulette wheel of conservation.

For everybody else the much-vaunted property ladder has turned into a snake, but not for them. If it is a Victorian country house of no accommodational use to anyone except the curator of a museum of Victorian country houses, then, of course, the National Heritage Memorial Fund will gladly hand over £17 million – more than three years of its income – to 'save it for the nation'. If it is a production run of 25m² steel frame prefabricated apartments for nurses to be delivered by truck and stacked up in a hospital car park, you can see the shaking heads and hear the sound of air sucked through teeth. We do not want to upset the delicate spatial arrangement of the district with peas-in-a-pod designs, do we? After all, Prince Charles is in charge of hospital design now.

When you think about it, the last few weeks have been a great time to be a conservationist, not only

was 2,000 years of marsh recovery in East Anglia set in reverse but a 1928 parking garage in Soho was saved for the nation because it was the 'largest and best-equipped building for the service of the motor car of its day' (and certainly not because of its proximity to English Heritage's headquarters in Savile Row).

As for old Victorian country houses, I have written here before about the scandalous purchase of Tynesfield, but not since the listing classes started

'We do not want to upset the delicate spatial arrangement of the district with peas-in-a-pod designs, do we? After all, Prince Charles is in charge of hospital design'

their own World Cup victory dance over it. To be sure they do have a great deal to crow about, so much in fact that, from the quotes in the newspaper stories, it almost seemed as though some of their leading lights could still hardly believe that they had actually got away with it.

Of the estimated £24 million (the exact figure has not been revealed), paid by the National Trust to the 19 anonymous relatives of the mysteriously intestate Lord Wraxall for the keys to his high-mileage gas-guzzler, all but £1.5 million came from other sources than the trust. Most of it from the largest grant ever made by the National Heritage Memorial Fund, an organisation which is not only awash with money but apparently has a 'fast-track' method of

ransacking its own reserves in case of an 'emergency' like this one. At the same time, the Secretary of State for Culture, Media and Sport did her bit, whittling away at the commercial value of Tynesfield – 'the vast sprawling mansion virtually unknown to all but locals' – by listing numerous internal features and raising its status from nil to parity with St Paul's Cathedral.

'Country houses are not just another building type in need of preservation,' purred a leading conservation enthusiast, omitting to add that hospitals aren't either.

a life in architecture

wayne hemingway



Wayne Hemingway, founder of fashion label Red or Dead, is excited by the giant steps being made in low- and mid-priced domestic housing. Last year, he designed a scheme of 688 homes for Wimpey in Gateshead after publicly criticising the UK mass housing market. Here he picks his three favourite European schemes.

'Sporenberg in Amsterdam is a wonderful development of 1,000 or so properties that has been inventive with inexpensive and traditional materials – brick and cedar. (Pictured is Claus en Kaan's scheme there.) Some streets have uniformity but prove uniformity does not have to mean rabbit hutches with a Ford Mondeo and a wooden wheelbarrow with pansies outside.'

The city of Malmö is his second choice. 'If you are an architect or planner and didn't visit the "BO 01" exhibition, then you are not doing your job properly. You can still visit the area around the dock of Malmö and see wonderful ideas for how to make residential environments community-friendly and visually stimulating.'

Third, he chooses IJburg in Amsterdam: 'While only at the stage of landworks and piling, this enormous project on a reclaimed island promises to set a new world benchmark. The plans, models and CAD illustrations are wonderful and well worth the 30-minute cycle ride from Central Station to the nice-looking visitor centre.'

Victoria Huttler
Wayne Hemingway is DJ-ing at the V&A 'Late View' tomorrow evening from 6.30 until 10pm as part of Architecture Week

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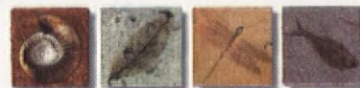
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American beauty

Nicholas Grimshaw and Partners had to battle with the cultural differences and the climate with its landmark Plant Science Center in the US city of St Louis



By Peter MacKeith and Paul Donnelly. Photographs by Timothy Hunsley

Located at the confluence of the Mississippi and Missouri rivers, St Louis is a city at the same time typical and unique in its American urban character.

Sited on the west bank of the Mississippi, underneath Eero Saarinen's Gateway Arch, and in the figurative shadow of Louis Sullivan's terracotta-clad Wainwright Building, the city centre struggles to hold onto its declining post-war population. Beyond the city limits proper, the metropolitan region continues to expand in the now-proverbial doughnut pattern of so many mid-tier American cities, extending the undifferentiated residential and commercial suburbs westward along ever-widening highways into the Missouri River flatlands.

But think of St Louis as an epicentre – draw a 500-mile radius circle in the American heartland with St Louis at its heart and you have defined the central agricultural region of the continent. In this context, the city already serves as a locus for the agricultural and botanical research activities of a

broad number of civic, academic and corporate institutions throughout the Midwest, and anticipates further growth as a centre of such endeavours in the US.

This status and the national, even international, ambition is signalled most clearly by the Donald Danforth Plant Science Center, located in St Louis' Creve Coeur suburb. It was completed last November to the designs of Nicholas Grimshaw and Partners (NGP) under the direction of Andrew Whalley, in association with Hellmuth, Obata & Kassabaum (HOK) of St Louis, with Mark Husser, director of design, as principal associate.

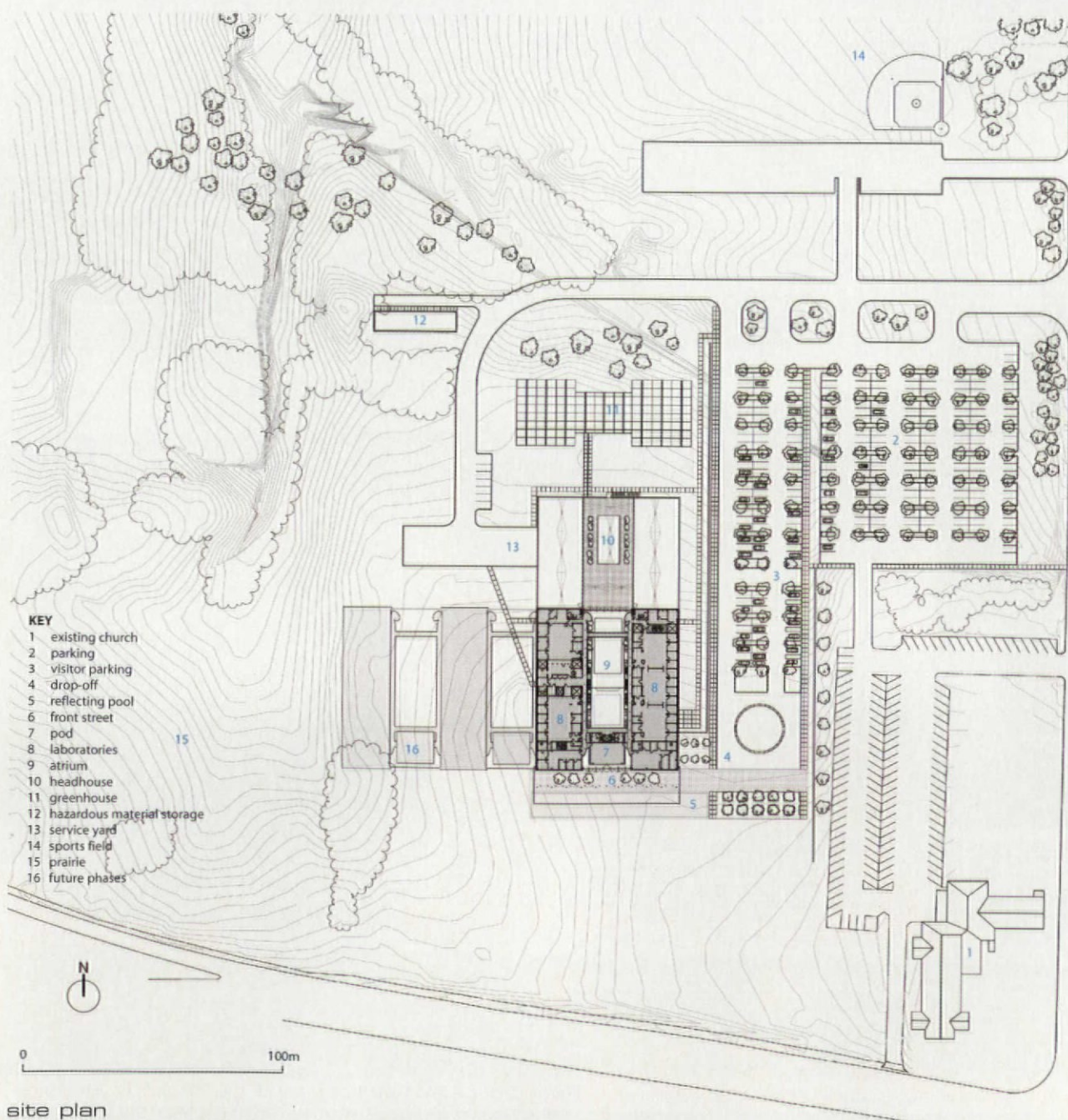
As an independent, non-profit institution for basic plant science research, the Danforth Center partners are the Missouri Botanical Garden, the Monsanto Company and four nationally known research universities of the region.

Simultaneously, the center honours one of the St Louis region's foremost agricultural businessmen, Donald Danforth

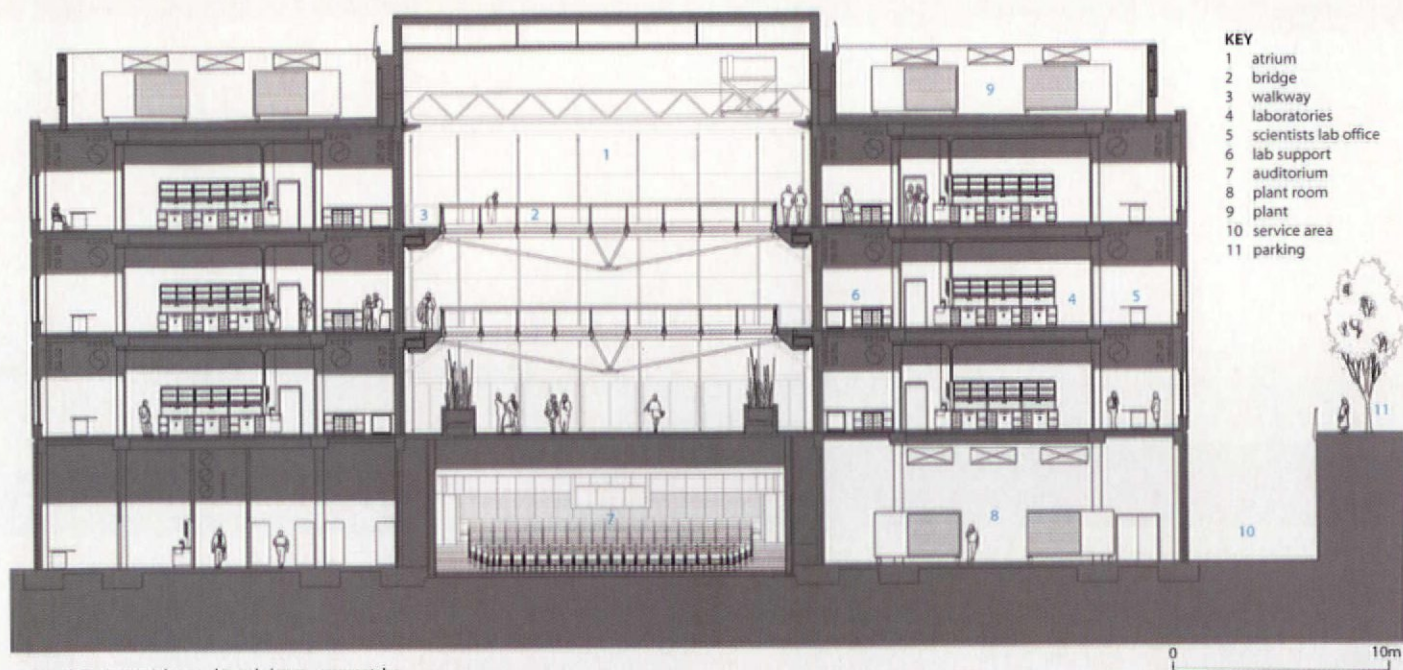
(1898–1973), former president and chairman of Nestle-Purina, a leading worldwide producer of feed grains, pet foods and cereals. During his lifetime, Danforth worked as both a humanitarian and philanthropist. The Danforth Foundation established the Plant Science Center initiative through a \$60 million (£41 million) endowment, an ideal fit for the Danforth interests in agriculture, nutrition and health.

Dr Roger N Beachy, president of the Danforth Center, describes its mission as being to 'significantly increase our understanding of basic plant biology and then apply new knowledge for the benefit of human nutrition and health and to improve the sustainability of agriculture worldwide'. The design competition entries were submitted and reviewed before the general furore, mainly in Europe, but to a lesser extent in the US, over the production and use of genetically modified seed.

By 1998, the Danforth endowment, plus Monsanto's donation of a 40-acre site oppo-



site plan



cross section looking north



The architects worked to create a public presence for the building, despite its suburban location

27 June 2002

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KEY: SECTION

- 1 greenhouse
- 2 headhouse
- 3 growth chambers
- 4 meeting area
- 5 bridge
- 6 northlights
- 7 auditorium
- 8 atrium
- 9 water feature
- 10 cafe
- 11 lounge
- 12 library
- 13 front street
- 14 reflecting pool

KEY: LEVEL 2 AND 3

- 1 laboratories
- 2 scientists' lab office
- 3 lab support
- 4 admin suite
- 5 library
- 6 elevator
- 7 service elevator
- 8 media kitchen
- 9 atrium void
- 10 bridge
- 11 meeting area



long section looking east



Daylit from above and both ends, the atrium aims to be a staff hub, and sometimes a space available to the community

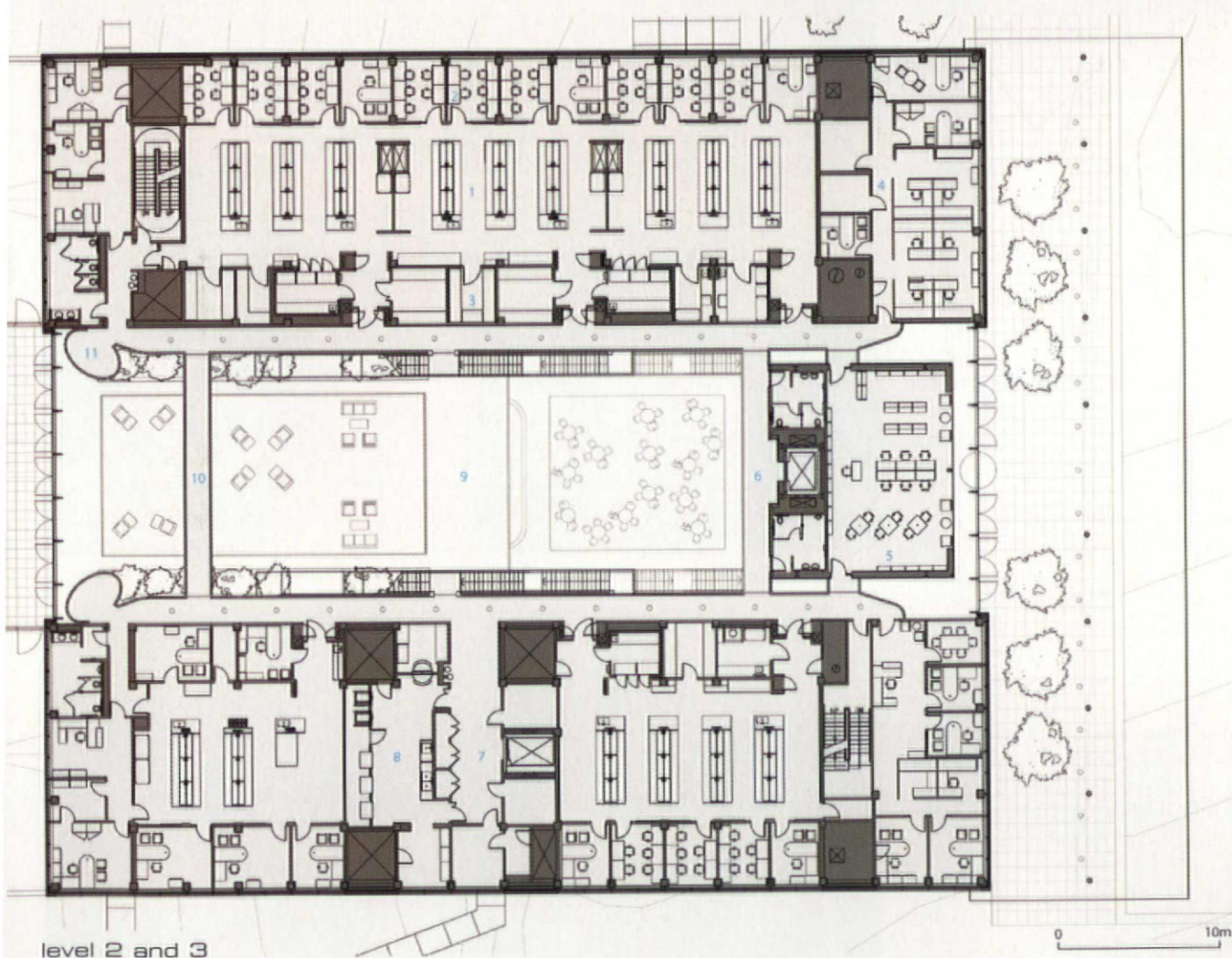
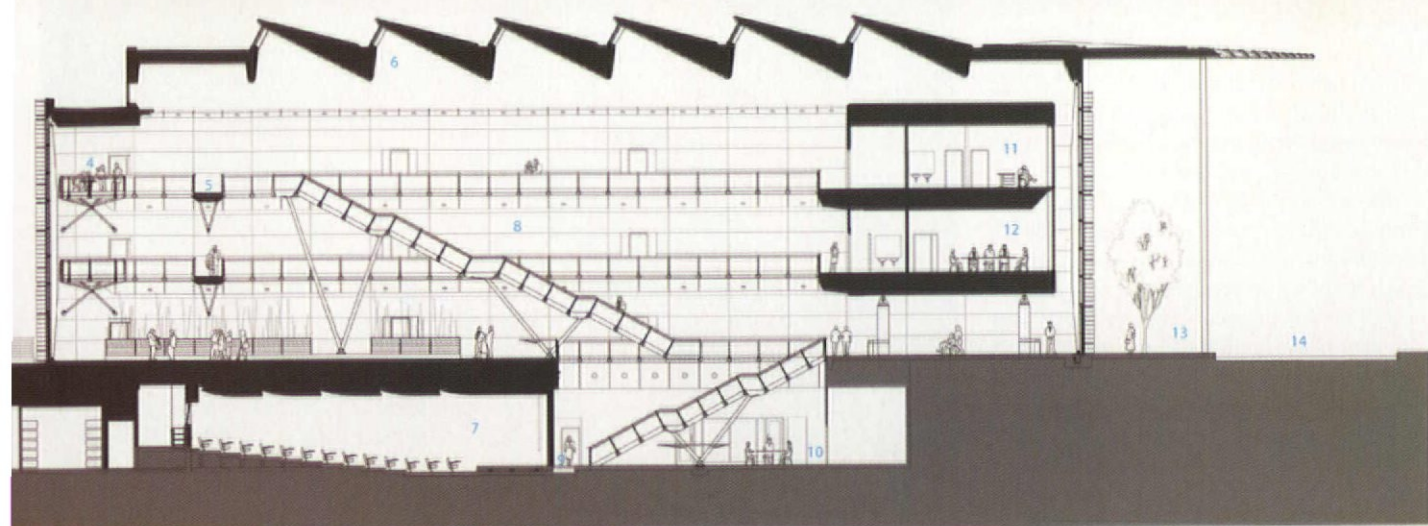
site its own suburban St Louis offices on Olive Boulevard, led to a development strategy for the building itself, based upon a general set of goals and purposes. Monsanto's donation of the Creve Coeur site placed the Plant Science Center in fairly open, acontextual terrain at the still-developing edge of St Louis County, in close proximity to the downtown area, major highways and the airport. However, the siting also meant that the center was located in an area where the dominant typological and aesthetic norm for a building of this size is the specu-

lative office building, dictated as much by economics, local zoning and building regulations and the necessities of parking, as by ideas of civic representation, integration of building technologies and sustainable design principles.

In the first stage of the project, HOK-St Louis was engaged as the technical consultant for the research laboratories, and Dr Frank Becker, a Cornell University consultant in workplace ecology, provided perspectives on the ideal scientific research space. There was, at least at the beginning, an

expressed interest in the building's potential to address environmental issues through the integration of sustainable design principles.

Second, a limited, invited competition was organised and, unusually for American competitions, it utilised both an interview phase and a compensated schematic design review phase. From a long list of suggested participants, the center's review board selected five firms for interviews – William McDonough and Associates, HOK-St Louis, Pei Cobb Freed, Ricardo Legorreta, and NGP. Four of the five subsequently submit-



level 2 and 3

ted schematic designs. NGP was awarded the commission, with HOK-St Louis designated associate architects for technical and landscape consultancy.

NGP submitted a schematic design similar in its basic diagram to the eventual project, incorporating laboratories and courtyards into a three-storey, nearly square volume, emphasising both the interaction of scientists and the public aspect of the research center. The design approached the issues of siting directly, providing a grand vestibule to Olive Boulevard and then dis-

playing the programmatic elements symmetrically around the absolute north-south axis. The discrete geometry of the original design was complemented by serrated elevations and roof profiles, by a variety of cladding materials and by a free-form pod for library collections and conferences, suspended in an atrium space.

Cautious construction estimates and the processes of value-engineering, endemic in American practice, reduced the original NGP competition design's multiple enclosure systems and profiles, specific to each

facade orientation, to a more standardised approach, incorporating terracotta panels in aluminum frames across the predominant expanses of all four elevations.

The south-facing portico, a formal entrance facade facing Olive Boulevard, began as a deep enclosed vestibule, configured in the original design by strongly dimensioned wooden laminate columns and a glass curtain wall. This structure was strongly resisted by the Creve Coeur architectural review board, and its intentions so compromised in subsequent attempts dur-

ing development phases that the NGP team decided to let it go and focus on the necessities of shading and civic presence through a reduced palette of elements.

The climate in St Louis is a particularly demanding one. Temperatures vary from the high 90s°F in summer to well below freezing in the winter, with high humidity levels. Though there are significant heating demands for this building type, the critical design loads are associated with cooling for most of the year. The cooling demand derives both from heat gain through the building envelope and internal loads associated with the occupants, lighting and equipment. The lab spaces are air conditioned.

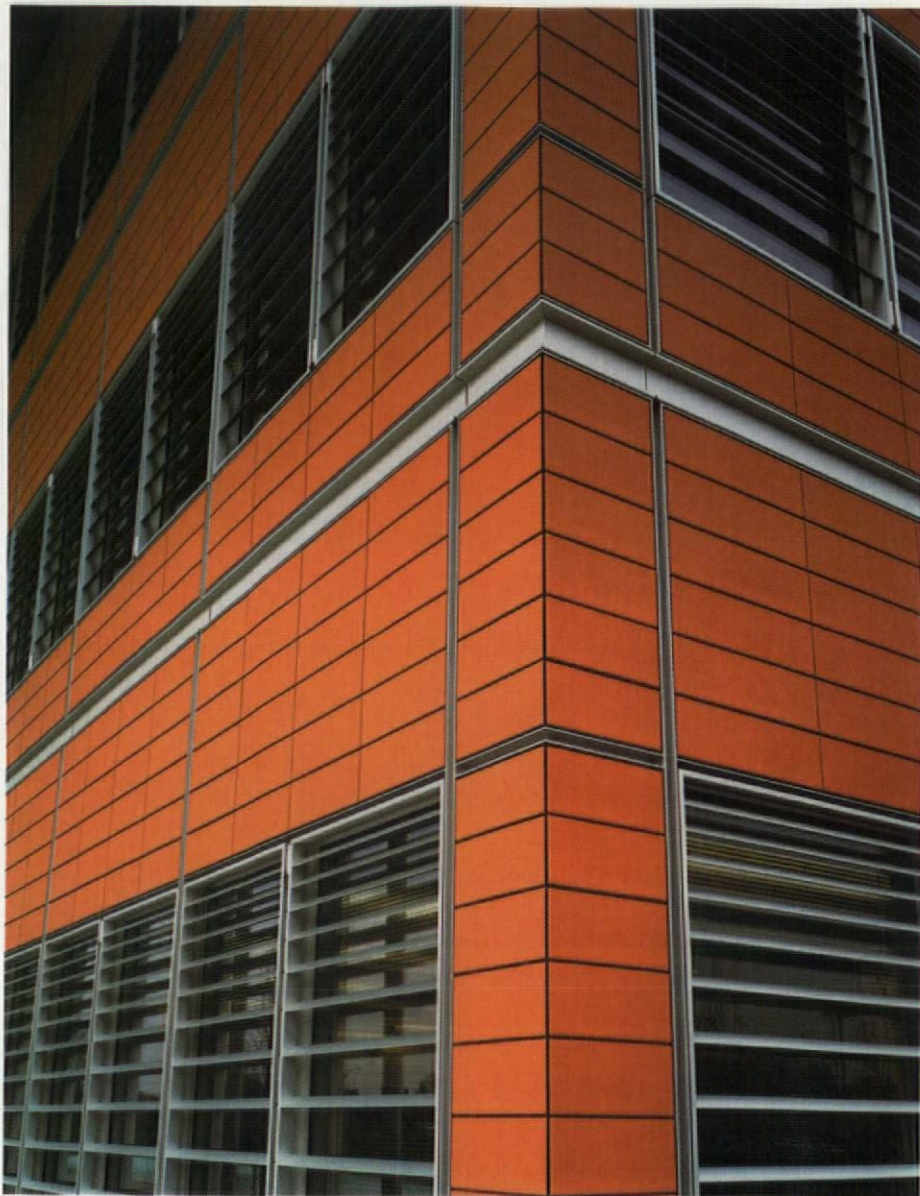
The long east and west exposures of this building required a thoughtful response to controlling natural light and minimising heat gain. The initial design strategy to create a vertical saw-tooth facade with all glazing facing north would have effectively resulted in solid or opaque exposures to the east and west. Following the 'value-engineering', the final design incorporates horizontal, concave shading devices to modulate the east-west light and mitigate radiant heat gain. The louvres were designed for the peak loading condition – 5pm at summer solstice – and were carefully spaced vertically over the window openings to optimise the shading coefficient and permit views to the outside for the occupants.

The enclosure technology is a unitised system of 11.5 x 15.5 ft, multi-layered panels made up of a terracotta rainscreen, a four-inch air space, six inches of mineral fibre insulation and a 16-gauge sheet metal moisture barrier. The terracotta also provides some thermal lag, which is particularly effective at the west wall, given the cycle of internal loading related to building occupancy. Panelisation of the technology during the manufacturing process provided a high level of quality control and craftsmanship, and also served to expedite erection.

The north and south walls of the atrium are structural glass curtain walls supported vertically by shaped, rolled steel mullions. The south wall is shaded at its top with a dramatic horizontal brise soleil, which also serves as the building's cornice. The roof of the atrium has a series of north-facing light monitors. The north-facing glazing of the monitors and north wall, and the shaded glazing to the south, provide soft, natural lighting.

The active climate control system in the atrium space is a low velocity, high volume displacement ventilation system. This is a highly energy efficient and cost-effective system for the type of environment it is serving. Cool air is introduced at the lowest level of the atrium space and displaces the warmer air upwards. The conditioned air occupies only the lowest, inhabited zone of the atrium, about seven feet in height. The upper zones of the atrium are maintained at higher temperatures and create a thermal blanket over the conditioned space.

This strategy requires the cooling of a



The original different, faceted facades gave way to a more uniform treatment



Typical deep-plan laboratory space, necessarily air-conditioned

much smaller volume of warm air than traditional high volume systems and dramatically reduces the demand on the chiller units. The low velocity strategy provides for air distribution stability and reduction of the noise normally associated with air systems. Although the duct distribution system is larger at the base of the atrium, the savings due to the reduced chiller size and the long-term energy savings associated with that make this strategy highly desirable. A system of this type also provides cleaner outside air to the conditioned spaces.

The upper level circulation zones at the perimeter of the atrium employ the same climate control strategy to create cooled microclimates. Cool air is released into these zones at each floor level, which fills them before cascading down into the atrium.

When heating is needed, this system is also more energy efficient than the traditional alternative. In heating mode, the system is supplemented by convectors at the north and south walls to counteract the heat loss at these glazed surfaces.

If NGP has been successful in responding to this US climatic and construction context, it is notable that, in general, British architects have not yet made significant inroads into US practice, and certainly not in proportion to the presence of American firms in London. Over the past 30 years, a relative handful of commissions can be noted, mainly for the big names such as James Stirling, Richard Rogers and Norman Foster. As a commentary on operating in the US it is worth noting that the association of NGP with HOK-St Louis has been respectful and productive, not least due to the diplomacy and shared enthusiasms for the project of Andrew Whalley and HOK's Mark Husser.

The initial teaming contained all the ingredients for disaster. The local US practice was denied a choice commission through competition, then given technical responsibility for ensuring the production of the design architect's desired quality. NGP was unfamiliar with the US processes of contract document production, the use of shop drawings in the construction phase and the abrasive character of value engineering.

But the end result has been far, far happier for all – a fine, well-made building for the Danforth Center and for St Louis, a justifiable credit for HOK-St Louis, and the subsequent move of Husser to NGP's recently established New York office.

Although the Danforth Plant Science Center is modest and well-tailored in the articulation of its responses, what emerges is an excellent example of the poetic potential of designing with the technology of climate and light. Given the anomie of the suburban locale and the high ideals of the center's purposes, NGP has, through its siting of the building, a hybrid of formal principles and insistence on the quality of materials and assembly, produced a paradigm for the collaborative research laboratory that possesses civic presence.

SUBSTRUCTURE	
	£/m ²
FOUNDATIONS/SLABS	50.15

\$6.87/sq ft
Includes drilled piers, grade beams, slab on grade, excavation and waterproofing

SUPERSTRUCTURE	

FRAME 280.03
\$38.36/sq ft
Includes concrete columns and beams, supported floor slabs, shear walls, steel framing and staircases

ROOF 35.99
\$4.93/sq ft
Insulated single ply membrane roof system

EXTERNAL WALLS 220.39
\$30.19/sq ft
Includes terracotta curtain wall system, glass curtain wall system, masonry block and hollow metal doors, windows and rooflights

INTERNAL WALLS AND PARTITIONS 221.92
\$30.40/sq ft
Includes metal stud and drywall partitions, interior masonry partitions, interior wood doors and hollow metal frames, wall finishes, floor finishes, and ceiling finishes

FITTINGS AND FURNISHINGS	
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FURNITURE 208.12
\$28.51/sq ft
Includes environmental growth chambers, cold rooms, lab casework and kitchen equipment

SERVICES	
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WATER AND SANITARY INSTALLATIONS 45.77
\$6.27/sq ft
Includes water installation, sanitary equipment, toilet accessories

SPACE HEATING/AIR TREATMENT 486.25
\$66.61/sq ft
Includes variable air volume Phoenix valves, 100 per cent outside air, multiple air handlers

ELECTRICAL SERVICES 305.07
\$41.79/sq ft
Includes emergency generator

LIFT AND CONVEYOR INSTALLATIONS 10.73
\$1.47/sq ft
One passenger and one service/passenger elevator

PROTECTIVE INSTALLATIONS 17.96
\$2.46/sq ft
Includes fire protection system, FM 200 gas fire protection system at data center, pre-action systems at other critical areas

COMMUNICATION INSTALLATIONS By owner

PRELIMINARIES AND INSURANCES	
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PRELIMINARIES, OVERHEADS 387.05
AND PROFIT
\$53.02/sq ft
Includes general conditions, fees, permits, and insurance

EXTERNAL WORKS	
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LANDSCAPING, ANCILLARY BUILDINGS 170.60
\$23.37/sq ft
Includes retaining wall, reflecting pool, landscaping, asphalt parking area and drive, greenhouse, grounds maintenance building, and hazardous materials building

Cost Summary

	Cost per m ² (£)	Percentage of total
SUBSTRUCTURE	50.15	2.06
SUPERSTRUCTURE		
Frame	280.03	11.48
Roof	35.99	1.47

External walls, door, windows	220.39	9.03
Internal walls and partitions, inc internal doors and finishes	221.92	9.09
Group element total	758.33	31.08

FITTINGS AND FURNITURE	208.12	8.53
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SERVICES		
Water installations	45.77	1.88
Space heating and air treatment	486.25	19.92
Electrical services	305.07	12.50
Lift and conveyor installations	10.73	0.44
Protective installations	17.96	0.74
Group element total	865.78	35.48

PRELIMINARIES	387.05	15.86
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AND INSURANCE		
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EXTERNAL WORKS	170.60	6.99
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TOTAL	2440.03	100
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CREDITS	
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DESIGN START DATE October 1998	PROJECT MANAGER Landmark Contract Management
COMPLETION DATE September 2001	LANDSCAPE ARCHITECT Hellmuth, Obata & Kassabaum
AREAS Main building 11,850m ² (127,435sq ft); Headhouse 2,270m ² (24,400sq ft); Greenhouses 1,400m ² (15,069sq ft)	LANDSCAPE CONSULTANT Mark Westcott
FORM OF PROCUREMENT Negotiated lump sum	CONSTRUCTION MANAGER McCarthy Building Companies
CONTRACT VALUE £34,386,100	IT CONSULTANT Sonacom
CLIENT Donald Danforth Plant Science Center	CIVIL ENGINEER Morrison Knudsen
DESIGN TEAM Nicholas Grimshaw and Partners: Andrew Whalley (director), Vincent Chang (project architect), Graeme Dix, William Horgan, Jim Keen, David Kirkland, Mark Middleton, Steve Riddell Hellmuth, Obata & Kassabaum: Bill Odell, Tom Goulden, Mark Husser, Andy Clinch, Jeff Strohmeier, David Hronek, Jim Fetterman, Nora Akerberg, Tod Burkhead, David Raver, Terry Lafen, Jerry Cannon, Mara Baum	TECHNICAL ARCHITECT Hellmuth, Obata & Kassabaum
STRUCTURAL ENGINEER Ove Arup & Partners	ARCHITECT Hellmuth, Obata & Kassabaum
SERVICES ENGINEER Ove Arup & Partners	GREENHOUSE CONSULTANT Agritechnove
MAIN CONTRACTOR McCarthy Building Companies	INTERIOR ARCHITECT Hellmuth, Obata & Kassabaum
QUANTITY SURVEYOR Davis Langdon & Everest	SUBCONTRACTORS AND SUPPLIERS Maple and cedar supplier Architectural Woodwork; maple panelling RPG Diffusor Systems; metal panel ceilings Ceilings Plus; growth chambers Conviron; interior/exterior stairs and railings Equus Metals; curtain wall and brise soleil Josef Gartner; water features Hydro Dynamics; lab casework Kewaunee Scientific; greenhouses Nexus; stone flooring supplier Zickel

WEBLINKS	
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Nicholas Grimshaw and Partners
www.ngrimshaw.co.uk
Hellmuth, Obata & Kassabaum
www.hok.com
Ove Arup & Partners
www.arup.com
Davis Langdon & Everest
www.davislangdon.com
McCarthy Building Companies
www.mccarthy.com
Landmark Contract Management
www.landmarkcontractmanagement.com

working details

The laboratories of the plant research institute are stacked three stories high on each side of an atrium; they are reached by walkways that run on each floor at the sides of the atrium and are connected by bridges and staircases.

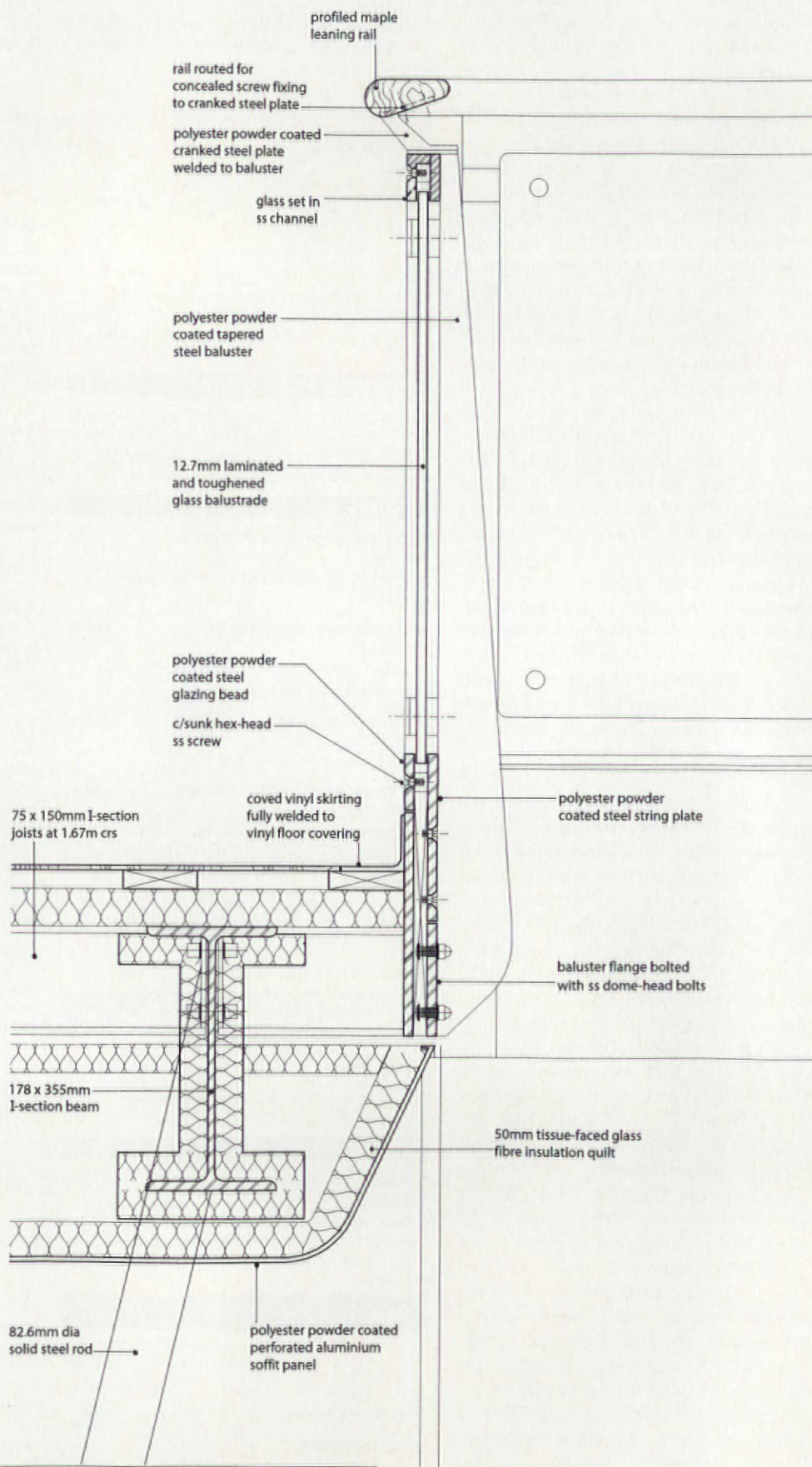
The atrium is designed as the main circulation hub and as a 'break-out' space for casual meetings. Formal meetings are held in elliptical pod-like rooms, which project at the north end of each walkway and give views of greenhouses through the glazed entrance wall. The two staircases cascade down from the walkways to the main entrance level, from which the refectory and auditorium are reached.

Walkways, bridges and staircases are of similar components; they are supported by canted steel props and have identical balusters of tapered steel. The bridge, meeting room pods and walkways are framed with steel; the staircases are formed of folded steel plate treads and risers welded to pairs of steel channel strings with flanges facing inwards.

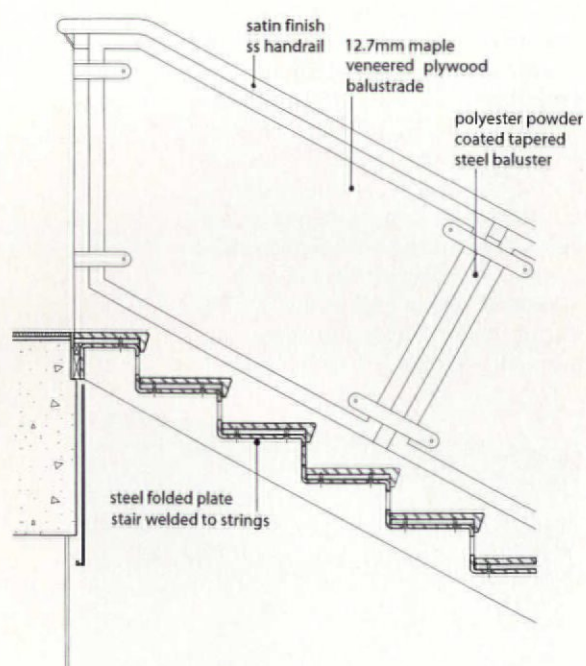
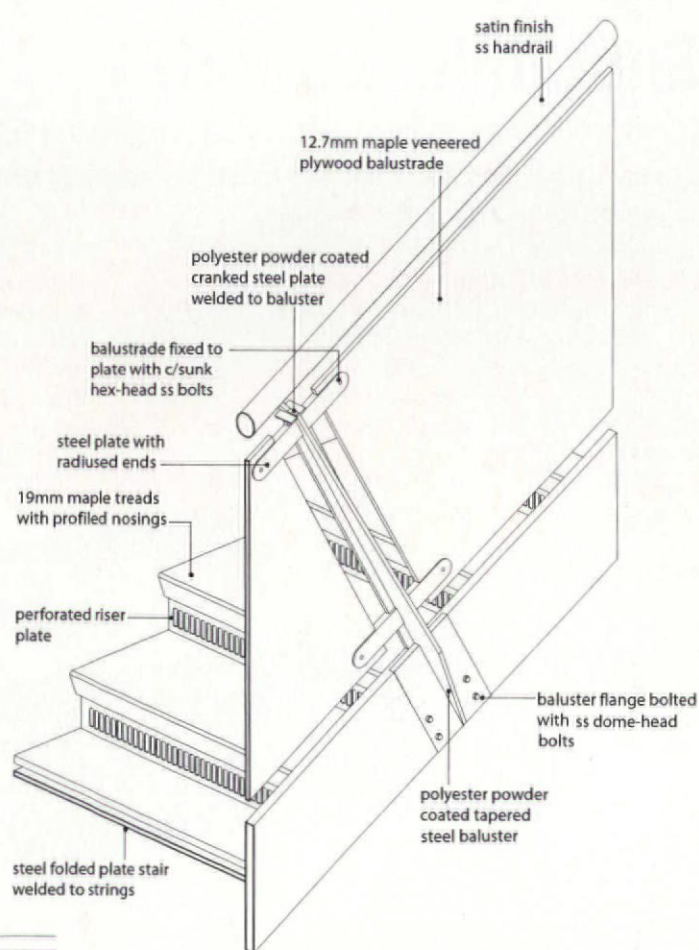
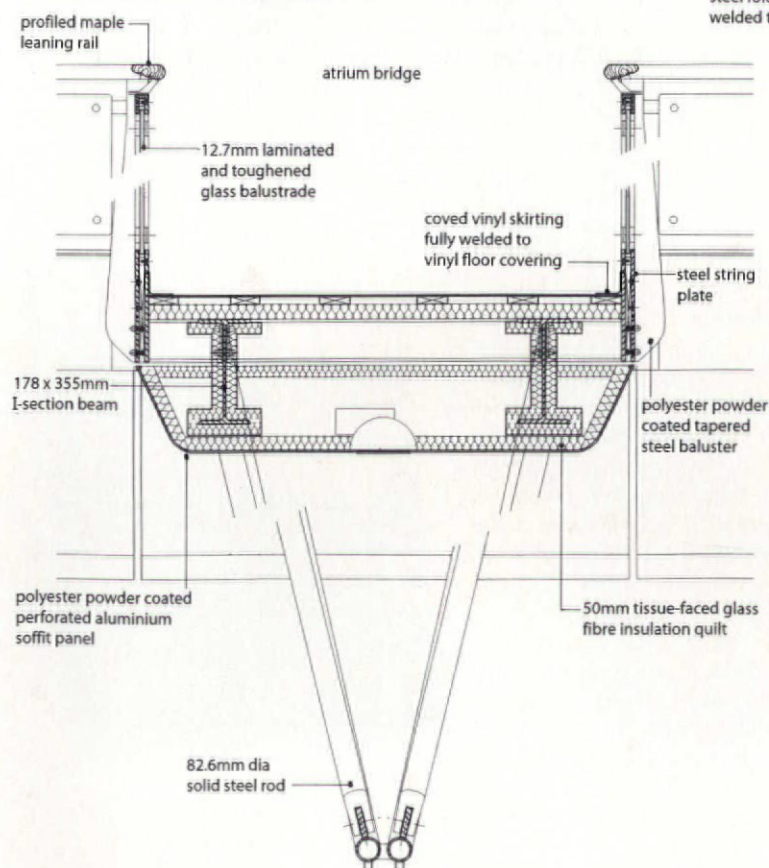
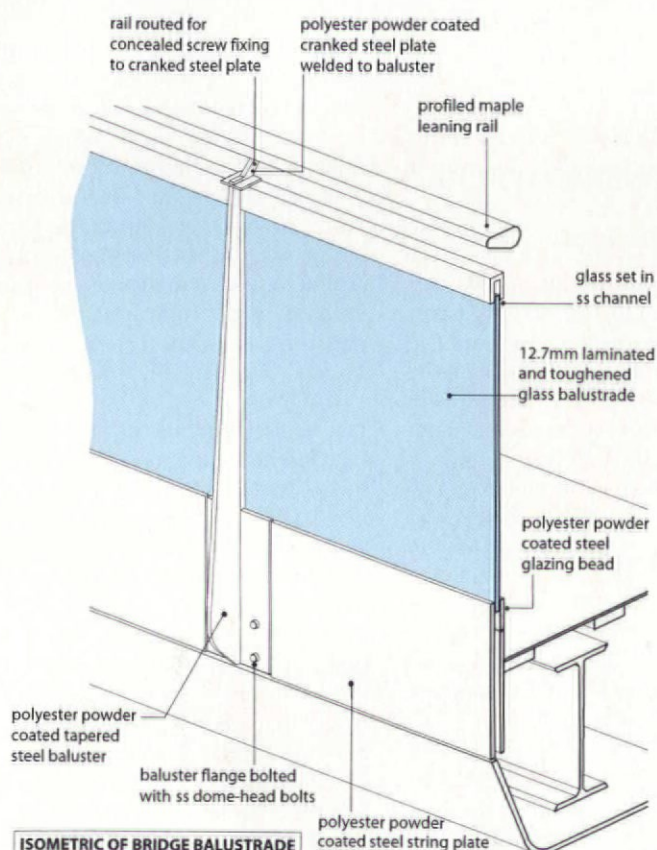
The bridge has a glazed balustrade of 12mm toughened and laminated glass panels fixed between the balusters and clamped at the base to steel glazing beads. The top of each glass panel is set in a stainless-steel channel. A maple leaning rail is fixed to the tops of the balusters with cranked steel plates.

Staircases have balustrades of maple-veneered plywood bolted to the balusters by steel plates with radiused edges. A stainless-steel handrail is fixed to the tops of the balusters with cranked steel plates. The atrium is not air conditioned; tempered air is directed into the space from aluminium-faced bulkheads in the soffits of the walkways and bridge.

Susan Dawson



DETAIL SECTION THROUGH ATRIUM BRIDGE AND BALUSTRADE



Sustainless steel?

The International Iron and Steel Institute (IISI) conference in Luxembourg was entitled 'Steel in Sustainable Construction'. Austin Williams kept a diary

I had been invited to sit on the final plenary panel of the IISI conference in Luxembourg on 16 May; a session entitled 'The business case for sustainability'. My presentation was called 'De-prioritising sustainability' – would they mind? Below I document my foray into the world of iron and steel.

3:40am: Alarm call.

3:42am: My failsafe second alarm call.

5:00am: Tube station not yet open.

5:20am: First train arrives full of bleary-eyed workers, who presumably do this sort of thing every day.

6:45am: Check-in at Heathrow Terminal 2.

6:50am: Obligatory cappuccino.

7:25am: Check watch. It's only 6:53 but feel as if I've been sitting there for ages.

7:29am: Realise watch has stopped.

7:30am: Call to gate.

10:00am: Taxi driver at Luxembourg airport has never heard of the Luxembourg Congrès building. Neither have his colleagues. Maybe it's my accent. As there is no other address on the conference brochures, we guess that it must be the Hemicycle – the European Parliament building.

10:50am: Guess correctly. Arrive during coffee break and given the heaviest conference bag in history.

Presumably steel samples inside.

11:00am: Sit in on session where Chris Wilkinson has just begun to describe the Gateshead Millennium Bridge. Pinch myself to check that it has not all been a dream and I am really still in the UK.

The bridge is sustainable, says

Wilkinson, because

it uses 10

per cent of

the steel in

the original

bridge. I wonder

whether this is the

benchmark – if

his new bridge

had been built in

a straight line

across the Tyne,

using even less

material, would it have been even more sustainable?

It is also 'socially sustainable', he says, because it links two sides of the river and brings people together and helps regenerate the area. Is this not what all bridges do? Nobody says anything, though.

11:30am: Philippe Samyn, a Belgian architect, says that 'the one thing that underlies sustainability, is "love"'. He shows a petrol station design of his in the Netherlands which looks to me like a normal petrol station surrounded by a 5m-high steel mesh fence. This, he says, is a sustainable design, because it has considered the users and slows down the wind to protect them.

12:00pm: Nils Larson from Canada, argues against amortising energy use over the life of a building, since you can never tell how long a building will last. It also, presumably, spoils dramatic graphs in Powerpoint presentations.

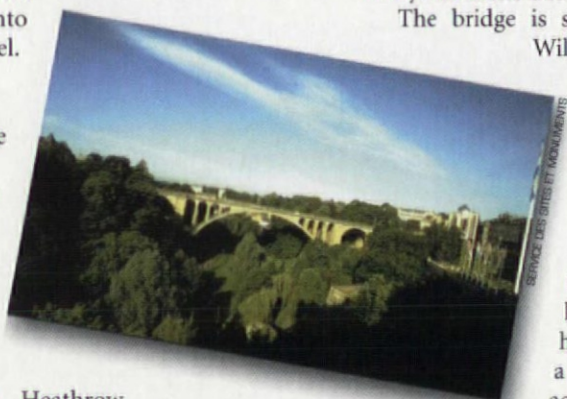
12:30pm: Lunch. European sustainability-types are definitely not vegetarian.

1:00pm: Pre-meeting discussion for speakers at the afternoon session. Chairman Dr Jan Hellings wants us to make 'controversial' contributions, like saying that 'you don't think that steel is a very good material,' for example? 'No, that wouldn't be very useful,' said Graham Hillier of Corus. 'I want to say that this conference has nothing to do with sustainability,' says S'PACE architect, Jean Robert Mazaud. 'Excellent,' says the chair.

The chair is excited but suggests that we keep our powder dry and do not lose our spontaneity. I want to say that sustainability reinforces low horizons, I say. 'Oh,' says the chair. 'Nice.'

2:45pm: Tea break. I browse the conference proceedings and note that only 16 per cent of papers relate to innovative products, and only two or three of them are really innovative. Notice that one of the papers is being given by Mr P Aromaa, which is vaguely amusing, as is Mr U Finger.

4:00pm: Anders Wijkman, MEP, who has driven at breakneck speed from Brussels, kicks off the proceedings. He tells us that he is not for regulation and then proceeds to outline a series of taxes, penalties, guidelines and legal constraints to



improve the take-up of sustainability. He seems to have missed the irony of having a 'sustainable steel' conference at the height of the US/European trade war over steel

imports. 'By doing things voluntarily,' he threatened, 'you can avoid legislation,' ('or else,' presumably).

4:30pm: My turn. I present my case that sustainability sets unnecessary constraints, especially when it is seen as a priority concern.

It is fragmentary, meaningless (in terms of definitional clarity), increasingly regulatory, deterministic and defensive. 'Why can't we just argue for "technology" rather than "alternative technology"; why not "development", rather than "sustainable development". Indeed, why do we try to justify things in terms of an unsubstantiated concept?'

I also stress that it is Utopian to suggest that resource productivity can occur without improvements in labour productivity. The idea that resources should work harder – becoming more efficient – is good, but only if it is not at the expense of labour efficiency.

Robert Mazaud is not impressed. The problem with sustainable architecture is that the building industry is perceived as aggressive. If the public was more involved, then they might realise that the construction industry, too, cares about the environment.

Professor Christer Sjöström from Sweden prefers to talk about the need to implement Agenda 21, and Gunter Pauli presents a

quick slide show of how, by building a hospital in a natural ground trough, they have captured water and avoided the need for mains water infrastructure. Apparently, this is a good thing.

Amory Lovins suggests that architects should be paid based on what they save, rather than what they spend. Inefficient choices, he says, have social costs and should be penalised. 'What,' I ask, 'is the definition of inef-

ficiency? Who decides whether it is a detrimental cost and who does the penalising?' No time for an answer – time is up.

5:30pm: Lovins suggests to me that labour efficiency is a thing of the past and that if I look at his website I will see the error of my position. I have, I say, and I have read all your books, but I still don't agree with you. He walks off.

6:00pm: We are whisked off to travel the 500m back to the

hotel by coach. I'm delighted by the luxury – all the other delegates are appalled (but they don't get off the bus). The organisers justify the ride saying that it would have been difficult for pedestrians to find their way...

7:00pm: Picked up at the lobby and taken to Luxembourg's only privately owned vineyard for a tour and tasting. Our guide innocently explains that during the fermentation of the wine, over 100,000 tonnes of CO₂ are released which 'disappears into the air'. People shift uneasily at this gratuitous addition to global warming. We console ourselves by getting pissed.

8:30pm: Back in the diesel coach for the 2km (we could have walked that) trip to a schloss over the border in Germany.

Chat to some people about the concept of win/win sustainability. 'It's a bit like,' I say,

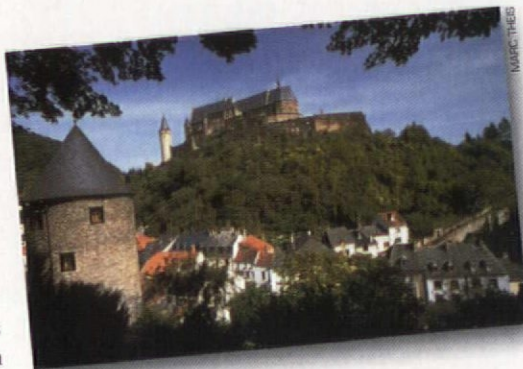
'employing blind people so that you can turn out the lights.' Unfortunately, everyone takes me seriously and begins to work out the logistics.

'Are there many jobs that can be done by unsighted people,' asks one. 'If it helps a section of society and saves energy at the same time, I'm for it,' says another. I was joking!

Shift my attention to someone from BRE's Centre for Sustainable Development. 'Do you know,' she says, 'I really believe that it would be better for the planet if human beings were wiped off the face of the earth.' I give her the benefit of the doubt.

'The trouble is,' she continues, 'the human race is too resilient; the Ebola virus has only managed to kill about 3,000.' She tells me that she is chatting to me in a personal capacity. Thank God for that!

9:00pm: Arrive at the schloss. Greeted by fat bloke and his wife in medieval re-enactment get-up, playing a bagpipe of some description. They both wear non-standard medieval prescription spectacles.



9:30pm: Take our seats and I join in a conversation with a Ugandan UN representative who is holding forth on the need for investment in civil society. I ask him what he means and he says there is a saying, that 'when the man on the Clapham omnibus doesn't understand something, then there is no point explaining further.'

I say that there is no such saying. A woman next to me is offended that I have contradicted a UN official and tells me to shut up.

I try to engage in conversation with someone else. 'What do you do?' I ask. 'Nothing,' he replies. This is going to be a long night. More drink anyone?

1:00pm: Arrive back at the hotel and watch un-PC bullfighting on Spanish satellite TV.

Something old, something new

Urban preservation need not mean stagnation, visitors to the fifth National Conservation Conference were told

BY RUTH SLAVID

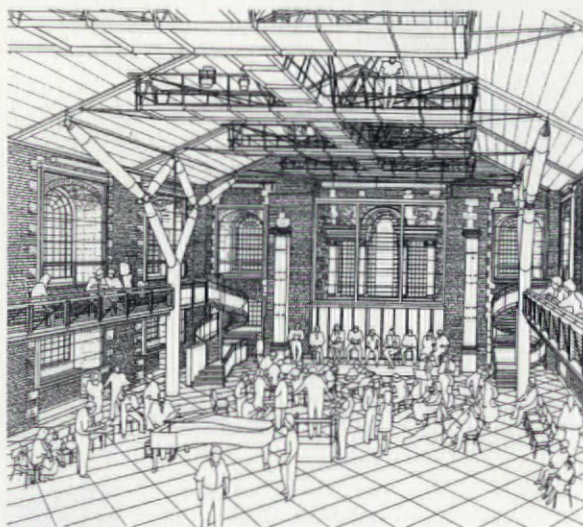
Northern European cities have always wanted to emulate their southern cousins, so Edinburgh boasted the sobriquet 'Athens of the North' and Amsterdam claimed to compete with Venice. Now Barcelona is the holy grail, with Bilbao claiming to have put itself in the running with Frank Gehry's Guggenheim museum. The latest contender is Birmingham, with RIBA president elect George Ferguson saying: 'I would like to think that people will talk about Birmingham the way that they do about Barcelona.'

Kevin McCloud, presenter of *Grand Designs*, would not agree, having given the city a hard time when he presented the RIBA Awards there earlier this month, and there certainly is some way to go.

But Ferguson was making a serious point. He was speaking in Bristol at the Fifth National Conservation Conference, where a case study on Birmingham's Jewellery Quarter was one of the key presentations. Peter Beacham, head of urban strategies and listing at English Heritage, said: 'We believe that the Birmingham Jewellery Quarter was one of the great starter projects for us.'

It is essential, he said, 'to give designation – listing, scheduling or registration – its proper role as mechanisms for managing change not stopping it, within the context of management strategies that embrace regeneration.'

He believes: 'We are at one of those moments in our history where we can do something special. We must move outside the heritage niche and make sure we connect ourselves with urban issues.' This was at the heart of the conference, with its title, 'Regeneration through conservation'. Mike Taylor, responsible for policy making, funding and urban regeneration in Birmingham city centre, outlined the way this was achieved in the Jewellery Quarter. The 100ha area, home to a concen-



Above: New lives for old churches. **St Luke's in London is becoming an education and rehearsal space for the London Symphony Orchestra**
Opposite: Bristol's dramatically wrecked Temple Church could become a glass centre

tration of artisans since the 18th century, had declined with competition from the Far East. At one stage, 30 per cent of all accommodation was vacant. The council levered in funding, including City Challenge money, and set about regeneration.

Taylor said when the council wanted to demolish a number of listed buildings, the Birmingham Conservation Trust had put together a 'funding cocktail' to refurbish buildings and give them new uses. Now the area is booming, but there have been some interesting lessons.

One is that the original plans, which used a zoning approach, were not feasible – they were not what the market wanted. The end result is far more mixed use – in fact like the original mix in the area. Having successfully brought in a residential element, the council faced pressure to keep increasing this. And almost none of the 2,000 new dwellings fits in the 'affordable' category. In other words, having opened the Pandora's box of regeneration, it is very difficult to control the direction it takes. And even the degree of balance that has been achieved is only because the council owns 30 per cent of the property in the area and therefore can exert a moderating influence.

Ferguson outlined some of the initiatives with which he had been involved in the conference's host city. At times this took the form of a kind of guerrilla conservation – forming a company to buy up the dock cranes when the city looked poised to destroy them, then later, having won the argument, selling them back to the city and using the money to create a ferry service. Or, buying a building threatened with demolition and opening a cafe in it that subsidises Ferguson's architectural work.

He regretted that no new developments would be able to recreate the density of the old city. 'There is no way you can build that tight unless you break some rules,' he said, adding, 'I am all for breaking some rules.'

He also believes that 'while it is sometimes worth being pragmatic, sometimes it is worth pushing the boat out further than you dare'. Another of his tips was 'not to be afraid of the temporary in order to get the permanent right'. A temporary construction can provide thinking time, while people become accustomed to change.

But sometimes it pays to be punctilious. Charles Wilson, a consultant architect and town planner, offered practical advice on urban regeneration. He said a study by English Heritage has shown 60 per cent of all applications in heritage areas are rejected because of a lack of information. With a growing shortage of local authority conservation staff, he recommended: 'Do as much of their job as you can.'

The conference moved into even more practical areas with the discussion of projects to find new uses for redundant churches. In London, Levitt Bernstein is turning St Luke's Church into an education and rehearsal space for the London Symphony Orchestra, while in Bristol Richard Griffiths Architects has an equally radical proposal for Temple Church.

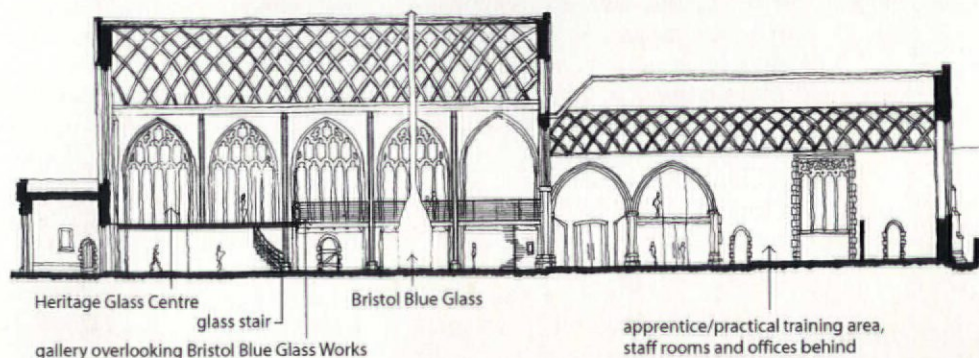
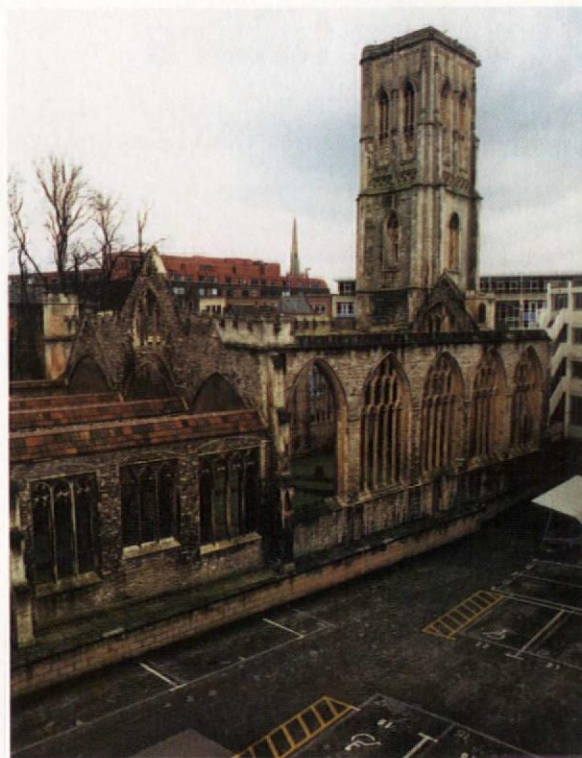
These buildings share architectural merit, a colourful history and the lack of a roof at the time work began. St Luke's was one of the last of the 12 churches built under the over-ambitious Fifty New Churches Act in 1711. Part of the work on the church, which has a dramatic obelisk spire,

can be attributed to Hawksmoor.

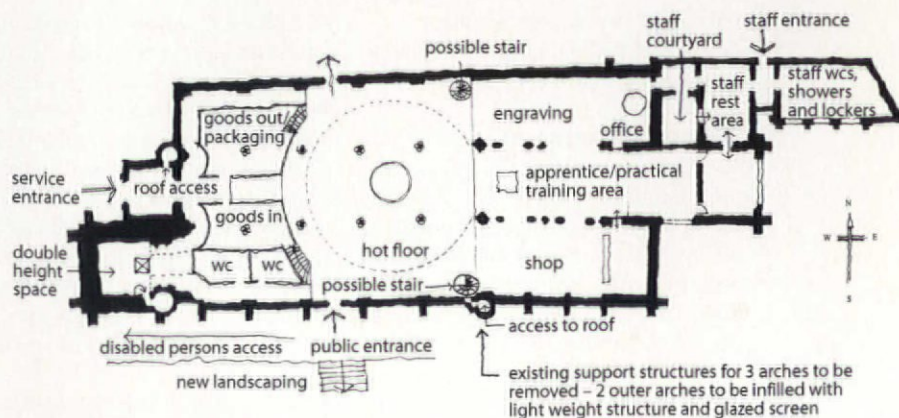
What is more certain is that corners were cut in the specification and construction and, having been consecrated in 1733, the church underwent its first repairs in 1734. It has been underpinned three times in its history, most recently in 1951, but in the dry summer of 1959 it suffered calamitous subsidence.

Although the building was listed Grade A (the equivalent of Grade I today) the extraordinary decision was taken to remove the roof and, apart from some emergency repairs, nothing more happened until the late 1990s. Then, with grants from the Arts and Heritage lottery funds, a new use was found for the building. Its large volume enables a choir and symphony orchestra to rehearse comfortably.

Engineer Arup found good ground remarkably close to the footings, and was able to underpin the building and also dig out new space



long section



floor plan

27 June 2002

beneath the crypt. The church has a new heavy roof to provide the necessary acoustic insulation, supported on an independent steel structure. And even the roughness of the walls is an advantage, as it prevents undesirable reflections of sound.

Looking back on the building's chequered history and the fact that a solution did not seem possible until the advent of the National Lottery, Levitt Bernstein's Axel Burrough said: 'The motto is "never despair".'

This is a motto that Richard Griffiths has taken to heart. Temple Church has a fantastic pedigree but an unhappy history. Built on the site of a 12th-century circular Templar church, the existing building is 14th century, with a 15th-century tower.

It survived the bombing raids of World War Two, but lost its roof. The then Ministry of Works put in concrete strainer arches and the thin brick walls started to decay from both sides.

'At the moment,' said Griffiths, 'it is a memorial to the war and it is using a lot of English Heritage money to maintain.' He wants to reroof it and allow it to make a contribution to the Temple area of Bristol.

Technical issues are challenging but usually soluble – in this case engineer Buro Happold has suggested the use of a lamella timber roof which would be light, stiff and effective and, says Griffiths, 'be parallel in richness to the compartmentation of the original roof'.

The trickier issue is finding a use. After a study with business planning consultant Prometheus, Griffiths is recommending that the building becomes the Bristol Glass Centre, run by Bristol Blue Glass. A furnace at the centre could recreate the original circle of the Knights Templar's church, there would be commissions for coloured glass in the north windows and live glass making.

If it proves successful the project will be an exemplary demonstration of Beacham's argument that the listing of a building should not be a brake on development, but a spur to finding excellent solutions.

● Next year's National Conservation Conference will be held in Birmingham

Planning a mixed-use future

The latest government reshuffle has affected transport and planning once more. So is it time to take a longer-term view?

BY BRIAN WATERS

It took years of lobbying and countless numbers of doctoral theses to persuade government of the logic of integrating transport policy with land-use planning.

The culmination was the invention of DETR – the Department of Environment, Transport and the Regions. That was only five years ago. It was reshuffled into the DTLR – the Department for Transport, Local Government and the Regions – only a year ago, when the environment secretary became responsible for agriculture instead of planning.

Another year and another reshuffle later and there is no department of planning; its remnant is subsumed into a new 'Office of the Deputy Prime Minister', which is now separated from the Department of Transport. What happened to 'joined-up thinking', let alone modernising planning?

Hopes are fading for the promised radical reform of planning anticipated in the form of a policy statement before the summer and a bill in the autumn. Sponsored behind the scenes by HM Treasury, its fate is in the hands of new planning minister Lord Rooker, who needs reminding that his predecessor, Lord Falconer, told local planning authorities to act as though the Green Paper reforms were already in place.

What price development plans now? These are slated for abolition in the Green Paper. Recent events make it clear that transport planning presents tough, long-term challenges that will be hard to resolve.

The recent rubbishing of the Deputy Prime Minister's 10-year Transport Plan by the Commons Select Committee, even though it is well into the 10-year period, underlines the point. Whether one considers the future of rail investment or the prospects for new roads (there are only 240km of new roads proposed in the government's plans up to 2010 and roughly 110km of

'The urban renaissance is not some futuristic fantasy but achievable under existing legislation and business practices. It is simply a matter of coordinating the interested parties'

new railway routes), or the introduction of congestion charging, there is no obvious happy ending.

Given the absence of short-term answers, trust has to be in longer-term strategic thinking. This brings us back to transport and land-use planning. The Royal Institute of Chartered Surveyors (www.rics.org) has been promoting an approach it calls Transport Development Areas (TDAs) – which simply means building at high density near and over stations.

It has just launched its final guidance on TDAs, which includes 20 case studies from around the UK. Under the headline 'City Life Solution – high density, well planned urban villages hold answer to many inner city problems', it claims: 'The urban renaissance is not some futuristic fantasy but achievable under existing legislation and business practices. It is simply a matter of coordinating the interested parties: planners, developers, the local community, transport planners, operators and providers.'

Following RICS' advice, local authorities would offer planning incentives for developers to build intensively in certain areas and in certain ways. 'The result will be the development of excellent, high-density, mixed-use areas around good public transport access, reducing reliance on the car and easing pollution. Essentially the kind of places people want to live and work.'

Dystopian images

London mayor Ken Livingstone's draft London Plan strongly endorses this approach and combines it with a policy for the inclusion of affordable housing with commercial development, both as a means of finding more housing land and subsidy and to reduce the average journey to work time.

As RICS chief executive Louis Armstrong says: 'High density may

conjure up dystopian, *Blade Runner*-like images for some, but high density does not automatically mean high rise. Paris has, on average, four times the living density of London, but is rarely built over seven storeys. Its urban environment is, by and large, better. Integrated planning has also produced enviable results in cities such as Copenhagen, Stockholm and Lyon.'

Wither the architect

All this is consistent with the Urban Task Force and Urban White Paper and suggests integrated transport and land-use planning has taken on a momentum of its own, regardless of the apparent early demise of the joined-up government department.

Perhaps this leaves an opportunity for a clearer purpose for regional government, the baby of Deputy Prime Minister John Prescott, in whose new department planning now languishes.

That it is the RICS, rather than the Royal Town Planning Institute (RTPI) or the RIBA that is behind the push for TDAs, suggests an even more powerful change. For decades it has been development surveyors who have resisted the integration of different uses (being opposed, in particular, to residential units mixed with commercial, but even of proposals for shops under offices), because this complicates the investment profile of a development.

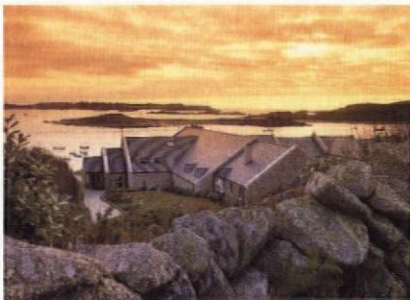
Even Railtrack has now dropped its objection to including flats in developments over operational railway land thanks to a provision in the Commonhold Act which obtained Royal Assent in May this year.

Architects will have to avoid being typecast into specialisms such as housing or retail so as to become skilled at integrating several uses into high density mixed developments; planning authorities will have to drop their suburban design criteria, such as large overlooking distances; and Building Regulations will have to relax their criteria for shared means of escape between different uses, for all this to come together in an effective way.

Brian Waters is principal of The Boissot Waters Cohen Partnership, e-mail: brian@bwcp.co.uk, www.bwcp.co.uk

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Controversial case proves to be straight fight between insurers

Some have expressed pure outrage at the recent decision of the *House of Lords CRS v Taylor Young Partnership & Others* (Judgement 25.4.02). The employer sustained losses in a fire. The case concerned the design professional's attempts to claim a contribution towards compensating the employer, from the construction team, whom they alleged were partly responsible for the fire.

At each stage of the judicial process, the courts consistently held that the operation of the provisions of the JCT standard form of contract, the joint names insurance and the Civil Liability (Contribution) Act 1978 operated to preclude such a claim. On a superficial reading of their Lordships' speeches, one would expect this outrage to have been expressed by the design professionals, and others like them, who are now left to face the employer's claim alone and are prevented from sharing their liability with other blame-worthy parties. However, a closer reading of the judgment reveals that the real fury is to be expected, not from the professionals themselves, but from their professional indemnity insurers.

At the heart of the design professional's claim in the CRS case was what was described by one of the law lords as their 'jury point'. Bearing in mind that juries are influenced by factors wholly unconnected with the operation of the law, the professionals simply claimed that it would be unfair if they were left to pick up 100 per cent of the bill for fire damage if they were only, for example, 10 per cent to blame for the fire. They endeavoured to illustrate the profound injustice of the contracting team colluding with the employer to exclude the ordinary rules of liability for fire, by means of their own private contract, which provided for an insurance policy that would foot the fire damage bill. The ultimate injustice was the fact that this policy covered the contractor and the employer, but not the professionals.

The combination of this private arrangement and the general principles of insurance law resulted in the joint names insurers being able to claim back their outlay from the professionals

but prevented the professionals from claiming a contribution towards the damage from the contractors. On the face of it, this argument has something going for it. But if you step back from the heat of the debate for a moment and consider the cold commercial reality of the case, you get a different perspective.

First, the professionals were not left to pick up the bill for fire damage. Their professional indemnity insurers were. So the professionals were insured against fire damage, just as the employer and contractor were.

Second, there is no common law right to claim a contribution. A contribution claim is a pure creature of statute. If the provisions of the 1978 Act are seen to be unfair, the position has been made a good deal fairer than it was before the introduction of the present legislation. As the Court of Appeal pointed out, if the present rule is harsh, the courts cannot remedy that harshness by inventing a new rule to enable the professionals to recover where there is no liability under the Act.

Third, there is nothing secret about the provisions of the JCT standard form of contract. One might need the assistance of a stiff drink to facilitate an understanding of how the insurance provisions operate, but the JCT is a composite body that includes representatives from most of the design professions, including the RIBA and ACE. Both the professionals and their insurers must be taken to have been well aware of the terms of the main contract. The law lords recognised that, ultimately, the case was a dispute between the professionals' indemnity insurers on one hand and the joint names insurers under the main contract on the other.

As Lord Bingham said: 'The real complaint of the indemnity insurers was their failure to take steps to guard against a contingency which has in fact occurred, a contingency which could in my opinion have been foreseen had the right questions been asked at the right time.' Now can you see why professional indemnity insurers are hopping mad?

Kim Franklin

'The real complaint of the indemnity insurers was their failure to take steps to guard against a contingency which has in fact occurred'

Cyber fun the AF way – chasing coloured boxes!

The Architecture Foundation, now under new management, has this nifty site (www.architecturefoundation.org.uk), according to an admiring reader, so here goes. Its big feature is a 17 by 8 grid of shadow boxes. Don't ask me why 17. Run your mouse across them and those on your mousepath change colour. Try to get off the grid and you still leave a trail.

Unlike bubblegum in ripple sole shoes, which this process somewhat resembles, they turn themselves off after a bit, leaving you to wonder what it all means. That's not entirely true because if you linger for long enough on a coloured box, a little name pops up – for example, there's one here called Hans Dollgast.

OK, so you click away. And nothing happens. Oh yes it does, bits of text appear unobtrusively in the brown strip above the boxes, announcing the 1991 exhibition at the foundation's gallery. At last. A bit of fun in the, mostly, deadly serious architectural cyberworld.

Try another box. But first see if you can make all the boxes go coloured before the early ones turn themselves off... sorry, this is an information column, not a guide to games. Then it strikes you that, imaginative though this may be, it's not exactly the party line on information accessibility. Then you discover that you can also select by date and by type. Select what? you might ask. And the answer to that is not a lot.

You click on the line Millennium Landmark Competition and there in the brown strip is basic info about when the exhibition was held – but not a sausage about who was eligible, who won or who had too much warm white wine at the private view. But wait. Try Tower Power and, blessed relief, up comes a thumbnail in the brown strip with the injunction Read More.

But you're so exhausted chasing coloured boxes around that you go and make some peppermint tea. Interesting potential. What will Rowan Moore make of it all?

sutherland.lyall@btinternet.com

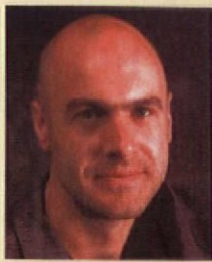
Summer 2002



MetalWorks

Transport





If there was any doubt about the problem we have with technology, you need only visit The Ideal Home Show and The Motor Show.

The first is a celebration of traditional designs, bolstered by the sponsorship of that cutting-edge newspaper the *Daily Mail*. It is a desperate place to visit. A desert with one oasis (the LivingQuarters stand).

The centrepiece was a medieval tower, which seemed to have been labouring under the misapprehension that Thomas Edison invented the lightbulb while on the quest for the Holy Grail. This hideosity was flanked by a thatched house and a cottage, both of which reflect the national obsession with an entirely invented rural past.

What a contrast at the Motor Show. Here the emphasis is on technology expressed, not hiding behind pastiche. Technology oozes from the polished nacelles of equally polished concept vehicles. That a desirable car should express anything other than the cutting edge of materials science and information technology – that it hasn't been developed, somewhere down the line, from formula one racing or rallying – is anathema to the motor industry.

And yet we see no dichotomy in parking a brand-new car on the driveway of an equally new building but, in exiting the former and entering the latter, leaving the 21st century to enjoy a facsimile of the 18th.

Perhaps it is transport itself which fires our cultural tastebuds into adventurous mode. The argument might go something like this: horses are better than walking – cars are better than horses – aeroplanes are better than cars. The word 'better' is, naturally, interchangeable with 'faster'. So our transport buildings are in fact celebrations of speed, and reflect the ethic of the artefacts which perform the transportation.

In architecture, the Futurists understood this relationship, replicating in their architecture the nascent potentiality of a static aeroplane or ship. Perhaps the last word should be from their manifesto: That, just as the ancients drew inspiration for their art from the elements of nature, we must find that inspiration in the elements of the utterly new mechanical world we have created, and of which architecture must be the most beautiful expression, the most complete synthesis, the most efficacious integration.

Matthew Teague

Cover shows Expo Station, Singapore
Photograph by Richard Bryant/Arcaid

MetalWorks Technical

Modular success

Corus' modular railway platforms come with advantages of consistent quality, cost certainty and design flexibility

BY KEVIN LANE



Less than a year ago, Corus launched a new venture called Modular Systems, dedicated to providing cost-efficient modular railway platforms that will reduce construction time and provide better value for money. Corus Rail Modular Systems is focussing on delivering integrated solutions for the design, fabrication and installation of modular platforms, within the railway environment.

The core product offered is a lightweight, steel-framed platform of a modular design and construction that is flexible enough to be applied to the construction of complete new permanent platforms, temporary platforms, and for the extension of existing platforms in main-line, light-rail, depot and underground locations.

Aesthetically pleasing, the platform surface can mimic traditional construction appearances or be tailored to give a more modern, architectural feel, while still complying with existing passenger-safety requirements.

To complement the system, the company is developing a range of standardised and modular products including car parks, buildings, footbridges, and sports halls.

Typical of the integrated approach that Corus is taking with its 'solutions' offerings, Modular Systems brings together the expertise of Corus Metal Services, Corus Rail Consultancy, GrantRail, Corus Research, Development and Technology, and the Corus Construction Centre.

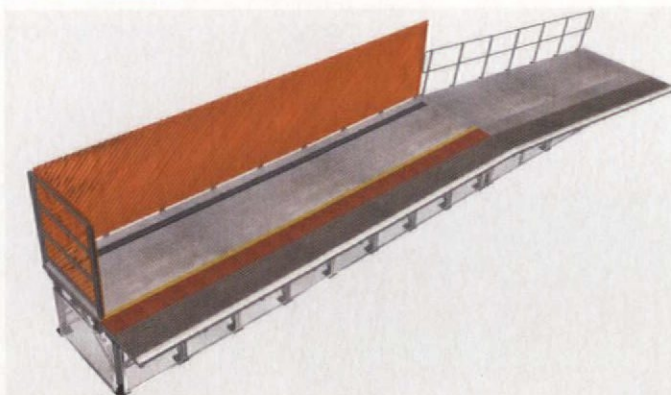
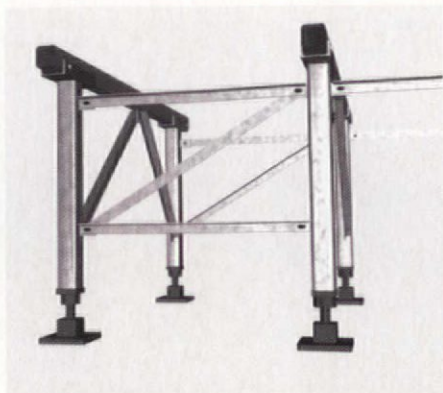
The unique aspect of the system is that it

is adjustable in height and reach both during and after installation. This is a great benefit where track changes occur or the kinetic envelopes of the rolling stock are altered. Adjusting the line and level of the modular platform is easily carried out compared to the expensive and extensive adaptation and rebuild required on all other platform systems. The other highly advantageous benefit is that the bulk of assembly is carried out as a 'Green Zone' operation, meaning that reliance on track possession is limited.

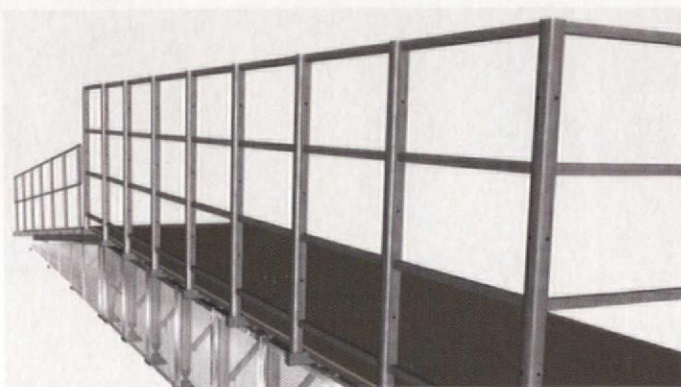
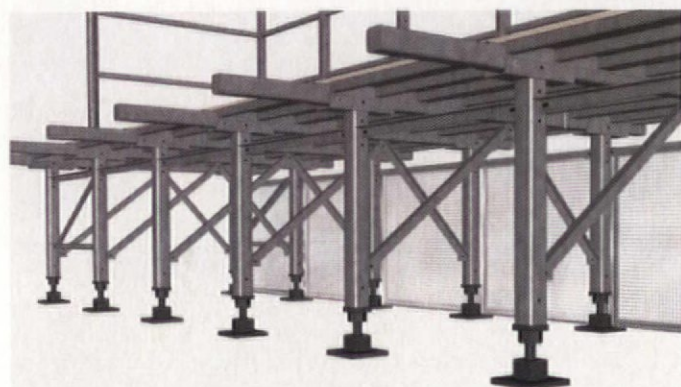
Further, for the possessions that are necessary, line isolation or Tiii's are not required. Tii possessions are adequate, which makes platform installation less costly and easier to programme within the operational train timetable. Other spin-offs include the lightness of the platform components, making mechanical handling unnecessary and making access to difficult locations economically achievable without costly disruption to train services. The platform comes with 'in-built' modular advantages of consistent factory quality, cost certainty, flexibility and adaptation, and an aesthetically pleasing design.

Modular Platform System benefits:

- Architecturally pleasing with choices of component type and colour as well as a range of innovative structure designs.
- Pre-designed system: part of the intrinsic value of the system is derived from offering a complete package that includes both the



The modular system is lightweight, easily adjusted both before and after installation, and reduces the number of track closures required



generic system design and site-specific detail design for each platform location. Furthermore, full design liability for the platform system provides single-source responsibility. Since the platform system relies on a standard design, the outline design can be pre-approved, particularly as site-specific detail is based on a range of standard available details.

- Adjustability in both horizontal and vertical planes for re-gauging.

- Versatility: our system brings the advantage that a platform may be dismantled and re-erected at a different location with reusability of many standard components. This is vastly more cost-effective than demolition and rebuild. Future traffic requirements may dictate platform movement and/or extension and the system is designed to accommodate such variations.

- Design flexibility: the system may be used in any location and for any type of platform such as island or restricted-access sites and for platform extensions. The system may be sited on curves. Alternative finishes are offered to suit planning requirements or customer preference. It is an inherent benefit of our system that its advantages become more significant as access becomes more difficult and the line more heavily trafficked.

- Lightweight system both in individual components and as a finished installation. This results in all individual components being easy to handle with no mechanical-handling equipment required during the

assembly process. Also, the finished structure is able to sit on poor ground, over tunnels or sited on bridges.

- Modular benefits of prefabrication/component assembly off-site in factory conditions. This has the dual benefit of consistent quality of assembly to an accredited standard and, on site, significantly reduced construction time.

- Benefits are greater over alternative platform systems where sites have restricted access or limited possession opportunities.

- Cost savings on whole installation compared to alternative platform types. Reduced site time and reliance on possession working significantly reduce labour for installation and safety-critical and possession-management staff.

- Safety commitment: fewer personnel on site over a shorter duration and effectively 'single trade.' Programming, risk assessment and monitoring are all simplified over alternative platform systems.

- Proven product: the system is proven and is performing on a daily basis at a number of locations on the rail network.

- Cost certainty: modularisation leads to a quantified procurement programme. This leads to certainty of cost/installation for all work above ground. In the event of variation, the effects are readily evaluated.

- Significantly reduced requirement for possession times and no Tiii isolation requirement.

- Technically proven to meet and exceed all current Railway Group Standards. Policy of continuous improvement to ensure that the product maintains this position.

Modular Systems has been contracted to build a permanent platform at Barry Waterfront Station in South Wales. In addition, it will supply a temporary platform for two years during remodelling works at St Pancras for the London Terminus of CTRL, working with Mowlem Rail. The work programme limited the installation period to a single 54-hour possession. A study on all platform types demonstrated that this platform provided the only solution:

- Only platform type to meet the limited time period requirement for installation.

- Gave value for money compared to alter native platform systems-winning on both cost and time.

- Meets and exceeds the design criteria for mainline stations.

- Modular components provide a high level of reusability for future platform requirements.

- Uniquely adjustable to meet any site changes – essential on work of this nature.

- Lightweight system gives significant advantage over existing brick arches in this location.

- Aesthetically pleasing and confidence inspiring to both client and passengers.

- One-stop solution, designed, fabricated and installed by Corus.



On the right track

Expo Station on Singapore's new rapid transit line offers a dramatic and original vista for new visitors to the country

BY SUSAN DAWSON. PHOTOGRAPHS BY RICHARD BRYANT/ARCAID

Visitors flying in to Singapore can now take the new Changi Airport rapid-transit line to reach the city. Expo Station is the first stop on the line; its dramatic roof structures – a 200m-long titanium hull and a 38m-diameter stainless-steel disc – will for many visitors be their first visual impression of Singapore.

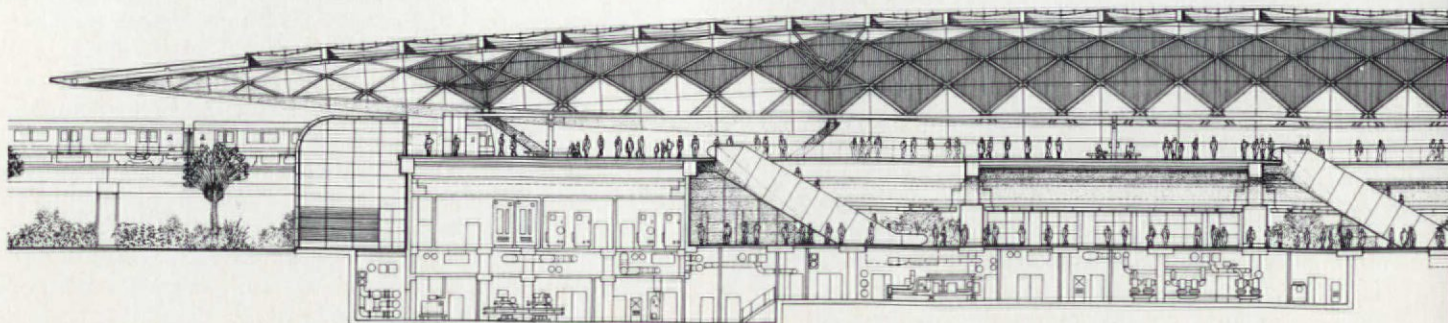
The strong forms impart a symbolic value to the station, announcing its presence as the urban gateway to a dynamic modern city. But unlike other well-known structures with titanium cladding they were not designed as sculpture – they are the logical expression of functional, structural and environmental constraints. They also act as

a conspicuous marker and direction finder on the relatively flat hinterland of the airport. This area is now being developed and includes the new Singapore Exhibition Centre. As part of its brief the new station had to accommodate the vast numbers of visitors to the Exhibition Centre – at peak times an estimated 17,000 passengers will pass through the turnstiles.

The metro runs into the station on a pair of elevated tracks that rest on cast-in-situ concrete viaducts. The platform, an arched concrete structure, is set between the tracks at upper level and is reached from the concourse at ground level by ramps, escalators and lifts. The process is the reversal of Fos-

ter's underground station at Canary Wharf, and the numbers of people involved demanded easy access and clear orientation within the station. A strong visual connection between upper and lower levels has been achieved by cutting out a long section from the floor that divides the platform from the concourse. Passengers can glimpse trains passing overhead as they enter and buy their tickets.

The platform and concourse are sheltered by the hull-like roof that takes the form of a sweeping toroidal curve. Supported only by two pairs of elegant, V-shaped columns along the sides, the hull is a steel diagrid 200m long which cantilevers 37m at both ends to a delicate tapering edge. As Singapore has one of the warmest and most humid climates in the world, the concourse has open stainless-steel screened sides instead of solid walls, which allow the space to be naturally ventilated; fresh air is drawn in through the screens to replace warm air, which rises and is expelled through



rooflights. In addition, the screens give a feeling of openness, and suggest that the roof is floating over the platform and concourse.

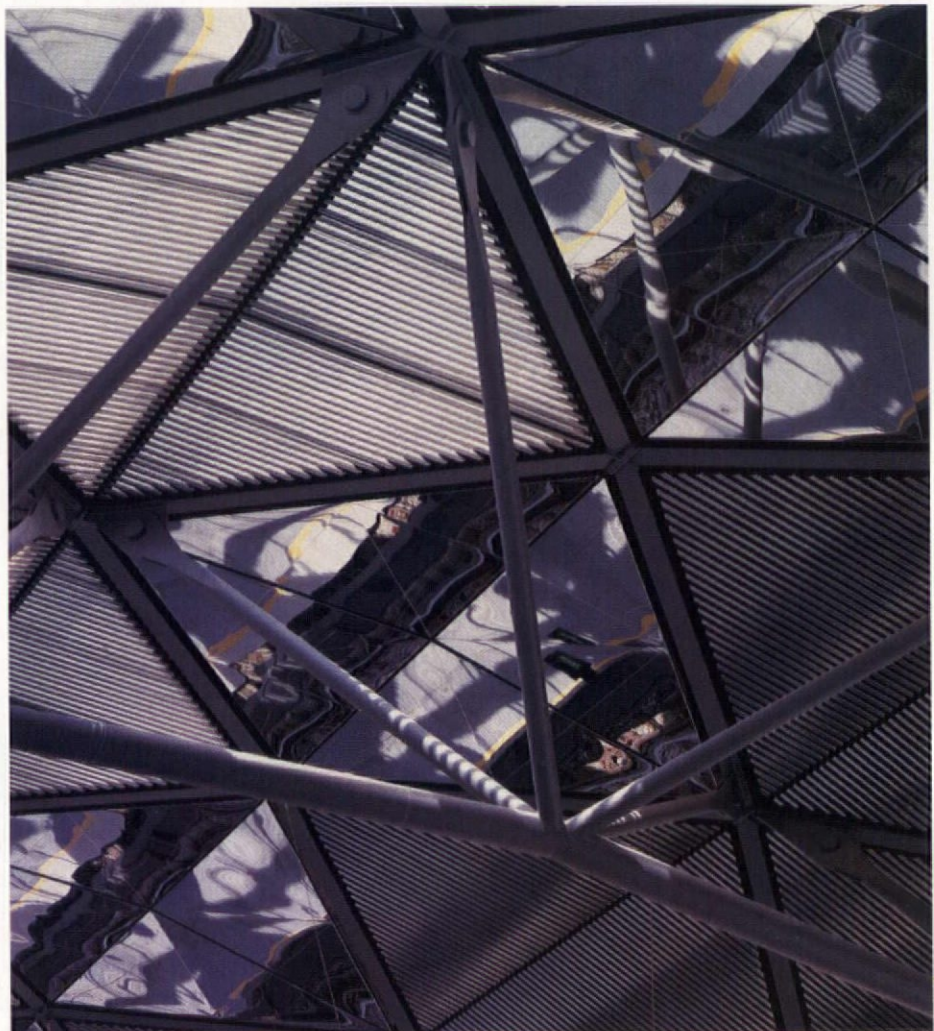
The ticket-hall roof overhangs part of the platform roof to create a unique visual counterpoint. Supported on four raked steel columns, fire-protected and clad with stainless steel-panels, it is a 38m-diameter disc with a soffit of satin-finished stainless-steel panels that radiate from the centre and tilt slightly upwards at the curved edge to reflect the daytime sky.

At the centre of the disc is a circular rooflight glazed with light-diffusing glass. It directs natural light to a cylindrical glass and stainless-steel lift shaft immediately below. The top of the stainless-steel tubular shaft is fitted with uplighters which illuminate the disc at night. The roof is covered with an aluminium deck for easy maintenance.

The materials used to construct the station reflect the harsh qualities of the local environment: it is exposed to marine sea-borne salts, very heavy rainfall and baking temperatures combined with 90 per cent humidity.

In addition, the number of passengers using the station dictated the use of durable, low-maintenance materials with a long life. The client wanted quality, not only in design but also in materials. The client specified a light-grey granite floor for the concourse, the platform and surrounding paved areas. The choice of roof materials also has an environmental significance. The stainless-steel soffit reflects daylight into the concourse, while the titanium cladding deflects the sun's rays, thus helping to create a micro-climate on the platforms that is up to four degrees cooler than the outside temperature.

When it comes to transport, Singapore demonstrates the future. Drivers are charged for using the roads to encourage them to use public transport; this, in turn is efficient, clean and well-maintained – chewing gum is banned from the country. The new Expo station makes public transport look positively glamorous.



The station is designed for a high throughflow and to offer a pleasant environment in the hot and humid climate. Materials were selected for ease of maintenance as well as visual appeal

CREDITS

CLIENT

Land Transport Authority, Singapore (LTA)

ARCHITECT

Foster and Partners

ASSOCIATE ARCHITECT

PWD Consultants Singapore

Land Transport

Authority, Singapore

CIVIL ENGINEER

Land Transport

Authority, Singapore

MECHANICAL AND ELECTRICAL ENGINEER

Land Transport

Authority, Singapore

STRUCTURAL ENGINEER

Ove Arup & Partners

QUANTITY SURVEYOR

Davis Langdon and

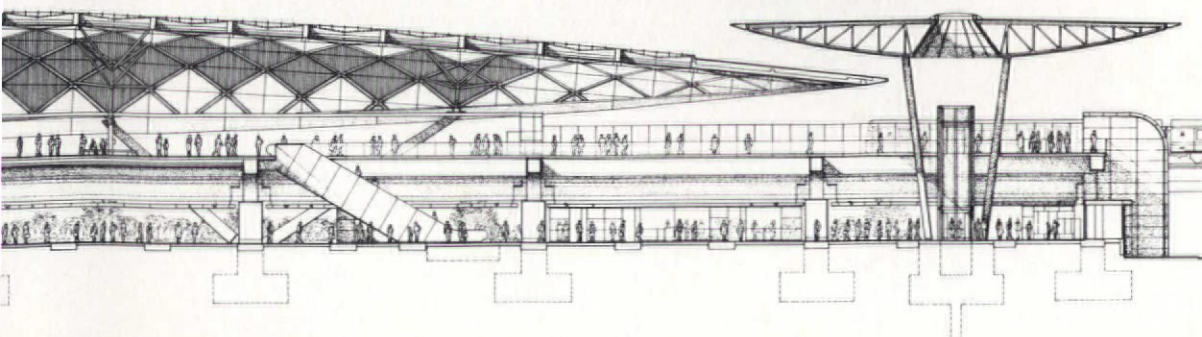
Seah

LIGHTING

Claude Engle

LANDSCAPE ARCHITECT

Cicada Singapore



MetalWorks Transport

A steel diagrid roof structure lined with steel panels

The concourse roof structure is a curved, toroidal diagrid of steel UB members that are connected by prefabricated nodes to a welded steel frame. Structurally it is so stable that a span of 70m between the two central columns provides ample support, while at the ends it is balanced by the 37m cantilevers.

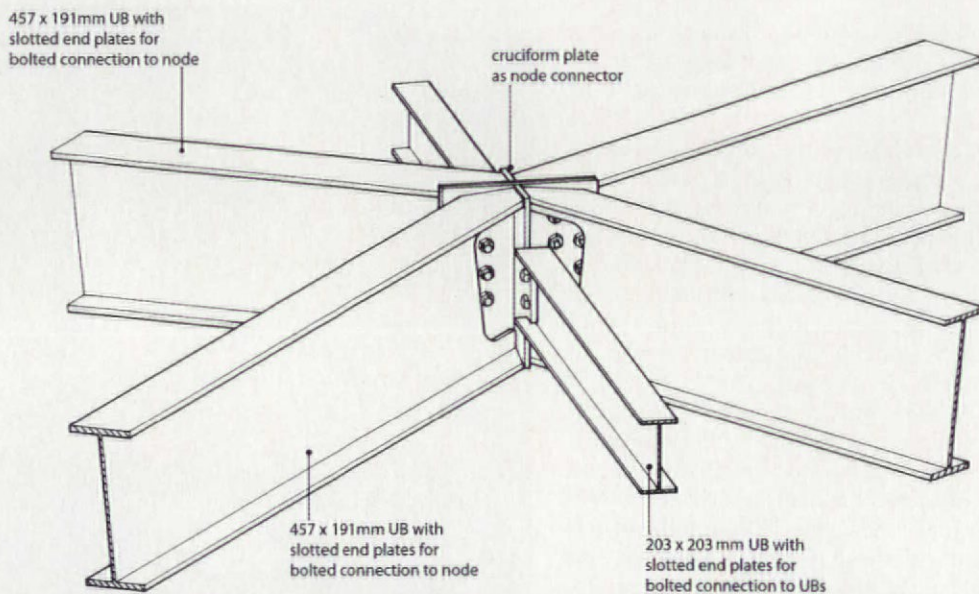
The roof is covered with titanium sheet, chosen for its light weight, potential durability and ability to reflect the sun's rays. The sheets were cut on site with a rolling machine which was specially developed to taper their edges in order to accommodate the toroidal shape. These sheets were jointed with rolled seams.

The soffit of the roof is lined with a series of triangular stainless-steel panels which are fitted between the diamond grid of the steel structure. Stainless steel was chosen for its ability to resist the harsh environment – although sheltered, the panels are exposed to the atmosphere.

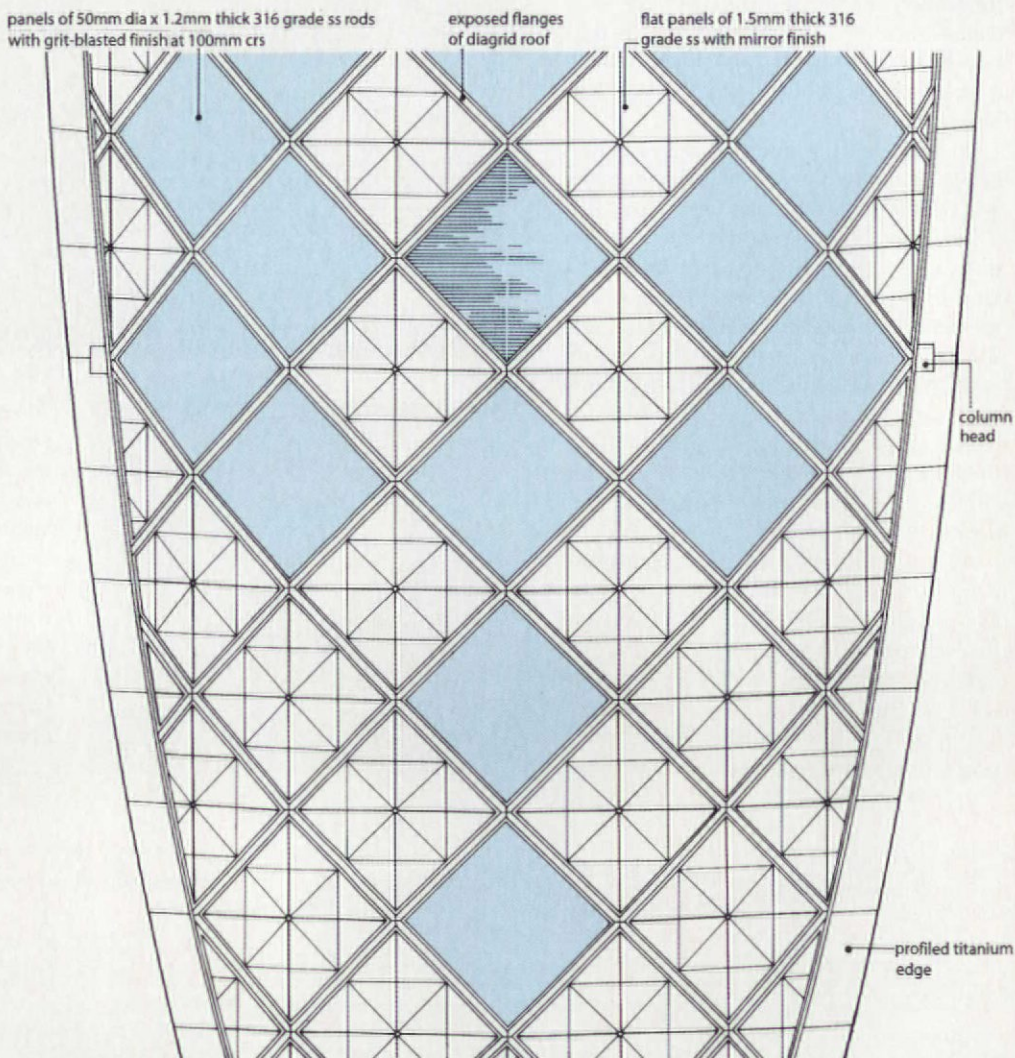
Some panels are of stainless steel polished to a mirror finish, giving magical reflections of moving trains. Other panels are formed of a series of polished stainless-steel dowels and are backed with acoustic-absorbent material.

Natural light is brought into the platform areas by means of diamond-shaped rooflights set at the apex of the diagrid; they are fitted with triangular louvres formed of stainless-steel dowels which match the adjacent solid panels and filter direct sunlight.

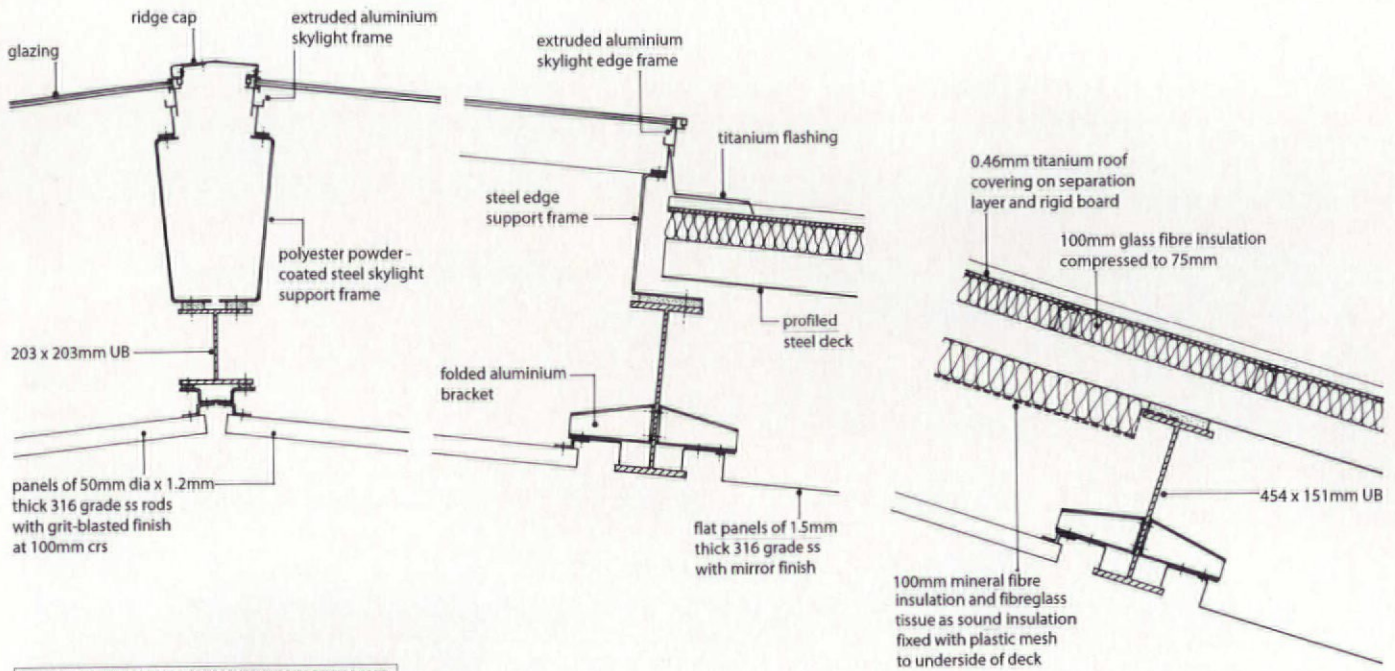
The bull-nose edge of the roof was fabricated in the factory from a thicker, 1-2mm gauge of titanium. Gutters and downpipes are not used – none would be large enough to cope with Singaporean downpours. Instead, rainwater simply discharges along the two sides of the roof and drains into high-capacity land drains.



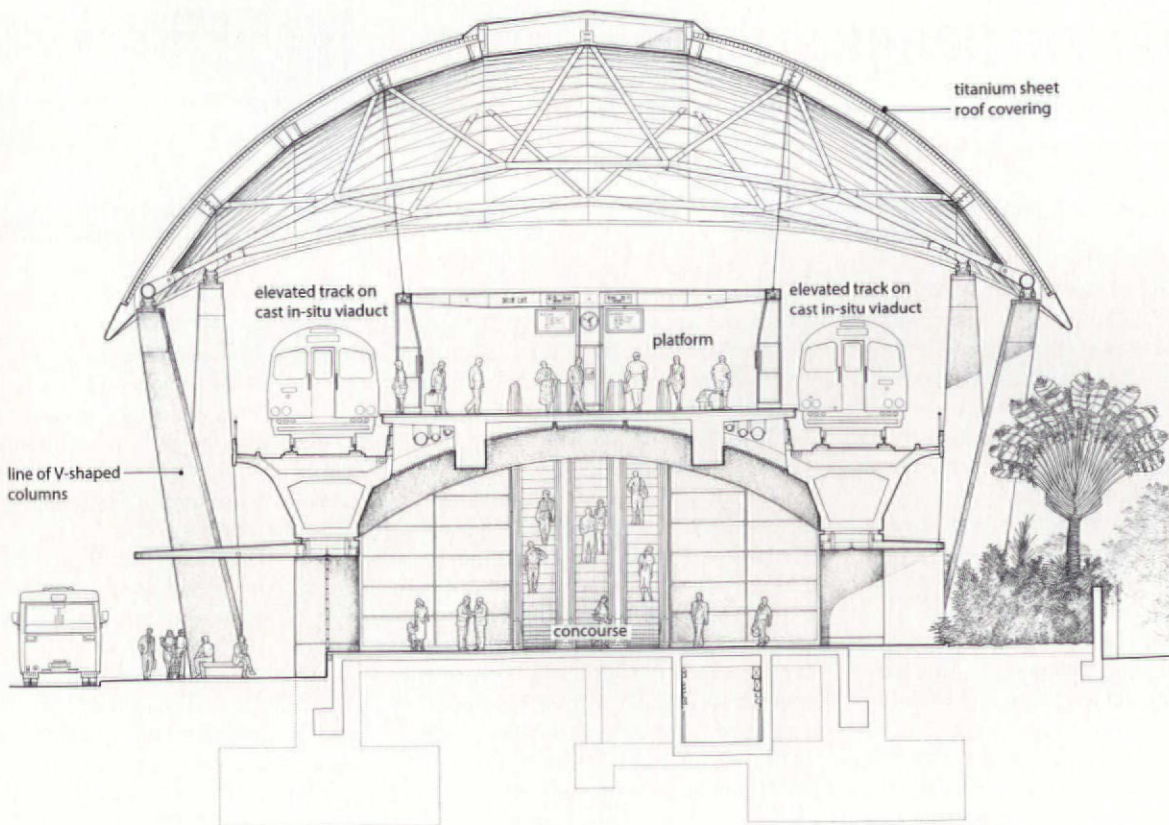
ISOMETRIC DETAIL OF STEEL ROOF DIAGRID ROOF STRUCTURE



REFLECTED CEILING PLAN

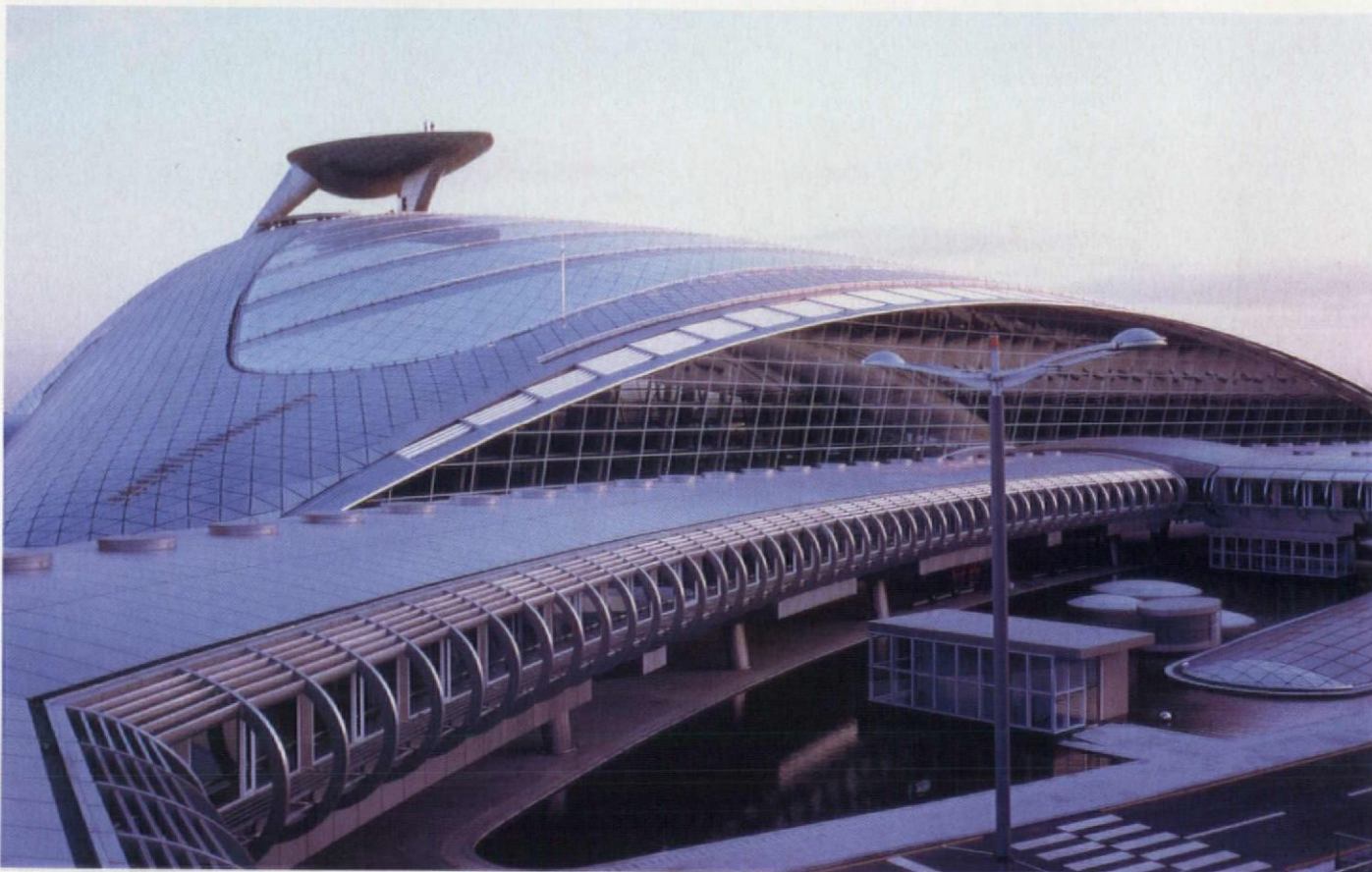


DETAIL SECTION THROUGH ROOF AND SKYLIGHT



KEY SECTION

MetalWorks Transport



Foreign exchange

A new Transportation Centre forms the hub of Incheon International Airport, South Korea

BY SUSAN DAWSON. MAIN PHOTOGRAPHS BY YOUNG CHEA

In the 19th century, the railway station was an essential civic landmark – a symbol of prosperity. Today, and particularly for East Asian countries, the airport plays this role. The new Incheon International Airport in South Korea, with its Transportation Centre designed by Terry Farrell & Partners, has all the qualities of a landmark.

The airport was one of the world's largest construction projects and its scale is vast. Work began in 1992 to reclaim a tidal marshland site between what were once two islands. Mountains were excavated as landfill to create a new airport zone measuring 8km x 6km. It is designed to serve Seoul (population more than 20 million and rising) and 43 other major Asian cities, with a projected capacity of around six million passengers a year. There are two runways, with space for a potential five, and a 50-gate passenger terminal, the first of several planned.

The new Transportation Centre is bi-lat-

erally symmetrical about its north-south axis; it gives an identifiable visual focus to the vast and amorphous array of airport infrastructure, including the terminal which curves around it in an enormous arc.

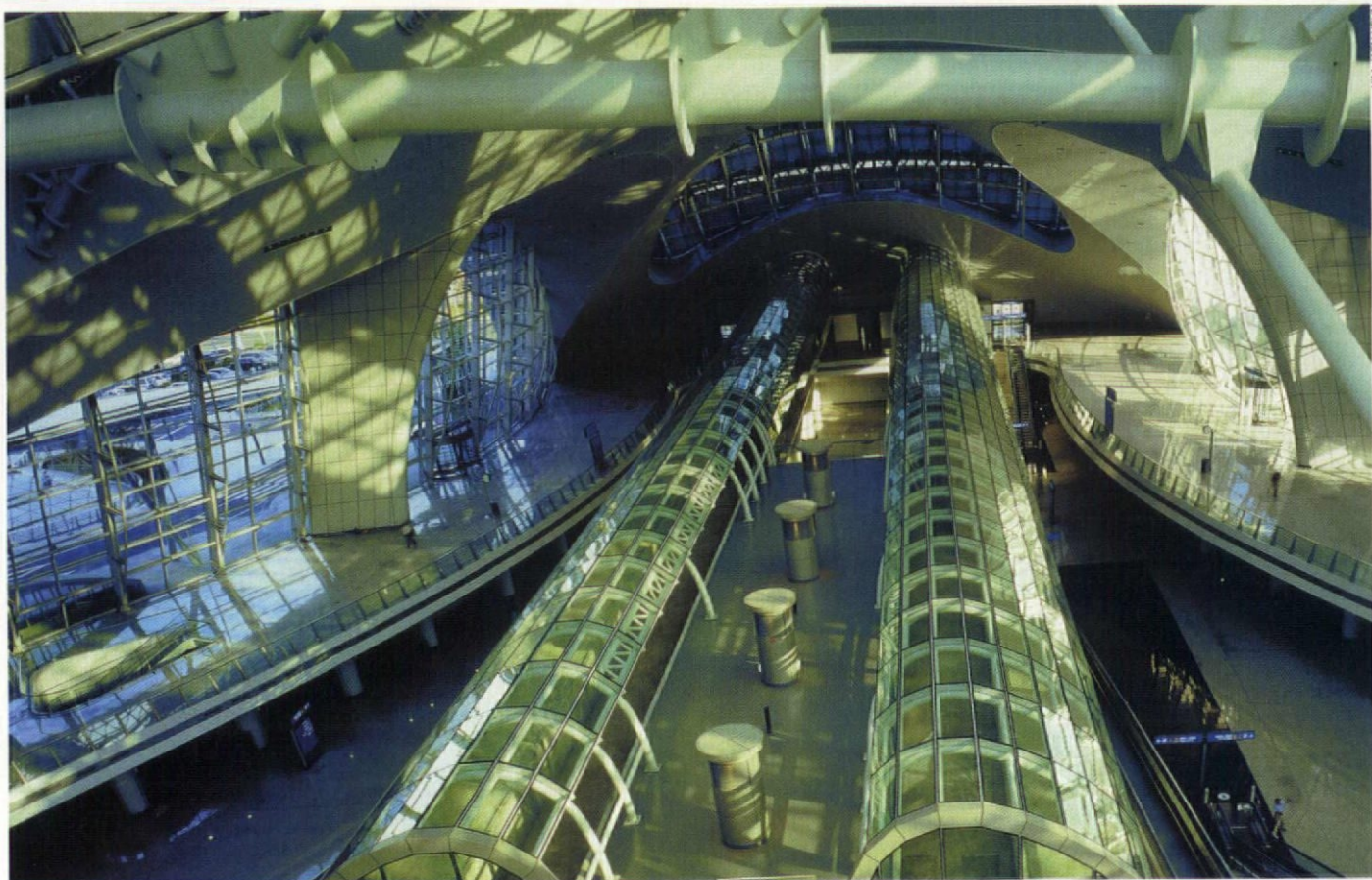
The purpose of the centre is to bring together a number of transport systems, linking them and making them easily accessible to passengers. Most systems have been placed below ground level, so that the centre sits in a landscaped park. Its roof and swelling walls form an organic shape – reminiscent perhaps of a Korean fan or a gigantic crown-cap bottle opener – which give the airport an identifiable form when seen from the air or by those arriving by road or rail.

The roof and curved walls cover the main public concourse and hub of transport activity – the Great Hall, a huge vaulted atrium spanning 180m. It is formed by a steel structure of arched portal-frame trusses partly glazed and partly roofed with stainless-



steel panels. Swelling glazed walls cut into the hall on the east and west sides to form a baroque sequence of fluid shapes, overhanging platforms and concourses interlinked with balconies, escalators and ramps. On the south facade, the roof arches to create a vast glazed wall looking out on to the airport and giving views of terminal buildings and arriving and departing aircraft.

The layout is simple. All passengers pass through the Great Hall whose large, naturally lit spaces are visible from all arrival points. A series of basement levels houses five rail systems (a new Seoul subway line, standard train, high-speed train and local train to the airport business centre); a bus and coach station; taxi, car rental, hotel and tour-bus pick-up points. The complex car-parking requirements of passengers, visiting public, employees, taxis, rental cars and buses are accommodated in 5,000 spaces in three basement levels.

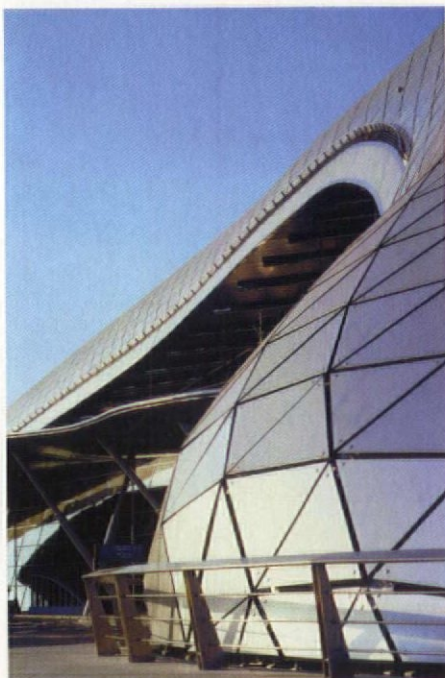


In Farrell's original design, the flight-control tower, an organic bird-like form, hovered over the roof, supported on delicate legs and reached by a system of elevators. This was not needed after the number of runways was reduced, and it was replaced by a 'pod' with a glazed underside which rests on three legs. The pod, together with an oculus in the roof below it, acts as an aerofoil ventilator and solar accelerator to ventilate the building naturally in summer.

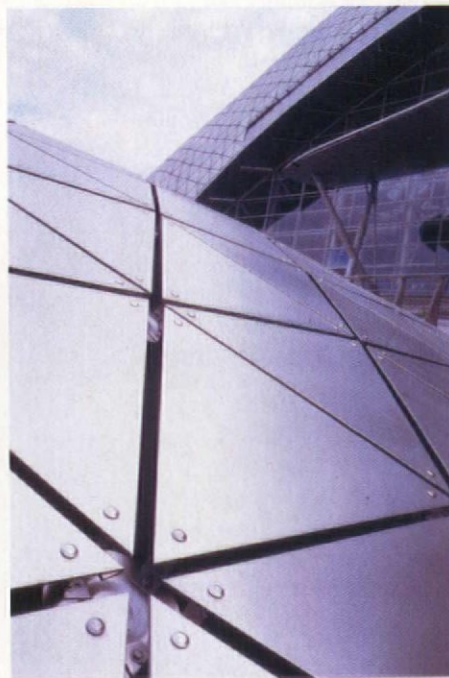
The interior is fitted out in a restrained palette of materials – silver-grey fluorocarbon-coated aluminium wall panels, grey granite floors, clear glass curtain walls and satin stainless-steel cladding to the underside of the monorail.

While the basements that house the transport infrastructure are constructed of cast in-situ concrete, the enclosure of the Great Hall is a steel structure of arched portal-frame trusses. Using more than 6,300 tonnes of steel, the main frame was fabricated in two sections on the south side of the site while the concrete sub-structure was being cast, and subsequently slid on tracks into its final resting place.

The Transportation Centre and the airport were finished in time to be one of the first sights that greeted air passengers arriving for the World Cup in June.



The Transportation Centre makes interchange between a large number of transport modes comprehensible



CREDITS

ARCHITECT

Terry Farrell & Partners

EXECUTIVE ARCHITECT

Samoo Architects & Engineers

STRUCTURAL, MECHANICAL & TRANSPORT

ENGINEER

DMJM

MetalWorks Transport

A roof covered with a rain-screen of stainless steel panels

The roof spans 180m and is formed by a series of arched portal frame trusses, over 6m deep, which are formed of welded tubular members. The complex form was initially modelled by hand and 'sliced' into sections that could subsequently be rationalised by a CATIA program – commonly used in car design.

The organic curved forms of roof and walls are covered with a rainscreen system of triangular stainless-steel panels; the triangular shape was chosen as it would accommodate the complex three-dimensional curves of the roof and wall planes.

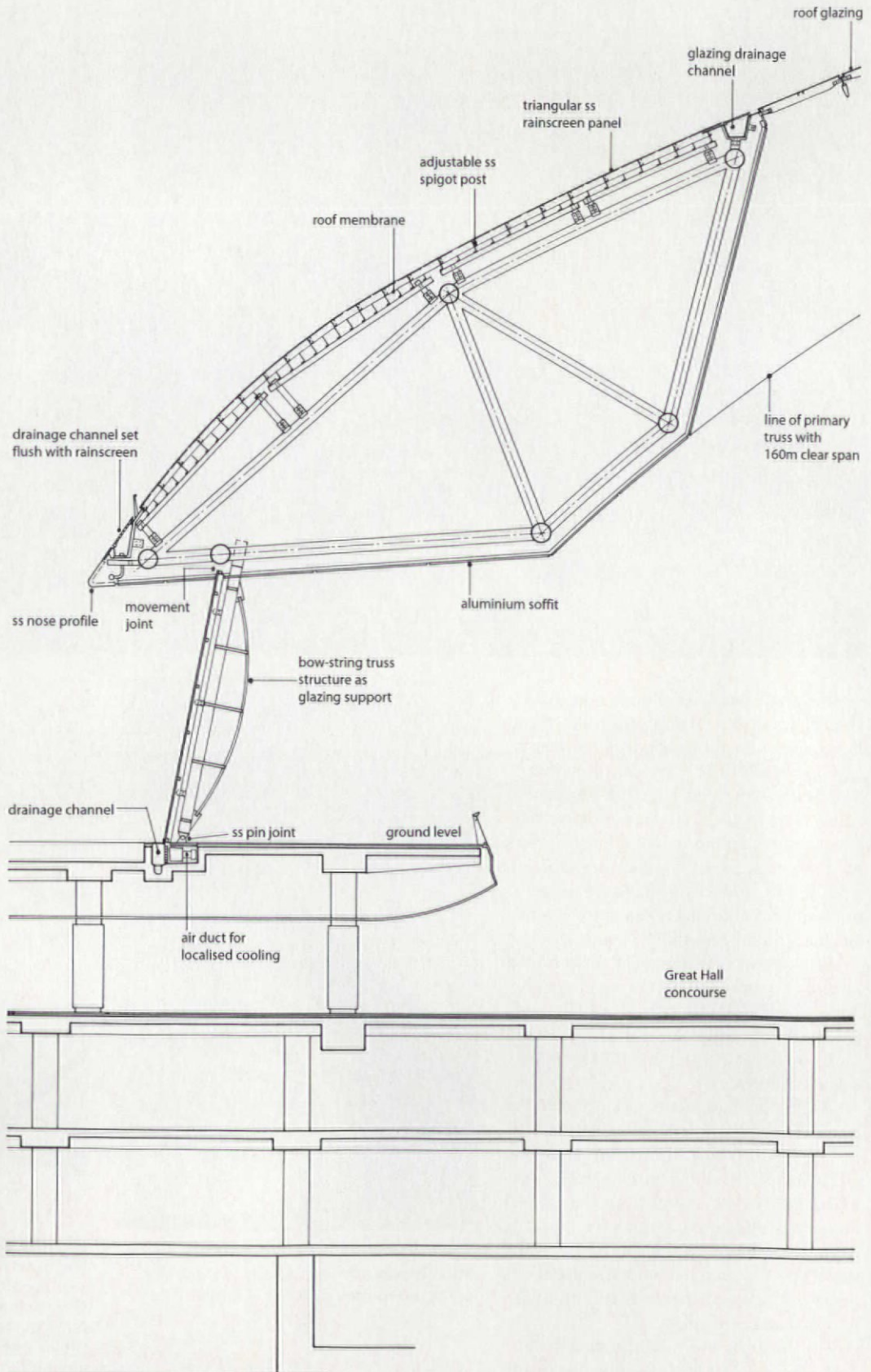
The roof covering is supported by a 600mm-deep steel space frame that rests on the main trusses and determines the curve of the roof. It is overlaid with absorbent material and an EPDM membrane.

Spigots are fixed to the nodes of the space frame and penetrate the membrane; they are fitted with shoes and proprietary rubber gaskets to create a waterproof lining. The spigots are topped with circular steel nodes. Z-shaped legs at the corners of the stainless-steel panels are bolted to the nodes; they are set with edges 50mm apart and adjusted by hand to fine-tune the curve of the roof.

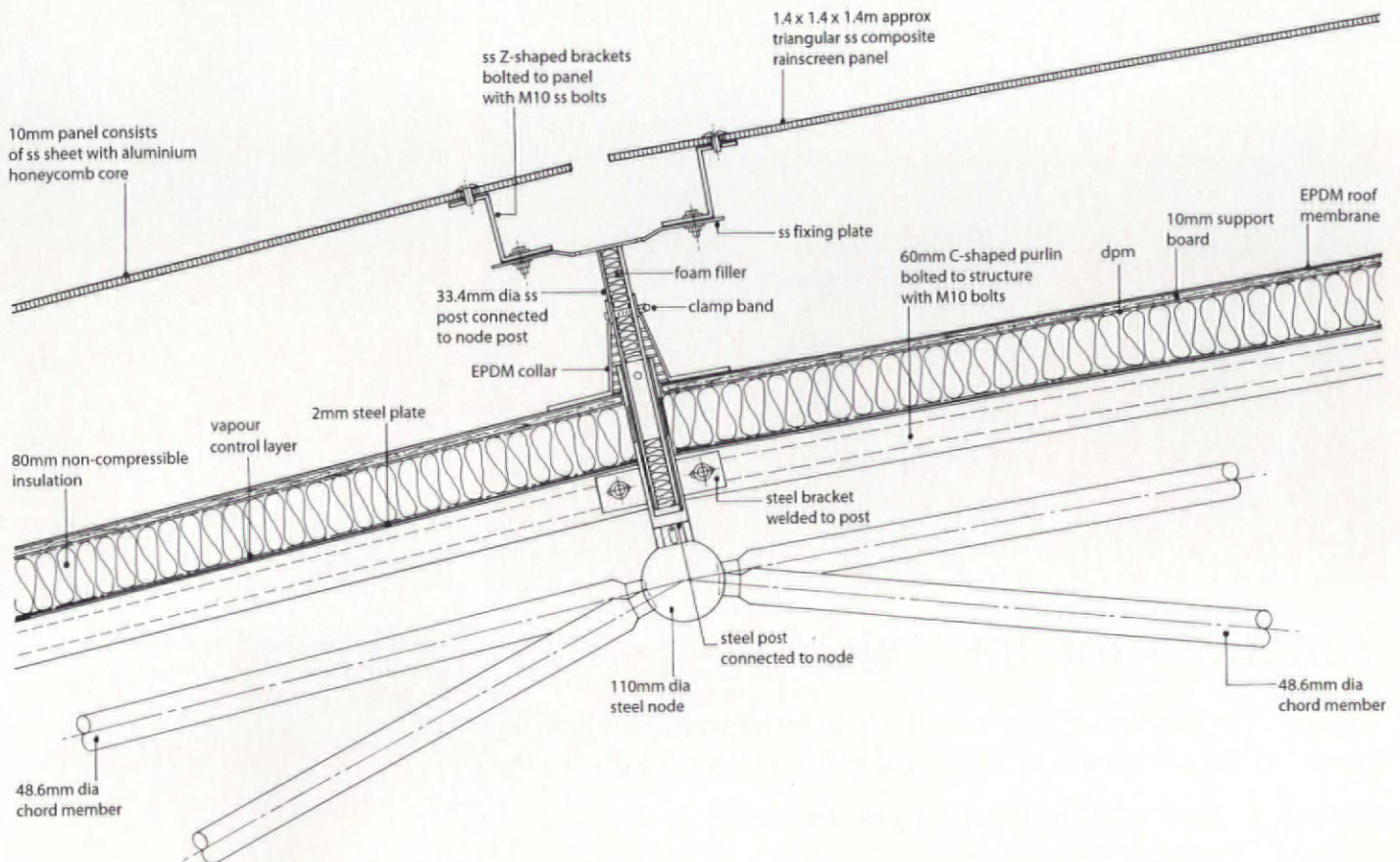
The 12mm-thick panels are composed of an aluminium honeycomb core, bonded to inner and outer sheets of stainless steel.

Stainless steel was chosen for its resistance to weathering in a harsh and humid climate which experiences extremes of temperature and is exposed to marine salts.

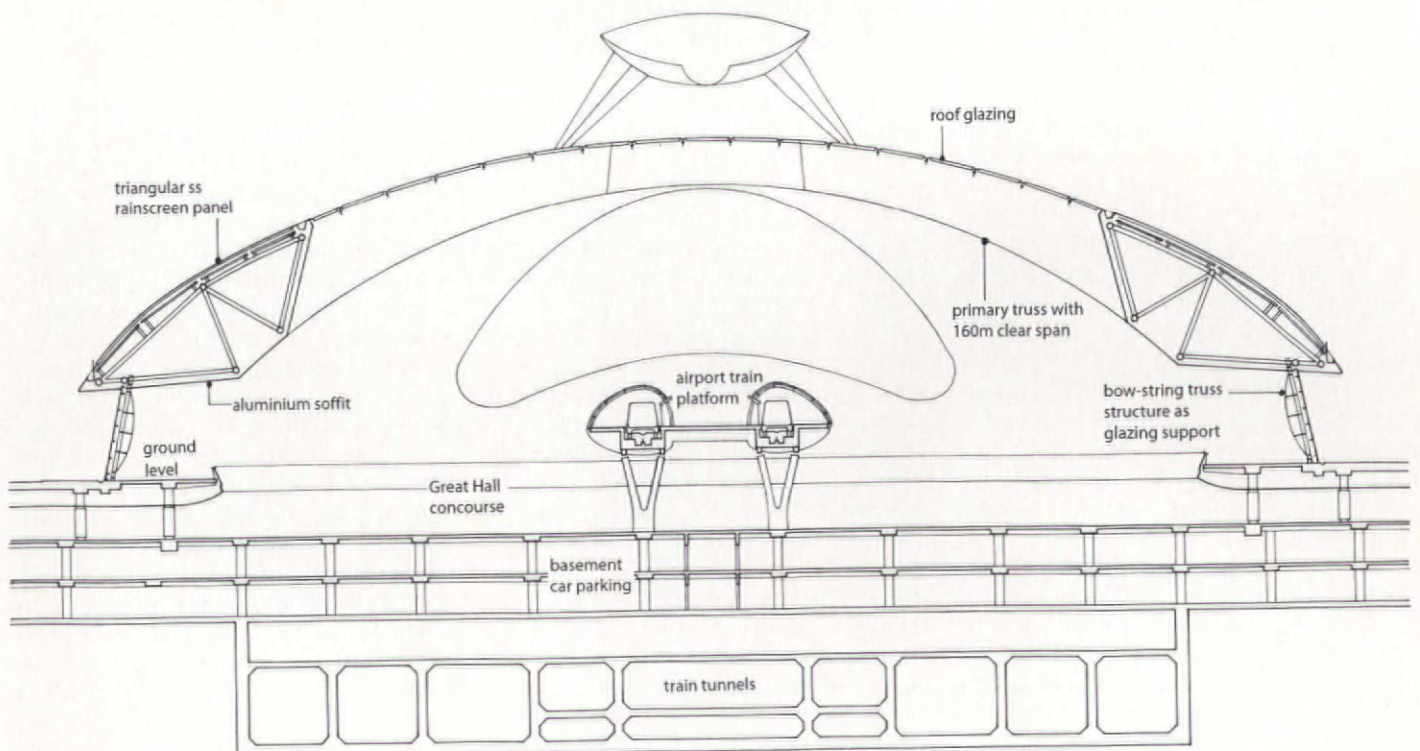
A curved rooflight at the apex of the roof consists of fritted glass panels with solar-control coatings; the panels are flat and the frames are faceted to create the curved surfaces.



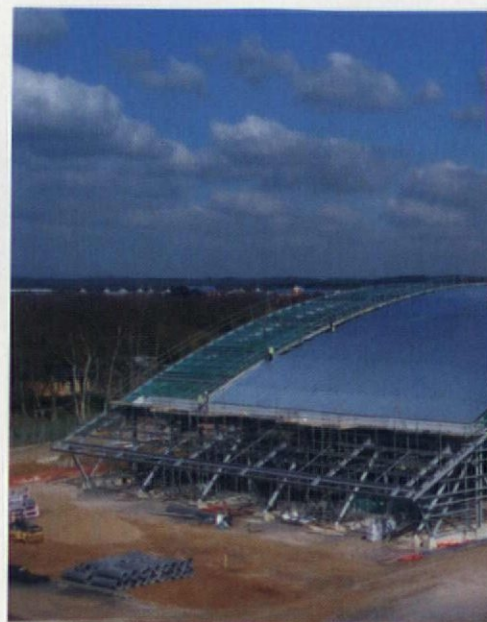
PART CROSS-SECTION OF ROOF OF GREAT HALL



DETAIL SECTION OF STEEL RAINSCREEN AND STRUCTURE



KEY CROSS-SECTION OF ROOF OF GREAT HALL



Reaching for the skies

Farnborough airfield's new owners plan to expand facilities – including the construction of new-design aircraft hangars

BY SUTHERLAND LYALL. PHOTOGRAPHS BY BURO HAPPOLD/ADAM WILSON

You remember Farnborough from years of TV coverage of all those annual air fairs. With TAG Aviation now in the driving seat as leaseholder, the air fairs will continue – but the enormous airfield is now set to become the UK's leading airport for business aviation.

The tulip-shaped control tower whose stem is embraced by the terminal structure is nearing completion – and so too is the first phase of the hangar building programme, a 290m-long three-bay wave of Kalzip curves which can accommodate six big, Boeing 737 business jets.

Right at the beginning of the £50 million project, TAG appointed Buro Happold as engineering consultant and then ran a beauty contest among 15 architects for the masterplan and design of the airport facilities: hangars, control tower and terminal building. Of the three finalists, Grimshaw, Gensler and Geoffrey Reid, the latter was appointed with the general idea that the best solution for the hangar was a big arched structure.

The thing about hangars is the awkward shape of aircraft. There is no simple way to accommodate them without seeming to waste a lot of space. Hangars have to be very wide to accommodate wings and high to allow for the tall tail at the back. There is not much you can do about the wings. For the

high tails, all sorts of solutions have been tried out including having the front part of the hangar raised up to accommodate only the tail section. The familiar solution is a crinkly metal arch that accommodates aircraft tail feathers because it is higher at the middle. But for big planes, existing solutions are either ungainly or, as in the case of the arch, require additional structure such as tie rods which limit their effective height.

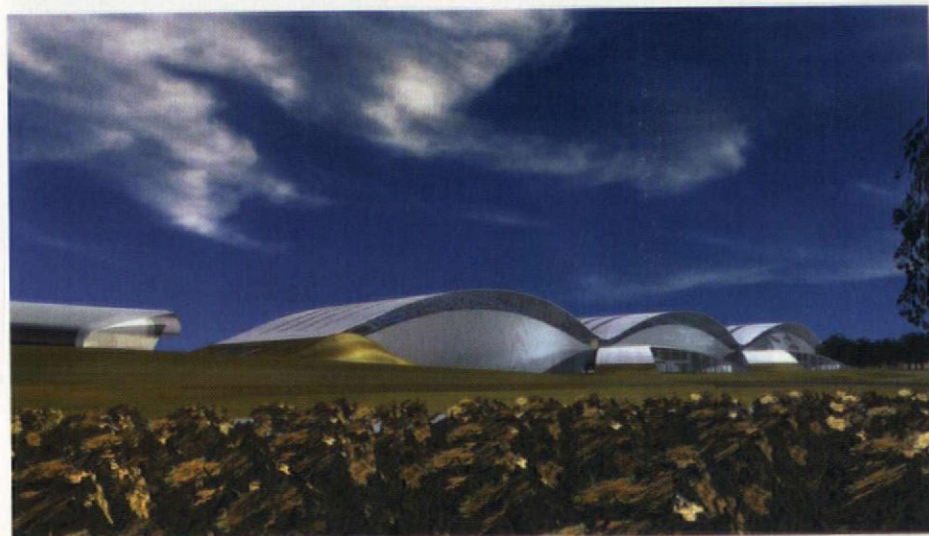
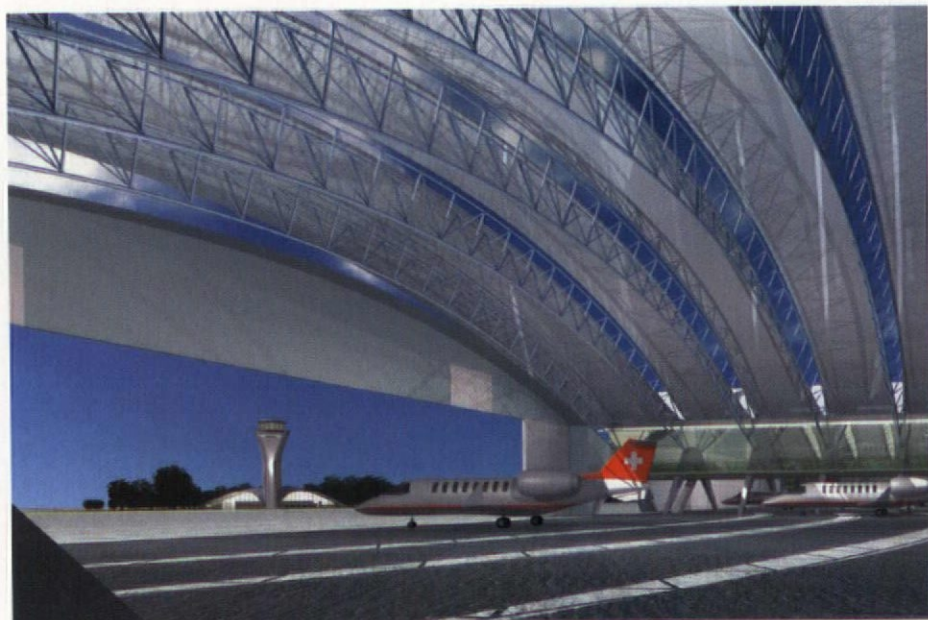
The arch solution first mooted was too big – and a tad too obtrusive for what is an often secretive activity. Although the brief asked for the design to create a sense of place and arrival, around half all business travellers want to be able to slide very unobtrusively in and out of the country. So privacy is a ruling factor and one of the design requirements was that travellers could arrive and, without getting out of their cars, be processed by Immigration and Customs and drive right up to the aircraft on the apron.

Following talks with the client, the Geoffrey Reid team, headed up by associate director Colin Calderhead, and the Happold team under senior engineer Thomas Gabele, decided that the solution was to have three interconnected smaller arched structures. The original 45m depth would be retained and each arch would span 93m. Geoffrey Reid's Calderhead says: 'This is where Buro

The arched hangars have a series of ties buried underground, allowing the overall height to be reduced

Happold really interpreted what we wanted, which was to get the apex as low as possible and bring the eaves down low – which makes a massive difference to the scale – and makes a response to the sweeping hills in the sweeping nature of the hangar roof.' The height is dependent on the minimum clearance needed for the aircraft's empennage. There are plenty of uncomplicated single-arch hangars around for small aircraft, but in arched structures of this size, there is a need for some kind of tie to stop the roof spreading. It is usually installed high up, but that means the arch has to be even higher to allow clearance for rudders under the tie.

At Farnborough, Gabele's better-mouse-trap solution was to install the essential tie *underground*. The tie is a 600mm x 600mm post-tensioned concrete beam buried 500mm or so below the hangar/apron slab, tying together the ends of the arch. This meant that the arch could be designed as a simple compression structure without complicating bending moments. It's not quite as simple as that because each end of the arch actually sits on an A frame with 3m-long legs fixed to foundation pads through which the below-ground tensioning cables are threaded. So there are some bending moments around the A frames, but they are not serious. After this the hangar design



turned out to be quite simple: three rows of five 90m span, 3m deep arched trusses supporting the purlins for the three giant undulations of the standing-seam roof. Post-tensioning was applied, half straight after the trusses were erected and, as the loads were applied, the remaining tension was tuned to bring the structure into a state of equilibrium. Gabele says that there was not a lot of room for tightening tensioning nuts in the two mid sections where tie beams ran contiguous with the bolts on the ends of the tension cable for the next bay. The back walls are skinned in straightforward cladding although the front, where the aircraft go in, is a bit more complicated.

Arched hangars usually have sliding doors running on tracks fixed to the overhead tie beam. Here the upper part of each arch has a weatherproofing infill across the top – with vertical slots through which pilots manoeuvre

the tail. The main doors, by Jewers, slide from either side, and the slots overhead have roller shutters. But without the overhead tie beam (or the problem of getting power across the slot) the doors were installed to roll – and be powered at ground level.

Calderhead selected Kalzip because its standing seams help to emphasise the curve and have a shadowing effect. He says: 'The other key thing is that it's a natural mill-finished aluminium, not anodised. It will lose its shine, but there is something attractive about the quality of the use of a natural material.'

Different buildings call for different shapes – and materials. Most of the control tower, whose form springs out like a tulip, is clad in square aluminium shingles 400mm to 500mm square and laid diagonally. They vary in size because the tower, elliptical in plan, swells out towards the top – where the roof is clad in Kalzip. The tower is actually a

concrete slip-form structure to which a steel sub-structure for the cladding is attached.

Equally conventional is the 4,000m² three-level terminal building wrapped around its base. It also accommodates TAG's corporate offices and it is clad in the same mill-finish aluminium shingles. Calderhead says: 'The form of the terminal is reminiscent of a flying wing clad in aluminium into which holes have been punched for windows. This wraps around the tower and hovers over a band of ground-level glass.' In contrast, he points out, 'the hangar is about a roof that lets you do what you want inside'. In fact the deep overhanging eaves and the space inside the A frames are to be used for offices and workshops – a planning decision which obviates the too familiar addition of excrescences around any of the available flat walls on the average airfield. This hangar will be replicated nearby when business traffic expands.

MetalWorks Transport



The Moulton bike (left) and Morgan car (above and right) share characteristics with the best buildings and use materials in an innovative manner

Wheels in motion

Architectural influence on personal transport is increasing, particularly the design of more sustainable vehicles

BY MATTHEW TEAGUE

I suppose you could argue that it all began with the cart. The placing of an iron hoop around the wheel to tension everything up might be the first instance of metal being used directly to facilitate personal transport. But then, where does that leave the horse-shoe? In order to make things easier, let's assume that personal transport, particularly where the use of metals is concerned, is primarily a 20th-century phenomenon.

Architects and engineers have had influences on many areas of life, but some of the most immediate and direct concern transport – and not just the buildings in which we interchange, set down, pick up and lose our luggage, but also the artefacts which convey us to and from our destination. In order of provenance, these types of transport might be: ships, rail, airships, cars and aeroplanes.

The area of architectural endeavour has largely concerned the car. This is understandable since the car has altered the environment irrevocably and has created a new genre of architecture as its supporting infrastructure – that of the road, the garage, the parking lot and motorway service area.

The list of architect-designed automobiles is surprisingly long and involves the obvious, such as Buckminster Fuller's Dymaxion car, and the esoteric, for instance Renzo Piano's work for Fiat which resulted

in the Strada. However, I think architects might also be interested in the design of more sustainable forms of transport, so I've included a bicycle as well.

In the low-tech stakes, bicycles have an almost mythical status. Most of us as children had steeds fashioned from pig-iron ingots seemingly capable of terminal velocity on the mildest of slopes, and usually accompanied by brakes that served a more cosmetic than impeding function. What a shock the Moulton is when compared to a more utilitarian view of the bike.

Swinging '60s

Dr Alex Moulton was active in the field of suspension research, having invented the rubber suspension used on Alec Issigonis' Mini. Simultaneously, as a result of the Suez crisis and the subsequent scares about continued oil supply from the Middle East, he played a major part in reinventing the bike for a mass market. He used small wheels and suspension techniques borrowed from the automotive industry, together with an extremely rigid frame produced from high-quality steel tubes such as Reynolds 531. The bike proved extremely popular, not least because its smaller overall dimensions (think 'mini') and unisex design appealed to the ethos of the swinging 60s.

The central idea – small wheels, step-through frame – was much copied and resulted in Raleigh acquiring the company and producing what is widely regarded as 'the worst bike ever' the RSW-16 (later known as The Shopper). This prompted Dr Moulton to buy back the name from Raleigh, and to begin to produce hi-tech bikes in a manufacturing facility at Bradford-upon-Avon.

Versions available today have a space-frame construction, increasing the rigidity of the frame while reducing overall weight. Suspension has become more efficient, using a system of rubber in torsion for the front and 'borrowing' the hydroelastic system from MG for the rear wheel.

You could ride a Moulton while wearing a skirt and put a week's shopping in a basket, or you could put on racing tyres and drop handlebars and set the bicycle world speed record (51.26mph). This was truly an 'all-purpose bike', fashioned from steel. The very latest bicycles from Moulton are stainless-steel racing machines. They use aeronautical (304) stainless-steel tube which is silver-brazed into the larger diameter frame, which is also stainless steel. Moultons can be made with a central separation joint for storage and transport, which may be omitted to save weight.

Currently, this machine will set you back about £5,000. But, in the strangely contradictory world that is British hi-tech manufacture, there are many hundreds of man-hours in this product. Weighed against the cost of sitting in a traffic jam for hours at an end in most of our towns and cities, perhaps that is value for money.



Hybrid cars

In London, assuming your reactions (and life insurance) are up to scratch, cycling makes sense, but for some longer trips an alternative will have to be sought. The car is the ubiquitous choice for many, despite the queues, the price of fuel and other drivers. But cars need not be unsustainable.

New and more efficient power plants are slowly becoming available, and LPG is increasingly seen as an alternative fuel for public-service vehicles. Experiments with solar power continue as photovoltaic units become more efficient. Hybrid cars are marketed as part of the mainstream. Toyota's Prius uses a battery/petrol engine which flips to the most efficient power supply according to the type of driving being undertaken. Ford continues to tantalise us with visions of the fuel-cell car, and ultimately the hydrogen economy.

A quick way to make a vehicle more fuel-efficient is to make it lighter. Aluminium and magnesium are common in cars but, until quite recently, could not be used structurally. New forming techniques have enabled this to change. Hydroforming, where water pressure is used to equalise the bending forces on a metal blank while it is being shaped, enables complex shapes to be made without stressing the material.

Water, to draw an analogy, replaces the spring a plumber might insert in a copper pipe to stop it collapsing while being bent. Huge savings in the number of components and weight can be achieved. For instance, a radiator assembly, if formed from stamped pieces, has 17 components and weighs 16.5 kg. A similar hydroformed assembly uses 10

components and weighs 11.5 kg – an overall saving of 30 per cent.

It is possible to see uses for this technology in construction. Glazing bars, window and door assemblies and stair components are all candidates. Hydroforming plant can produce, from pre-prepared blanks, three-dimensional components, with infinite variations of penetrations, fixing points and strength characteristics. It is possible to hydroform both steel and aluminium.

Piece of jewellery

Famously Audi has marketed its cars using the 'made from aluminium' tag as a unique selling point, but if we pursue the idea of 'craft', a similar company to Moulton in the automotive sector would be Morgan. Morgan recently developed an all-aluminium coach-built car – the Aero 8.

The objectives here are speed and desirability, not sustainability, but the key cues are the same as for the Moulton bike; quality, care and longevity. The artefact is seen as a piece of jewellery which is as much worn by the user as ridden or driven.

The key aspect to Morgan's work has been close cooperation with suppliers to arrive at a materials specification which is then combined with traditional construction methods to produce the car. Although seemingly contradictory, the 'hi-tech material, low-tech construction' has its parallels in building. Think of the way in which highly serviced components and systems are incorporated into hand-built structures and the hand-built ethic (for products) ceases to seem quaint but becomes more personal and exacting. Somehow this 'maker's mark' prod-

uct ownership has been lost in construction.

Distinctively, this car maintains the unique aspect of the Morgan in that it is a composite construction of aluminium and timber (ash), offsetting the properties of timber (flex and shock absorption) with the high strength low-weight performance of the aluminium sheet, and in doing so again emulates the way in which materials are used, although seldom with as much sophistication, in building – the folded plate structure of the semi-monocoque chassis seeing expression in the Yokohama port terminal or (more organically expressed) the Lord's Media Stand, two examples of the purer form where metal-timber composites have obvious uses in short to medium-span structures.

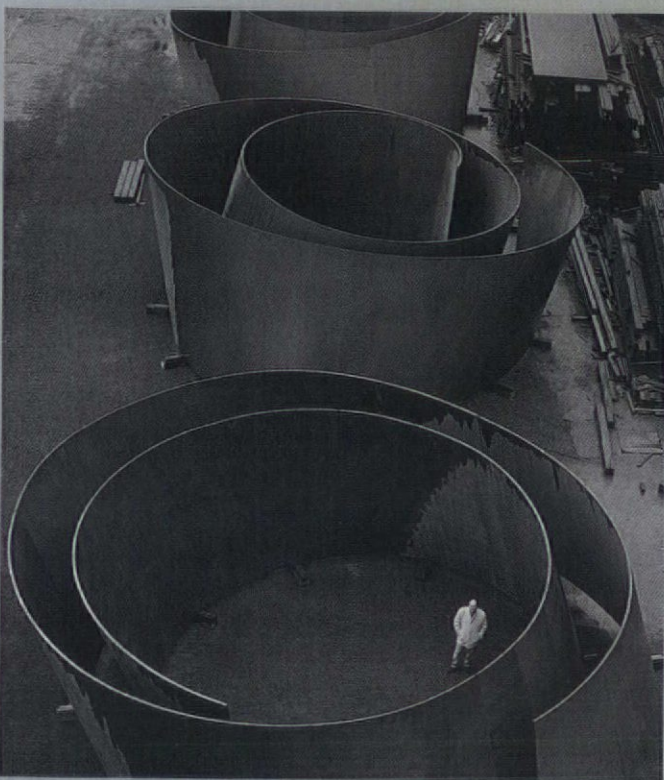
Common thread

Architecturally this association between extremely high value, longevity and utility is accepted. These are precisely the criteria applied when selecting bronze as a cladding material for instance. It is less well understood in commodity terms where high value can also mean fashionable (and therefore soon passé) or technologically advanced, which also implies inbuilt obsolescence.

The common thread between expensive cars, bikes and buildings is that they are meant to be cherished over a number of years and, possibly, a number of owners. The expense is reflected in the thought, time and skill invested in designing and making these products, often repetitive but always, somehow, unique.

Thanks to Shaun Moulton at Alex Moulton Bicycles and Natasha Waddington at MPH Communications

MetalWorks Round-up



Spirals and spheres

Pictured above at the centre of one of his recent 'Torqued Spirals', the American sculptor Richard Serra looks diminutive. No wonder – the curved steel wall that encloses him is some 4.3m high. Serra's heavy-duty metal works have been appearing in galleries and public spaces for 30 years or more, but these latest are surely his most complex and ambitious. Shown last autumn in New York's Gagosian Gallery, they are the subject of a new book from publisher Steidl – *Richard Serra: Torqued Spirals, Toruses and Spheres* (distributed by Thames & Hudson, £18).

Baroque in inspiration, and dependent – like all Serra's work – on the spectator's movement, their spatial effects can be partly inferred from the photograph; though perhaps not their visceral impact. As the passages expand and contract, their walls pressing in ominously overhead or disconcertingly leaning out, it is easy to feel destabilised; yet, at the same time, the continuous curve keeps luring you towards the unseen centre of the work.

In reality, the surfaces of these sculptures are richly coloured (in the rust-to-orange part of the spectrum) and, with the varied marks of their manufacture, almost Expressionist in feeling at times. As usual, though, Serra has had them documented in sober, elegant black-and-white, suppressing surface contingencies in favour of the forms that these massive steel plates have somehow been coerced into taking.



Fly away success for metal roofing

Two important international airports both have standing-seam aluminium roofs from Corus Kalzip, representing two of the largest orders ever for the material. At Madrid's Barajas airport (above), Richard Rogers Partnership has designed a new terminal that consists of 240 interconnected modules, each with a width of 9m and a length of 75m. The roof of each module arches in opposite directions, to create an effect rather like the wings of a bird. The Kalzip sheets, some of which will be tapered, will be laid lengthways and curved into a convex shape. The roof lining will be made from pre-curved perforated aluminium with special sound-absorbing panels laid above.

Parsons Design Group from the US has designed the new international airport at Guangzhou in China, about 150km from Hong Kong. It is working with the Guangdong Architectural Design and Research Institute. The concept comprises a central building flanked on both sides by terminals that arc smoothly from top to bottom of the site and connect to road and rail interchanges. Both the terminal buildings and the spurs will be roofed with Kalzip standing-seam, colour-coated white.



Light and warm

The Building Research Establishment has published its Digest 465, U-values for light steel-frame construction, which allows U-values to be calculated by a simplified method. It can easily be incorporated into software tools. The method was developed jointly by BRE and the Steel Construction Institute.

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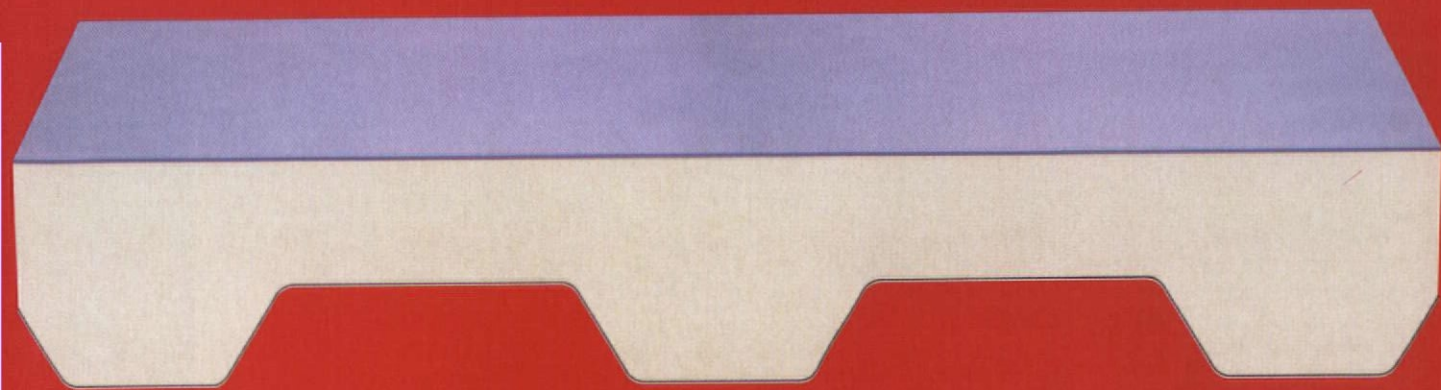
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View from the base of the spiral stair, across the breakfast room through the illuminated opening into the kitchen. Seen above is the glazed bridge from the spiral stair to the existing hall floor

Simple steps

By Victoria Huttler. Photographs by Victoria Albuquerque

Guy Barlow of the Manser Practice explains the approach behind this residential refurbishment project in London's Belsize Park: 'We believe in simplicity, in leaving some things as they are, drawing distinctions between new and old.'

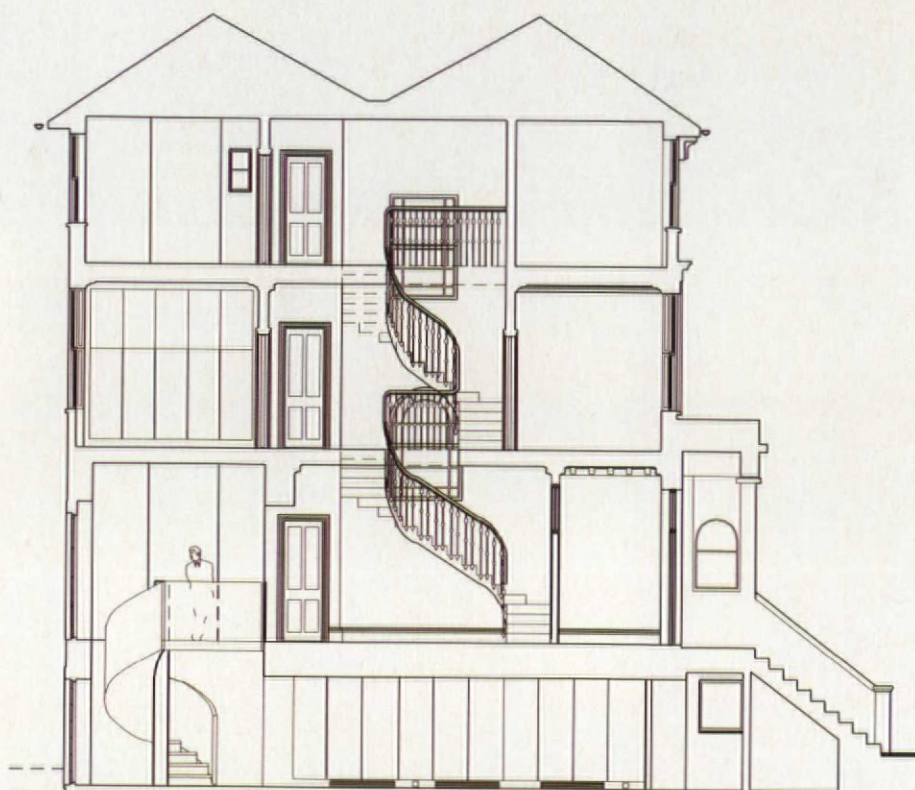
Evidence of this honest approach is clear throughout this newly completed Georgian conversion. There is no attempt by the architects to disguise or blend what is old and what is new. Minimal CVO fireplaces sit amid deep Georgian skirtings and elaborate

ceiling roses. In using a 'simple language and a simple palette of materials' to respond to the client's brief, the Manser Practice has rationalised and refined the basement and first floors of the house to create a modern working family home.

The basement now provides the main 'hub' of the house with a good-sized and sociable preparation area, open plan to the breakfast room with views and access to the garden. The client wanted to create a family kitchen with breakfast room, utility room,

lots of storage and to include a separate family room. The bedsit and original kitchen were taken out and one load-bearing wall was removed, which required substantial structural alterations. A steel column had to be threaded through the existing structure of the house to support the upper floors. 'The house was already very twisted. The central spine wall twists around by about 300mm and drops down by about 500mm at the back of the house,' explains Barlow.

The original staircase remains from the ground floor to the upper floors, but has been 'de-cluttered', as Barlow describes it. 'It was an intrinsically pleasant Georgian staircase, although it had been added to over the years,' he explains. A WC was removed from beneath the stair and a structural support



section AA

**Above right: glazed bridge. Right: illuminated opening between kitchen and breakfast room.
Below: spiral stair with wire mesh and plaster finish**

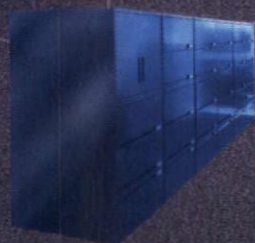
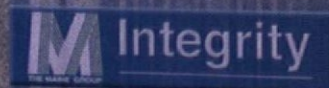


added in its place. A glass bridge walkway has opened up the vista from the front to the back of the house, further emphasized by the removal of a door between the lobby and the hallway. A new spiral staircase leading down to the basement has been put in place. The sinuous shape of this staircase was achieved with the help of a sculptor, who moulded the form on top of the basic staircase structure using wire mesh and plaster.

The large corridor between breakfast room and family room provides an entire wall of concealed storage that uses the same 50mm-thick lacquered MDF as for the kitchen cupboards. The kitchen features a large illuminated opening through to the dining area, its worktop, sides and soffit lit using Phillips T5 tubes behind laminated glass. An opaque interlayer was used between the glass sheets to help soften and diffuse the light across each surface, each of which can be controlled separately, giving a number of different combinations. The sink, hob and extractor are all set into this illuminated opening, which also acts as a serving hatch. Fridge and oven are set into the wall behind. The kitchen has a sociable feel and an almost theatrical quality; the workstation is stage-like, and the backlit worktop is practical as well as aesthetically interesting.

The family room uses banquet seating in a semi-circular arrangement around half of the room, opposite the bay window. Bookshelves line the walls above and a storage cupboard conceals a TV, hi-fi and computer games. A combination of trough lighting around the rim of the ceiling and spot lighting is used here and throughout the

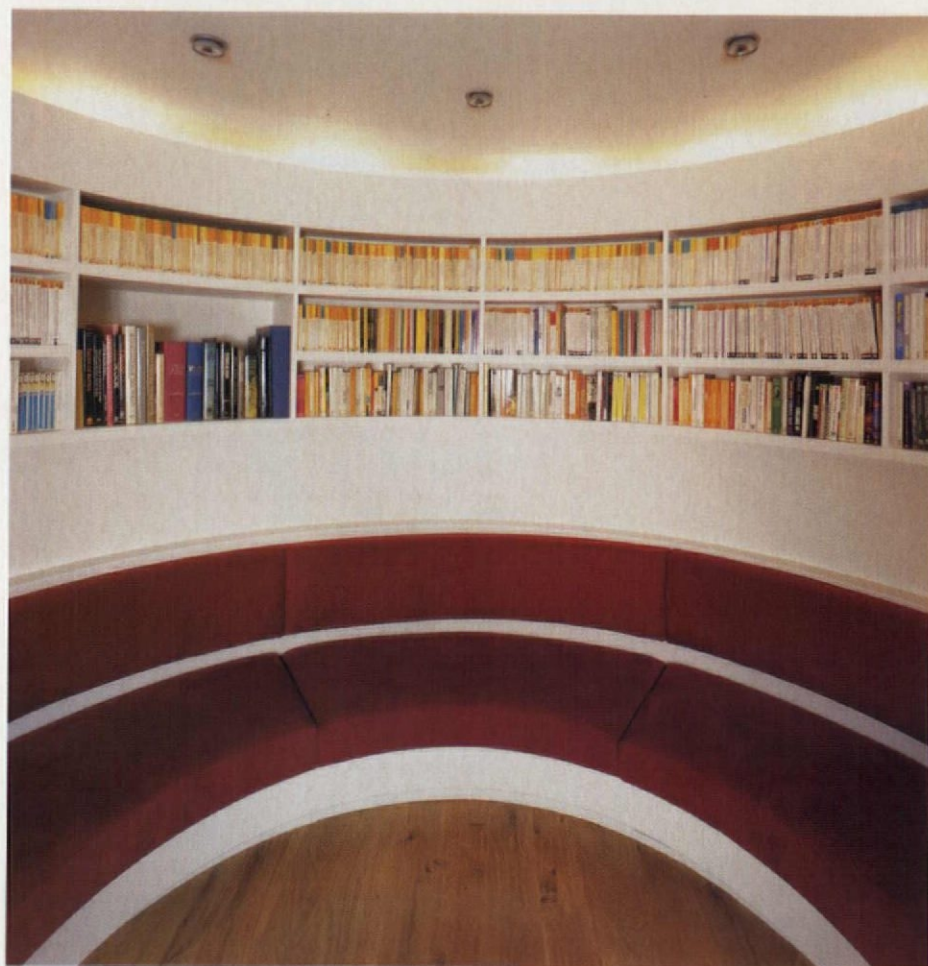
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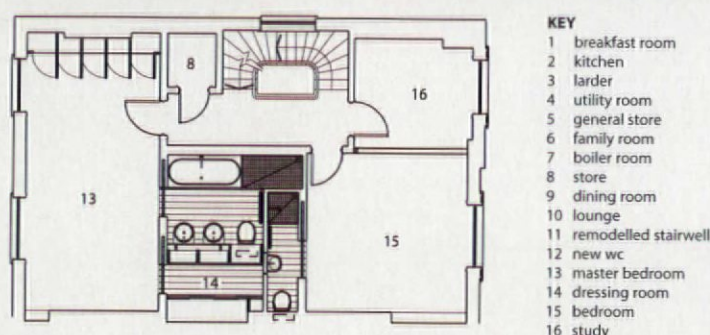


house, avoiding obvious lighting fixtures and fittings and giving subtle washes of light with accent where necessary. Hidden lights behind mirrors in the bathrooms add to the simplicity and softness of the scheme.

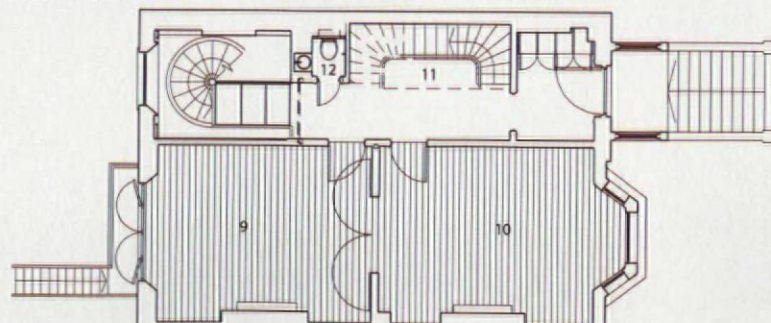
On the first floor, one dividing wall was removed to create a large master bedroom. A central core was put in place to house dressing room and en-suite bathrooms for the master bedroom and guest bedroom. A lower ceiling in the master bathroom provides extra storage in the adjoining dressing room. Glass mosaic tiles are used in the bathrooms. The layout is a simple galley style. 'The nautical reference is a simple layout that just seems to work really well,' explains Barlow.

Little else was altered on the ground floor, although new fireplaces had to be added after a break-in during the early stages of the project. Thieves took both original fireplaces, worth around £10,000, and these were replaced with the CVO fire bowls, with a glazed Portland concrete surround.

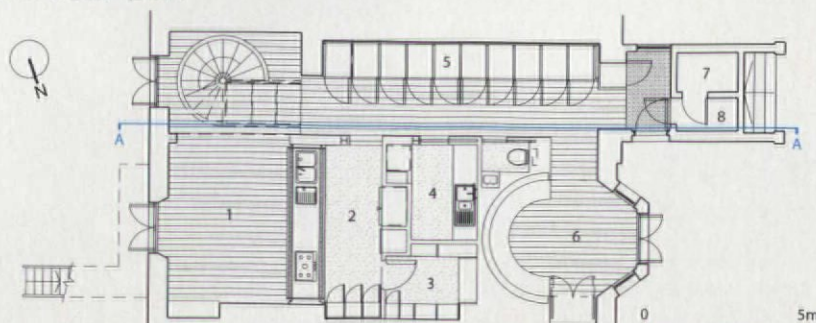
The original floor was in good condition so was just sanded and sealed, while the skirtings and covings were painted. Guy Barlow explains: 'There were many things we could have done, but we took a very simple approach. For example, we could have stripped back the many layers of paint on the original coving to show its detail. But to leave elements like this alone shows the building's history.'



first floor plan



ground floor plan



basement plan



Top left: custom-made banquet seating and bookcase in the family room. Above: bathroom to master bedroom

CREDITS

ARCHITECT

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Price & Myers

QUANTITY SURVEYOR

Wrighton Projects

MAIN CONTRACTOR

Cheshire Contracts

Shopfitting

SUB CONTRACTORS

mechanical engineers

Remec Mechanical;

electrical engineers M&H

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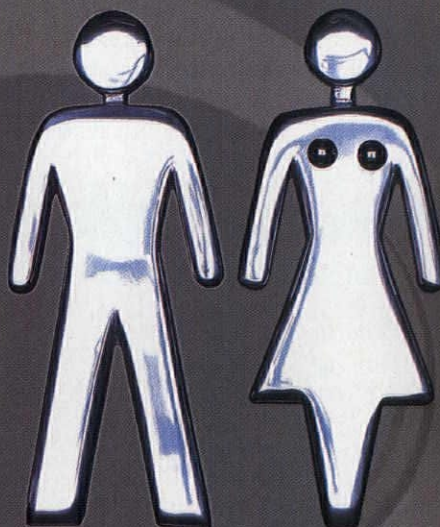


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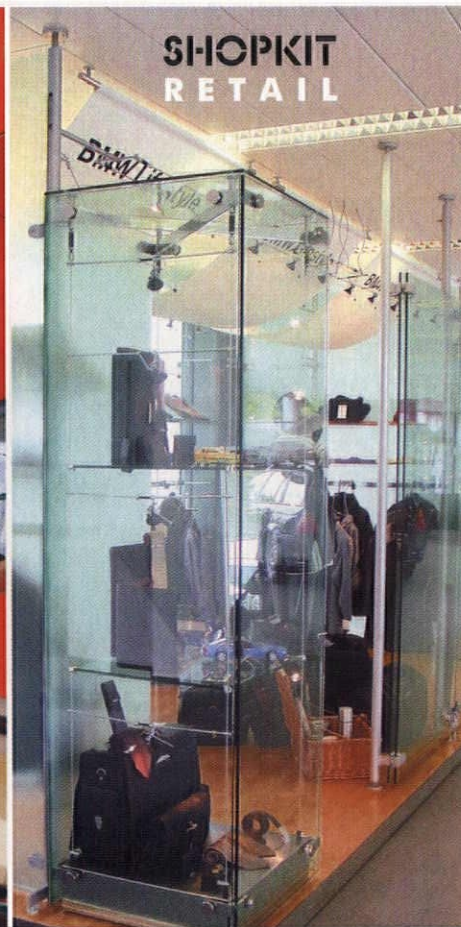
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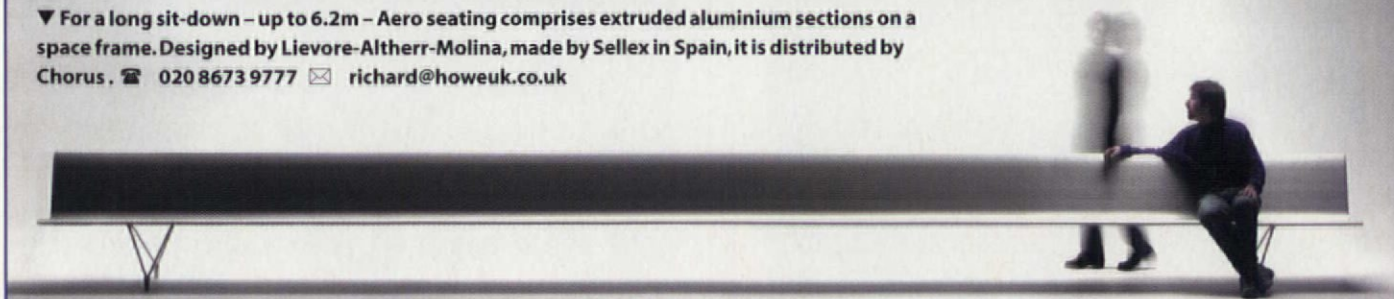
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Take your seats

In our second report from the Spectrum 2002 exhibition, we focus on ideas for seating. While the office remains a significant market, public seating is increasingly combining elegance with toughness, and some garden seating is escaping its poor-relation image

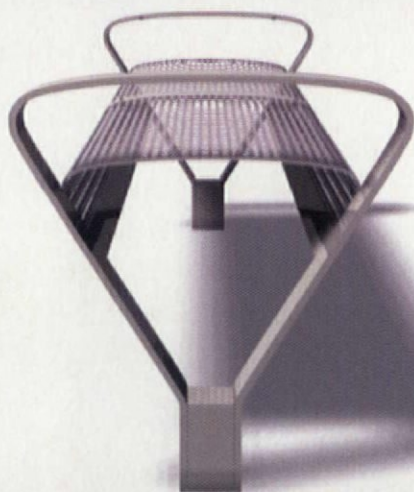
▼ For a long sit-down – up to 6.2m – Aero seating comprises extruded aluminium sections on a space frame. Designed by Lievore-Altherr-Molina, made by Sellex in Spain, it is distributed by Chorus. ☎ 020 8673 9777 ✉ richard@howeuk.co.uk



▲ New Wave workstations from Intoform include the Wingdesk, with locking castors, and the TT trolley, a self-contained mobile PC trolley and monitor support. ☎ 02476 347777 ✉ post@intoform.ltd.uk 🌐 www.intoform.co.uk



▲ The Modern Garden Company's Solo Mio lounge is framed in powder-coated mild steel, with a plastic mesh sling. Available in a range of colours. The designers are the YDF (the Young Designers Factory) from Italy. ☎ 01279 851900 ✉ info@modernngarden.co.uk 🌐 www.modernngarden.co.uk



▲ Launched at Spectrum 2002, Standup is new street furniture from Wales & Wales. This stainless-steel range includes seating, bollards, litter bins, cycle racks and tables. ☎ 01825 872764 ✉ info@walesandwales.com 🌐 www.walesandwales.com



▲ These dining chairs are from the Loom collection, designed by Ross Lovegrove. The range is made from aluminium and stainless-steel framing and mesh surfaces of paper-coated wire, finished for outdoor use. Contact details as Solo Mio above.



▲ Kasper Salto designed the B2 chair for Fredericia Furniture of Denmark for dining and conference use. It is available in cherry, maple or oak with steam-bent back staves. ☎ 0045 7592 3344 ✉ sales@fredericia.com 🌐 www.fredericia.com



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Over the top

KENNETH POWELL

John Simpson: The Queen's Gallery, Buckingham Palace, and Other Works

By Richard John and David Watkin. Andreas Papadakis, 2002. 136pp. £20

The appearance of this book to coincide with the opening of The Queen's Gallery is a considerable achievement in publishing terms. A number of the gallery's completed interiors, with furnishings and works of art in place, are illustrated with photographs up to the same excellent standard of those throughout the book. Indeed, the overall quality of the production is high, confirming Andreas Papadakis' confident emergence, post-Academy, as an independent architectural publisher.

The text is all that one would expect from scholars of the stature of Richard John and David Watkin: elegant, informative and well-pitched for a general, as much as a specialist, audience. It is also, as one would expect, highly partisan, depicting John Simpson, architect of The Queen's Gallery, as a brave defender of tradition against 'Modernists' who always seek as a starting point a *tabula rasa* from which all vestiges of the past have been expunged, thus allowing every commission to be approached as though no building had ever been designed before.

Many of these 'Modernists' will probably wince as they pass Simpson's Greek Doric portico on Buckingham Palace Road ('a tour de force in which the principles of Greek construction and ornament come more dramatically alive for us than in any other modern work of its kind', say John and Watkin). They may even eschew a visit to the gallery, denying themselves a rich artistic treat – treasures from Duccio to Freud – but also an interesting architectural experience.

You do not need to share the authors' estimate of Simpson's achievement here – they rank it alongside Soane's at the Bank of England – to find the project, if not entirely admirable, at least remarkable. Go with the flow and you might conclude that there is room, on the British architectural scene, for something as full-blooded and over the top as this. Simpson and his collaborators, like the sculptor Sandy Stoddart and the carver Dick Reid, have worked with great conviction.

What might Michael Hopkins or Jeremy Dixon (also shortlisted for the gallery) have made of the project? Both are, in a sense, tra-

ditionalists who draw on history in their work. But neither, I am sure, would have much time for Simpson's 'literalism', nor have they aligned themselves, as he conspicuously has, with the architectural campaigns of the Prince of Wales.

Simpson established his practice in 1980 but came to public notice later that decade when his alternative scheme for Paternoster Square, backed by the Prince, was decisive in derailing the winning one by Arup Associates. By 1991, Simpson, paired rather uncomfortably with Terry Farrell, was set to build a version of the Paternoster project – it fell victim to the 1990s recession.

Since then, the New Classicism seems to have made little headway. It has been pushed back to the fringes, the world of opulent private houses, where figures like Raymond Erith and Francis Johnson had kept it alive during the 1950s and 60s. Poundbury, launched with such hopes in 1993, has made little impact on the wider development scene – I find Simpson's market hall there the least happy of his built works, a perversely clumsy reworking of the one at Tetbury (the nearest town to Highgrove). In contrast, his progression of new common rooms at Gonville & Caius College, Cambridge, has all the skilful planning, spatial skill and command of detail found at the Palace.

It is pointless to slate Simpson and other New Classicists for lack of originality, for not being 'progressive' in the way that such profound Classicists as Behrens, Lutyens, Plecnik or Asplund were. Simpson is happy to revisit the work of Soane, Nash, Cockerell and others and rework their inventions, often on a reduced scale, for 21st century needs.

The Watkin school of criticism commends him for this: the quest for 'originality', it argues, has produced the disaster of Modern architecture and urbanism. Not for Simpson the explicit attempt to fuse Classicism with modern technology and materials found, sometimes to bizarre effect, in the work of Robert Adam. Instead, he seeks for beauty and a form of perfection that would have been understood in the Georgian age – and his vision has plenty of buyers.

In the US, where Robert Stern, Allen Greenberg and others have built modern Classicism on a huge scale, he could doubtless run a large office. In Britain, in contrast, he and others like him seem boxed into a corner – there are only so many jobs that the Royals can offer. Simpson, I suspect, is not content with this, and the next phase of his work might offer clues as to the prospects for the Classicists in decades to come.

Kenneth Powell is an architectural journalist

On the surface

SARAH JACKSON

Skin: Surface, Substance and Design

By Ellen Lupton. Laurence King, 2002. 240pp. £26 (Accompanying an exhibition at the Cooper-Hewitt Museum, New York, until 15 September)

This is a great taster book for a subject that is both relevant and fashionable: skin, surface, blobs, folds – key themes that have dominated architectural theory and education for the past decade. Typically, most writings associated with these trends are either abstruse or ridiculously reverential; this book is neither. It does, admittedly, tend towards the addictive shallowness of must-have consumer magazines, but it is an exhibition catalogue of contemporary product design, so it is not surprising that there is an element of soft sell.

Exhibits – a cross disciplinary collection of packaging, clothes, art works, furniture and representations of architecture – have been organised into six themes. The nomenclature is interesting (Beauty, Horror + Biotechnology, Vessels + Membranes, Warps

+ Folds), but the actual classifications are rather spurious. It is a forced structure, but it does not unduly intrude.

The three short essays at the beginning are much more successful, particularly those by Ellen Lupton (the curator) and Alicia Imperiale. They provide a clear overview of the subject matter, and raise issues that give you a framework for assessing the exhibits. 'Skin: New Design Organics', by Lupton sets the main premise – contemporary design is focused on the skin (surface) rather than the skeleton (structure). 'New Organics' is characterised by a crossover of skin properties; at the same time that developments in biotechnologies and cosmetic surgery make 'natural' skin more manufactured, products are showing more skin-like properties.

The theme is continued and extended

into a more architectural application in Imperiale's 'Digital Skins: The Architecture of Surface'. Imperiale explains that, in contrast to the Modernist dialectical division between interior and exterior space, contemporary works compress allusions of spatial depth into the surface. This emphasis on the complex surface has theoretical, material and technical roots, all of which have provided designers with means to produce (and describe) this new aesthetic: the Deleuzian idea of continual spatial flows, developments of new materials where the boundaries between the natural and the man-made are blurred, and, of course, digital technology.

Imperiale also neatly observes that the spatial development from Modernist to contemporary forms is mirrored in our design drawing methods, by the difference between Cartesian and algorithmic mathematics – points in space (x, y, z co-ordinates as in AutoCAD and Microstation-type software) versus surface geometries (NURBS splines, as in CATIA, Rhinoceros and Form Z-type software).

The essay is unfortunately illustrated by the rather overused (unbuilt) examples of Greg Lynn et al, but Imperiale is able to stand far enough back from the subject to make refreshingly sharp criticism. How accurate is the architectural world's use of Deleuze? What stops interior volume becoming inferior left-over space, a result of the over-prescribed external form? Is technology devised for three-dimensional modelling of products such as shampoo bottles really appropriate for large-scale urban interventions?

Jennifer Tobias' essay, 'Artificial Skin: Ingrown and Outsourced', is more problematic. It is an account of the properties and possibilities of skin – for example, grafting, skin substitutes, and stem cell research – but I suspect that this subject will be cherry-picked and downgraded to the inaccurate pseudo-science so loved by architects.

This use of technology is my main concern about the theme as a whole. Despite constant references to the impact of imagery, the whole subject has been post-rationalised through the scientific analogy of skin. We know, though, that these products are more aesthetically than technically determined. They look like they do because someone wants them to.

Some of the objects appear quite beautiful, and I assume will be even more impressive when seen in the flesh. But if image is replacing tactility as Lupton suggests, one wonders why they want to mount an exhibition at all.

Sarah Jackson is an architect in London



The 'tattooed' skin of Herzog and de Meuron's Eberswalde Library, Germany

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Rene Daniels and Karin Ruggaber 4 July-17 August. Paintings and sculpture 'with clear references to space, light and architecture'. At Bloomberg Space, 50 Finsbury Sq, EC2. Details 020 7330 7500.

John Baker: Building Modernism in West Africa in the 1950s Thursday 4 July, 18.30. A Docomomo lecture at The Gallery, 77 Cowcross St, EC1. Details 01223 366977.

Capital Gains: Making High-Density Housing Work in London Friday 5 July, 09.00-14.00. A conference at the Barbican Centre. Details Elaine Hill 020 7843 2217.

University of Westminster End of Year Architecture Show Until 5 July. At 35 Marylebone Rd, NW1. Details 020 7911 5000.

AA Projects Review 2002 5 July-2 August. At the AA, 36 Bedford Sq, WC1. Details 020 7887 4000.

Hong Kong: A City on the Move 10 July-15 August. An exhibition at the RIBA, 66 Portland Place, W1, with a discussion on 12 July, 18.30. Details 0906 302 0400.

Reassessing Nikolaus Pevsner: A Centenary Conference 12-13 July. At the Clore Management Centre, 25 Torrington Sq, WC1. Details www.bbk.ac.uk/hafvm/pevsner.html

American Beauty Until 13 July. American Minimalist works at Annely Juda Fine Art, 23 Dering St, W1. Details 020 7629 7578.

England's Lost Houses Until 21 September. An exhibition drawn from the archives of *Country Life* at Sir John Soane Museum, Lincoln's Inn Fields, WC2 (020 7405 2107).

Gio Ponti Until 6 October. An exhibition at the Design Museum, Shad Thames, SE1 (020 7940 8790).

Eastern

Control of Solar Shading Wednesday 10 July. A course at the BRE, Garston, Watford. Details John Kempster 01923 664800.

The Eco-Friendly Historic Building Tuesday 23 July. A craft day at Cressing Temple, nr Witham. Details 01245 437672.

Ben Nicholson: Drawings and Painted Reliefs 27 July-22 September. An exhibition at Kettle's Yard, Castle St, Cambridge. Details 01223 352124.



MEMORY BANK

Peter Richards' photographs are of public memorials in Belfast, which range from conspicuous monuments to local community murals and gardens. Reflecting decades of conflict and disturbance in the Province, they are at Belfast Exposed, 44 King Street, Belfast until 18 July. Details 028 9023 0965.

Historic Barn Conversions Thursday 22 August. A one-day seminar at Cressing Temple, nr Witham. Details 01245 437672.

Construction Law Summer School 2-4 September. A three-day event (worth 16 CPD hours) at New Hall College, Cambridge. Details 01932 893852.

Northern

Are You Sitting Comfortably? Until 28 August. An 'interactive seating exhibition' at Belsay Hall, Northumberland. Details 01661 881 636.

North West

Northern Exposure Until 20 August. An 'innovative' presentation of work by selected practices in the north west region. At CUBE, 113 Portland St, Manchester (0161 237 5525).

South Eastern

Langlands & Bell at Petworth 6 July-29 September. An exhibition of architectural work in Turner's studio at Petworth House, Petworth, West Sussex. Details 01798 342207.

Colour White Until 7 July. An exhibition at the De La Warr Pavilion, Bexhill-on-Sea. Details 01424 787900.

RIBA CPD Event: Sustainability

Masterclass Wednesday 10 July, 10.30. At Canon UK HQ, Reigate. Details 01892 515878.

Southern

Oxford School of Architecture Show

Until 30 June. At the Ashmolean Museum, Oxford (01865 483200).

Peter Aldington's House and Garden Sunday 30 June, 14.00-17.30. Open to the public at Turn End, Townside, Haddenham, Bucks (01844 291383).

South West

Urban Plymouth - The Next Step Friday 28 June. An update following the debate in May. At a Plymouth venue. Details 01752 265921.

RIBA Event: Site Visit to the O'Sullivan House, Salcombe. Saturday 6 July. Details Alan Cook 01404 813675.

Wessex

Jon Rouse Friday 28 June, 13.30. A lecture at the New Studios Building, Frenchay Campus, Coldharbour Lane, Bristol. Details 0117 3443093.

Juha Leiviska Until 2 August. An exhibition at the Architecture Centre, Narrow Quay, Bristol. Details 0117 922 1540.

Richard Long Until 22 September. An exhibition at the New Art Centre, Roche Court, East Winterslow, Salisbury. Details 01980 862447.

West Midlands

Van Heyningen and Haward Tuesday 2 July, 19.30. A lecture at the Assembly Rooms, Ludlow. Tickets 01584 872150.

Cottrell + Vermeulen Tuesday 2 July, 19.00. A lecture at the Railway Rehearsal Room, Stoke Station, Stoke-on-Trent. Details Chris Hesketh 01538 373477.

RIBA CPD Event: The Party Wall Act 1996 Thursday 4 July, 16.00. Details of venue 0121 233 2321.

The Effective Management of Fast-Track Projects Tuesday 16 July. A CPN workshop in Birmingham. Details 020 7222 8891.

Yorkshire

Design for Homes: Meeting Design Guidance for Housing under PP63

Friday 5 July. A conference at St William's College, York. Details Keith Knight 01904 658482.

Maintaining Safe and Secure Housing Thursday 11 July. A one-day BRE seminar at Leeds. Details 01923 664766.

Wakefield Summer School 2-4 August. Led by Will Alsop. At the Orangery, Wakefield. Details 01924 215550.

The Object Sculpture Until 1 September. An exhibition at the Henry Moore Institute, 74 The Headrow, Leeds (0113 246 7467).

Scotland

Glasgow School of Art Degree Show Until 29 June. At 167 Renfrew St, Glasgow. Details 0141 353 4500.

University of Strathclyde Architecture Show Until 10 July. At 131 Rottenrow, Glasgow. Details 0141 548 3023.

University of Edinburgh Degree Show Until 12 July. At 20 Chambers St, Edinburgh. Details 0131 650 2305.

The Great Divide Until 27 July. An exhibition exploring the interaction of people and the environment. At the Fruitmarket Gallery, Market St, Edinburgh. Details 0131 225 2383.

The Alchemy of Light Until 7 September. An exhibition at the Hunterian Art Gallery, 82 Hillhead St, Glasgow. Details 0141 330 5431.

International

UN Studio: Ben van Berkel / Caroline Bos 1987-2002 Until 15 September. An exhibition at the NAI, Museumplein 25, Rotterdam. Details 003110 4401200.

Image, Use and Heritage: The Reception of Architecture of the Modern Movement 16-19 September. The Seventh International Docomomo Conference takes place in Paris (contact: adcep@wanadoo.fr)

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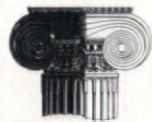
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people & practices

Magnus Strom has joined **John Pardy**. The practice is now called **John Pardy Architects** and its address is Beck Farm Studio, St Leonards Road, East End, Lymington, Hampshire SO41 5SR.

Sheppard Robson has appointed five new associates. They are **Paul Frondella**, **Barry Kendall**, **Benjamin Lesser**, **Fraser Rae** and **Ian Rudolph**.

Jonathan Davidson Associates has been renamed **Total Architecture Ltd.**

Birmingham-based **Sjolander da Cruz Architects** has moved to 57 Frederick Street, Birmingham B1 3HS, tel 0121 200 1072.

Dublin-based **RKD Architects** and **McCarthy Lynch Partnership** in Cork have merged to form **RKD McCarthy Lynch** and will continue to be based in Exham House, Douglas, Co Cork.

Tangram has appointed **Tim Barnett** as a partner.

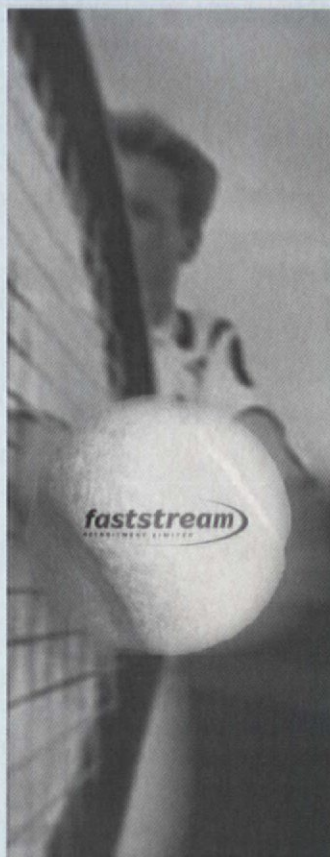
Trevor Hewett Architects has moved to 25 Castle Street, Hereford HR1 2NW, tel 01432 360938.

Building Design Partnership has elected **Nicholas Terry** as chairman.

Squire and Partners has made **William Jeffries** and **Robert Bochel** directors. **Henry Squire**, **Richard Webster** and **Tim Must** have been promoted to associate level.

Pollard Thomas & Edwards has promoted **Dominic May** to director.

● Send details of changes and appointments to Victoria Huttler, The Architects' Journal, 151 Rosebery Avenue, London EC1R 4GB, or e-mail victoria.huttler@construct.emap.com



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For an application form and information pack please contact Helen Blane on (01223) 457302 or email helen.blane@cambridge.gov.uk (please note that it is not possible to email the information pack).

For an informal chat, after receipt of the information pack, please contact Paul Marshall, Principal Architect on (01223) 457352.

The closing date for receipt of applications is 11th July 2002.

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MFI has launched its second competition with the theme 'Room to Grow' which seeks to explore the evolution of a child's room over the years and through each stage of childhood. The competition aims to stimulate discussions as to how design may address the requirements of a child's personal environment. Deadline 6.8.02.

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OTHERS

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PARK REDEVELOPMENT

Lambton Cokeworks, Sunderland. Design for reclamation of a contaminated former cokeworks site to create a country park with a development opportunity for housing. Miss A Tough, One Northeast, St George's House, Team Valley, Gateshead, Tyne & Wear NE11 0NA, tel 0191 4877655, fax 0191 4875690, e-mail Alison.Tough@onenortheast.co.uk. Application by 18.7.02.

● Richard Haut operates a weekly 'competitions' e-mail service, telling architects about projects they can apply for across Britain, Ireland and Europe. Tel 0033 673 75 02 76, e-mail hautrichard@hotmail.com, web communities.msn.com/RichardHautscompetitions



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Due to a transmission error an advertisement was published incorrectly in last weeks Architects' Journal. The advertisement recorded 30 years of excellence for Shorterm Engineers and should of course have read 1972 – 2002 and not as published. We would like to apologise for the error and for any embarrassment caused.

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The WDA has acquired 40Ha of former dockland adjacent to Swansea city centre and has commenced the development of an international mixed use waterfront development incorporating 1500 residential units, leisure activity sites, and 2,500,000 sq ft of B1 business uses, focused on added value knowledge based employment. To date 25,000 sq ft of office building has been completed, 70,000 sq ft is under construction together with £5 million of infrastructure works.

The client wishes to appoint high calibre visionary architects to the design team, who can bring added value and dimension to this fast moving high profile project, ensuring that developments objectives are achieved.

Consequently, architectural services from suitably qualified and experienced consultants are required to provide design advice in the following areas:

- Commercial development
- Residential development
- Leisure Development
- Water/Maritime related uses
- Design development briefs
- Public Realm

The Consultant should identify their specialist areas, which need not be all the above categories, as it is envisaged that a number of Consultants will be appointed. Awards will be made on the basis of experience, quality, vision and delivery.

Expression of interest must be in writing providing the following information:

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Two copies of submissions must be received by 15th July 2002 and sent to:

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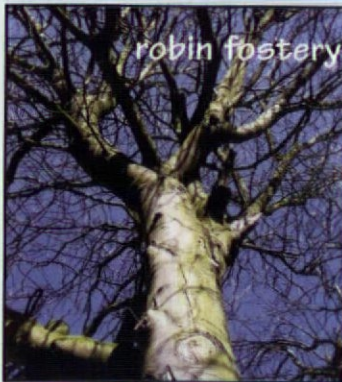
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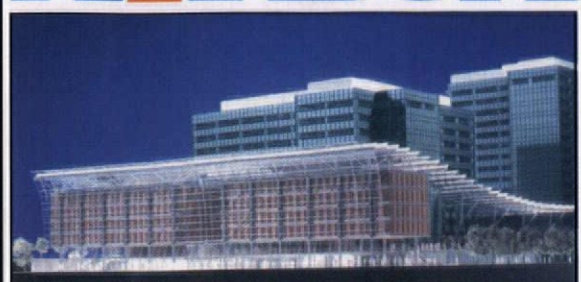
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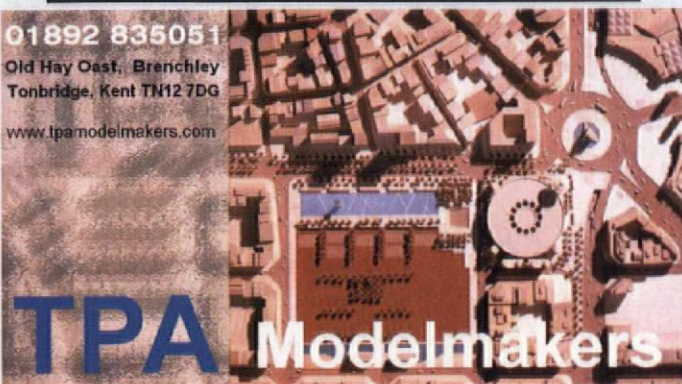


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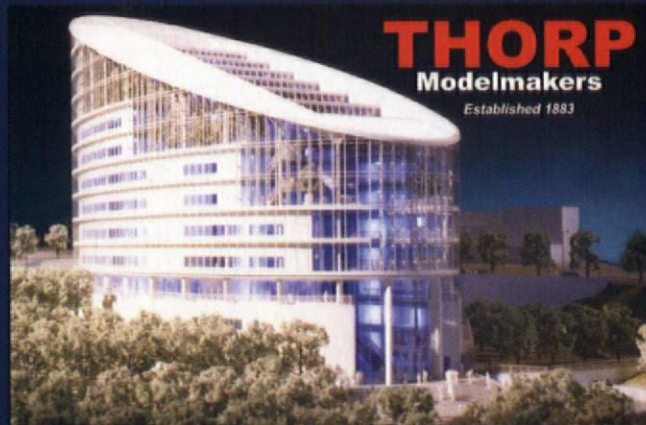
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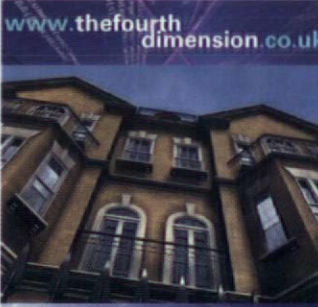
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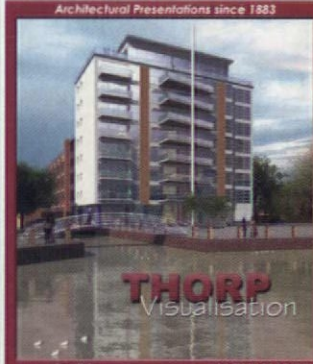
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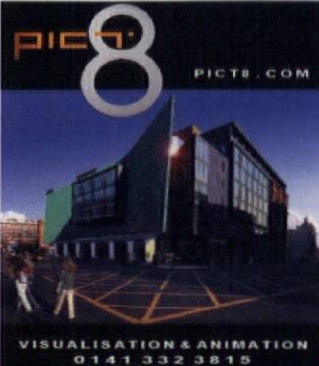
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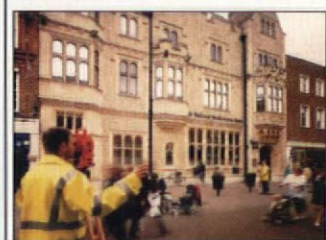
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archicharades



Congratulations to recent graduate Tim Hatton of Newcastle upon Tyne ('I'm seeking employment for next year,' says Tim). He identified Hugh Baillie Scott from the clues in our 'archicharades' competition last week. Can you identify the famous architect from this week's clues? Send your answer on a postcard, by first thing Monday morning, to: AJ Astragal, 151 Rosebery Avenue, London EC1R 4GB, or fax your entry on 020 7505 6701. The first correct entry out of the hat wins a bottle of bubbly.

Academy award

Massimiliano Fuksas was on good form at the Royal Academy annual architecture lecture on Saturday, attracting a large crowd. While UK architects have to put up with contract conditions which insist on 'no innovation' as a mark of approval, MF's work shows no such inhibitions. Having completed 42 buildings in France, he has now returned to Rome, partly because he feels that the architecture of that city has cropped up consistently in his work, even if unconsciously. And he has his European Congress Centre project ('a cloud in a box') to complete (tenders are now in), won in competition against a galaxy of stars including Lord Rogers. His most interesting international project is the Peace Center in Israel, backed by Simon Peres and Yasser Arafat, who could talk to each other when the project began a couple of years ago. How things change. Intriguingly, finance for the project has been voted through by the Israeli government, even amid the current distressing events, and work is under way. A sign of rationality in an irrational world.

Urban attitude

Fuksas famously coined the phrase 'Etica non estetica', roughly translated into English as 'less aesthetics, more ethics', as the title and theme for the 2000 Venice Biennale. We could now introduce another phrase which he used on Saturday: 'Intensity, not density.' Curiously enough, the idea of

intensity has surfaced in the mayor's London Plan, and surely deserves prolonged discussion, especially in the light of the near obsession with density that has been around since the Rogers report. Not, happily, that the two are mutually exclusive, but there is something interesting in the idea of buildings and spaces which are occasionally densely used, but are otherwise vacant – for example stadia, or Sunday markets.

Tower question

Would Fuksas design office towers again, after the events of 11 September? Probably not, was his answer at a private supper at the Academy after the debate. He recently designed a pair of towers for Vienna, in which he tried to encompass the idea of a city within a building; his headquarters competition entry for Piedmontese regional offices in Turin comprised 'floating space behind vertical facades'. Fuksas seems to be striving for what he described as 'architecture without form', a design ethos based on 'the space between'. It sounded pretty Roman. And the immaculate technical presentation of slides, interviews and snappily edited videos reminded us that Rome is the home of Cinecitta.

High point

Developer **Minerva** cannily launched its Grimshaw-designed City of London tower just as the mayor launched his London plan, extolling the virtues of high-rise. Anyone who remembers the 'bouncy castle' design that was previously

proposed will appreciate the rethinking undertaken by the firm, producing what will surely rank as one of their best buildings. Who would have thought triangulated forms could prove to be so efficient? The future of the project rests with the planning system, but if this is the standard of design we can expect from spec office schemes, keep them coming.

Cuddling up

Astragal doubts if **Sir Terry Farrell's** architecture has ever been described as 'cuddly' before. But that's what happened last week when Farrell appeared on *Midweek* on BBC's Radio 4. Presenter Libby Purves was the one coining the phrase, as she attempted to seamlessly interweave the lives of all of her guests on the show, Wet Wet Wet singer and now Chicago actor Marti Pellow, aid worker Justin Hill and composer Shirley Thompson. Thompson talked about her new piece, commissioned for the opening of the Stratford Cultural Quarter, while Farrell waxed lyrical on his buildings. These included M16, which he thought of as being more 'Hollywood' than the fascistic tag it often gets. When asked what his least favourite client might be, he replied instantly: 'The disinterested one'. Not enough cuddles, clearly...

Noises on

Watch out for *Benefactors*, a new performance of the architectonic play by **Michael Frayn** and starring Neil Pearson of *Drop the Dead Donkey* and *Between the Lines* fame, which opened on 25 June in London.

The play, from the celebrated author of *Noises Off*, was written in 1984 and won an Olivier award for Best New Play. Apparently, it 'cleverly traces the intersecting paths of two neighbouring couples, one well off and the other down on their luck. Spanning the course of 15 years, *Benefactors* investigates the interplay between politics and architecture and the dance of those who help and those who are helped.' Phew!

Sorry, Ian

In our 13 June issue, Astragal ran a satirical list of new architectural terms submitted by a reader and published in good faith. We have since discovered that the author is the estimable **Ian Martin**. The AJ apologises for this error. Mr Martin has also asked us to point out that the last definition on the list, added by Astragal, should not be considered part of his 50 New Architectural Terms For The 21st Century, on the grounds that 'it is xxxx'.

Defining moment

Meanwhile, here is a definition from Wiltshire reader Harry Montresor. **Pollock** – spatter or cause (paint, plaster, etc) to spatter in small drops and-or runs (esp on adjacent finishes). Examples: the painters have Pollocked the floor finishes; the ceiling tiles are completely Pollocked.

Latest issue

Congratulations to the AJ's **Isabel Allen** and **Jonathan Stock** on the birth of their son, Charlie. Another welcome supplement from the AJ!

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