

**THAMES TIDEWAY TUNNEL - APPLICATION REFERENCE WW010001**

**DOCUMENT APP27.02**

**DAY 1 OF THE ISSUE-SPECIFIC HEARING REGARDING THE RATIONALE FOR THE SELECTION OF WORKSITES AND TUNNEL DRIVE STRATEGY**

**BIOGRAPHIES OF EXPERT WITNESSES CALLED BY THAMES WATER UTILITIES LIMITED**

Thames Water Utilities Limited called upon the following expert witnesses to give evidence on Day 1 (11 November 2013) of the issue-specific hearing regarding rationale for the selection of worksites and tunnel drive strategy:

- Phil Stride – Head of Thames Tideway Tunnel
- John Rhodes – Planning consultant, specialist in large-scale infrastructure
- Derek Arnold – Tunnel design engineer
- David Crawford – Waste and wastewater engineering specialist
- Alan Lewis – Environmental impact assessment specialist
- Kenneth Sabel – Architectural historian and heritage conservation consultant

Copies of the biographies of these witnesses are attached to this note.

**Thames Water Utilities Limited**

**12 November 2013**



## PHIL STRIDE

Head of Thames Tideway Tunnels

### AREA OF SPECIALISM

Phil Stride is the Head of Thames Tideway Tunnels at Thames Water. Until 2008 he was Head of Capital Delivery and in the regulatory year 2007/2008 he managed the delivery of the company's £527million capital investment programme for clean water assets. Mr Stride was the Institution of Civil Engineers' UK Civil Engineering Manager of the Year in 2003.

### PROFESSIONAL ORGANISATIONS

- Member of the Institution of Civil Engineers
- Member of the Chartered Institution of Water and Environmental Management
- Fellow, Royal Institute of Chartered Surveyors

### QUALIFICATIONS

- Cardiff University, UK, BEng. (Hons), Civil Engineering, 1978
- Henley Management College, London UK, Diploma, Management 1997

### RELEVANT WORK EXPERIENCE

Mr Stride has almost four decades of professional experience with Thames Water. He has extensive industry knowledge in terms of both operations and engineering, as demonstrated by previously-held positions such as Head of Capital Delivery (from 2007/08) and Head of Operational Control (from 2005/07). He has also held a number of project directorships, namely Water Project Director, Network Services Project Director and Process Services Project Director. This combination of senior strategic experience and direct understanding of project and stakeholder requirements affords Mr Stride extensive insight into the utilities industry.



## JOHN RHODES

Specialist in large-scale infrastructure project consulting

### AREA OF SPECIALISM

John Rhodes takes responsibility for a number of larger projects handled by Quod and often manages substantial consultant teams on behalf of major clients. He has given evidence on more than 100 occasions at planning enquiries in the High Court and other tribunals. Working with predominantly private sector clients, John specializes in handling large-scale construction projects and acts as lead consultant on wide-ranging issues including planning, site selection and coordinating environmental assessments.

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### PROFESSIONAL ORGANISATIONS

- Member of the government Practitioners Advisory Group on the NPPF
- Member of the government Planning Sounding Board
- Member of the Major Developers Group
- Member of the Department for Communities and Local Government CIL Policy Group
- Member of the London First Planning Committee
- Member of Lord Taylor's Review of Planning Policy Guidance

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### QUALIFICATIONS

- Thames Polytechnic, UK, BSc Estate Management

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### RELEVANT WORK EXPERIENCE

John has acted as a planning advisor and expert witness on a wide array of large infrastructure projects including Thameslink, Stanstead Airport, Heathrow Airport's third runway, London City Airport's expansion and EDF Energy's application for development consent for a new nuclear power station at Hinkley Point C. He is widely respected as an authority on the planning of large-scale construction projects throughout the UK.



## DEREK ARNOLD

Tunnel design engineer

### AREA OF SPECIALISM

Specialist in multi-disciplinary design projects involving major water supply, wastewater, drainage and tunnelling.

### PROFESSIONAL ORGANISATIONS

- Chartered Engineer, 1986
- Member of the Institution of Civil Engineers, 1986
- Member of the British Tunnelling Society, 1984

### QUALIFICATIONS

- University of Surrey, UK, BSc (Hons), Civil Engineering, 1981

### RELEVANT WORK EXPERIENCE

Derek has over 35 years' experience working on design and construction supervision assignments around the world. His first significant tunnelling project in 1983 was a 6km long raw water tunnel for the Three Valley Water near Slough. His paper on the project won him the British Tunnelling Society's Harding Prize in 1984.

In the mid-1980s, Derek worked on the Cairo Wastewater Scheme in Egypt where he was exposed to the practical issues involved in building a major tunnelling project in the urban areas of downtown Cairo. He moved onto the Channel Tunnel project as a section manager in 1988.

Derek worked in Hong Kong between 1990 and 2007 and was responsible for several major water tunnels, taking them from feasibility through site selection, design and construction management. He briefly worked in the USA until he was reassigned back to the UK in January 2009. Since June 2009 Derek has worked on the Thames Tideway Tunnel project, initially as the tunnel design manager before moving to a more senior management role in the integrated design, planning and environment team.



## DAVID CRAWFORD

Water and wastewater engineering specialist

### AREA OF SPECIALISM

David is a senior engineer and project manager with over 30 years' experience in water and wastewater engineering. He has been involved with combined sewer abatement plans and designs; storm water management; sanitary and storm sewer system analysis; reservoir management; water quantity and quality modelling of river, reservoir and estuary systems; and water supply assessments. As Technical Delivery Manager, David is the first point of contact for technical explanations to public and stakeholder groups.

### PROFESSIONAL ORGANISATIONS

- Member of the Institute of Civil Engineers (C Eng)
- Member of the American Society of Civil Engineers
- Member of the Engineering Council
- Member of the European Federation of National Engineering Associations
- Registered Professional Engineer in New York, Oregon, UK and Europe (Eur ING)

### QUALIFICATIONS

- Queen's University of Belfast, Northern Ireland, BS (Hons.) Civil Engineering, 1974
- University of Alberta, Canada, MS Civil Engineering, 1977
- Pennsylvania State University, USA, Post Graduate Certificate in Geographic Information Systems, 2006

### RELEVANT WORK EXPERIENCE

Over the course of his expansive and award-winning career, David has previously acted as an expert witness for the Federal Energy Regulatory Commission and served on the National Marine Fisheries Roanoke River Water Flow Committee. He has provided technical support to federal and state agencies and the US Army Corps of Engineers. He was Adjunct Lecturer in Civil Engineering for six years, has given numerous presentations and is widely published across the USA and Canada.



## ALAN LEWIS

Environmental impact assessment specialist

### AREA OF SPECIALISM

Alan Lewis is an Associate EIA Manager at URS (formerly Scott Wilson) and is under full time secondment to the Thames Tideway Tunnel project. He has been an EIA practitioner since 1999 and has over 13 years of professional experience in this area. He is one of three EIA managers on the project; prior to this, he lead the EIA inputs into site selection.

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### PROFESSIONAL ORGANISATIONS

- Member of the Institute of Environmental Management and Assessment (MIEMA)
- Member of the Institute of Ecology and Environmental Management (MIEEM)

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### QUALIFICATIONS

- Open University, UK, BSc. (Hons), Natural Sciences, 1999
- Imperial College, London UK, MSc., Environmental Technology 2001
- Chartered Environmentalist

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### RELEVANT WORK EXPERIENCE

Alan has previously lead the EIAs for Thames Water on both the Lee Tunnel and the Thames Gateway Water Treatment Plant at Beckton (also known as the 'Desalination Plant'). He has also managed a number of other EIAs in the waste and urban generation sectors as well as managing international EIAs and environmental assessments in the Caribbean, Africa, Eastern Europe and Central Asia. Prior to 1999, Alan was employed by Scott Wilson as an ecological surveyor.



## **KENNETH SABEL**

Architectural historian and heritage conservation consultant

### **AREA OF SPECIALISM**

Ken is an architectural historian who specialises in conservation and consultancy advice in relation to historic areas and buildings. He has worked in the field for over 27 years. He has particular expertise in providing strategic advice in relation to historic townscapes and landscapes; area characterization, assessment and strategies; and conservation appraisals and plans. He has led the heritage work for bored tunnels at Crossrail for over two years and has worked as the built heritage specialist on the Thames Tideway Tunnel project since 2011.

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### **QUALIFICATIONS**

- MSc Historic Conservation
- Cert Architectural History

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### **RELEVANT WORK EXPERIENCE**

Ken's key experience includes heritage and tunnelling as well as consents in the historic environment. He has been involved with numerous London developments and major national projects, including Crossrail, the London 2012 Olympic Park and Heathrow Airport. He is a widely published built heritage consultant and has previously acted as an expert witness. Ken also taught historic building survey techniques and management to the Department of Archaeology at the American University of Beirut.