

GZA
GeoEnvironmental
Technologies, Inc.

Donald T. Goldberg, P.E.
Chairman

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FEBRUARY 28 2000
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February 28, 2000

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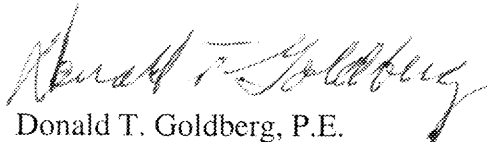
Mr. John Shriner
Florida Department of Transportation
605 Suwannee Street
Tallahassee, Florida 32399-0450

Dear Mr. Shriner:

As requested in your letter dated February 18, 2000, enclosed please find a copy of my resume to be included on the Department's internet site to aid those who must choose a DRB member.

If you need any additional information please feel free to contact me at 617-630-6200 or email me at dgoldberg@gza.com

Sincerely yours,


Donald T. Goldberg, P.E.

DTG:dlw
Enclosure: Resume

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EXPERIENCE

GZA GeoEnvironmental, Inc. - 1964 to present
Years with Other Firms: 10

AREAS OF SPECIALIZATION

- Geotechnical Engineering
- Earth Support Systems
- Forensic Investigations

EDUCATION

B.A., 1948, Biology/Chemistry, Tufts University
B.S., 1954, Civil Engineering, Massachusetts Institute of Technology
M.S., 1957, Civil Engineering (Soil Mechanics and Foundation Engineering), Massachusetts Institute of Technology

BACKGROUND

Donald T. Goldberg, a co-founder of GZA, served as CEO until September 1995; he is now the firm's Chairman. With over 40 years of geotechnical engineering experience and recognized expertise, he serves in the capacity of Geotechnical Consultant.

He is a noted authority on techniques for stabilization of deep "soft-ground" excavations and has developed particular expertise in solutions for complex geotechnical/foundation issues. As principal-in-charge, his experience includes: foundations for waterfront structures, industrial, high-rise, and institutional buildings, and specialty structures, as well as bridges, highways, tunnels, dams, geohydrological studies, and site development projects. His activities have encompassed site investigation, geotechnical analysis, lateral support system design, foundation selection, forensic investigations and evaluations of constructability issues.

He has been active in professional organizations throughout his career having served as president of the American Consulting Engineers Council of New England, President of the Massachusetts Section of the American Society of Civil Engineers, and the President of The Engineering Center. He also was a member of the Board of Directors of the Hazardous Waste Action Coalition of the American Consulting Engineers Council.

SUMMARY OF PROJECT EXPERIENCE

Buildings

In each of the following projects, except where otherwise noted, he was Principal-in-Charge with responsibility for site investigations, foundation recommendations, and construction oversight:

- **Eastern Airlines Parking Terminal and Garage, Logan International Airport, Boston, Massachusetts.** Building is founded on pre-stressed concrete piles driven through deep soft clay.
- **Howard Johnson's ("57" Building) High Rise Structure and Garage; Boston, Massachusetts.** Building is founded on steel H-piles driven through complexly stratified and folded fine sand, clay and glacial moraine.
- **High Rise Apartment Buildings, Medford, Massachusetts.** Buildings sited over deep deposit of soft clay were founded on mat foundation without piles.

- **Waste Treatment Plant, Gloucester, Massachusetts.** Site was preloaded to consolidate peat and soft clay; sand drains were used to accelerate consolidation.
- **Charles Hotel and Condominiums, Cambridge, Massachusetts.** Utilized laboratory tests to model stress-strain behavior of compressible clay underlying sand/gravel layers in which short piles were proposed. Controlled load-in-piles to limit settlement thereby eliminating deep piles through the soft clay.
- **Gold Bond Gypsum Board Plant, Tampa, Florida.** Site was preloaded to consolidate variably compressible soils, thereby eliminating piles while limiting settlement to critical limits of tolerance for the manufacturing of wall board.
- **Commonwealth Pier No. 5 (World Trade Center), Boston, Massachusetts.** Development required conversion of a large pier to commercial/exhibit space. Structure had undergone over 20 inches of settlement and over 15 inches of lateral displacement as a result of pier's retained earth fill bearing on soft, unstable soils. The solution used to stabilize the pier was to replace 70,000 cubic yards of existing fill with low density concrete coupled with linking together certain existing pile caps.
- **Massachusetts Technology Center, Logan International Airport, Boston Massachusetts.** Building and garage successfully built without piles by combination of deep dynamic compaction of up to 30 feet of loose fill (originally dumped under water) plus pre-load stabilization of up to 5 feet of organic silt.
- **O'Neill Federal Building, Boston, Massachusetts.** Site is surrounded by historic sensitive buildings. Work included pile foundations, pile driver analyzer testing, and dewatering.
- **MBTA Alewife Parking Garage, Cambridge, Massachusetts.** Subway excavation (40 feet deep) and pile driving for overlying garage were proceeding concurrently. Major geotechnical engineering challenge was to avoid adverse effects on proximate subway construction while assuring satisfactory performance of pile foundations for garage.

Deep Excavations/Subways

He was Principal-in-Charge for each of the following projects:

- **Central Artery North Area, Cut-and-Cover Tunnel, (Route 93/Route 1) Interchange, Charlestown, Massachusetts.** Supervised geotechnical aspects of new vehicular cut-and-cover tunnel, depressed approaches to tunnel, and modifications to existing bridges in the vicinity. Included foundation recommendations for structures in soft soil areas that were adjacent to existing viaducts and structures.
- **MBTA Red Line Extension Northwest and Alewife Station, Cambridge, Massachusetts.** Responsible for geotechnical investigations, testing, analysis, and recommendations. Worked with engineering consultants during design and construction. Project in unusually soft, unstable soils, included complex construction staging and temporary bridge over the excavation. Some of the design features were slurry walls for permanent structures, load-bearing slurry walls "floating" in soft clay, provisions for pile foundations of overlying garage to pass through the subway without adverse impact and a 40-foot-deep excavation in an extremely soft metastable clay.

- **Harvard Square Station, Cambridge, Massachusetts.** Worked for the Contractor to provide a value engineering proposal on a re-design of the tie back anchorage system for slurry walls protecting adjacent historic structures. Had responsibility for temporary decking system over this excavation.
- **Investigation of Construction Failure, Washington, D.C.** Worked for Washington Metropolitan Area Transit Authority to investigate probable cause of failure through a soldier pile/wood lagging wall in very soft cohesive soil deposits. Assignment included extensive review of soil test data, project records, and on-site interviews. Geotechnical analysis was made of potential failure modes. Opinion rendered with regard to basis and reasonableness of contractor's claim.
- **U. S. Department of Transportation (DOT)sponsored study entitled "Lateral Support Systems and Underpinning", Report Number FHWA-RD-75-128, 129, 130, and 131, administered by Federal Highway Administration and published in (1976).** This was a state-of-the-art report on geotechnical designs and construction methods. Included were data on ground displacements and structural behavior from a large number of case histories. The report provided both a theoretical and empirical basis for design and prediction of behavior.

Highways

- **Central Artery (I-93), 3rd Harbor Tunnel (I-90) Interchange, Boston, Massachusetts.** Served as in-house consultant to project team making investigations and preliminary design recommendations. The design of the interchanges are complex within this area, as many levels of ramps and roadways will be stacked above and below the ground surface.

The soil conditions in the area are complex. Soft to medium clay extends as much as 130 feet below ground level in areas where excavations will be made as much as 100 feet deep. Dewatering these excavations, as well as bracing them to maintain the integrity of the openings and limit movement of adjacent structures are key issues for this project.

- **Route 2 Relocation Studies, Cambridge-Arlington, Massachusetts.** Conducted investigations, laboratory tests, and geotechnical settlement and stability analysis for embankments and bridges over deep soft clay. The Spy Pond Crossing required embankment over 80 feet of peat. GZA provided research to evaluate methods for constructing embankments over soft soil.
- **I-95 Widening, Georgetown, Massachusetts.** Assisted the highway consultant to formulate design in rock cuts and over areas flanking the highway that were underlain by soft peat.
- **Innerbelt Interchange with I-95, Roxbury, Massachusetts.** Over 150 feet of soft clay underlies multi-level interchange featuring embankments, depressed sections, retaining walls, and bridges. Scope included definition of soil conditions, geotechnical analysis, and formulation of construction staging.

PROFESSIONAL AFFILIATIONS

Massachusetts Section of American Society of Civil Engineers

- Past President
- Chair, Disadvantaged Youth Training Committee
- Former Member of Board of Directors

Boston Society of Civil Engineers

- Past Chair of Structural Section
- Past Chair of Geotechnical Section
- Former Member of Board of Directors

American Consulting Engineers Council of New England

- Past President
- Former Member of Board of Directors

The Engineering Center - (Consortium of Boston Society of Civil Engineers Section/ASCE, American Consulting Engineers Council of New England, Massachusetts Association of Land Surveyors and Civil Engineers)

- Past President

United Way of Massachusetts Bay

- Chairman of Consulting Engineers Committee

Hazardous Waste Action Coalition of the American Consulting Engineers Council

- Former Member of Board of Directors

PROFESSIONAL REGISTRATION

Registered Professional Engineer in Connecticut, Illinois, Maine, Maryland, Massachusetts, New York, and Rhode Island.