THE SCHOOL OF BUILDING CELEBRATES 100 YEARS

From left to right; Ken Hatter (Council Member SOAB), Peter Lakin (Council member SOAB Lambeth College), Julie Glaser (Private Secretary to Head of Construction, Lambeth College), Bill Burnstead (Chairman, SOAB), Arthur Churchyard and Maxwell Hutchinson (Guest Speaker – architect and TV broadcaster).

On 26th March 2004, London South Bank University celebrated the centenary of the School of Building Association with guest speaker Maxwell Hutchinson (pictured on the right) at the LSBU Tower Restaurant.

The opening of The School of Building in Brixton in January 1904 was the outcome of a variety of initiatives stretching back to 1869 when technical education was first officially recognised and aided from the public funds in this country. The school grew rapidly and within two years of opening, the students numbered around 700. (Cont’d on Page 2)

MESSAGE FROM THE CHAIRMAN

One year on…..

Our Society has enjoyed steady growth over the past twelve months since our official launch on a riverboat on the Thames. It seems a good opportunity to review our progress. The most obvious area is our continuing programme of technical seminars, which have gone from strength to strength. In addition, to London seminars, SoPHE now has a Manchester location for technical presentations, which has been put together by Kate Longley. The newsletter has taken shape with its mixture of technical articles and news; our thanks go to Jonathan Gaunt, Editor. Membership continues to grow - recent new members are recorded within the newsletter and a number of awards have been made by the Society.

The Industry Group, jointly chaired by Mike Jones and Alan Flight, have been busy agreeing the best way to support our industry through technical and other ways. The second revision of CIBSE’s Guide G - Public Health Engineering was launched in June at CIBSE HQ. The launch was accompanied by a series of technical presentations on the changes. Looking to the future, we are hoping to organise a social dinner in October 2004, perhaps at the Kew Steam Museum - watch this space.

Once again I wish to thank the members of the steering group and CIBSE HQ, especially Samantha Caplan, our society liaison officer, for all their efforts in making our society so successful over the past year.

Martin Shouler, Chairman SoPHE
Apart from the classes in all the skilled trades, there were classes in building construction, geometry, the chemistry and physics of building materials and in surveying and levelling. The rapid growth of the School inspired a proposal to erect a new building on the vacant part of the site in order to double the accommodation available. The estimated cost of the build was £530,000, causing massive misgivings, but was opened in September 1909.

The strength of the School’s work lay in the evening classes in which notable developments prior to 1914 included the provision of a 4-year course in reinforced concrete and classes in heating and ventilating design. There was an impressive success in national examinations held by the Board of Education, City and Guilds of London Institute, RIBA and other professional institutions.

And then came the War... bombing began in real earnest in September 1940 and during the night of 15-16 of that month, incendiary bombs set fire to the original School building. The large hall was completely gutted and all the workshops adjoining it were destroyed. Fortunately, the other buildings were not damaged. The largest rooms in the 1908 building were reconverted and equipped with machines and tools borrowed from other colleges and schools; thus it was possible for the teaching of craft work to be continued.

Plumbing and Building Services Technology was the slowest in development than the general construction subjects. Before the war the only course of Technical Studies was the City and Guilds Sanitary and Domestic Engineering. Further development took place in the late 40’s and early 50’s when the Institute of Plumbing produced its Diploma Award. Brixton SOB was one of very few Colleges to provide courses of study leading to the award of the Diploma. However, the College was also aware that further studies beyond the Diploma were needed. The Institution of Public Health Engineers was contacted. They welcomed the interest and approved the Colleges programme for Ordinary and Higher National Certificate and Diploma courses in “Sanitation of Buildings”. The courses became well supported and successful candidates were soon occupying positions of responsibility in design and management in Public Health services organisations.

In 1968, the London County Council commissioned the Wandsworth Road Building for the Brixton School of Building. The Government had a plan to use the building for Polytechnics, which divided the site before the building was even started. Its implementation led to the creation of South Bank Polytechnic and the Built Environment Faculty within it.

In 1970, Polytechnic of the South Bank incorporated the Brixton School of Building, presently the School of Building Association, along with the City of Westminster College and the National College of Heating, Ventilating; Refrigeration and Fan Engineering. Today they continue to share in a historic union.

(Many thanks to LSBU and Ken Hatter for the above information and details)

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**EVENTS**

**OTHER OPTIONS BEING CONSIDERED FOR FUTURE PRESENTATIONS**

A) Understanding and evaluating Health & Safety Risk Assessments relating to PHE work.
B) Contract documents for PHE works with regard to responsibilities, duties and penalty clauses, etc.
C) Asbestos and the risk associated (H & S).
D) Sizing of small/medium sewage treatment package works, BOD, COD etc.
E) Sizing principles of syphonic rainwater systems.
F) Roof drainage, assessing risk, intensity etc. under BS EN 12506-3
G) Vacuum Drainage presentation
H) Syphonic Rainwater systems
I) Marrioff Hi-Fog Mist fire extinguishing systems.

**PREVIOUS TECHNICAL EVENTS THIS YEAR (2003)**

1. **TYCO/WORMALD FIRE SYSTEMS.** Life and building fire protection
   Contact: www.wormald.co.uk
2. **MARLEY PLUMBING.** Sanitation sizing to BS12056, Part 2.
   Contact: www.marleyplumbinganddrainage.com
3. **HYDROTIC UK LTD.** Technical overview of physical water conditioners and ultra violet disinfection.
   Contact: www.hydrotec.co.uk
4. **A O SMITH (WATER PRODUCTS Co).** Assessing, sizing of direct and storage type hot water heaters for commercial/industrial applications, giving consideration to latest building regulations.
   Contact: www.hotwater.com
5. **VERNAGENE.** Chlorine dioxide, Disinfection, Understanding the principles of dosing with consideration to health and safety aspects.
   Contact: www.vernagene.com
6. **NEW HADEN PUMPS.** The design and sizing of both foul and surface water pump sump chambers and stations.
   Contact: SouthEast@NHPPumps.com
7. **ALLAN AQUA LTD.** Design principles for boosted cold water and fire services relating specifically to high rise buildings.
   Contact: www.allanaqua.co.uk
8. **THAMES WATER PLC.** Discussions on items within the Regulations which required clarification.
   Contact: www.thames-water.com
10. **KSB LTD.** Grey Water Re-cycling for various types of buildings. General overview on the design principles with advantages and disadvantages on the possible options for re-using water
11. **BRE.** Control of Legionella Bacteria in water systems.
12. **SPEL Products.** An introduction to surface water/Foul water Puraceptors, Stormceptors, both full retention and by-pass types. Sizing, Alarms, Regulations and update on the latest Rivers Authority Requirement etc.
FORTHCOMING EVENTS
Forthcoming Technical Presentation Evenings

Date: Tuesday 28th September 2004
Venue: O'Neills Function Room
       Conway Street, London
       (subject to confirmation)
Presenter: EVAC
Design principles for vacuum drainage systems.

Date: Tuesday 26th October 2004.
Venue: O'Neills Function Room
       Conway Street, London
Presenter: Rainwater Design Principles
          David Saville
Designing sprinkler mist systems

Date: Tuesday 30th November 2004.
Venue: O'Neills Function Room
       Conway Street, London
Presenter: Grinnel
Designing symphonic rainwater systems.

Date: Tuesday 22nd February 2005.
Venue: O'Neills Function Room
       Conway Street, London
Presenter: Geberit
Applications of thermostatic mixing valves, TM2 & TM3 valves.

Date: Tuesday 24th May 2005.
Venue: O'Neills Function Room
       Conway Street, London
Presenter: Atlantic Water Management
SUDS and water percolation systems.

Date: Tuesday 28th June 2005.
Venue: O'Neills Function Room
       Conway Street, London
Presenter: Kessel / New Haden Pumps
Grease converters and over-pumping into surcharged sewers.

Future Industrial Visits:
Geberit Terrain would be happy to host a visit to their Maidstone factory to see their test rigs for sanitary and symphonic rainwater pipework. If you are interested (probably October/November 2004) please advise David Shaw on:
www.dshaw@qeneverandpartners.co.uk

PUT THIS DATE IN YOUR DIARY!

SoPHE Social Event - 1 Year Anniversary

Kew Bridge Steam Museum
Thursday 21st October 2004

The event will include a hot buffet sit down dinner and drinks, jazz band, a prize raffle, access to the topical public health exhibition hall and other exciting entertainment.

The evening will commence with a drinks reception while viewing the steam engines in action at 7pm and finish at midnight.

We have had two generous sponsorship offers so far and will be offering reduced rates for SoPHE members.

There will be a booking form sent to you shortly and to find out further details please visit the CIBSE website at www.cibse.org and click on the Society of Public Health Engineers link, or contact Samantha Caplan at scaplan@cibse.org
NEWS AND INFORMATION

SoPHE Annual General Meeting

On Tuesday the 22nd of June, the SoPHE Annual General Meeting was held which incorporated the annual elections for the committee posts.

The election results were as follows:

Chairman: Martin Shouler (re-elected for second term)
Vice Chairman: David Shaw
Secretary: Chris Northey (re-elected for second term)
Treasurer: Richard Mountney

The evenings elections were professionally chaired by Bill Bumstead, a long standing and invaluable member of the Public Health Engineering Group.

In order to recognise his many years of hard work and dedicated service to the Public Health Engineering Group and more recently the SoPHE steering committee, Bill was awarded the CIBSE Bronze Medal by Martin Shouler following the elections.

Following the SoPHE Annual General Meeting, a technical presentation was given by John Griggs of BRE on the Control of Legionella Bacteria in Water Systems. It is hoped that the technical literature from this presentation and past presentations will become accessible on the SoPHE website for those to access who were unable to attend the evening.

Below are a collection of photographs from the SoPHE Annual General Meeting:

Technical presentation by John Griggs of BRE on Legionella

Martin Shouler re-elected as Chairman for the second year.

Martin Shouler awards Bill Bumstead with the CIBSE Bronze Medal for his dedicated service to SoPHE

There was a good turn-out for the AGM, with attendees travelling from as far as Manchester
NEWS AND INFORMATION CONTINUED......

‘Plumber shortage can be solved by training women’

The Daily Telegraph published an article on 6 May with the above title. The article stated that the Construction Industry Training Board estimates that 29,000 new plumbers will be needed by 2007 and that companies should be offered subsidies to attract more women into plumbing to help reduce this shortfall.

The Equal Opportunities Commission uncovered no significant increase in the number of women finding a job in construction, engineering or plumbing in the past 10 years. Just 8% of the engineering workforce is currently female, but it is estimated that an additional 10,000 apprentices will be needed by next year.

The EOC is to launch an advertising campaign encouraging employers to take on more women using the example of Pauline Brown, an 18 year old mother of two who has trained to become a plumber. Pauline took a two-year National Vocational Qualification (NVQ) in plumbing and was employed by Lovell Partnerships, the builders and developers. She is currently the sole woman on a building site in Homerton, east London. (Extracts courtesy of the Daily Telegraph)

Launch of the New CIBSE Guide G

On 27th May 2004, CIBSE held a technical seminar launching the revised version of the CIBSE Public Health Guide G. The seminar was well attended with over 30 delegates. Alan Watson launched the event, giving an overview of the major areas of change, followed by a number of more specific technical presentations given by some other respected specialists in the field of Public Health Engineering.

Martin Shouler (BRE) gave a presentation on the subject of Water Services and Utilities followed by Gordon Puzey who spoke about Sanitary Pipework and Drainage as well as Waste Management. Janice Calvert (Oakland Calvert) gave a very informative presentation on Swimming Pools and the required treatment, while Ian Fellingham drew the morning’s seminar to a close by giving a presentation on Miscellaneous Piped Services.

All of the presentations not only covered the changes that have been made to the relevant sections in the new issue of the Guide, but also touched on where these specific PH areas might lead in the future. The seminar was very well received by all. The new Guide can be purchased from the CIBSE Bookshop on the Website or by post, addresses given on the last page of the newsletter.

Photograph in the opposite column:

Seminar speakers outside CIBSE Head Quarters From Left to Right:-
Janice Calvert, Martin Shouler, Alan Watson, Gordon Puzey & Ian Fellingham

NEWS AND INFORMATION CONTINUED......

PUBLICATIONS

CIBSE Revised Public Health Guide G – Available from the CIBSE bookshop and web site.

A complete list of CIBSE Publications and price list is available from the CIBSE website www.cibse.org

MEMBERS’ FORUM

This section will enable members to raise or ask questions relating to specific projects or design items for comments or guidance. This would enable other members to assist by explaining or giving design advice, considerations, or stating where/which BS Codes or authorities could be contacted in answering original questions.

With regards to a letter posed in the last Newsletter regarding swayle sizing, storm cell performance ratings and grass roof retention periods, a number of responses were received. Some of which have been included below:

Q: Has anybody had any experience in sizing swayles for a sustainable urban drainage system, could anyone suggest a suitable guideline to help with the design process?

A: For swayle design, you are best to review the new CIRIA document C609, ‘Hydraulic, Structural and Water Quality’ along with C522 and C523 ‘Suds’.

Q: I am currently looking at installing a StormCell surface water retention system at a site as part of a SUDS scheme. Has anybody had any experience with this sort of system with regards to performance levels and maintenance issues?
MEMBERS’ FORUM CONTINUED.....

A: Stormcell functions by allowing water to rise within a network of perforated pipes through a granular blanket then into the stormcell modules. With regards to maintenance, this type of system rarely incurs blockages due to the granular material functioning as a filter medium. Also natural microbes that exist in the background digest much of the oils that may be passed through. Any upstream apparatus, such as catch pits and light liquid separators, should deal with solid settling.

There are other systems on the market that allow water movement both vertically and horizontally such as the Wavin Aquacell and Alderburgh Atlants. Hydro Research have also just launched a similar Gecell module. All allow water movement freely within the Gecells. Studies by many manufacturers have shown that maintenance issues from blockage rarely occur.

Q: Could anybody suggest suitable retention periods for rainwater passing through a Terram roof build-up?

A: The retention time of any roof build up will depend on the drainage capacity of the medium. If a granular roof is installed, then the engineer can use the grain permeability to calculate head loss and in turn a time of flow through the medium. If the roof build up comprises a combination of granular and a geocomposite (membrane with spacer and geotextile) then the granular method can be used as aforementioned with the geocomposite calculated for time of flow using the manufacturer’s data. The roof manufacturer should be able to help you with this kind of calculation.

Many thanks to Simon Dent of Infrastructure Services Ltd for the above responses and to all other members who e-mailed responses.

These additional questions have been posed by members, if any body has suitable suggestions or useful tips, please write in.

1. I am currently working on a small commercial kitchen fit out. The kitchen waste discharges to a foul pumping station and so the removal/elimination of grease from the system is essential. Could anyone advise whether or not it would be suitable to install Enzyme dosing at the top of the drainage run as well as physical grease removal plant such as a ‘Big Dipper’ or whether the two treatment techniques should only be used independently.

2. While working on a scheme for a number of residential flats, I have been investigating typical annual gas consumption. While I have been able to find values for office blocks, restaurants certain other building types, I have been unable to find guidelines for residential properties. Does anybody know of any guidelines or does anybody.......
FEEDBACK

We would welcome any comments on this newsletter or contributions to future editions, in particular with regards to:

- Future events for consideration
- What should SoPHE be providing to our members
- Items or comments you think may be worth raising or informing your fellow members
- Technical articles from members, giving situations encountered and how they were overcome.

Please email comments to Alan Watson awatson@cibse.org or write to Alan at 222 Balham High Road, London SW12 9BS.

USEFUL WEBSITES and e-mails.

The Chartered Institution of Building Services Engineers
www.cibse.org

Society of Public Health Engineers
www.cibse.org/sophe

Technical Group:
Alan Neall - team1@curona.co.uk

Membership Group:
Martin Shouler - shoulerm@bre.co.uk

Communication Group:
Alan Watson - awatson@cibse.org

ODPM Building Regulations:
www.safety.odpm.gov.uk/bregs/brads.htm

Qualified Water Technology List:
Details on water products, which qualify for Enhanced Capital Allowance
www.eca-water.gov.uk

DATES FOR YOUR DIARY

Wednesday 21 July:
SoPHE North West: Presentation/discussion by Evac/BSRIA on vacuum drainage.

Wednesday 15 September:
SoPHE North West: Presentation/discussion by KSB Pumps on rainwater harvesting and grey water useage.

Wednesday 19 January:
SoPHE North West: Presentation/discussion by Culligan (formerly Liff Industries) on either physical water conditioning or UV and filtration (to be confirmed)

For technical evening dates, refer to ‘Forthcoming Technical Presentation Evenings’.

New SoPHE Members

Associate
J P Gilbert
D J Pepper

Associate Member
J P Jameson

Member
I O Boyd
M J Hussey
K D Tovey
A F Ockerby
D R Saville
L P Seymour
T J Surridge
T M Watson

Student
T C Grimes

THE STEERING COMMITTEE

Chairman: Martin Shouler
shouler@bre.co.uk

Vice Chairman: David Shaw
dshaw@qeneverandpartners.co.uk

Honorary Secretary: Chris Northey
cnorthey@zbp.co.uk

Honorary Treasurer: Richard Mountney
richard@mountneyconsultants.co.uk

Communications Group:
Alan Watson
Jim Buckmaster

Technical Group:
Alan Neall
Alison Franklin
Roger Baker
David Shaw
Jonathan Gaunt

Membership Group:
Martin Shouler
Chris Northey
Bill Bumstead

Education Group:
Ian Fellingham
Roger Baker

Regional Committee Contacts

Manchester:
Kate Longley
kate.Longley@arup.com
The Society of Public Health Engineers
Membership Tree

Fellow (FSoPHE)

Member (MSoPHE)

Associate

Student

Member of CIBSE (CEng MCIBSE)

Member of CIBSE (CEng MCIBSE)
Associate of CIBSE
Licentiate of CIBSE (LCIBSE)
Graduate of CIBSE
Affiliate of CIBSE

Plus relevant experience in public health engineering, see "Guidance to applicants for election and transfer".

Interview

Interview

Interview

Interview

Minimum age of 35
10 years minimum experience
and/or relevant members qualification's

Minimum age of 25
5 years minimum experience
and/or qualifications recognised by the society

Actively employed in the field of Public Health engineering

Studying on a recognised course approved by the society

Student Member of CIBSE

To find out more about CIBSE and the Society of Public Health Engineers go to the CIBSE website www.cibse.org/sophe or write to:

CIBSE
Society of Public Health Engineers
222 Balham High Road
London
SW12 9BS, UK

Tel 020 8772 3643
Fax 020 8673 3302
E-mail scaplan@cibse.org

Application forms can be downloaded from the SoPHE Web site (www.cibse.org/sophe), along with all subscription rate details.

Those wishing to join SoPHE who are already members of CIBSE should complete the Membership Form M2 while those wishing to join SoPHE who are not members of CIBSE should complete the non-CIBSE member form M1.