

**GERVASIO & ASSOC., INC.**  
**CONSULTING ENGINEERS**  
77 EAST THOMAS ROAD, SUITE 120  
PHOENIX, ARIZONA 85012  
(602) 285-1720 • (602) 285-1530 (FAX)

**CURRICULUM  
VITAE:**

**Fred M. Nelson, P.E.**



**EDUCATION:**

BES in Civil Engineering  
Brigham Young University, 1972 Summa Cum Laude  
MS in Structural Engineering  
Brigham Young University, 1972  
Graduate Studies, ASU, 1989-90  
Tucson High, 1965

**SCHOLASTIC  
HONORS:**

ASCE National Scholarship, 1971  
Outstanding CE student BYU, 1972  
Phi Kappa Phi & Tau Beta Pi  
All State AZ Track 1964 & 1965 (Mile Relay,  
All American 1965) & Tucson High School  
Sports Hall of Fame (2012 Inductee)  
BYU Track 1966 & 1969-70

**REGISTRATIONS:**

Arizona - Civil Engr. #10650, Struct. Engr. #12207, Land Surveyor #16876  
New Mexico - Professional Engineer #19061  
North Dakota - Professional Engineer #PE-5272  
Pennsylvania - Professional Engineer #023279-E  
South Dakota - Professional Engineer #8974 (Inactive)  
Utah - Professional Structural Engineer #94-168388-2203

**MEMBERSHIPS:**

American Society of Civil Engineers, Fellow status & Life Member  
Arizona Section - President 2001-2002  
Daniel W. Mead National Finalist 1979  
Arizona Section - Director 1980; Historian 1992-99; Newsletter Editor 1981-82  
Phoenix Branch - President 1990-1991  
John C. Park Outstanding Civil Engineer Award in Arizona, 1998  
Arizona Consulting Engineers Association  
American Society for Testing Materials  
D21, Member since 1989, attended 10 national meetings  
F13, Member, 1989-2006, attended 5 national meetings  
E54, Homeland Security Applications, Member since 2004, 5 national mtgs.  
ASU Civil Engineering Dept. Advisory Committee 2001-2013  
BYU Civil & Engineering Scholarship Society, April 2005-2013  
California Office of Emerg. Services, SAP Evaluator since 2010 & Program  
Instructor since 2014 (taught 5 full-day seminars)  
City of Phoenix/FEMA Urban Search & Rescue Task Force, Structural Specialist  
Participated in 1995 Oklahoma City Rescue Effort  
Participated in 1996 Atlanta Olympics Task Force  
Participated in 2001 World Trade Center Rescue Effort  
Participated in 2005 Hurricane Rita Rescue Effort  
Activated in 2013 for Hurricane Sandy  
Participated in 2014 Oso Landslide Rescue (National IST Structural Specialist)  
Incident Support Team (IST), Member since May 2006  
Structures Working Group, Member since 2009  
City of Phoenix Roof Drainage Task Force 1981  
Structural Engineers Association of Arizona  
SEERP (Emergency Response) Committee - Chairman, 2003+ to present  
2010 Award Winner in "Open" Category  
Volunteer Services in Boy Scouts & Little League 1977-1990; 1995-current  
Bike MS Arizona Committee & PMBC Member  
Town of Gilbert Structural Volunteer since 2012

**PUBLICATIONS & PRESENTATIONS:**

Co-Editor of "A Biographical History of the Brigham Young University Civil and Environmental Engineering Department", 2007  
"Disaster Preparation for Structural Engineers", *Structure* magazine, C3 Ink, September 2007  
"Rescue Engineering and Environmental Impacts at the World Trade Center", Presentation for State Bar of Arizona, "Emergency Preparedness and Response: Are We Ready?", April 2005  
"Rescue Engineering", Presentation at Arizona Law & Litigation Seminar by CLE International, November 14-15, 2002  
Guest Speaker at dozens of events relating to Forensic Studies, FEMA Events, & Disaster Preparation

**EXPERIENCE:**  
1989 - Present

Gervasio & Assoc., Inc., Vice President & Forensic Dept. Director. In charge of Investigations & special projects. Supervise engineering and architectural professionals; and prepare comprehensive investigations and reports on the cause of structural failures, fire damage, repairs, rehabilitation projects and renovations. Supervise design repairs based on these findings and inspect related field work of reinforced concrete, masonry, steel, wood and prestressed concrete structures. Consult with other engineers in the firm on projects that he has special experience such as bridge design, industrial buildings and large wood truss damage. Special projects that require unusual designs and research. Accident evaluation (slip & fall and other) and expert witness testimony (150+ depositions).

1977 - 1989

Hastain & Deatherage, Inc., Phoenix, Arizona, Vice President. As Civil Engineer, complete project responsibility for the design and/or field inspection of airport facilities, several major streets, Improvement District paving projects, water transmission lines, storm sewers, sanitary sewers, the Gilbert Road Bridge over the Salt River, and numerous minor bridges. Also perform expedited plan review for City of Phoenix (Grading & Drainage). As Structural Engineer, designed commercial & industrial buildings, large billboards etc. Wrote reports involving investigations, restorations and structural repairs and provided expert testimony.

1975 - 1977

Dibble & Associates, Phoenix, Arizona, Project Engineer. Designed civil engineering projects for government agencies. Performed interstate highway and urban road design, hydrologic and hydraulic design, reinforced concrete design, design of structural steel plate structures, a cable suspension bridge, etc.

1974 - 1975

Bechtel Power Corp., Berwick, Pennsylvania, Susquehanna Nuclear Power Project. Field engineer, responsible for miscellaneous and embedded metals. Monitored and inspected reinforcing steel, concrete placement, form work, Q-decking, water-stop, structural steel, precast panels, etc. Worked directly with Procurement and vendors in ordering material, reviewing/approving shop procedures/drawings.

1972 - 1974

Bechtel Power Corp., San Francisco California, Pilgrim II Nuclear Power Project. Involved in the analysis and design of structural steel, reinforced concrete and prestressed concrete components of the containment structure. Most significant assignments were the complete seismic analysis of the containment building, finite element design of equipment hatch, the design and analysis of the base slab, and the preliminary design and drafting of reactor support schemes.

Summer,  
1969 - 1971

Construction worker for Stern-Rogers and M. M. Sundt Corp. at various heavy construction sites in southern Arizona.

**LANGUAGES:**

Spanish - read, write and speak with near native fluency.  
Portuguese - can communicate with minimal skills.