

Credentials

**Professional Engineer**

New Jersey	Pennsylvania	Illinois
GE 31896	PE-037865-R	062-020735



Education

**Doctor of Philosophy in Civil Engineering (Partial)**  
Lehigh University, 1961

**Master of Science in Civil Engineering (Soils Major)**  
University of Illinois, 1958

**Bachelor of Science in Civil Engineering (Structural Major)**  
University of Illinois, 1953

**Continuing education** through programs offered by: George Washington University, New York University, Alexander Hamilton Institute, Lehigh University, and local seminars by professional and private groups.

Professional Associations

- American Society of Civil Engineers
- American Iron and Steel Institute
- Association of Iron and Steel Engineers
- Tau Beta Pi and Chi Epsilon Societies
- American Society of Highway Engineers
- Pennsylvania Society of Professional Engineers
- American Railway Engineering Association
- American Institute of Steel Construction

Professional Service Positions

- American Society of Civil Engineers, Lehigh Valley Section - President 1992-1993
- American Railway Engineering Association - Committee 15 for development of specifications for movable and fixed railway bridges
- Pennsylvania Society of Professional Engineers, Lehigh Valley Chapter - Vice president

Public Service Positions

- Catasauqua School Board President, 1973 - 1976
- Lehigh County Community College Trustee, 1978 - 1984
- Catasauqua Exchange Club President, 1977
- Catasauqua Library Board President, 1970
- Holy Cross Lutheran Church Councilman, 1965 - 1969

Publications

- “Lessons from Structural Failures”, Best Paper of the Year, AISE, 1980
- “Structural Design of Industrial Buildings”(lecture), University of Wisconsin, 1976
- “Inspection of Steel Bridges for Fatigue”, ASCE Structural Journal, 1971
- “Testing of a Steel Deck Bridge”, Transportation Research Board Record, 1968
- “Commentary on Welded Coverplated Beams”, ASCE Structural Journal, 1967
- “Bracing of Bridges” (Lecture), University of Wisconsin, 1970
- “Economics of Simple Span Highway Bridges”, PENNDOT, 1967

Areas of Concentration

- |                        |                              |
|------------------------|------------------------------|
| Structural engineering | Construction relationships   |
| Civil engineering      | Contractor responsibilities  |
| Railway engineering    | Construction means & methods |
| Strength of materials  | Failure analysis             |
| Vibration analysis     | Product liability            |
| Soil mechanics         | Storm damage                 |
| Fracture mechanics     | Fire damage                  |
| Bridge inspection      | Foundations                  |
| Steel erection         | Trenching                    |
| Excavation             | Foundation problems          |

Specific Experience & Interest

- |                                |                            |
|--------------------------------|----------------------------|
| Buildings                      | Roof collapses             |
| Highway and railroad bridges   | Carnival & amusement rides |
| Temporary bridges              | Timber structures          |
| Docks and wharves              | Masonry structures         |
| Parking structures             | Concrete structures        |
| Warehouses                     | Construction site safety   |
| Trucking docks                 | Retaining walls            |
| Shipping facilities            | Soil stabilization         |
| Metal fatigue                  | Steel fabrication          |
| Brittle fracture               | Footings & foundations     |
| Culverts                       | Tunnel liners              |
| Construction products          | Pilings                    |
| Cofferdams                     | Sheeting                   |
| Welding & riveting             | Towers                     |
| Pre-engineered steel buildings | Guiderails                 |

Professional Experience**Institute for Products, Engineering and Construction** **1998 to Present**

Consulting forensic engineering services for attorneys and insurance companies. Investigations encompass the fields of civil and structural engineering, with an emphasis on accident prevention, construction means and methods, structural failures, soil stabilization and contractor responsibilities.

**Barry Isett and Associates - Senior Structural Engineer** **1993 to 1997**

Senior Structural Engineer with responsibilities for design and construction supervision on a variety of structural, civil and industrial engineering projects. Major projects included strengthening and eliminating vibration on the Hercules roller coaster at Dorney Park, PA; raising of the Chestnut Ridge Railroad bridge in Palmerton, PA for increased vertical clearance; resolution of insurance claims for structural collapse and distress as expert witness; fire damage evaluation and remediation; industrial bridge design and structures of timber, masonry and concrete.

**McTish, Kunkle and Associates - Vice President** **1988 to 1993**

Vice President of consulting engineering firm in the field of structural engineering. Projects consisted of the design, construction and rehabilitation of all types of highway and railroad bridges throughout the state of Pennsylvania. Significant projects included a four span, continuous curved steel girder bridge in Allentown, PA, which won the 1991 AISC Prize for bridges in the short span category.

**Gannett, Fleming Transportation Engineers - Project Manager** **1987 to 1988**

Projects included the \$17 million completion of New Jersey Route 18, including seven grade separation structures, landfill stabilization and utilities relocation, as well as upgrading a three mile stretch of the New Jersey Turnpike, including widening and rehabilitation of existing bridges.

**Bethlehem Steel Corporation - Manager, Technical Services** **1961 to 1986**

Responsible for Research and development and failure analysis of steel products. Projects included conversion of over 100 bridges from concrete to steel; development of bridge and highway-related construction products; studies of bridge fatigue, fracture, corrosion and economics; creation of computer programs for bridge design and specification.