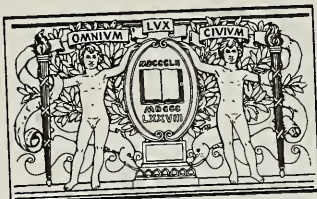


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Statement of Qualifications

Boston Redevelopment Authority
Boston, Massachusetts

In Connection With

Engineering Services
For
St. Botolph Street
Harcourt to West Newton Street

Engineers/Architects/Planners
75 Kneeland Street, Boston, Massachusetts 02111

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ENGINEERS/ARCHITECTS/PLANNERS



March 25, 1988

Boston Redevelopment Authority
One City Plaza
Boston, Massachusetts 02201

Attention: Mr. Paul Reavis, Assistant Director
Engineering and Design Services

Reference: Request for Qualifications for Resident Engineering and Design
Services for Street Scope Improvements to St. Botolph Street

Gentlemen:

The LEA group, Inc. is pleased to submit this letter of interest and its qualification in response to the request for qualifications for St. Botolph Street Scope Improvements as referenced above.

The LEA Group, Incorporated is a Boston based engineering/architecture/planning firm offering a full range of professional design services to both public and private sector clients. We offer clients the unique service of performing multidisciplinary design services in-house and single-source accountability to the Boston Redevelopment Authority. Our services include site/civil, structural, electrical, HVAC/mechanical, and environmental engineering; landscape architecture, surveying, planning, architecture, roofing and waterproofing technology, and construction inspection and management.

LEA has a 65-year record of achievement and has the experience, expertise, and capability to work effectively with the Boston Redevelopment Authority to provide a complete quality design, on time and within budget.

LEA has assembled a project team within the firm with expertise in the following areas: site planning and analysis, landscape architecture, utility and drainage design, electrical and lighting design, structural engineering, preparation of construction drawings and specifications, cost estimating, construction supervision, and the preparation of design review material for the Boston Redevelopment Authority as well as the community. In addition, LEA's Survey Department has the staff resources to respond rapidly to any survey and mapping requirements to facilitate rehabilitation needs.

LEA GROUP, INCORPORATED

Boston Redevelopment Authority
March 25, 1988
Page Two

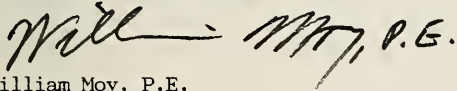
Mr. William Moy, P.E., Vice President, Division Manager for Site Development/Civil Engineering, will be the Project Director responsible to the Boston Redevelopment Authority for the success of the St. Botolph Street Improvements. Mr. Richard Benevento will be assigned as Project Manager responsible for development of concept, design, and contract documents. His prime responsibility will be coordination of the in-house disciplines and to provide a successful project to the BRA. The Project Manager will be accountable to the Project Director.

We look forward to working with Boston Redevelopment Authority on the St. Botolph Street Improvements Project.

If you have any questions, please do not hesitate to call.

Very truly yours,

LEA GROUP, INCORPORATED

A handwritten signature in black ink, appearing to read "William Moy, P.E.", is written over the typed name and title.

William Moy, P.E.
Vice President
Division Manager
Civil Engineering



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<http://www.archive.org/details/statementofquali00leag>

Relevant Past Experience

The LEA Group, Inc. through its Site Development/Civil Engineering Division provides the design of urban streets, infrastructure, site development, and landscape architecture. Additionally, all other design and supplemental services except for soils and foundation analysis and design will be provided by the LEA's in-house staff including lighting, construction observation services, and field service as necessary.

The LEA Group, Inc. has provided design services including lighting and landscape architecture for a variety of urban system roadway projects throughout the Metropolitan Boston area.

In the Town of Watertown, Watertown Street (3,010 LF) and North Beacon Street (4,200 LF) are currently in the design stage and Arsenal Street (8,161 LF) and Mount Auburn Street (16,800 LF) have been successfully designed and constructed. These projects, under the jurisdiction of the Federal Highway Administration and the Massachusetts Department of Public Works, required extensive improvements to grading, drainage, and pavement systems also improvements to traffic flow, signalization, improved roadway alignment, new street lighting and landscaping enhancements were required. Other services included environmental notification and permitting with the appropriate regulatory agencies.

In the Town of Winthrop, LEA has provided engineering, design, and construction administration services for improvements to Kennedy Road (1400 LF). Those services, included in addition to the services mentioned above, sewer and water improvements. Because the project site was located near tidal and fill areas, the design of these pavement and utility systems, required special roadway stabilization considerations. Additionally, utility lines were designed to withstand the corrosive effects of harsh soils and salt water. LEA also provided representation for all permitting at local Conservation Commissions, DEQE, and other State and local agencies.

The LEA Civil Division has designed the Chris Lee Playground and is presently designing McConnell Park (Savin Hill) for the Boston Parks and Recreation Department. These parks involve extensive landscape architecture, design, and involved community input and participation necessary for the design development of these projects.

The LEA Construction Services Department is presently providing services for the Boston Water and Sewer Commission, the Town of Winthrop, the City of Braintree, and various private developers. One of the LEA Resident Construction Services personnel has extensive experience on past BRA projects in the South End Urban Renewal Area.

As outlined above, the LEA Group has the relevant past experience and expertise to provide the BRA with all the services necessary for the implementation of the St. Botolph Street Improvements and Street Scope Project.

Work with Public Agencies

The LEA Group, Inc. has extensive experience working with public agencies through our public and private sector clients. This office routinely deals with the DEQE, EPA, and U.S. Army Corps of Engineers, as well as client representation with various municipal boards and agencies. As a matter of routine, LEA aids clients in preparing and filing applications for permits, approvals and/or grants with various municipalities and State and/or federal agencies. The LEA Group, Inc. is quite comfortable in dealing with various agencies encountered in the performance of the St. Botolph Street Improvements and Street Scope Project.

Project Approach

The LEA Group, Inc. has organized its team for the St. Botolph Street Improvements entirely with its in-house staff, with the exception of the soils and foundation consultant who may or may not be required. If soils and foundation expertise is required, the LEA Group, Inc. has selected Asaf A. Qazilbash, P.E., a SOMBER certified MBE, as a consultant. All disciplines and expertise necessary for successful completion of this project will be under the direction and supervision of Mr. William Moy, P.E., who will be LEA's Project Director. Mr. Moy will be directly responsible to the Boston Redevelopment Authority for the success of the St. Botolph Street project. Mr. Richard Benevento will be responsible for the day to day operation of this project. It will be his responsibility to coordinate the activities of all the disciplines necessary for the project's successful completion. Mr. Benevento will be directly responsible to the Project Director.

It is our understanding that improvements may include improved street lighting, placement of additional trees and landscape improvements, and possible neckdown areas for improved resident street parking.

In order to develop a concept plan, the Boston Redevelopment Authority will meet with community members in public forum. The community will be a part of the design development process. The LEA Group, Inc. has the experience and a proven track record to successfully work with the community participation process.

It would be LEA's intent to initially prepare several landscape alternatives for the Boston Redevelopment Authority to review and present to the public for comment. It would be hoped that a recommended plan for implementation could be developed from this process.

Once the community is in agreement to a selected design concept, the project would proceed into design development, contract documents, and construction phases.

REFERENCES

Mr. Blair Hynes, Project Manager
City of Boston
Parks and Recreation Department
294 Washington Street
Suite 930
Boston, Massachusetts 02110
617-542-3071

Mr. Lester Towlson
Executive Secretary
Town of Winthrop
One Metcalf Square
Winthrop, Massachusetts 02152
617-846-1743

Mr. Rodney Irwin
Office of the Town Manager
Town of Watertown
Watertown, Massachusetts 02172
617-924-6890

Mr. George Whittie
Director of Public Works
City of Salem
One Salem Green
Salem, Massachusetts 01970
(617) 745-9595

BOSTON
REDEVELOPMENT
AUTHORITY

WILLIAM MOY, P.E.
VICE PRESIDENT
PRINCIPAL-IN-CHARGE

RICHARD J. BENEVENTO
PROJECT MANAGER

DANIEL GARSON
COMMUNITIES PARTICIPATION

JON ENGLE, P.E.
ELECTRICAL / LIGHTING

THOMAS C. HOUSTON, P.E.
PROJECT ENGINEER
URBAN DESIGN

THOMAS W. ENNIS, R.L.A.
PROJECT
LANDSCAPE ARCHITECT

PAUL BOUCHER, RLS.
SURVEY

BEN FEHAN, P.E.
CONSTRUCTION
ADMINISTRATION
MUNICIPAL

MARTHA FITZPATRICK, M.L.A.
LANDSCAPE ARCHITECT

MASAF A. QAZILBASH, P.E.
SOILS & FOUNDATIONS
#486

WILLIAM MOY

POSITION Vice President, Civil Engineering

EDUCATION Northeastern University
B.S. Civil Engineering 1957

REGISTRATION Registered Professional Engineer
MA

EXPERIENCE Mr. Moy has over 30 years of practical experience in site development; civil engineering design; transportation engineering and design; environmental engineering; and construction and project management. His expertise is varied including storm drainage system planning and design; floor control facilities, hydrology and hydraulic analysis and design; sanitary sewer and pump station systems planning and design; water system planning and design; and transportation system planning and design including interstate expressways, primary highway systems; urban street systems, urban highway systems, etc.

Mr. Moy's transportation expertise is concentrated in the design of utility systems for major highway projects including urban interstate expressways, primary road systems, and urban street systems.

Some of the transportation projects Mr. Moy has been associated with are:

Interstate Route 84 - Hartford, CT
Interstate Route 91 - North Haven, CT
Interstate Route 95 - Providence and Cranston, RI
Interstate Route 495 - Haverhill, MA
Interstate Route 93 - Medford, Somerville, Boston, MA
Interstate Route 91 - Springfield, MA

Additionally, Mr. Moy helped develop the storm drain and sanitary sewer system design concept for the BRA South End Urban Renewal Area. Much of what has been constructed in the South End is a result of this concept.

RICHARD J. BENEVENTO

POSITION Project Manager, Site/Civil Department

EDUCATION Northern Essex Community College
A.S. Civil Engineering

New Hampshire College
Certificate: Construction Project Management

EXPERIENCE Mr. Benevento brings over 12 years of experience to the LEA Group in civil engineering, roadway design, and construction. Specializing in transportation engineering, specifically roadway construction and reconstruction, he has been involved in all phases of design on a variety of public and municipal projects, including urban systems, Federal Highway Administration, Massachusetts Department of Public Works, and community development projects. Within the private sector, Mr. Benevento has provided engineering and design for industrial park roadway systems, pavement rehabilitation and reconstruction, and site development. Additionally he is an active member of the American Public Works Association (APWA) and the Asphalt Recycling and Reclaiming Association (ARRA).

Mr. Benevento's past experience also includes the position of Project Manager for a major Massachusetts construction firm where he was responsible for the direction and progress of significant site and roadway improvement projects which include the reconstruction of Mystic Avenue (Route 38) in Medford and Andover Street (Route 110) in Lowell for the Massachusetts Department of Public Works, the Lynn Access Roadway for the Lynn Economic Development Industrial Corporation (EDIC), and site improvements to the Middlesex Community College, Burlington Campus, for the Massachusetts Division of Capital Planning and Operations.

As Project Manager with LEA Group's Site/Civil Division, Mr. Benevento is responsible for complete project conceptual and detail design. He is also directly involved in the management of assignments and project coordination including planning, engineering, scheduling, procurement, and client interface. Representative project assignments included urban systems roadway improvements to North Beacon Street and Watertown Street in the Town of Watertown; roadway improvements to Kennedy Road for the Town of Winthrop;



complete site and roadway design for Orleans Regional Septage Facility, Orleans, MA; roadway design for Corporation Way at the Centennial Industrial Park, Peabody, MA; and Danton Drive Extension at the Methuen Industrial Park, Methuen, MA; and roadway conditions analysis and recommendations for the Town of Mansfield Planning Department.

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DANIEL GARSON

POSITION Vice President - Planning and Permitting Team Leader

EDUCATION George Washington University
B.A. American Studies, 1970

Harvard University, Graduate School of Design
M.C.P. City and Regional Planning, 1973
M.L.A. Landscape Architecture, 1974

ORGANIZATIONS American Planning Association
New England Water Pollution Control Association
American Society of Landscape Architects

EXPERIENCE As a Vice President and Team Leader specializing in environmental planning, site development feasibility studies, permitting, and impact assessment, Mr. Garson oversees a variety of projects for both public and private sector clients. He brings over 15 years of experience to LEA Group in the management and technical performance of planning and development projects.

Among current projects he is managing is the preparation of a Facilities Plan and Environmental Impact Report (EIR) to site a major relief sewer interceptor for the Massachusetts Water Resources Authority (MWRA). The project encompasses engineering design, planning, and environmental studies, with public participation involving eight communities, for the MWRA's Southern Sewer System. Projections of future growth and sewer demand in the region are a key aspect of his analysis of alternatives, their impacts, and costs.

Mr. Garson is also involved with the Facility Plan Study and preparation of an EIR for the South Essex Sewerage District for development of secondary wastewater treatment facilities and ocean outfall discharge. This project involves planning and impact assessment for eight communities north of Boston encompassing a regional sewage management district. Issues of siting, community impacts, mitigation measures, and facilities design are among his direct areas of responsibility.

Mr. Garson also directs the planning and permitting work by the firm for private developers. Among projects currently underway are development feasibility and siting studies, site planning, and designs, environmental impact assessments, and permitting management for commercial/retail, housing, and industrial development projects across the region and the country. His team also develops park and open space plans and development studies for reuse of parkland and shoreline areas for municipal clients.

Solid waste management projects are another area of expertise which, under Mr. Garson's direction, encompass preparation of site plans, feasibility studies, and State and local permitting documents. He also serves as the firm's legislative liaison to maintain up-to-date contacts with key legislative members, regulators, and permitting officials in the solid waste and environmental management fields.

Previous projects which he has managed include master planning and permitting for wastewater and septage/sludge facilities, design of water conservation programs, development of regional water supply systems, and siting of power generation facilities. In this capacity, he has served as an expert witness, providing testimony before Federal and State regulatory panels.

Representative clients served include: U.S. Environmental Protection Agency; Metropolitan District Commission; South Essex Sewerage District; Boston Edison Company; Power Authority of the State of New York; New York State Electrical and Gas Company; Anne Arundel County, Maryland; and State agencies in Massachusetts, Rhode Island, New York and Maryland.

PUBLICATIONS

- "Town of Hingham, Septage Management Feasibility Study," May 19, 1986.
- "Anne Arundel County, MD, Water Conservation Program and Devices Reprofit," October 31, 1986.
- "Alternative Wastewater Management Feasibility Study, Rose Haven - Holland Point, Maryland," September, 1986.
- "Wastewater Management Plan, Mayo Peninsula, MD," September, 1986.
- "Marine Sanitary Wastewater Management Study," July, 1986.
- "The Environmental Review Process: Proceeding with Projects in an Arena of Controversy and Conflict," Construction Outlook, 1986.

THOMAS W. ENNIS

POSITION Chief Landscape Architect

EDUCATION University of Florida
B. S. Landscape Architecture

REGISTRATION Registered Landscape Architect
MA, FL

As Chief Landscape Architect, Mr. Ennis directs a staff of landscape architects and support personnel in the preparation of landscape designs, specifications, and cost estimates. His conceptual and innovative ideas are supplemented by his technical experience to provide practical, cost effective approaches to diverse project requirements within this discipline.

Since becoming a member of the firm, he has been involved in a variety of projects for a variety of clients. Representative assignments include: the design and construction documents for Jamaica Towers roof deck plaza, Jamaica Plain, MA; design for Tufts University's Wessel Library roof deck plaza, Medford, MA; and site design and construction documents for a new, 300-student dormitory at Tufts University, Somerville, MA. Additional project work has consisted of: design for the rehabilitation of the Gansett Shopping Plaza, West Providence, RI, (20 acres) and WBC Extrusion Products, Haverhill, MA (10 acres).

Mr. Ennis provided design and planning services for the following clients, while associated with other design firms:

Digital Equipment Corporation, Office Facility, Littleton, MA (44 acres)

Digital Equipment Corporation, Spitbrook III, Nashua, NH (200 acres)

Crystal Office Park, Arlington, VA

Bird Island Flats/Harborwalk, Logan International Airport, Boston, MA

Instron Corporation, Canton, MA

Togus Veterans Administration Medical Facility, Togus, ME

Druid Hill Park, Revitalization Master Plan Design Competition (Third Place), Baltimore, MD

Spectacle Island, Design Competition (Commendation Award), Boston Harbor Islands, Boston, MA

Southern Massachusetts University, Campus Housing, Dartmouth, MA (80 acres)

GTE/MSE Facility, Taunton, MA (25 acres)

Mercy Hospital, Davenport, IO (42 acres)

MacNeal Memorial Hospital, Berwin, IL (10 acres)

Bell System Center for Technical Education, Lisle, IL (30 acres)

Copley Memorial Hospital, Aurora, IL

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THOMAS C. HOUSTON

POSITION Chief Civil Engineer

EDUCATION Northeastern University
B.S. Civil Engineering 1971
M.S. Transportation 1979

Boston University
M.U.A. Urban Affairs 1974

REGISTRATION Registered Professional Engineer
MA, ME

EXPERIENCE As Chief Civil Engineer, Mr. Houston is responsible for all civil design and site planning projects. He is directly involved with engineers, landscape architects, and support personnel in the preparation of site plans and roadway/utility betterments for diverse municipal, residential, commercial, and office/R & D projects throughout the northeastern United States. In addition, Mr. Houston is responsible for permitting and environmental documentation requirements of demolition projects and assignments in coastal zones.

His experience includes successful completion of area wide and multi-modal transportation planning projects situated throughout the Northeastern United States. He has been responsible for the preliminary and final design of transportation projects including the preparation of final plans, specifications, and cost estimates for limited access highways; local, collector and arterial streets; site access roadways, parking facilities; intersection improvements encompassing channelization and signalization; railroad and rail sidings, and bicycle and pedestrian facilities.

As a member of the Town of Sharon Planning Board, Mr. Houston is sensitive to the issues effecting a community in the planning, design construction, and costs associated with municipal improvement projects.

With an extensive background in the regulatory permit process, he has prepared applications and supporting documentation for COE Section 404 FWPCA, DWPC sewer groundwater discharge permits, and the MGL Ch. 131 S-40 process in both coastal and inland resource areas.

PAUL A. BOUCHER

POSITION Manager, Survey Department

EDUCATION New Jersey Institute of Technology
B.S. Civil Engineering 1973

 Ohio University
Masters of Regional Planning 1975

 Oregon State University
Graduate Studies in Surveying 1979-1981

REGISTRATION Professional Land Surveyor
NM

 Engineer-in-Training
OR

EXPERIENCE As Manager of the Survey Department, Mr. Boucher supervises and oversees all daily survey operations. He is responsible for the interpretation and computations of all field work, and coordination of field data and computations into survey, property plans, and/or topographic plans. He also directs the research of property and deed plans; oversees field and office checking of actual field work, plotting, contouring, and final plans; and interfaces with the CADD Department for plotting of surveys.

 Since joining LEA Group, his project work has involved a variety of property lines and topographic surveys, title insurances, and utility surveys. Representative firms include:

The Stop and Shop Companies, Inc., Salem, Quincy, North Attleborough, and Concord, MA
Prime Computer, Inc., Milford, MA
Star Market, Distribution Center, Norwood, MA
Staples, Natick, MA
John Keith Developers, Apartment Complex, Abington, MA
Comunitas Architects, Conversion of Warren Jr. High School into Apartments, Newton, MA
U. S. Navy, Naval Shipyard, Portsmouth, NH

 Mr. Boucher's background ranges from supervising the execution of property and construction surveys, to general engineering and surveying work on county road and bridge projects. Of note, as Survey Party Chief for studies at Mount St. Helens, WA, he planned and conducted surveys in support of long-term research regarding the post eruption period, including establishment of long-term revegetation study sites and erosion monitoring sites.

BENJAMIN J. FEHAN

POSITION Vice President

EDUCATION Northeastern University
B.S., Civil Engineering, 1960
M.S., Civil Engineering, 1967

REGISTRATION Registered Professional Engineer
MA, ME, NH, NY, NJ

EXPERIENCE Mr. Fehan has more than 20 years of experience in civil and sanitary engineering. As Deputy Chief of LEA's Construction Division, he supervises the construction management and administration of projects, with particular emphasis on municipal projects.

Project responsibilities involve oversight of the construction project to provide the client with a continual flow of information which serves to keep the client apprised of all progress and to allow for proper corrective action as necessary. Specific duties include supervision of field inspections and site visits, client and contractor relations, change order negotiation, review and approval of shop drawings, and contractor payment requests.

Mr. Fehan is currently providing these services to several municipalities in the Commonwealth of Massachusetts. Projects include the Town of Winthrop's sewer and pump station and the reconstruction of Kennedy Road; the City of Salem's new Wenham Lake Pump Station; and a major section of the Boston Water and Sewer Commission's new main sewer interceptor and portions of Dascomb Road in the Town of Tewksbury.

Past civil and sanitary management assignments with other nationally-known firms include duties in all areas of environmental construction projects. These duties include a regular progression of assignments beginning with field inspection, resident inspection, design development, specification writing, project management, and planning. Also included is two years of experience as a project manager and estimator for a major construction company.

SPECIAL VERSION
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JON D. ENGLE

POSITION Chief Electrical Engineer

EDUCATION Georgia State University
M.B.A. 1984

Newark College of Engineering
B.S. Electrical Engineering 1966

REGISTRATION Registered Professional Engineer
MA, MI, GA, SC, NC, VA, KY, FL, AL, MS, LA

EXPERIENCE Mr. Engle brings nearly 25 years of experience in electrical engineering to the LEA Group. As Chief Electrical Engineer, he directs a staff of electrical engineers and designers in the preparation of design specifications, and cost estimates. He is also responsible for supervision of the electrical engineering staff in construction observation and administration, and engineering evaluation of existing structures.

His technical capabilities include the design of electrical power, lighting and control systems for industrial, commercial, institutional and multi-family residential projects. On power distribution projects, spanning the standard building design voltages, Mr. Engle's past assignments have covered distribution voltages through 25 kv. For lighting design, he provided technical input for the ASHRAE 90-75 Energy Conservation Standard, and specialized lighting design on numerous interior and exterior spaces. In addition to the design of conventional building support systems, he has designed communications, security, emergency power, fire/smoke detection, CCTV, control and energy management systems.

Prior to joining LEA, Mr. Engle was associated with other design organizations and worked on a variety of commercial and industrial projects. Past industrial related designs were provided for various industries, including chemical, plastics, textile, and food processing. Commercial designs were performed for high- and low-rise office buildings, shopping centers/retail space, medical and hospital facilities, prisons, military and governmental agencies, sports lighting and recreation facilities. Electrical design for residential complexes involved underground utility distribution for power, telephone, fire alarm, security and cable television. Specialized lighting design was also performed for a wide variety of commercial clients, such as restaurants, boutiques, malls, building lobbies/corporate offices, multi-sport facilities and theatres, security CCTV lighting, and VDT work areas.

Mr. Qazilbash has twenty four (24) years experience in the field of civil engineering. Prior to forming his own firm in 1984, he was employed for nineteen years at C.E. Maguire, Inc. where he was involved in the design of over 600 projects including more than 200 buildings and 150 bridges. He successfully directed multi-disciplinary teams as senior project manager. Additionally, Mr. Qazilbash served as chief geotechnical engineer and department head for all projects. These included low and high-rise buildings, industrial plants, marine terminals, waterfront facilities, seaport designs, environmental studies and water and sewer treatment plants, transportation facilities, tunnels, and dams.

Building projects included in Mr. Qazilbash's professional experience were the N.A.S.A. Electronics Research Center, Cambridge, Massachusetts, Boston State College, University of Massachusetts Library, Combustion Engineering Headquarters and Corporate Offices, Industrial buildings for Raytheon, International Silver Corporation, Brandeis student housing, D.C. Heath Building, Libbey Industrial Park, Condominiums ranging from 4 to 2,000 units and small residential properties.

Dam projects include Mangla, Charles River, Amelia Earhart, Waynesville, and Warsak.

Highway projects where he has worked on professionally include Interstate Route 93, Route 25, I-190, Route 140, Route 9, and I-91.

Treatment Plants include: Charles River Estuary, Fall River, Franklin, Cottage Farm, Cambridge, Combustion Engineering, Windsor, Norwich and many more.

Environmental studies include: DEQE Blackstone River, Bourne Water Supply, Onset Fire District, Libbey Industrial Park, Charles River, U.S. Plastics Corporation facilities, Polaroid Corporation Plants, I.B.M. Poukeepsie and Suburban Television.

Mr. Qazilbash's transit experience includes involvement in the MBTA Orange Line Extension - Forest Hills to Needham, the Red Line Extension - Cambridge and Somerville, Red Line Vent Shafts and Emergency Egresses - Boston and Ashmont, and the Metro in Washington, D.C.

Mr. Qazilbash holds a Professional Civil Engineering Degree from MIT - 1967, a Masters Degree in Civil Engineering from MIT - 1965, and a Bachelor's Civil Engineering Degree with distinction from the University of Peshawar, Pakistan - 1962. Mr. Qazilbash is a member of ASCE, BSCE, ASTM, ISSMFE, and ASFE.

MARTHA FITZPATRICK

POSITION Landscape Architect

EDUCATION Harvard University
Masters Degree Landscape Architecture 1986

Bradley University
B.A. Art History 1982

EXPERIENCE As a Landscape Architect in LEA Group's Site/Civil Department, Ms. Fitzpatrick is responsible for all aspects of site planning, including design development drawings, and construction documents. In addition, her duties include the review and evaluation of proposed projects for compliance with applicable regulations for assignments involving zoning analyses, permit applications, and environmental impact evaluations.

Since joining the company, she has performed a variety of site design assignments for several clients, including Tufts University, Medford, MA; and the New London Mall, New London, CT.

Before her professional association with LEA, Ms. Fitzpatrick worked for the Boston Redevelopment Authority and the Planning Group at Harvard University. Previous projects included:

- o Site planning, landscape plan, and design review of the Columbia Point Redevelopment and the proposed MBTA Station, Columbia, Point, Boston, MA [for the Boston Redevelopment Authority]
- o Design development of Harbor Park, Boston, MA; Harbor Front Park, Columbia Point, Boston, MA; Athletic Field/Playgrounds, Columbia Point, Boston, MA [for the Boston Redevelopment Authority]; street trees for Charles Street and Pinkney Street [for Beacon Hill Neighborhood Assoc.]
- o Open space assessment for the South End, Boston, MA; and Roxbury, MA [for the Boston Redevelopment Authority]
- o Design and preparation of a reference guide of all Massachusetts Audubon Society properties
- o Residential landscape design for clients in greater Boston, MA

ST/1/88

AA/EEO POLICY STATEMENT

LEA GROUP, INCORPORATED

1. Statement

The statement of the firm is to provide equal employment opportunity to all persons without regard to their race, color, religion, sex, national origin, or any handicap.

Our firm will continue to assure that applicants are recruited and hired, and that employees are treated during employment without regard to their race, religion, sex, color, national origin, or any handicap. Equal opportunity and equal consideration will be afforded to all applicants and employees in personal actions which include recruiting and hiring, selection for training, promotion, fixing rates of pay or other compensation, transfer and lay-off or termination. It is our intention, in the implementation of this statement, to assure full employment opportunities for members of minority and disadvantaged groups, and to provide a framework for minority group recruiting, hiring and upgrading at all job levels.

Furthermore, we coordinate the affirmative action program directed at seeking personnel from minority and handicapped groups for employment with the firm and to provide encouragement and direction to our staff to advance within the limits of each individual's capabilities.

2. Dissemination of Statement

Our equal employment opportunity shall be communicated to all relevant audiences within and outside the firm. These include non-discrimination statements in our personnel manuals and booklets, and other employee information literature: posting of EEO posters on bulletin boards; periodic written and oral statements from the firm's top management meetings and advisory board sessions; recruitment advertisements in newspapers and technical journals, including those specifically directed to minority groups and audiences; oral and written statements to public and private employment agencies, to universities from which we recruit employees to community leaders, and to community action groups.

3. Responsibility for Implementation of Statement

Mr. E. R. Eisenberg is personally responsible for implementation of our affirmative action statement and will direct our equal employment opportunity program. His responsibilities will include 1) developing a statement, affirmative action program, internal and external communication techniques; 2) assisting in the identification of problem areas; 3) assisting project engineers and project managers in arriving at solutions to problems; 4) designing and implementing audit and report systems that will measure the effectiveness of the program, indicate a need for remedial action, and determine the degree to which the goals and objectives of the firm's program have been attained; 5) serve as liaison between the firm and enforcement agencies, minority organizations and community action groups; 6) keep top management informed of all developments in the entire area of equal employment opportunity.

DEVELOPMENT AND EXECUTION OF PROGRAMS

- A. Recruiting: Our present recruiting program will be expanded to include help wanted advertisements in neighborhood and minority group newspapers. The State Employment Service will be advised of job openings.

Minority group employees and subcontractors will be further encouraged to refer prospective employees.

- B. Training: We will establish training positions in conjunction with this project and endeavor to attract minority applicants for any new positions available.

- C. Personnel Actions: Personnel actions of every type including hiring, upgrading, promoting, transferring, laying-off and terminating will be periodically reviewed to insure the action was without bias. During meeting with supervisory personnel, their actions will be reviewed to insure their support to the firm's equal employment opportunity statement.

- D. Community Relations: Representatives of the Company will continue to work with the appropriate agencies and groups within the community so as to cooperate in the future development of community acceptance and adoption of non-discrimination practices in employment. In talks before local school groups, we will stress opportunities for minority individuals within our profession and our firm.

AUDIT, REPORT AND EVALUATION

- A. Job Openings: A list of applicants will be kept for each job opening. An informal record solely for statistical purposes will be maintained to identify minority applicants where practical. If the minority applicant is not hired, the reason will be recorded.

- B. Separation: A record of separations and the reasons for separation will be maintained and minority group employees will be specifically identified. A thorough check will be made to insure that discrimination did not enter into the separation.

- C. Promotion: A record of promotions by employee name and category will be maintained with minority employees specifically identified. Again, this information will be maintained solely for statistical purposes.

AFFIRMATIVE ACTION POLICY

LEA Group, Incorporated, is committed to affirmative action in all aspects of its personnel policies and activities. A copy of the firm's Affirmative Action and Equal Employment Opportunity Statement is attached and included as part of this proposal.

LEA maintains a tradition of recognizing and utilizing the talents of minorities. Our Vice President and Chief of the Site/Civil Division is Mr. William Moy, a Chinese American. In his position as head of one of the firm's five divisions, Mr. Moy plays a prominent role in the workings of the company, and his extensive engineering experience and expertise are instrumental in its success. As of February 1, 1988, total employment at LEA stands at 165. Of this total, six employees are minority males (one managerial, two professional, two technical, and one clerical) and five are minority females (all technical).

We take pride in the involvement of minority personnel comprising the project team for the Massport assignment under consideration. Mr. Moy will act as Project Director for LEA, and our subconsultant, Asaf A. Qazilbash & Associates, will provide soils and foundation engineering expertise. Asaf A. Qazilbash is certified as a minority owned business enterprise (MBE) by the State Office of Minority Business Assistance (SOMBA) and is listed in the directory of that office.

Site and Civil Engineering Services

Site design and engineering
Landscape design
Master planning
Economic feasibility studies

Parking design
Roadway design and improvements
Railroad spur track design
Grading
Mapping

Site development including plans and layout
Site work improvements

Utilities and infrastructure design
Transportation planning
Retention pond design for storm run-off and flood control
Compensating flood storage
Environmental permit applications and submittals
Environmental notification forms and impact reports
Construction administration, supervision and inspection
Cost estimates and specifications

Construction Management Services

OFFICE SUPPORT CAPABILITIES

- Design review
- Pre-bid and pre-construction conferences
- Grant application assistance
- Work planning, construction engineering and conflict resolution
- Comprehensive monthly progress reports
- State and Federal reimbursement requests
- Computerized tracking of:
 - shop drawing submittals
 - contractor requisitions
 - unit quantities
 - elapsed time vs. performance
 - engineering costs vs. construction progress
- Assistance in expediting deliveries to maintain schedules
- Network scheduling and "critical path" identification
- Assessment of change orders, negotiations and approval
- Operation and maintenance manuals
- Post start-up oversight
- Operational assistance

FIELD CAPABILITIES

- Full-time, on-site monitoring of construction operations
- Daily reports and quality control tests
- Soil and concrete test analysis
- Record keeping and final measurement
- Start-up services
- Construction photographs and video recordings
- Contract operations

SUMMARY



Planning and Design

The TOPICS and Urban Systems Programs were established by the Federal Government to provide municipalities with assistance in improving and maintaining deteriorating road and sidewalk facilities.

LEA transportation engineers and planners have served twelve (12) communities in Maine, New Hampshire and Massachusetts, ranging in population from 4,000 to 91,000 and representing a wide range of pre-existing conditions and design objectives.

LEA performed all planning, design and construction administration services for these projects. The construction value of completed assignments exceeds \$15,000,000.

Other projects are currently in study and design phases.

ROADWAY RECONSTRUCTION

WATERTOWN, MASSACHUSETTS



Site/Civil Engineering

For the Town of Watertown, a total reconstruction of Mt. Auburn Street (Route 16) from Watertown Square to the Cambridge line was designed. Services included survey, design of roadway, sidewalks, curbing, numerous plantings and high pressure sodium lighting over the entire two (2) mile project.

The \$3 million project, funded by the Federal Urban Systems Program, was constructed under Massachusetts DPW approval.



Through the combined efforts of the National Park Services Grant Administration and the Essex County Planning Department, a \$400,000 grant was made available to redesign and rehabilitate three urban parks located in Methuen, Beverly and Peabody, MA. The existing facilities were in poor condition and located in densely populated areas with a high potential for use.



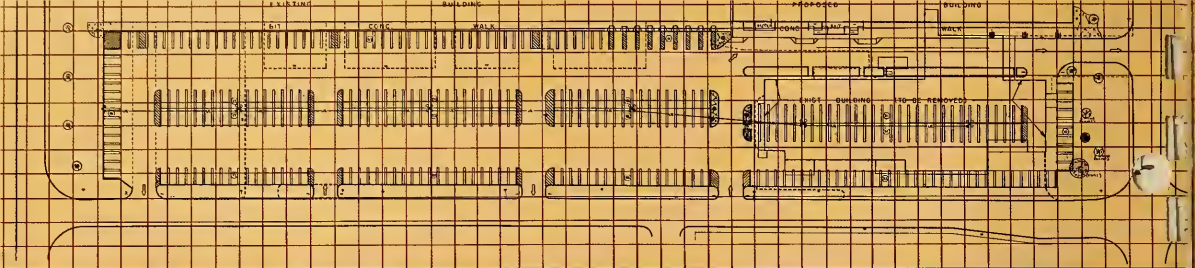
Various types of recreation equipment were designed, including polished stone sit-down slides, a 42" concrete pipe climber-crawler, tennis courts, and half-size basketball courts. Play equipment includes marine figures, swings, and climbing and sliding apparatus. Other upgrades to the parks included drainage, water and soil improvements, playing fields, park furniture, lighting, tot lot facilities, and drinking fountains.

LEA's Site/Civil Department was selected to perform all design and construction administration and engineering services, including public participation activities, preparation of plans, specifications and contract documents and assistance in bidding and construction administration.

SITE/CIVIL ENGINEERING



LEA
GROUP
INCORPORATED



Top Photo: For the Seekonk, Massachusetts location of Ann & Hope stores, full site and civil services were provided for the ingress/egress, parking, lighting and landscaping in conjunction with store design.

Bottom Photo: Maximum usage and attractive landscaping on a difficult site was the result of LEA's design for Aetna Insurance in Fall River.

Today every building project under consideration raises key questions: land usage, environmental impact and community involvement to name a few. The answers to these questions demand more than comprehensive and creative engineering and design solutions. Experience and familiarity in dealing with the complex and continually changing governmental environment is a critical and necessary requirement for any successful project.

CAPABILITIES AND ACCOMPLISHMENTS

Our Site/Civil Engineering Division has comprehensive

Cover Photo: The 300-acre site for Centennial Industrial Park in Peabody has been transformed from marginal land into a fully committed high tech industrial park.



Top Photo: A total rehabilitation by LEA turned Tenny Park in Methuen, Massachusetts into an ideal gathering spot for neighborhood children.
Bottom Photo: The largest surface parking facility in Boston was engineered for the U.S. Postal Service at their South Postal facility.

in-house capabilities to furnish conceptual and master planning, feasibility studies, surveying, hydrology and site design including civil engineering, landscape architecture, and infrastructure design for roadways, sewers, utilities and drainage. We also offer full environmental and conservation expertise to help a client meet applicable governmental regulations for wetlands protection. Additionally, the LEA Group enjoys a distinction in our field for having a staff of both registered land surveyors and landscape architects supported by our registered engineers.

Our Site and Civil Engineers have completed a variety of projects for architects, devel-

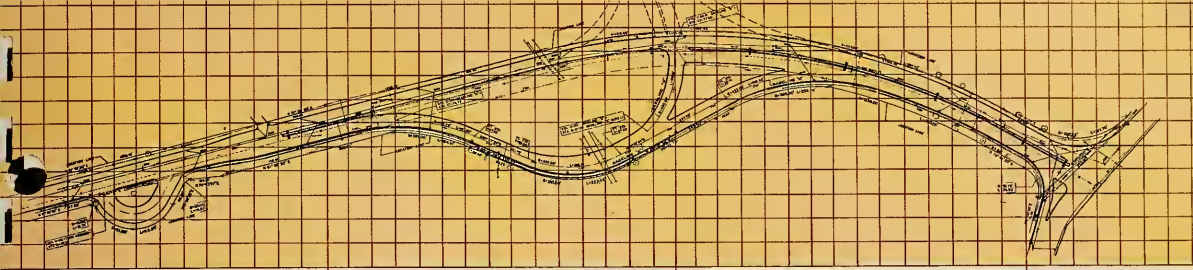


Arsenal Marketplace, the \$45 million conversion/renovation of the Watertown Arsenal, was totally site engineered by LEA with additional responsibilities for the adjoining municipal street reconstruction.

opers, private industry and government. Our projects have included shopping centers, industrial parks and corporate office complexes, parking facilities, recreational and athletic facilities, roadways and multi-unit housing projects. Whether the project require site design, surveying, hydrology and storm drainage systems; involve wetlands protection, conservation commission compliance or coastal zone management; or simply demand a way to convert a marginal piece of property into a viable, profitable one, the LEA Group can meet all challenges with innovation, technical knowledge and very practical experience.

PERMITTING — KNOW-HOW MAKES THE DIFFERENCE

Making headway through the governmental grant approval process can be a frustrating and painstakingly slow experience. It is an area where "knowing how" makes a defi-



Brandeis University's master campus site plan was originally created by LEA with the university's architect.

personnel. This single source of contact facilitates communication and insures an efficient and effective completion of all site and civil work, in accordance with the client's needs and the project plans.

Technical considerations often develop that require engineering expertise beyond site and civil. We have all the resources, in-house, to solve any engineering or design problem from the simplest to the most complex. Because we have nearly 100 professional and technical support personnel, we can provide the range of disciplines and services required to meet these increasingly challenging and demanding situations. Our technical and management expertise is highly refined and our professionalism and quality of work is evident at every level. We offer our services as a completely integrated package or individually on an "as needed" basis. We are large enough to provide the in-house capabilities to execute every building requirement ranging from conceptual design to detailed design and construction management. In short, as a single source for all engineering services, we can respond quickly to the requirement for

Top Photo: For State Properties of New England's Arboretum Condominium project in Peabody, LEA provided full site design and engineering services.

Bottom Photo: At Prime Computer's corporate world headquarters in Natick, the 35-acre site development was engineered by LEA including three multi-level parking areas with all related infrastructure.

technical expertise outside of the site and civil engineering discipline, as always streamlining the process and saving time and money for our clients.

INNOVATION AND ATTENTION

Innovative engineering skills are balanced by proven project management techniques to give us an unusually high degree of project organization, technical competence and experience. We continually refine our working relationship with our clients; and our design teams are always responsive to their changing needs. This has made our track record of maintaining a very high percentage of repeat clientele over the past 60 years an impressive one. And it is, perhaps, the most compelling statement about building your own relationship with us.

nite difference. Our longtime experience with the approval process from beginning to end enables us to minimize the risks of delay at the critical early stages of a proposed project. Our grantsmanship talents can be invaluable in obtaining desirable funding such as Urban Development Action Grants (UDAG) or Industrial Revenue Bond monies (IRB). Permitting and approval can be a long and costly process under normal circumstances. We can help a client obtain all required permits for municipal, state and federal agencies with maximum efficiency, speed, and minimum red tape.

THE SINGLE SOURCE PROFESSIONALS

Many of our clients come to the LEA Group because we offer a single source for both project management and technical services. This translates into reliable, solid decision-making and a significant savings in time and money. Our Project Manager, accountable for project coordination and implementation, serves as the liaison between the client and the engineering



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