

ENGINEER: CIVIL/STRUCTURAL

EDWARD M. DEEGAN, JR., M.S., P.E.

Engineering Design & Testing Corp.

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EDUCATION:

- 2009 Master of Science, Civil Engineering
Drexel University, Philadelphia, Pennsylvania
- 2002 Bachelor of Science, Civil Engineering
Northeastern University, Boston, Massachusetts

EXPERIENCE:

- May 2009 **Engineering Design & Testing Corp.**
to Present **Cherry Hill, New Jersey**

Consulting Engineer. Specialized consulting, with an emphasis on root cause, scope, and value of damage. Investigations include property damage to residential, commercial, industrial, institutional and government buildings, bridges, and other structures. Systems include gravity and lateral load-resisting structures, building envelopes, and stormwater conveyance. Types of damages include, but are not limited to, wind, fire, water intrusion, storm surge, snow, earthquake, explosion, foundation settlement, deterioration, corrosion, impact and construction defect. Investigations also include construction site and pedestrian accidents, involving the built environment.

- August 2007 **CMX, Inc.**
to May 2009 **Voorhees, New Jersey**

Project Engineer. Provided civil engineering services for wireless telecommunication sites including the evaluation of existing structures and the design of structural modifications in compliance with the International Building Code and other applicable codes. Structures included monopoles, self-support towers, guyed towers, utility structures, water towers and buildings. Provided engineering testimony for wireless telecommunication site applications at municipal zoning hearings. Also provided evaluation of existing structures for support of photovoltaic systems (solar panels).

July 2002
to August 2007

Cornell & Co., Inc.
Woodbury, New Jersey

Project Engineer. Developed and engineered solutions for temporary support structures and erection crane installations related to building and bridge erection and rehabilitation. Equipment included tower cranes, truck cranes, crawler cranes and derricks. Projects included widening of highway bridges, girder bearing replacements, elevated subway bridge reconstruction, building rehabilitation and new construction. Conducted field monitoring for compliance with temporary support and erection specifications. Analyzed structures for stresses and deflections due to hoisting, jacking and loads induced by cranes and derricks. Evaluated bridge girder stability for steel erection operations. Designed rigging and erection crane schemes for critical lifts (heavy-lift planning). Developed erection crane layouts and provided on-site project management services for efficient field production.

January 2002
to April 2002

Natgun Corp.
Wakefield, Massachusetts

Co-op Engineer. Construction management services for pre-stressed concrete water storage tanks, including coordinating requests for quotes and preparation of site layout drawings of construction operations.

March 2001
to June 2001

Weidlinger Associates, Inc.
Cambridge, Massachusetts

Engineer-in-Training. Bridge rating calculations and reports for local and state authorities. Field visits for bridge rating projects and other project proposals.

June 2000
to January 2001

S&F Concrete Contractors, Inc.
Boston, Massachusetts

Field Engineer. Engineering and construction management support during the construction of three reinforced concrete high rise office, hotel and residential buildings in downtown Boston, including establishing building control lines with electronic survey equipment and accurately measuring, calculating and ordering concrete.

January 2000
to March 2000

**Kiewit/Atkinson/Cashman, A Joint Venture
Boston, Massachusetts**

Co-op Engineer. Contributed to construction operations, on-site safety and quality control for Central Artery/Tunnel Project, including formwork design for concrete bridge deck, field monitoring of ground water levels, and mass concrete differential temperature analysis.

January 1999
to June 1999

**HDR Engineering, Inc.
Boston, Massachusetts**

Engineering Aide. Provided construction phase services for Central Artery/Tunnel Project (Big Dig) including conflict resolution, submittal review and contract drawing revisions. Drafting and computer programming for New York Interstate-287 bridge rehabilitation.

June 1998
to September 1998

**Cornell & Co., Inc.
Woodbury, New Jersey**

CAD Operator. Crane layout plans for steel and precast concrete erection operations. Calculations for critical lifts and temporary support design.

CONTINUING EDUCATION:

Structural Design for Bomb Blast Loads and Accidental Chemical Explosions
American Society of Civil Engineers, June 10-12, 2015, Secaucus, New Jersey

Earthquake-Induced Ground Motions
American Society of Civil Engineers, January 24, 2014, Philadelphia, Pennsylvania

Seminar on Shear Walls, Engineered Wood Beams, Connections and Special Design
Provisions for Wind and Seismic Loads
American Wood Council, November 13, 2013, Philadelphia, Pennsylvania

Energy Efficient Building Envelope Design & Construction
HalfMoon Education Inc., August 15, 2013, Cherry Hill, New Jersey

California Emergency Management Agency Safety Assessment Program
Delaware Valley Association of Structural Engineers, October 26, 2012, Philadelphia,
Pennsylvania

CONTINUING EDUCATION (CONTINUED):

Seismic Loads for Buildings and Other Structures
American Society of Civil Engineers, March 8-9, 2012, Baltimore, Maryland

Moisture and the Building Envelope: How to Avoid Problems
Construction Specifications Institute, June 27, 2011, Philadelphia, Pennsylvania

Workshop on Conducting Period Façade Inspections
ASTM International Committee E06, April 29, 2011, West Conshohocken, Pennsylvania

Confined Spaces Training
National Safety Council, September 16, 2009, Charlotte, North Carolina

Design & Renovation of Wood Structures
American Society of Civil Engineers, August 6-7, 2009, Philadelphia, Pennsylvania

National Advanced Fire Arson and Explosion Investigation Training Program
National Association of Fire Investigators, August 3-5, 2009, Sarasota, Florida

Structural Condition Assessment of Existing Structures
American Society of Civil Engineers, June 25-26, 2009, St. Louis, Missouri

Steel Design After College
American Institute of Steel Construction, November 3, 2005, Philadelphia, Pennsylvania

OSHA 30 Hour Training Course - Construction Safety & Health
Cornell & Co., Inc. Safety Department, 2003, Woodbury, New Jersey

PROFESSIONAL ORGANIZATIONS:

American Society of Civil Engineers (ASCE)
 Forensic Engineering Division
 Construction Safety Committee – Crane Safety Subcommittee
 Temporary Structures Committee
Structural Engineers Association of Pennsylvania (SEAOP)
Delaware Valley Association of Structural Engineers (DVASE)
International Code Council (ICC)
National Roofing Contractors Association (NRCA)

REGISTRATIONS:

Registered Professional Engineer in Pennsylvania (#PE074225)
Licensed Professional Engineer in New Jersey (#24GE04713800)
Licensed Professional Engineer in Delaware (#16493)
Licensed Professional Engineer in New York (#088683)
Licensed Professional Engineer in Maryland (#36855)
Licensed Professional Engineer in District of Columbia (#PE905202)
Licensed Professional Engineer in Virginia (#45955)
Registered Professional Engineer in West Virginia (#18734)
Licensed Professional Engineer in Connecticut (#28208)
Licensed Professional Engineer in New Hampshire (#28208)
Licensed Professional Engineer in Kentucky (#26315)
Registered Professional Engineer (Civil) in Arizona (#48045)
Licensed Professional Engineer (Civil) in Nevada (#19379)
Licensed Professional Engineer in Maine (#PE15284)
Licensed Professional Engineer in North Carolina (#044284)
National Council of Examiners for Engineering and Surveying (NCEES) (Record #35213)

PUBLICATIONS:

“The Five “Ws” of Construction Subrogation,” Subrogator, Spring/Summer 2013, pg. 50, with Dana R. Bowling.

“Spare Part Storage Optimization Onboard Deployable Military Support Assests,” Naval Engineers Journal, Vol. 122, No. 1, 2010, pg. 137, with J. A. Goshorn and B. E. Layton.

SPEAKING ENGAGEMENTS:

“A Mock Administrative Licensing Hearing Focusing on Structural Engineering Ethics and the Code of Conduct,” Delaware Valley Association of Structural Engineers, February 14, 2018, Plymouth Meeting, Pennsylvania.

“A Primer Regarding Blast Loads on Structures,” Engineering Design & Testing Corp.: Annual Engineers’ Meeting, February 5, 2016, Columbia, South Carolina.

“To Fall or Not To Fall? That is the Question: A Guide to Investigation of Imminent Collapse,” Engineering Design & Testing Corp.: Annual Engineers’ Meeting, February 7, 2014, Salt Lake City, Utah.

“Property Case Studies Involving Structural Engineering Issues,” National Association of Subrogation Professionals: New Jersey Chapter Meeting, September 6, 2012, Mount Laurel, New Jersey.