

# V. VICTOR SOUKAMNEUTH, M.S.C.E., P.E.

#### **BACKGROUND**

Over 28 years of combined structural design and forensic experience, along with practical design and analysis experience of residential, commercial, industrial, institutional and marine type structures including hurricane barriers, foundations for dynamic equipment, and various other types of structures and facilities.

Forensic investigation expertise includes cause and origin failure analysis, structural analysis, and condition assessments of single-family residences, multi-family residences, custom residences, manufacturing facilities, commercial properties, office buildings, governmental buildings, and light and heavy industrial facilities.

Representative forensic engagements include construction defects, foundation movement, structural failures, wind damage, impact damage, water intrusion, plumbing failures, soil heave and settlement, post-fire structural issues, concrete silo explosions, and vibration effects resulting from construction and earthquakes.

Testified in court, depositions and has been a designated expert in multiple cases.

#### **EDUCATION**

M.S. in Civil/Environmental Engineering, Worcester Polytechnic Institute, Worcester, MA, 1997 B.S. in Civil/Environmental Engineering, University of Rhode Island, Kingston, RI, 1994

#### **PROFESSIONAL LICENSES & CERTIFICATIONS**

Registered Professional Engineer in FL, GA, KS, NC, NY, SC, VA, WA, MS, LA, PA. Holder of MSHA (Mine Safety and Health Act) Certification for mines of 650ft in depth HAAG Certified Inspector, Commercial Roofs V2 HAAG Wind Inspector Certification

## PROFESSIONAL MEMBERSHIPS

Member of the American Society of Civil Engineers (ASCE) #000009807417
Member of the National Society of Professional Engineers # 300741484
Member of the Spray Polyurethane Foam Alliance # 51903303
Member of the Florida Society of Structural Engineers
Member of the American Association for Wind Engineering

### **PROFESSIONAL EXPERIENCE**

### February 2023—Present - Sole Proprietor

Providing expertise in structural engineering and related expertise to a wide variety of clients.

Conventional residential and commercial construction deficiencies

Stucco related construction defect cases

Basement water intrusion and mold claims

Foundation and retaining wall distress and failures

Ceramic tile failures

Brick, masonry and concrete structural distress

Roof (Residential, Commercial, Institutional, Industrial) evaluations due wind and hail damage claims

Evaluations of damages due to water main breaks, explosions, blasting, and construction vibrations

Concrete driveway and sidewalk cracking, spalling, etc.

Code compliance issues for decks, porches, ramps, stairs, railings, handrails, etc. for personal injury claims

Pool leaks and structural failures

#### April 2019—2023 IARCCA, Incorporated - Senior Civil/Structural Engineer

Providing expertise in structural engineering and related expertise to a wide variety of clients.

Basement water intrusion and mold claims

Foundation and retaining wall distress and failures

Foundation settlement

Floor and roof framing distress and excessive deflection

Ceramic tile failures

Brick, masonry and concrete structural distress

Conventional residential and commercial construction deficiencies

Decks, walkways, wood fire escape failures

Railings and handrail collapses

Vehicle impact damage evaluations

Wind and hail damage claims

Roof collapse claims due to snow and/or ponding water

Roof ventilation and attic mold claims

Evaluations of damages due to water main breaks, explosions, blasting, and construction vibrations

Wood roof truss collapses

Concrete driveway and sidewalk cracking, spalling, etc.

Code compliance issues for decks, porches, ramps, stairs, railings, handrails, etc. for personal injury claims

Pool leaks and structural failures

### 2012-2016 IOmega Forensics Engineering IProject Engineer

Conduct forensic investigations of commercial, institutional, high-rise and residential buildings Determine the cause and origin of structural failures and construction defects Conduct roof damage evaluations for residential and commercial structures Conduct moisture /water intrusion damage evaluations Prepare and provide oral and written reports May be called upon for expert witness testimony

### 2011-2012 IBRPH Architects and Engineers - Structural Department Team Leader

Lead, develop, and mentor engineers and designers for continuous improvement of engineering expertise, professional development and career path planning

Performed structural analyses using hand calculations, 3-D analysis software and other accepted

methods

Exercised technical responsibility required within areas of technical competence for sealing engineering

work performed by the structural team

Generated required engineering reports, white papers, analyzed the information, and made recommendations

Kept abreast of new technical methods and developments in seismic engineering Helped bring RISA 3D software into department, helped to develop and grow structural department

from 5 to 15

#### 2004—2011 IBorton, LC - Senior Structural Engineer

Performed structural analysis and design of light and heavy industrial type projects Provided structural engineering services for concrete silo slip form construction, in addition to other

miscellaneous structures

Steel, concrete, and foundation design of large material handling system supports, specialty structures, process equipment installation supports, conveyor system supports, truck load out structures, air handling supports and foundations, sampling and control rooms, electrical containment buildings, receiving buildings, mechanical and machinery support systems including deep and shallow foundations

Provide technical building code guidance to in-house project managers, salesman, engineering coordinators, and estimators

Voluminous seismic analysis and design experience on steel and concrete industrial structures (dynamic and spectra response analysis also performed)

Assist in developing project structural requirements, conducting field surveys, and developing construction documents

#### 1995—2004 ISEA Consultants, Inc. - Structural Engineer

Performed structural analysis and design of residential, commercial, municipal, DOT and industrial type structures. Engaged in steel, concrete, masonry, and wood design Reconnaissance travel, field inspections ,reverse engineering, engineering data collection and interpretation of current conditions

Performed construction services including responding to RFI's, reviewing shop drawing submittals, and performing field observations as required Prepared preliminary and final design contract documents Performed drafting as required using Auto-cad

# 1990—1994 IR.I.D.O.T. (Rhode Island Department of Transportation) - Summer Engineer Intern

Performed materials testing in the RIDOT Laboratory

Performed routine DOT bridge inspections

Performed materials quality control for the RI Department of Transportation on various highway projects

Performed concrete and steel strength tests, cylinder compression tests from samples created in the laboratory, or those created in the field

Other tests performed included concrete clump tests, temperature measurements, air content pressure method test, air content volumetric test, curing concrete test specimens in laboratory and unit weight (density) test