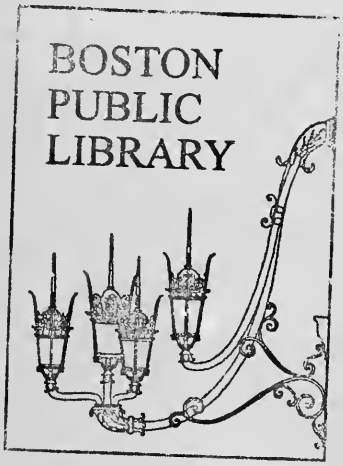
STATEMENT OF QUALIFICATIONS

Street Scape Improvements to St. Botolph Street



Submitted to the

Boston Redevelopment Authority
Boston, Massachusetts

March 24, 1988

ENGINEERS
ARCHITECTS
PLANNERS

BAYSIDE ENGINEERING ASSOCIATES, INC.
Boston, Massachusetts

Bayside Engineering Associates, Inc.

CONSULTING ENGINEERS - ARCHITECTS

803 SUMMER STREET
SOUTH BOSTON, MASSACHUSETTS 02127-1609
TELEPHONE (617) 269-5500

March 25, 1988

Boston Redevelopment Authority
Boston City Hall, Room 943
One City Hall Square
Boston, MA 02201

Attn: Mr. Richard Hong

RE: Improvements to St. Botolph Street

Dear Mr. Hong:

Bayside Engineering Associates, Inc. is pleased to submit a letter of interest for your consideration regarding the above-mentioned project. As indicated in the enclosed material, we offer extensive prior experience in all the areas required for this design. Our firm specializes in roadway and sidewalk designs including drainage, environmental work, historic paving and lighting and necessary permit applications. We maintain close cooperation with local authorities and concerned citizen groups on all our projects.

We are considered experts in the field of transportation engineering and are routinely engaged by other consultants to provide this expertise on large and small projects. We also have been requested to critique the traffic analysis performed by other firms by the MDPW, further attesting to our qualifications.

Our proposal contains information on the firm, a summary of our related experience in street, sidewalk, lighting and landscaping designs in historic urban areas, and resumes of the personnel assigned to this project. Our current workload will allow us to begin work at your convenience, allowing assured completion within time and budget constraints.

Bayside would like to emphasize our desire to work for the Boston Redevelopment Authority. We have previously completed related projects at Spring Lane and Blackstone Block in downtown Boston and at the Charlestown Navy Yard. We look forward to continuing to serve the Authority on this project.

We hope to be able to further describe our qualifications and approach to this project during an interview and thank you for consideration of our firm.

Very truly yours,

BAYSIDE ENGINEERING ASSOCIATES, INC.

BY: A. Paul LaRosa

A. Paul LaRosa, P.E. President

TABLE OF CONTENTS

RELEVANT EXPERIENCE & REFERENCES

RECENT RELATED EXPERIENCE

Charlestown Navy Yard, Charlestown

Bayside Engineering under contract with the Boston Redevelopment Authority, has recently completed construction documents for the Charlestown Navy Yard Project. The construction program provides for utilities, streets, sidewalks, installation of water mains, sanitary lines, surface drainage lines, street lighting, signs and landscaping. Bayside coordinated work with building development in the area and provided supervision during construction.

Revitalization of Blackstone Block, Boston

Blackstone Block, in the Haymarket district of historic Boston, is one of the oldest existing street networks in the U.S. and has been designated as a landmark area. Bayside recently completed design work relating to street and sidewalk improvements for this area including historic pavement treatment, installation of vehicular barriers and a new street lighting system. The project required full coordination with many public agencies. The final design successfully reflects the history and atmosphere of this unique area as well as being safe and attractive for pedestrians and property owners.

Reconstruction of Spring Lane, Boston

The reconstruction of Spring Lane, a pedestrian walkway, was designed for the Boston Redevelopment Authority in 1982, construction was completed in 1983. Located between Washington and Devonshire Streets in downtown Boston, Spring Lane illustrated Bayside's streetscaping abilities in a historic city area. The lane is now a pleasant pedestrian walkthrough featuring brick paving to match the buildings along both sides and new lighting system with period light posts. The close proximity of the ajoining buildings with basements below the lane surface necessitated careful design consideration.

North Harvard Project, Allston

Bayside Engineering was responsible for street design and site development of a major urban renewal project at North Harvard Street in Allston, MA. Project included civil, site, grading, utility relocation and installation and new lighting system for a parking area for a large urban housing complex located at Western Avenue and North Harvard Street in Allston.

Restoration of the Muster House, Charlestown

Bayside is currently designing the restoration of the historic Muster House at the Charlestown Navy Yard. The building, which is over a century old, is an octagonal three story brick structure with an ornate cupola roof. Our designs include repointing, window replacements, roof repairs, reguilding of ornamental fixtures and repainting. Work on the surrounding grounds include landscaping, replacement of stone pavement and bollards and sidewalks.

Revitalization of Post Office Square, Boston

Bayside is currently providing ornamental lighting designs for the Post Office Square area and Spring Lane in Historic Downtown Boston.

HIGHWAY DESIGN EXPERIENCE

BAYSIDE'S Highway Engineering Department consists of individuals with years of experience in all phases of highway design including drainage, landscaping, horizontal and vertical alignments, signing and traffic signalization as well as the design of bridges and highway structures. Bayside currently designs over $10,000,000 worth of roadway reconstruction per year for the Massachusetts Department of Public Works and other Massachusetts municipalities and agencies. Below is a partial list of Bayside Highway Design projects.

For Massachusetts Department of Public Works

LOCATION	DESCRIPTION
South Boston & Dorchester	Reconstruction of Boston Street
Groveland	Improvements to Route 97
Plympton & Halifax	Redesign of Route 58
Barre, New Braintree & North Brookfield	Reconstruction of Route 67
Revere	Reconstruction of Route 1-A
Danvers to Newburyport	Design of landscaping for Route I-95 (award winning design noted by U.S. Dept. of Transportation)
Merrimac Valley	Safety improvements along 25 mile stretch of I-495 from Andover to Salisbury plus the 213 Connection in Methuen and the 125 Connector in Haverhill
Amherst, Hadley	4.3 miles of multi-lane highway plus 1.3 miles new barrel to existing highway. Major ramp systems, relocation of riverbed, three new structures.
Westboro	Reconstruction of Route 9 and connector road
Saugus	Design of Interchange between Lynn Fells Parkway and Route 1
Sudbury	Route 20

For Cities and Towns

LOCATION	DESCRIPTION
Revere, MA	Full depth reconstruction of Revere Street
Worcester, MA	Design improvements to Plantation and Belmont Streets
Newburyport, MA	Reconstruction of Low Street Reconstruction of Parker Street
Whitman, MA	Reconstruction of Auburn Street (Route 14)
Abington, MA	Reconstruction of Chestnut Street
Newbury, MA	Reconstruction of Scotland Road
Beverly, MA	Design improvement to Tozer Street
Methuen, MA	Design improvements to Osgood, Lowell and Pelham Streets
Tewksbury, MA	Livingston Street improvements including curbing, drainage and resurfacing

For Other Public and Private Agencies

AGENCY	DESCRIPTION
Boston Redevelopment Authority, Brighton, MA	Street design for major urban renewal project at North Harvard Street
Massachusetts Port Authority, Boston, MA	Reconstruction and resurfacing of viaduct from Summer Street, South Boston, to the Commonwealth Pier Exhibition Hall
West Virginia Dept. of Highways	Design of 7.9 miles of Appalachian Development Highway
Digital Corporation	Widening of the Greely Street Interchange, Merrimac, NH
Eastern Airlines Logan Airport, Boston, MA	Roadway design and construction supervision, and design of a bus ramp
Industrial Association Everett, MA	Street and utility design: 1.6 miles

TRAFFIC AND SAFETY ENGINEERING EXPERIENCE

Bayside Engineering Associates, Inc. has distinguished itself as a firm of experts in the field of traffic and safety engineering. In addition to the projects described below, Bayside was chosen for the redesign of more than 50 high hazard intersections for the Massachusetts Department of Public Works in addition to the design of hundreds of miles of new highway with intersections and signalization. Our knowledge of all aspects of safety engineering is solid and is well recognized by the Massachusetts Department of Public Works. "Bayside" has provided engineering solutions to hazarded intersections in all eight Highway Districts of the Commonwealth. Many of our assignments have involved design at several locations.

MASSACHUSETTS HIGHWAY SAFETY PROJECTS:

The Reconstruction of over 42 High Hazard Intersections throughout the Numbered State Highway System. Some of these include:

Cheshire	Route 8; 2,500 ft. in length. Alignment changes, improved channelization, warning beacon installation
Dalton	Route No. 8 at Main, High, and North Streets, Improvement of roadway geometry.
Pittsfield	Route 20 at Lebanon Avenue Installation of illuminated warning sign.
New Salem	Route 202 and 122 Re-design of intersection and installation of beacons
Westfield	Route 20 Improved channelization and signalization
Milford	Route 140 at Highland, West, and Freedom Streets Improvement of Signalization and Channelization
Oxford	Route 20 at Route 56 Updating of traffic signal, improvement of geometry
Northbridge	Route 122 at Church Street Updating of traffic signal and geometry improvement.

West Boylston	Route 12 at Route 110 Improvement of geometrics, updating of traffic signal
Palmer	Route 32 at Route 20 Installation of warning beacon
Wilbraham	Route 20 and Stoney Hill Road Updating of traffic signal, alterations to geometry.
Concord	Work included channelization, storage lanes and new signal systems at six locations along Route 2: -Baker Avenue -Main Street -Old Road and Nine Acre Rd. -Sudbury Road -Fairhaven Road -Walden Street -Sandy Pond Road
Acton	Route 27 and 111 Redesign and installation of signals
Lowell	Route 3A at Wood Street Improvement of geometry, updating and installation of signals
Natick	Route 35 and Speen Streets Improve geometry, construct storage lanes, updating and installation of signals.
Salisbury	Route 110 at Merrill Street Construction of storage lanes, updating of signals and signage.
Rowley	Route 1 at Route 133 Improvement of intersection geometrics and highway lighting.
Weymouth	Route 18 at Park Avenue Updating of signal and inter- connection of existing signals.
Randolph	Route 28 at Pond and Reed Streets Installation of signals
Walpole	Route 1 at Coneuy street Improvement of sight distance, updating of signal
Easton	Foundry Street (Route 106) at Route 138 Improvement of Channelization

Hanover	Route 139 at Pleasant Street Channelization and design and installation of new signals
Wellfleet	Route 6 at Main Street. Redesign intersection, left turn lanes, channelization
Weymouth	Route 18 and Independence Square Updating of signals, improvement of channelization
Boston	Huntington Avenue at M.B.T.A. Green Line. Alignment improvements, traffic signalization and installation of pedestrian shelters.
Lowell	Intersection reconstruction at the Lowell Street Bridges to alleviate tight fire truck turning patterns.
Northampton	Traffic signal design at Route 5 and Damen Road.
West Springfield	Traffic signal designs at Route 5 and Morgan Road.
Amherst	Traffic signal design at Route 116 and Meadow Street.
Seekonk	Route 6 at Anthony Ave. and Warren Ave: Complete reconstruction including traffic signals, sidewalks, medians, channelization, landtakings and profile modifications.
Concord	Geometric improvements to Route 2 at rotary intersection with Commonwealth Avenue.
Weymouth	Traffic study and analysis for the intersection of Talbot and Pine Streets.
Brookline	Traffic study and analysis. Route 9 at Heath Street.
Peabody	Route 128 at Lowell Street. Traffic Volume Studies, interchange ramp designs, intersection design, and traffic signalization.
Attleboro	Traffic study and analysis at three intersections.
Orleans	Signalization at four intersections in conjunction with new roadway design.

CITY AND TOWN HIGHWAY SAFETY PROJECTS

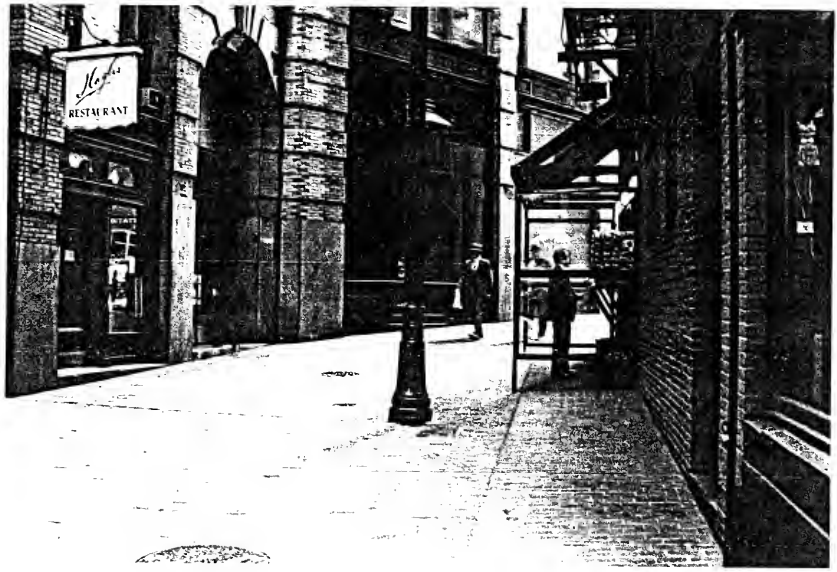
Boston and Newton	Beacon and Hammond Streets. Design of sidewalks along new scenic roadway with installation of safety median barriers, islands, channelization and new signal system.
Beverly	Dodge Street (Route 1A) and Enon Streets. Sohier and Herrick Streets Cabot, Rantoul, and Colon Streets Colon, Essex Streets at Brimball Ave. Dane and Essex Streets Improvements included inproved channelization, handicapped access, signals, etc.
West Concord	Three locations -Main Street at Church and Pine Streets -Main Street at Commonwealth Ave. -Main Street at Baker and Cottage Sts. Improvements included improved channelization, and signals, (including fire station pre-empt system).
Littleton	For the Digital Corporation Great Pond Road (Route 119) widened from the intersection of Westford Road and King Street. Improvements to Littleton Common, signalization and channelization.
Lancaster	For the Digital Corporation Reconstruction of Lunenburg Road and its intersection with Old Union Turnpike.
Andover	For the Digital Corporation Widening of Dascomb Road, four traffic signals, and design of a commuter parking area and ride facility.
Revere	Revere Street and North Shore Road Revere Street and Ocean Avenue Revere Street and Bay Road
Brockton	Signalization at the intersection of Crescent St. (R. 27) and Algiers Street.

Worcester	Complete signalization, geometry, channelization for three intersections: Belmont Street and Shrewsbury Street Belmont Street and Plantation Street Plantation Street and Lincoln street
Whitman	Signalization of the intersection of Auburn Street and Wahington Street.
Marlborough	Signalization at two intersections: Felton Street and Route 20 Felton Street and Elm Street.
Maynard	For the Digital Corporation Traffic Study
Watertown	Traffic signalization designs at 16 intersections along Mount Auburn Street, Arsenal Street, North Beacon Street,and Watertown Street. Included a fire station pre-empt installation.

RECONSTRUCTION OF BLACKSTONE BLOCK

Boston, Massachusetts

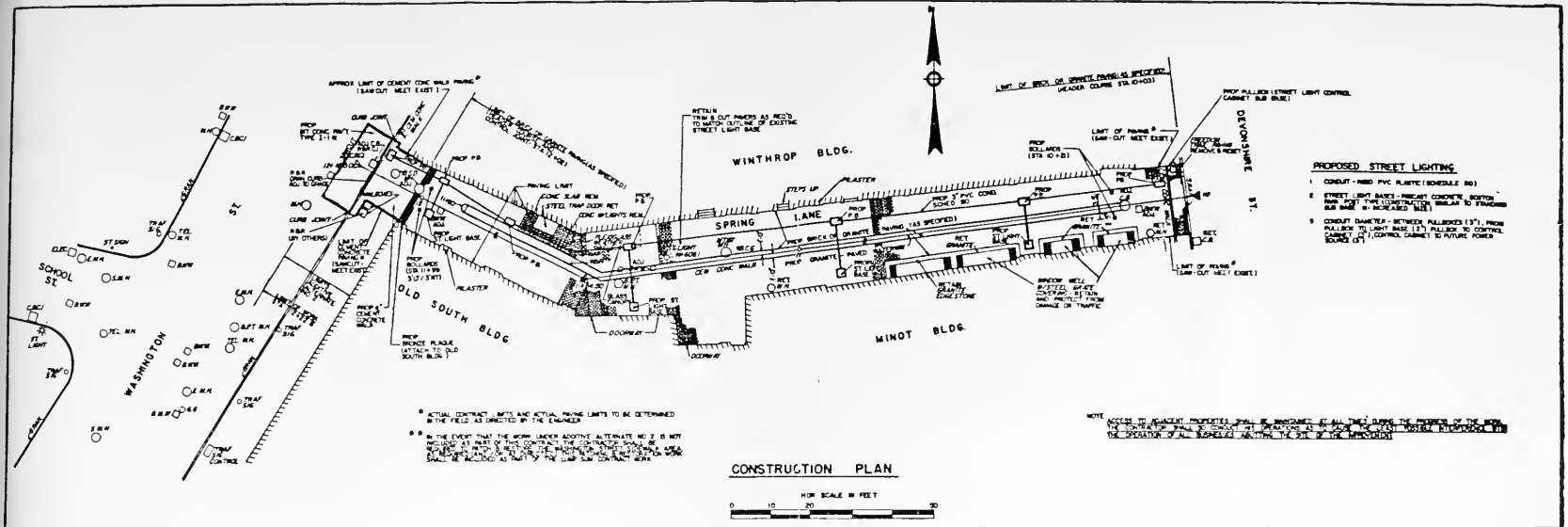
Blackstone Block, in the Haymarket district of historic Boston, is one of the oldest existing street networks in the U.S. and has been designated as a landmark area. Bayside recently completed design work relating to street and sidewalk improvements for this area including historic pavement treatment, installation of vehicular barriers and a ornamental street lighting system. The project required full coordination with many public agencies. The final design successfully reflects the history and atmosphere of this unique area as well as being safe and attractive for pedestrians and property owners.



SPRING LANE, BOSTON

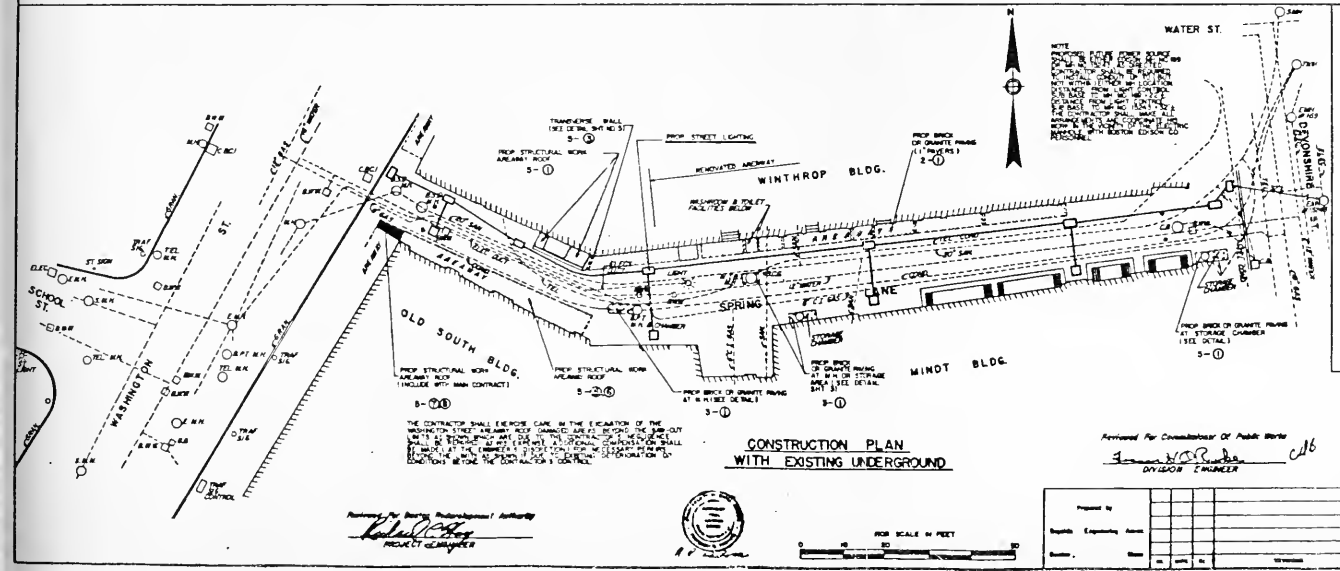
ABOVE: Looking toward Washington Street. Lunchstand is now a pleasant place to stop.

BELOW: Bollards at Washington St.



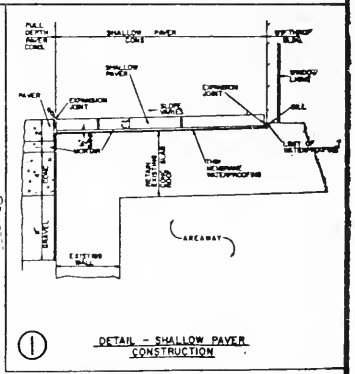
CONSTRUCTION PLAN

HOR SCALE IN FEET
0 10 20 30



CONSTRUCTION PLAN
WITH EXISTING UNDERGROUND

HOR SCALE IN FEET
0 10 20 30



DETAIL - SHALLOW PAVER CONSTRUCTION

GENERAL NOTES SEE SHEET NO 9
STRUCTURAL NOTES SEE SHEET NO 9

Approved For Consolidation Of Public Works
DIVISION ENGINEER

Approved For Boston Redevelopment Authority
PROJECT ENGINEER

SITE PREPARATION CONTRACT - SPRING LANE

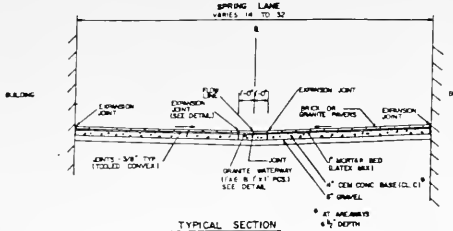
CONSTRUCTION PLAN & UNDERGROUND FEATURES

BOSTON REDEVELOPMENT AUTHORITY
BOSTON - SUFFOLK COUNTY - MASSACHUSETTS

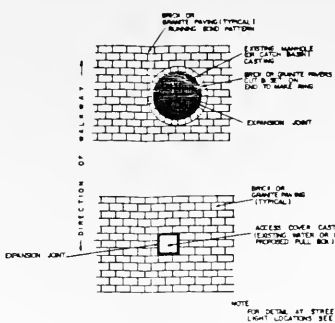
Approved by
Director

Scale 1" = 10'
Date APRIL 1983

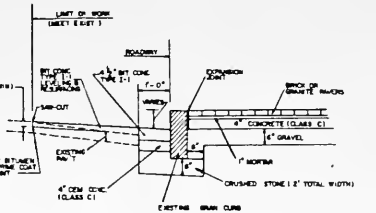
SHEET NO. 2



TYPICAL SECTION

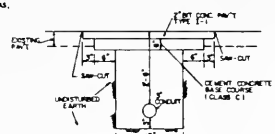


PAVING DETAILS AT UTILITY LOCATIONS

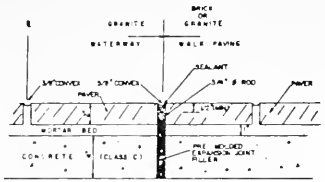


SIDEWALK SECTION AT ROADWAY

ADDITIVE ALTERNATE NO 2
CEMENT CONC WALK AT WASHINGTON ST.
4" CEM CONC (CLASS B) OVER 8" GRAVEL

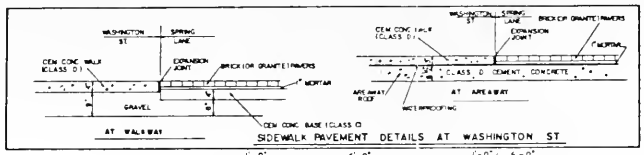


TRENCH SECTION AT DEVONSHIRE ST. ROADWAY

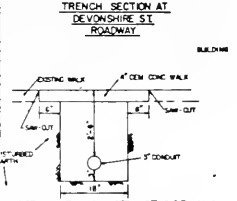


EXPANSION JOINT DETAIL

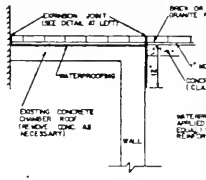
NO SCALE



SIDEWALK PAVEMENT DETAILS AT WASHINGTON ST.

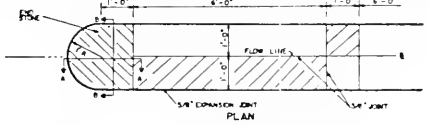


TRENCH SECTION AT WASHINGTON ST SIDEWALK (D.N.A ALTERNATE NO. 2)

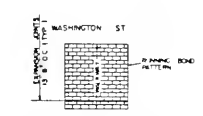


WATERPROOFING SHALL CONSIST OF A THERMEL APPLIED MEMBRANE (LATICRETE 36 OR 335 OR EQUAL) WITH A CONTINUOUS FIBER GLASS REINFORCEMENT

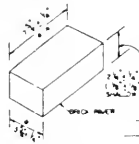
DETAIL AT STORAGE OR MANHOLE CHAMBER



GRANITE PAVED WATERWAY

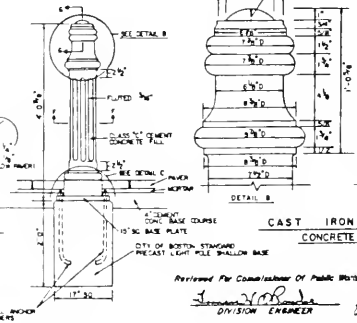


TYPICAL PAVER ARRANGEMENT

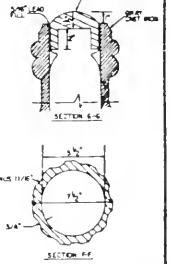


TYPICAL PAVER DIMENSIONS

A GRANITE PAVER - 5"
B B GRANITE PAVER - 8"



CAST IRON BOLLARD CONCRETE FILLED



GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND OWNERS OF ALL ABUTTING PROPERTIES FOR CONSTRUCTION WITHIN ALL UTILITY COMPANIES OR THAT THEY OR THEIR SUBCONTRACTORS CAN MAKE CHANGES IN THEIR RESPECTIVE STRUCTURES OR PLACE NEW STRUCTURES OR CORRECTIONS THEREIN, WITHOUT INTERFERENCE. THE CONTRACTOR SHALL HAVE NO CLAIM FOR OR ON ACCOUNT OF ANY DELAYS WHICH MAY BE DUE TO, OR ARISE OUT FROM, SAID WORK OF THE UTILITY COMPANIES.
2. PAVEMENT & GRAVEL DEPTHS AS SHOWN ON TYPICAL PLANS ARE THE THICKNESSES AFTER COMPACTION.
3. WHERE THE BACK OF THE PROPOSED SIDEWALKS, AS SHOWN ON THE PLANS, MEET EXISTING BUILDINGS, A PREMOLDED FILLER AND JOINT SEALANT SHALL BE USED.
4. CUTTING OF EXISTING SIDEWALKS SHALL BE AS SHOWN ON THE PLANS. INSTALL EXPANSION JOINT MATERIAL & SEALANT AT CUT LINES.
5. ANY DAMAGE TO PRIVATE PROPERTY DUE TO NEGLIGENCE ON THE PART OF THE CONTRACTOR, AS DETERMINED BY THE ENGINEER, WILL BE REPAIRED OR REBUILT BY AND AT THE EXPENSE OF THE CONTRACTOR.
6. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE COMPILED FROM THE BEST AVAILABLE SOURCES AND ARE NOT WARRANTED TO BE CORRECT.
7. EXISTING PIPES, VAULTS AND WATER GATES WITHIN THE EXISTING STREETS ARE TO REMAIN OR BE ADJUSTED DURING CONSTRUCTION.
8. EVERY REASONABLE PRECAUTION SHOULD BE TAKEN TO PREVENT THE DISTRUCTION OF EXISTING UTILITIES DURING CONSTRUCTION.
9. TO AVOID DISRUPTING ITS OPERATION OR UTILITIES, THE EXACT LOCATIONS SHALL BE DETERMINED BY TRIAL PIT EXCAVATION. TRIAL PITS WILL BE EXCAVATED WHERE DIRECTED BY THE ENGINEER.
10. WATER VALVE BOXES, EXISTING SEWER MANHOLES AND CATCH BASINS SHALL HAVE THEIR FRAMES AND COVERS OR FRAMES AND GRATES ADJUSTED TO THE PROPOSED GRADES.
11. ADJUSTMENT OF FRAMES AND COVERS ON GATE BOXES FOR EDISON, B.E.S.T. AT GAS AND OTHERS SHALL BE ALONG LINES BY THE UTILITY COMPANY IS FORCED IN COOPERATION WITH THE CONTRACTOR.
12. ACCESS TO ABUTTING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES DURING THE PROGRESS OF THE WORK. THE CONTRACTOR SHALL BE CONSIDERATE OF OPERATIONS AT TO CARE FOR LEAST INCONVENIENCE WITH THE OPERATION OF ALL BUSINESSES DURING THE LIFE OF THE CONTRACT.

Reviewed By Boston Redevelopment Authority
Richard Patry
PROJECT Engineer

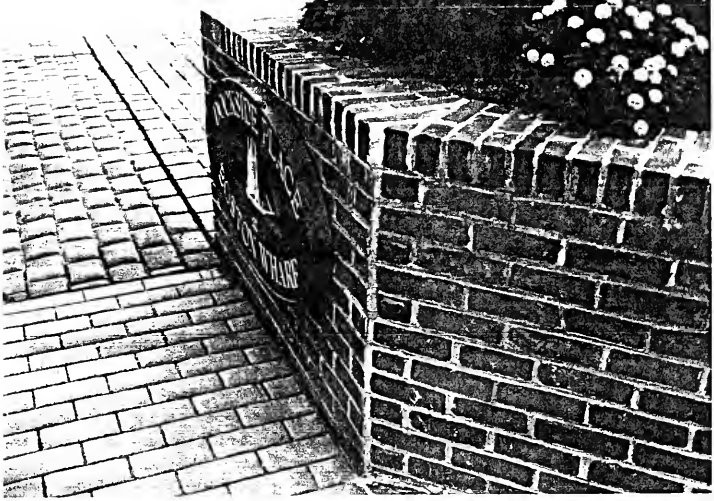
Reviewed For Commissioner Of Public Works
Thomas M. Rowden
DIVISION ENGINEER

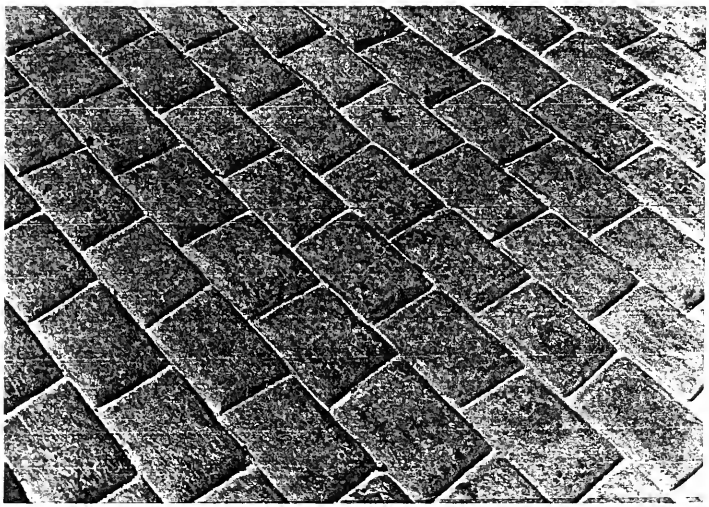
SITE PREPARATION CONTRACT - SPRING LANE

TYPICAL SECTIONS - GENERAL NOTES MISC. DETAILS

BOSTON REDEVELOPMENT AUTHORITY
BOSTON — SUFFOLK COUNTY — MASSACHUSETTS

CHECKED BY	APPROVED BY	SHEET NO.
DATE APRIL 1968	Wallace B. Askew	3





EMBOSSED PAVEMENT

An example of concrete stamped and dyed to simulate brick or cobblestone. This serves as a middle price range alternative for streetscaping and sidewalk reconstruction.

RECENT RELATED PROJECTS & REFERENCES

The following are several descriptions of recent projects with design considerations similar to yours. All of the projects are progressing or were completed under the direct supervision of A. Paul LaRosa, P.E., the Principal-in-Charge.

1) PROJECT NAME & LOCATION

Reconstruction of Bay Ridge and Baker's Pond Roads, Orleans, MA

PROJECT DESCRIPTION AND COST

Bayside is currently under contract with the Town of Orleans to design the realignment and reconstruction of these two roads and their intersection with Route 6A. The work includes full depth pavement reconstruction; minor widening, drainage modifications, new curbing and the installation of traffic signal conduit to accommodate future signalization.

Estimated Construction Cost: $500,000.00

REFERENCE

Orleans Traffic Study Committee
Town Hall
Orleans, MA

ATT: Mr. Sherman Reid, Chairman
Tel. (617) 2155-0900

2) PROJECT NAME & LOCATION

Brockton-Whitman, MA - Full depth reconstruction of Auburn Street (Route 14)

PROJECT DESCRIPTION & COST

This project, about 16,714 feet in length, consisted of full depth pavement reconstruction with new sidewalks, both sides of the street, adjustments to existing drainage system, traffic signals, signs, pavement marking, etc. Cost $2,250,000.00

REFERENCE

City of Brockton
Department of Public Works
City Hall
Brockton, MA 02401

ATT: Maynard D. Spekin, P.E.
Director of Public Works
Tel: 580-1100

Town of Whitman
P.O. Box 454
Whitman, MA

Att: Norbett J. Fredette, P.E.
Town Engineer
Tel. 447-5547

3) PROJECT NAME & LOCATION

Revitalization of the "Blackstone Block", in the Haymarket district of historic Boston; one of the oldest existing street networks in the U.S.

PROJECT DESCRIPTION & COST

Work consisted of street and sidewalk improvement including historic pavement treatment, installation of pavement barriers, provisions for handicapped, and a new street lighting system. The completed project successfully reflects the history and atmosphere of this unique area as well as being safe and attractive for pedestrians and property owners.

Construction Cost $220,000.00.

REFERENCE

Boston Redevelopment Authority
One City Hall Plaza
Boston, MA 02201

Att: Wallace B. Orpin, P.E.
Director of Engineering
Tel. 722-4300

4) PROJECT NAME & LOCATION

Design Support Services
Highway Engineering Division
Massachusetts Department of Public Works
10 Park Plaza, Boston, MA

PROJECT DESCRIPTION AND COST

Bayside Engineering served as an extension of the Massachusetts D.P.W. Design Division in assisting the Department in the design of streets and traffic control systems at over 40 high hazard locations through the Commonwealth. The fees received for these services has been approximately $1,400,000.00.

REFERENCE

Massachusetts Department of Public Works
10 Park Plaza
Boston, MA 02116-3973
Att: Paul W. McHugh, P.E. Tel.973-7511

5) PROJECT NAME & LOCATION

Reconstruction & Relocation of Meadow Lane Road/Bridge, Brockton, MA

PROJECT DESCRIPTION AND COST

This project, about 1500 feet in length, consisted of the relocation and reconstruction of sections of a heavy traveled urban street with a new highway bridge over the Salisbury Plain River. Utilities included new water line, relocation of a high pressrue gas transmission line and new storm drainage systems.

Estimate & Cost of Construction	
Street Construction	$460,000.00
New Bridge	350,000.00
TOTAL	$810,000.00

REFERENCE

City of Brockton
Department of Public Works
City Hall
Brockton, MA 02401

Att: Maynard D. Spekin, P.E.
Director of Public Works
Tel. 580-1100

Department of Planning and Community Development

Frank L. Stringi
Director

City of Revere
Massachusetts

George V. Colella
Mayor

September 26, 1986

Bayside Engineering Associates, Inc.
286 Summer Street
Boston, MA 02210

Dear Sir:

I would like to take this opportunity to thank a member of your staff, Mr. Michael Rizzo, for his cooperation and performance in developing plans and specifications for the Reconstruction of Revere Street, Revere, MA.

Michael was always willing to answer any questions which arose during the planning process and his responses were courteous, prompt and efficient.

It was a pleasure dealing with Michael throughout the project.

Sincerely,

David Castagnetti
Project Planner

DC/ch

PROJECT ORGANIZATION & KEY PERSONNEL

PROJECT ORGANIZATION

The following personnel of Bayside Engineering Associates, Inc. will be assigned to the design of street scape improvements to St. Botolph Street:

A. Paul LaRosa, P.E.	Principal-in-Charge
J. Randall Huber	Project Manager
Francis X. McGrath, P.E.	Soils/Structural
Bruno Campea, I.T.E.	Traffic Engineering
Joseph A. Handziak	Roadway Designs

Resumes for the above personnel follow.

A. PAUL LaROSA, P.E.

PRINCIPAL ENGINEER

1968-Present — BAYSIDE ENGINEERING ASSOCIATES, INC.

Total job coordination; preparation of environmental, civil, and safety data at public meetings and before various concerned agencies; Designer-of-Record for over 200 million dollars of civil and environmental engineering projects.

1951 - 1968 — Employed as Civil Engineer, Project Engineer and Chief Engineer by Boston-based consulting engineering firms.

PROFESSIONAL REGISTRATIONS — P.E., Civil, Massachusetts, 1960

PROFESSIONAL AFFILIATIONS

-Construction Specifications Institute (CSI)
-National Society of Professional Engineers
-Boston Society of Civil Engineers
-American Society of Civil Engineers
-Former State President; Mass. Society of Professional Engineers
-Past State Secretary; Consulting Engineers Council.

EDUCATION — A.E., Civil, Northeastern University, Boston
B.S. Industrial Technology, Northeastern University

PROJECTS INCLUDE: Engineer of Record for the following:

- I-495, 29 miles of safety reconstruction; Tewksbury to Salisbury.
- I-93, Peabody to Newbury, MA: Roadside beautification
- I-195, 14 miles of roadway reconstruction, Westport to Fall River, MA
- I-290, 5 miles of highway reconstruction, Northboro-Marlboro, MA
- Point of Pines Interchange, Revere, MA
- Route 62, Concord, MA
- Lynn Fells Parkway Interchange, Saugus, MA
- 46 high hazard intersections throughout Mass.: designs for safety upgrading.
- Traffic safety improvements, Littleton, Lancaster, Andover, MA
- Route 128, 6 miles, Waltham, Weston, Lexington, MA
- 2 miles Horseneck Beach Highway
- Route 2: 3 miles, Lexington, Arlington, Belmont, MA
- Routes 2 & 4, West Virginia: 11 miles of highway design

FRANCIS X. McGRATH, P.E.

CIVIL/STRUCTURAL ENGINEER

1968 - Present	BAYSIDE ENGINEERING ASSOCIATES, INC. Senior Engineer, Project Engineer on numerous bridge reconstruction projects; Coordinator of Structural Analysis Projects, Supervision of Field Teams.
1964 - 1968	Employed as Structural Engineer, Designer and Instrument Man by Boston consulting firms.
PROFESSIONAL REGISTRATION	P.E., Civil Engineering, Massachusetts, 1972
EDUCATION	B.S., Civil Engineering, Northeatern University, Boston, MA M.S., Structures, Northeastern University
RELEVANT EXPERIENCE	BAYSIDE ENGINEERING ASSOCIATES, INC.

- Currently head of Bridge Rating Program for the Massachusetts Department of Public Works.
- Route 9, Intersections and grade separations.
- Route I-495 Safety Improvements including structural review and repair recommendations for 18 structures.
- Structural Adequacy of the North End Bridge over Connecticut River and Subsequent Reconstruction, Springfield, MA
- Design Engineer, Commonwealth Pier Viaduct, Boston, MA
- Project Engineer; Route 4, Elkins, West Virginia
- Senior Engineer; Route 2, West Virginia including the design of five structures.
- Structural Analysis and Rating Report; Calvin Coolidge Bridge over the Connecticut River, Northampton-Hadley, MA

PRIOR TO JOINING BAYSIDE ENGINEERING ASSOCIATES, INC.

- Project Engineer, New Bedford City Viaduct: a 1,300 foot long structure of embankments and bridge with service ramps.

JOHN RANDALL HUBER

CIVIL ENGINEER & PROJECT ESTIMATOR

1974 - Present — BAYSIDE ENGINEERING ASSOCIATES, INC.

Project Engineer in responsible charge of surveying, site and roadway layout and design, materials and testing, structural analysis, site drainage design, site work and estimates, construction resident engineering and inspection.

1972 -1974 — Employed as Engineer by a Boston-based consulting engineering firm. Assistant to the Chief Engineer and in charge of field survey, soils and concrete inspection and testing, and subdivision layout.

PROFESSIONAL REGISTRATIONS — Surveyor-in-Training, MA, 1977

EDUCATION — Worcester Polytechnic Institute, 1970, Mathematics

RELEVANT EXPERIENCE:

- Charlestown Navy Yard, Charlestown, MA: Roadway construction and development.
- Rehabilitation of Earth Dam, Hopkinton, MA: Design and Inspection
- Blynman Canal Bridge, Gloucester, MA: Field Inspection and Survey
- Underground Culvert, Maynard, MA: Inspection and Cost Estimates
- Massachusetts Floodproofing Program: Various locations throughout the State.
- Chestnut Street, Abington, MA. Reconstruction of street, relocation of utilities and installation of water main.
- Sanitary Landfill, West Bridgewater,MA
- Bridge Street over Chatham River, Chatham, MA. Field Inspection of this tidal river bridge.
- Metropolitan Schoolboy Track, Neponset Circle, Boston, MA. Project included designs for boat ramps and slope protection.
- Reconstruction of the Blackstone Block, Haymarket District, Boston, MA: Field survey, design and construction supervision of the oldest street network in the U.S.
- Parking lots with capacities up to 3,000 cars.
- I-95 Landscaping Project, Danvers to Newburyport.
- Bridge approach roadway designs for:
  - o Southampton Street Bridge, Boston, MA
  - o Rollstone Street Bridge, Fitchburg, MA
  - o Boston Street Bridge, Boston

BRUNO CAMPEA
TRAFFIC ENGINEER

1981 - Present BAYSIDE ENGINEERING ASSOCIATES, INC.

Traffic Safety Projects, Site Grading, Parking Lot Design, Drainage, Geometric Design, Intersection Capacity Analysis, Traffic Signal Design, Signing, Pavement Markings and Layout, Grading, Construction Inspection, Structural Analysis and Reports.

1972 - 1981 Employed as Civil Engineer by nationally-known consulting engineering firms. Responsibilities included: Traffic and Highway Design Intersection Capacity Analysis, Traffic Signal Design, Signing, Pavement Layout and Markings, Plans, Specifications and Estimates.

PROFESSIONAL AFFILIATIONS

-Member: Institute of Traffic Engineers
-American Society of Civil Engineers
-Boston Society of Civil Engineers

EDUCATION B.S., Civil Engineering, Northeastern University, 1972

RELEVANT EXPERIENCE BAYSIDE ENGINEERING ASSOCIATES, INC.

- Redesign of six high hazard intersections, Beverly, MA
- Concord, MA; Interconnected traffic signals including railroad and fire station pre-emption phases.
- Reconstruction oftwomiles of Low Street, Newburyport, MA
- Commuter Parking Lot, Georgetown, MA

PRIOR TO JOINING BAYSIDE ENGINEERING ASSOCIATES, INC.

- Watertown Square Parking Study
- Endicott Street Improvements, Danvers, MA
- Intersection Analysis and Design, City of Newton
- TOPICS Programs throughout the state
- Boston Transportation Planning Review
- Capacity Analysis and Traffic Signal Design plus Specifications for three locations, Ludlow, MA

JOSEPH A. HANDZIAK

HIGHWAY DESIGN ENGINEER

1968-Present — BAYSIDE ENGINEERING ASSOCIATES, INC.
Chief Highway Engineer, Drainage, Civil Projects, Site Work, and Parking Lot Design. Estimator, Surveyor, and Data Preparation for presentation at Public Meetings and Permit Application.

1963-1968 — Employed by a Boston based consulting engineering firm where he was involved in civil engineering computer applications, highway right-of-way, (registered) land takings, plans. He was responsible for the design of alterations to public utilities, storm drainage, sanitary sewer and water systems.

1960-1963 — Employed by a survey company based in Newington, CT. He was responsible for the preparation of survey base plans. Other duties included survey traverses, street lines, property boundaries, topography, cross sections, and map making.

1954-1960 — Employed by Boston based engineering firm and the Massachusetts Land Court. Duties included highway cross sections, estimates of earthworks, architectural drafting, airport plans, registered land parcel plans and traverses.

EDUCATION — B.S., Civil Engineering, Northeastern University

RELEVANT EXPERIENCE

- Design and Reconstruction of Roadway approaches to:
  - o New Harbor Road Bridge over B&M RR, Clinton, MA
  - o Southampton St. Bridge over M.B.T.A. and Conrail, Boston, MA
  - o Route 113 bridge over Nashua River, Pepperell
  - o Bridge Street over Mitchell River, Gloucester, MA
- Belmont & Plantation Streets, Worcester, MA: Roadway reconstruction design
- Reconstruction of Route 58 (6.5 miles), Plympton, Halifax, MA
- Intersection improvements: Hudson, Seekonk, MA
- Concord, Route 2
- Route 67: Barre-North Brookfield, MA
- Reconstruction of Old Colony Way, R.R. & Canal Road, Wareham, MA
- Rte. 495: design for 30 miles of safety reconstruction, including improvements to 36 high hazard intersections throughout the state.
- Amherst-Hadley By-pass.
- Historic reconstruction of Spring Lane pedestrian walkway, Boston. Included brick paving and period light posts.

AFFIRMATIVE ACTION

EQUAL EMPLOYMENT OPPORTUNITY/AFFIRMATIVE ACTION PROGRAM

1987

PREFACE

Bayside Engineering Associates, Inc. is committed to offering employment, training, and promotion opportunities without regard to an applicant's or employee's race, color, religion, handicap, national origin, veterans status, age or sex.

Our Affirmative Action Program is designed to accomplish two objectives: (1) to reaffirm our continued commitment to a program of merit employment policies and (2) to assert leadership within the community and to put forth the maximum effort to achieve a balanced work force, reflective of the population within our business or recruitment area.

Bayside further recognizes that the effective application of a policy of merit employment involved more than just a policy statement and will, therefore, undertake a program of affirmative action to make known that equal employment opportunities are available on the basis of individual merit, and to encourage all persons to seek employment with Bayside and to strive for advancement on this basis.

The Management of Bayside Engineering Associates, Inc. has prepared this written Affirmative Action Plan on a strictly voluntary basis. In the preparation of this Affirmative Action Plan, the terminology used in E.O. 11246, and its implementing regulations, has been used as a guide by Bayside. The use of such terminology should not be construed as an admission by Bayside, in whole or in part, that in fact Bayside is in violation of Federal, State, or local fair employment practice laws.

In developing and implementing this Affirmative Action Program, Bayside has been guided by its established policy of providing equal employment opportunity. The goals which Bayside has formulated in conjunction with this Affirmative Action Program are not intended as rigid, inflexible quotas that must be met, but rather as targets toward which Bayside will apply every good faith effort.

AFFIRMATIVE ACTION POLICY

I. It is the policy of Bayside Engineering Associates, Inc. to:

A. Recruit, hire, train, and promote persons in all job titles, without regard to race, color, religion, handicap, national origin, veteran status, age or sex, except where age or sex are a bona fide occupational qualification as stated under the Civil Rights Act of 1964, under Executive Order 11246, as amended.

B. Base decisions on employment so as to further the Principle of Equal Employment Opportunity.

C. Insure that promotion decisions are in accord with principles of equal employment opportunity by imposing only valid requirements for promotional opportunities.

D. Insure that all personnel actions such as compensation, benefits, transfers, company sponsored training, education, tuition assistance and social and recreational programs will be administered without regard to race, color, religion, age, sex, handicap, or national origin.

II. The firm has an Affirmative Action Officer, Manuel A. Priante, Personnel Officer, who coordinates our Affirmative Action Policy and Programs. The content, construction, reporting and monitoring of the programs are administered by Mr. Priante and, therefore, all inquiries concerning Equal Employment Opportunity/Affirmative Action should be directed to him in the Personnel Department.

III. Our affirmative Action Program is designated to accomplish two objectives: (1) To reaffirm our continued commitment to a program of merit employment policies and (2) To assert leadership within the community and to put forth the maximum effort to achieve a balanced work force, reflective of the population within our business or recruitment area.

IV. We are committed to making steady and measurable progress toward the achievement of our Affirmative Action goals. The ultimate responsibility for successfully fulfilling the intent of this policy lies with every Manager, Supervisor, and Employee to actively support the philosophy and policies contained in our Equal Employment Opportunity/Affirmative Action Program.

Signed,

A. Paul de Rosa
Chief, Executive Officer

Manuel A. Priante
Personnel Officer