

# E. MITCHELL SWANN, P.E., FCIBSE, LEED AP Managing Director

# EXPERIENCE SUMMARY

Mitchell Swann, a Managing Director with Resolution Management Consultants, Inc. (RMC), has over 35+ years of experience on both domestic and international projects in the areas of consulting, design engineering, construction, project management, risk management, forensic engineering and claims analysis. Licensed as a Professional Engineer in multiple states, Mr. Swann's experience includes the engineering and design of mechanical and control systems on projects involving commercial, industrial and institutional construction and building types including central utility plants, laboratories, and research facilities, microelectronic facilities, pharmaceutical facilities, broadcasting, computer centers, correctional facilities and shipboard systems.

As a LEED Accredited Professional and Fellow of the Chartered Institution of Building Services Engineers, Mr. Swann is a recognized expert that possesses advanced knowledge in green building construction and accountability for decisions on the design, management and financial implications of engineering projects.

A solutions-oriented professional, Mr. Swann is experienced in project, department and organizational management. He has provided design and engineering consultant services on over fifty (50) projects totaling approximately 10 million square feet and on construction projects cumulatively exceeding \$2.5 billion in the USA and internationally.

Mr. Swann has provided expert witness testimony on a number of cases including at arbitration and trial, and is experienced in settlement discussions and mediation. Testimony topics have included issues concerning deficient and defective design and engineering, standard of care, interpretation of building codes, and disruption, delay and inefficiencies experienced in the performance of work.

Mr. Swann has served as Chair on several ASHRAE Technical Committees and co-authored design guidelines for ASHRAE and ISPE, including the ASHRAE Green Design Guide and the ASHRAE Survival Guide for Design-Build Projects. He has also

### ACADEMIC BACKGROUND

• Drexel University – Philadelphia, PA B.S. Mechanical Engineering (1981)

#### LICENSES/REGISTRATIONS

- Registered Professional Engineer: California, Delaware, Maryland, New Jersey, New York and Pennsylvania
- Leadership in Energy and Environmental Design Accredited Professional (LEED AP)
- National Council of Examiners for Éngineering and Surveying
- Chartered Institution of Building Services Engineers (UK) (FCIBSE)

#### **PROFESSIONAL ORGANIZATIONS**

- American Bar Association (ABA)
- ABA Forum on the Construction Industry
- American Society of Heating, Refrigeration and Air Conditioning Engineers
- Association for International Arbitrators (AIA)
- Chartered Institute of Building Services Engineers (UK)
  Engineers Club of Philadelphia Board of Directors &
- former President 2012-2014
- Green Buildings United (Philadelphia) Board of Directors
- International Society of Pharmaceutical Engineering
- National Society of Black Engineers
- PA Review and Advisory Committee for the PA Uniform Construction Code
- U.S. Green Building Council

## PRIOR EMPLOYMENT

- 2001 2020 MDC Systems
- 1998 2001 Day & Zimmerman
- 1998 Independent Consulting
- 1997 1998 Hatch BioPharmaceuticals
- 1994 1997 HLW International
- 1992 1994 Quasar Engineering & Construction
- 1981 1992 The Kling Lindquist Partnership

served as Vice-Chair of the ABA's Committee on ADR in Construction and as Chair of the on the Board of Directors for The Enterprise Center Community Development Corporation. He is a 2018 graduate of the Goldman-Sachs 10,000 Small Businesses Program and as a recognized thought leader in engineering and design, project execution strategies, sustainable building processes and life-cycle project management, he is a frequent speaker at Technical & Professional programs for organizations such as ASHRAE (a Distinguished Lecturer since 2005), the ABA, the AIA, the PA Society of Professional Engineers and others. He has also conducted multiple "one day" training seminars on Integrated



Design Process and Integrated Project Delivery for ASHRAE's Learning Institute and NAVFAC. A summary of the presentation topics is listed below:

# **SEMINARS & PRESENTATIONS**

2024 – Design Build for Green Buildings: Integrated Delivery of an Integrated Idea (ASHRAE Chapter – Nigeria & Ghana)

2024 – Implementing Energy Efficiency and Decarbonization in Low Income Urban Households (ASHRAE Decarbonization Conference)

2024 - College of Fellows Debate - Use of AI in Engineering Design (ASHRAE Winter Conference - Chicago)

2024 – Professional Liability – Sliding Doors\Changing Landscapes Panel Discussion (ASHRAE Winter Conference – Chicago)

2024 – Decisions, Decisions Comparing Project Delivery Approaches (ASHRAE Chapter – Hampton Roads)

2023 – College of Fellows Debate – Engineers Have an Obligation to Decarbonize (ASHRAE Summer Conference) Tampa, FL

2023 - Are We There Yet? What is "Substantial Completion"? (ASHRAE Chapter - Omaha)

2023 – Design Build for Green Buildings: Integrated Delivery of an Integrated Idea (ASHRAE Chapter – Omaha)

2023 – Don't let your BIM go BOOM! Risk management in the robot age. (ASHRAE Chapter – Central NY)

2023 – Design Build – Executing the Project (Engineers Club of Philadelphia) Philadelphia, PA

2023 – Building Turnover for Successful Operations, Maintenance and Cost Management (ASHRAE Winter Conference) Atlanta, GA

2022 – "Design Build – Executing the Project" (based on The ASHRAE Design Build Survival Guide) (ASHRAE Chapter) Dayton, OH

2022 – Climate and its Impact on the Construction Industry: Building Codes, Design Standards & Professional Standard of Care (ABA Construction Forum) Memphis, TN

2022 - Decisions, Decisions - Comparing Project Delivery Approaches (ASHRAE Region III Regional Conference)

2022 - Green Buildings Sustainability, Resilience Techniques, Objectives & Outcomes (ASHRAE Chapter) Central Pakistan

2022 – Design-Build and the Standard of Care: Under which Standard? Under whose Care? (ASHRAE Chapter) San Diego, CA

2021 - Workshop A - Managing Integrated Project Delivery (ABA Construction Forum) Seattle, WA

2021 - - Building Operation and COVID-19 What Is the Standard of Care and Who Is Responsible? (ASHRAE Virtual Winter Conference)

2020 – 2017 Jedi Mind Tricks for Integrated Project Delivery (IPD) (ASHRAE) Philadelphia, PA (2017); (SMCA) Philadelphia, PA (2018); (ASHRAE) North Jersey (2020)

2019 – Design – Build and the Standard of Care (Under which Standard? Under whose Care?) (ASHRAE) St. Louis, MO and Kuala Lumpur, Malaysia

2019 - Best Practices for Hot Tubbing in Arbitration (Construction SuperConference) Rancho Palos Verdes, CA



2017 – Weapons of Mass Construction: Green Building Standards Rating Systems and Codes (ABA Construction Forum)

2016 – Are we there Yet? What is "Substantial Completion" in Project Execution? (ASHRAE India Chapter) Delhi, India

2015 – 2016 – *Connecting Green Building Outcomes to Enterprise Sustainability Initiatives* (AIA Build) Pittsburgh, PA (2015); (ASHRAE & IES College of Architecture) Mumbai, India (2016)

2015 - Forensic Project Management I & II (PSPE Conference) Pittsburgh, PA

2010 – Application of ASHRAE Standard 189.1 in the Design of High-Performance Buildings, (Vietnam Green Building Council Conference) Ha Noi, Vietnam

2010 – Design Build for Green Buildings: Integrated Delivery of an Integrated Idea, (MEET Conference) Moncton, NB, Canada

2010 – Setting the Horizon – Integrated Project Delivery in Theory and in Practice, (ASHRAE Annual Meeting) Albuquerque, NM

2008 – Trends in High Performance Buildings (CTSA) Philadelphia, PA

2008 – Integrated Project Delivery Expectations of Performance & Promises to Deliver, (ASHRAE Annual Meeting) Salt Lake City, UT

2008 - Managing Risk in Sustainable Buildings - Policy, Performance & Pitfalls, (DePaul University) Chicago, IL

2008 – A Mock Arbitration – Gargantua Pharma v E. P. Hemeral Design & Rhube- Goldberg Construction, (ASHRAE Winter Meeting) New York, NY

2008 - Understanding the Legal Liabilities of Green Building Projects, Engineering Vision 2030, Seattle, WA

2008 – Design Build for Green Buildings: Integrated Delivery of an Integrated Idea, (ASHRAE Sustainability Conference) Detroit, MI

2006 – Sustainability: Un-definable Success in a Defined World, ASHRAE, NYC, 2008; (Indiana Building Energy Symposium) Indianapolis, and (ASHRAE) Kansas City, MO, and Chicago

2007 – AcreConf 2007 "Challenges to Sustainability" - Sustainability – Indefinable Success in a Defined World, New Delhi, India

2006 - Project Green Light: The Business Case for Green, (ASHRAE) Chicago, IL

2005 – *Project Monitoring for Financial Institutions*, (National Association of Real Estate Investment Managers – AE & Environmental Forum) Philadelphia, PA

2005 - Risk: The Real World of Project Management, (ISPE) Phoenix, AZ

2005 – Construction Management 2005: New Challenges and Opportunities with High Tech Projects, (International Superconference), London, UK

2005 – Professional Practice and Risk Management: Engineering as a Contact Sport, Valley Forge, PA

2005 – Rule #1: Nothing Is as Simple as It Looks. The Use of Technical Experts as Neutrals in Complex Construction Cases, (American Bar Association Section of Dispute Resolution) Los Angeles, CA

2004 – *The Standard of Care – Expectations of Performance & Promise to Deliver*, (Construction Superconference), San Francisco, CA

2004 – Successful School Design & Construction: Mission Impossible or Impossible Mission?, (Duane Morris, Walter T. Wolf) Philadelphia, PA



2004 – "Can't We All Just Get Along?" Keeping Your Eye on the Prize Despite Getting Poked in It, ISPE (Annual Meeting) San Antonio, TX

2004 – HACCP – Design Responses to New Food Processing Regulations, (ASHRAE Annual Meeting) Nashville, TN

2004 - Project Management, (Pyramid Club's Innovation Forum) Philadelphia, PA

2004 – Construction Project ADR: Resolutions in Real Time, (Presented to ABA with Pepper Hamilton LLP and Drinker Biddle) New York, NY

2004 – Legal Issues: Mold, Mildew and IAQ for Owners/Facility Managers/Engineers, (ASHRAE/BOMA meeting) Philadelphia, PA

2004 – *Construction Management/Design-Build in Pennsylvania*, (Presented with Pepper Hamilton LLP for Lorman Education Services) Wilkes-Barre, PA

2003 - Salvaging the Troubled Project, (Buchanan Ingersoll) New York, Pittsburgh, PA and Washington, D.C.

2003 – Sustainability – Un-definable Success in a Defined World, CIBSE/ASHRAE, (Gathering of the Building Services Industry) Edinburgh, Scotland

2002 - Quality Through Project Management, ISPE, (Delaware Valley Spring Education Program)

2000 - Current Practice and Future Trends in the Design of Oral Solid Dosage Facilities, (ISPE) Durham, NC

2000 – Fumehood Testing, Specifying and Executing, (ASHRAE) Dallas, TX

1999 - ISPE/Interphex, Oral Solid Dosage Baseline Guidelines, Sao Paolo, Brazil

1998 – Cleanroom Project Execution, (ASHRAE)

1998 – ISPE/FDA Oral Solid Dosage Facilities Design Guidelines, Tampa, FL