

FIORAVANTE "VAN" A. BARES

Winchester, 2000

President F.A.B.E. & Associates

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www.hands-oncorp.com

CONSULTANT: underground construction, over 30 years experience, worldwide.

Engineering, Dispute Resolution, Claims, Expert Witness.

Professional Consulting

Consulting that capitalizes on a solid hands-on engineering and management base and on a continuously expanding and improving contractual experience derived from tackling and successfully resolving ever repeating construction problems. Proficient in helping legal counsel understanding how the construction process functions. Trouble shooting, dispute prevention through effective contract administration. Substantial track record as authoritative expert witness. Consulting provided anywhere. Multilingual, qualified metrication expert and computer skilled.

Hands-on Construction:

Engineering solutions to foundation and ground problems as encountered during the construction of industrial and residential buildings, tunnels, dams, embankments, bridges, highways, urban subways and rapid transit systems, marine and environmental projects, worldwide.

Dispute Prevention:

Whole project management, operation sequencing and scheduling. Contract clauses impact assessment and interpretation. Construction administration, site work documentation, cost control, timely submittal of change orders, negotiations.

Dispute Resolution:

Construction and contractual disputes resolution through Negotiation, Mediation, Arbitration and Litigation. Quantification, submittal and negotiation of change orders and claims. Technical support during litigation. Expert Witness.

POSITIONS HELD:

Chief Executive Officer, Chief Engineer, Construction/Project Manager, Claims Administrator, Construction Consultant.

EDUCATION:

Milan Polytechnic, Italy: Degree of Doctor of Civil Engineering
American Arbitration Association Trained Arbitrator
American Arbitration Association Trained Partnering Facilitator
University of Middlesex Trained Mediator
Board of Disputes Resolution Institute Trained Member of BRDs.
Continued and frequent attendance at Professional upgrading education Courses and Seminars

EXPERTISE FORGING COMPANIES:

F.A.B.E. and Associates, Winchester, MA	1988 to Present
Perini Construction Corp., Framingham, MA	1984 - 1988
I.C.O.S., Milan, Italy)
Urban Structures, New York, NY)
Franki Foundations, Boston, MA)
Parsons Brinckerhoff, Boston, MA and)
Pittsburgh, PA)
Cementation Piling and Foundations,)
London, UK)
Fondedile and Warren Fondedile, Naples, Italy)
and Boston, MA)

F.A. Bares' and F.A.B.E. & Associates' SELECTED PROJECTS:

Member of the Central Artery Project Conservator Team (McGinley-Hart Architects, McPhail Associates, Structural Engineering Inc. and F.A.B.E. & Associates as construction consultants), overseeing the preservation of historic structures along the up to 35 m deep excavations for the \$14.0 billion, 8 lane highway across downtown Boston (MA). An assignment for a State Agency requiring a good degree of professional competence and flexibility to mesh the implementation of the design of large and deep cuts across a congested downtown area with the sensitive mandate of preventing damages to delicate historic structures and realistic construction cost restraints.

Expert witness for large Middle West Municipality on dispute involving the construction of six 200 ft deep, up to 50 ft diameter shafts through overburden and high water bearing and gas producing rock and 12,000 ft of 18 ft diameter rock tunneling for new CSO system. The dispute involved assessing the effectiveness of the engineer's rock grouting specifications to deal with the rock to be tunneled through.

Consultant on assessing the causes of building foundations problems' and on damages caused by vibrations emanating from deep soil compaction operations.

Consultant in arbitration of \$12.0 million co-generation plant construction claim.

Change Orders' Identifier and Claim Quantifier for contractors seeking full recovery of extra contractual costs.

Consultant on providing jet-grouted soil improvement and support for the construction of a Soft Ground Tunnel under the landing strip of a busy airport in MidWest USA and elsewhere in Italy.

Associate Designer, Construction, Geotechnical Consultant (to SNC-Lavalin of Montreal, Canada) and **Cost Estimator** for the construction of an underground section of a \$85.0 million stacked-tunnels portion of the rapid transit system in Kuala Lumpur, Malaysia. The tunnel had to be fit within a narrow corridor between (and under) a raging river and shallow-foundation apartment buildings. F.A.B.E. & Associates suggested first switching from side by side tunnels to stacked tunnels and then co-designed slurry walls (with Weidlinger Associates) and top down construction. Structural deflections upon construction were only 20% of expected.

Construction Consultant on engineering, feasibility and construction (to HDR Engineering) of foundation and structural rehabilitation of a massive historic masonry railway viaduct (built in 1830) to allow 150 miles/hr train traffic. Another assignment for a Public Agency, requiring the ability to mesh public with contractual needs and mandates for the implementation of innovative solutions to preserve heritage and ambient.

Designer and Cost Estimator of alternative solutions for the construction of highways tunnels under live railway tracks, part of the Central Artery Construction project. One solution was based on constructing support of tunnel excavation by horizontal jet grouting and another on jacking mini-portions of the tunnel frames and complete them Lego-style (For J.F.White Constr. Co.).

Associate Designer and Cost Estimator of soft ground improvement (by jet grouting and slurry walls) for the construction of large, \$80.0 million subway tunnel stations in downtown area of San Juan, Puerto Rico (Tren Urbano Project, for Rotondo Constr. Co).

Associate Designer and Estimator of soft ground improvement and support (by soil freezing and jet-grouting) for the construction of \$45.0 million twin subway tunnels in downtown Caracas, Venezuela (Capucinos Station, for Odebrecht Constr. Co).

Consultant (to McNamara Constr. Co.) **on design, feasibility, construction and waterproofing** of large, \$400.0 million complex of rock dikes (overall, 10 km long) to allow diamond mining from bottom of lake in Arctic regions (Diavick diamond mining project, NW territories, Canada).

Consultant (to Walter Constr. Co.) **on design and construction** of a composite structure (small diameter drilled shafts and soil) to support one side of an excavation upon the failure of a 17 m deep steel sheeting wall, approximately 100 m from sea shore. The project included a grouted massive bottom plug and chemical grouting to seal both the bottom and portions of the remaining lateral steel sheeting (Vancouver Sulphur Wharf renovation, Vancouver, BC, Canada).

Consultant to Russian contractor for the introduction of new foundation construction technique in the US construction market and **promoter of joint venture** agreement with US contractor for work in Russia.

Consultant and Cost Estimator (for Trevi Icos) on Boston Port Authority Logan Airport improvement project for the construction of over 60 m deep 2.10 to 2.70 m diameter drilled shafts through obstructions plagued soil and keyed up to 6 m into bedrock.

Expert Witness in slurry flooding of utility ducts, site mismanagement, trench collapses, electrocutions, slip and fall accidents, other personal injury cases and flooding of buildings.

Expert Witness on litigation to recover \$30 million compensation upon the failure of major cofferdams for the construction of a 1 km bridge across the Narragansett Straits in Rhode Island.

Member of Panel of Arbitrators in various commercial disputes' arbitration.

Consultant on Environmental remediation projects in New Jersey, Pennsylvania, Georgia, New York, Arizona and British Columbia that included the construction of jet-grouted and slurry walls cut-offs and biodegradable filter trenches.

Consultant on River levees protection and stabilization in Italy and Missouri by jet-grouted thin diaphragms

Chief Design Engineer of contractor design-build solutions to stabilize Recurring Land-slides on Federal Highway Administration projects.

Project Manager of large site in Manhattan, New York for the construction of \$20 million foundations for 3 large skyscrapers (part of the World Financial Center) including bentonite slurry walls for support of 20 m deep excavations within 30 m of the Hudson River in congested metropolitan conditions, 400 t capacity tiebacks, 500,000 m³ of difficult removal of river bottom and clay soils and 1 m diameter angled drilled shafts keyed up to 6 m into local schist rock.

COUNTRIES WORKED IN:

United States, Canada, Italy, Spain, Sudan, India, Australia, Belgium, Malaysia, Brasil, Venezuela, Paraguay, Mexico

REGISTRATION:

Professional Engineer, British Columbia, Canada

PROFESSIONAL AFFILIATIONS:

Member of the American Society of Civil Engineers
Member of various technical Committees of the Boston Society of Civil Engineers Section
Member of the Association of Professional Engineers of British Columbia
Member of the AAA: the American Arbitration Association
Member of the Disputes Resolution Boards Institute
Member of the American College of Forensic Examiners
Member of the Deep Foundations Institute
Member of the Association of International Drilled Shaft Construction
Former Member of the Association of General Contractors and of AGC's Education Committee
Former Associate member of the Boston Bar Association

Former Member of the Boston Bar Association ADR Committee
Former Member of the Massachusetts Bar Association
Former Member of S.P.D.I.R.: the Society of Professionals in Dispute Resolution
Member of the Conflict Resolution Center

LANGUAGES:

Italian, Spanish, French

TEACHING, TRAINING AND LECTURING EXPERIENCE:

Lecturer at High Schools and Universities on the meaning and challenges of becoming and being an Engineer

Co-teacher on "Pipe Jacking and Microtunneling" (Trenchless Excavation") organized by the A.S.C.E. - 1994

Lecturer at the 17th Deep Foundation Institute Annual Meeting. Presented "Explosive Waterproofing of an Emergency River Embankment" - a paper dealing with a novel use of jet-grouting to waterproof rock embankments - 1992

Lecturer at A.S.C.E. meetings, at F.H.W.A. offices, at U.S. Corps of Engineers offices, at U. S. Bureau of Reclamation offices in different U.S. cities. Presented "The Solution of Difficult Foundation Problems using Mini Piles." - 1975-1978

Lecturer at the A.S.C.E. "Open Cut Construction Seminar" in New York. Presented paper on "Structure Underpinning by Mini Piles." - 1975

Featured speaker at the A.S.C.E./E.I.C./R.T.A.C. Joint Transportation Engineering Meeting in Montreal, Quebec. Presented paper on "Landslide Stabilization by Lattice Networks of Mini Piles." - 1974

Teacher and author of book on "Bentonite Slurry Trench Wall Construction" at Rutgers University Center for Continuing Engineering Studies in New Brunswick, NJ - 1973 - 1978

Featured speaker at M.I.T. Soil Mechanics Undergraduate Course. Presented lecture on the uses of Mini Piles - 1972

PERSONAL ATTRIBUTES:

United States citizen

Computer literate, radio amateur, serious bicycle racer, health and fitness enthusiast

REFERENCES:

Supplied upon request

CONSULTING FEES

Standard schedule of professional fees supplied upon request. Negotiated fee agreements considered in case of special or extended professional assignments.