

The original documents are located in Box 23, folder “New York City Finances (7)” of the James M. Cannon Files at the Gerald R. Ford Presidential Library.

Copyright Notice

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted material. Gerald Ford donated to the United States of America his copyrights in all of his unpublished writings in National Archives collections. Works prepared by U.S. Government employees as part of their official duties are in the public domain. The copyrights to materials written by other individuals or organizations are presumed to remain with them. If you think any of the information displayed in the PDF is subject to a valid copyright claim, please contact the Gerald R. Ford Presidential Library.

THE WHITE HOUSE
WASHINGTON

May 21, 1976

MEMORANDUM FOR:

JIM CANNON

FROM:

STEVE McCONAHEY *SM*

SUBJECT:

New York City Fire Academy

Recently you forwarded to me a letter from Dick Dunham relating to the New York City Fire Academy and the possibility of the U.S. Government purchasing this facility as a training center. I need guidance from you on how you would like to proceed.

Attachment

SM
1) Who would *Walter*
make a decision?
2) How *me*
put it up for
consideration?



THE WHITE HOUSE
WASHINGTON

5/17/76

TO: STEVE

FROM: PAT

Yes, by all means.



FEDERAL POWER COMMISSION
WASHINGTON, D. C. 20426

OFFICE OF THE CHAIRMAN

May 3, 1976

Mr. James M. Cannon
Director
Domestic Council
The White House
Washington, D. C. 20500

Dear Jim:

I have enclosed the background material on the New York City Fire Academy matter I discussed with you a few weeks ago.

You will recall that the argument advanced by the City in support of the U.S. Government purchasing this facility or selecting it as a U.S. Government training facility is that it could be purchased at a price more advantageous than constructing a comparable facility and would also help New York City and U.D.C.

Sincerely,

Dick

Richard L. Dunham
Chairman

Enclosure



*Proposal for Submission to the National Fire Academy
Site Selection Board*

WARDS ISLAND CENTER



By The City of New York

*Abraham D. Beame,
Mayor*



THE CITY OF NEW YORK
OFFICE OF THE MAYOR
NEW YORK, N.Y. 10007

April 23, 1976

Mr. David M. McCormack
Superintendent
National Fire Academy
National Fire Prevention and
Control Administration
U.S. Department of Commerce
2400 M Street, N.W.
Washington, D.C. 20036

Dear Mr. McCormack:

On behalf of the City of New York, I am pleased to present our proposal for the siting of the National Fire Academy at our new Wards Island Fire Department Training Center.

We are convinced that this facility offers unmatched advantages in meeting the initial requirements and future needs of the Academy and the National Fire Prevention and Control Administration.

The immediate availability of this virtually complete facility would almost certainly allow the Academy to begin operations more quickly than at any other proposed site. This would fulfill the stated goal of the sponsors of the National Fire Prevention and Control Act to start up this critically needed program as rapidly as possible.

Moreover, the selection of this site - specially designed for fire training and superbly equipped for educational, research, and demonstration programs - would lay the groundwork for the economical and orderly growth of the Academy to meet any foreseeable need.

In accordance with the specific request made by the Site Selection Board at its March 22nd hearing, we have provided a full description of purchase and lease options for utilization of the facility. Any of these options would be acceptable to the City administration, subject, of course, to the normally required local approvals.

As our representatives indicated at the hearing, the City would require some access to the center to meet the training needs of the New York Fire Department. I am confident that the City and the NFPCA could reach a mutually beneficial agreement which would meet the requirements of both the Academy and the NYFD. Indeed, one of the chief assets of a New York City location for the Academy would be its proximity to the activities and resources of our renowned firefighting service.

Our enthusiasm for this proposal is based on the center's excellent potential to fulfill the goals of the Academy and on the unique combination of assets that New York City offers as a home for this project.

New York is already a focal point of fire science activity, as detailed in our application. The city is an important center in the construction and engineering fields. Our national and international transportation facilities are second to none.

In addition, the metropolitan area offers every conceivable type of fire prevention and control situation: from high-rise office buildings to wooden bungalows, from oil refineries to factory lofts, from airports to harbors and from grass fields to subway tunnels.

Of course, New York is only one hour by air shuttle from NFPCA headquarters in Washington. The Wards Island site is approximately ten minutes by car from LaGuardia Airport. It is also less than thirty minutes from the transportation terminals and hotel facilities concentrated in the Mid-Manhattan Central Business District.

The new Wards Island Fire Training Center was constructed by the New York State Urban Development Corporation to the specifications of the New York Fire Department. The facility is virtually complete.

The 27-acre site includes a full range of fire training facilities, among them a 40,000 square foot main education building. This structure incorporates seven classrooms, a multipurpose auditorium, laboratory/lecture room, library and a television studio.

While this building alone would meet many of the initial requirements for the Academy, the other facilities of the center, available for present or future use, would allow the development of comprehensive fire research and training programs. A basic training building is specially designed to permit the setting of high heat and gaseous blazes for test purposes. Four unique structures patterned after typical residential and commercial buildings are equipped to simulate varied firefighting problems.

Two separate buildings are available for the development and maintenance of breathing equipment and fire apparatus. A joint marine building/simulated fire house with a 260 foot wharf is also available. The Fire Department plans to station periodically a 20,000 gallon-per-minute fire boat at this location.

The center also offers outdoor lighting to permit 24-hour operation, a 300-car parking lot, bleachers, a simulated subway tunnel, and other features.

Although the City had intended to utilize the center for its own training programs, current budget constraints make it impossible for the City to purchase the facility from UDC and to operate it as originally planned. The proposal describes our training needs, which would not be incompatible with the full range of programs envisioned by the Academy.

The City proposes six options under which the facility could be made available as the home of the National Fire Academy. Final agreements would be subject to required local approvals and the concurrence of the Urban Development Corporation.

- * Purchase by the National Fire Academy of entire campus for approximately \$14,000,000.
- * Lease by the National Fire Academy of entire campus for approximately \$1,315,000 per annum.

- * Purchase by the National Fire Academy of selected building(s) and other site improvements.
- * Lease by the National Fire Academy of selected building(s) and other site improvements.
- * Purchase by the National Fire Academy of individual facility elements.
- * Lease by the National Fire Academy of individual facility elements.

By taking advantage of any of these options, the NFPCA would gain the benefits of near-immediate occupancy, reasonable cost, a New York City location, and wide flexibility in meeting future needs,

Our submission includes a statement by an independent authority on construction costs, who concludes that the prices stated in our proposal are virtually the best which could be obtained today close to any major city. Further, with construction costs still rising at the rate of about 8% annually, the availability of such an existing facility strongly recommends our proposal.

Coupled with the advantages of the site itself, New York City offers significant assets directly related to the goals and operations of the Academy.

Our submission includes a description of the extensive work in this area carried out by the Polytechnic Institute of New York, often in partnership with City or federal agencies. The Port Authority maintains training programs for the control of bridge, tunnel, and airport fires. Our own Fire Department has recently worked with the National Aeronautics & Space Administration to test new lightweight breathing apparatus and to develop standards for liquefied natural gas facilities.

Of course, New York is also a national center for the architectural and engineering fields and the construction industry. I can tell you that, in the development of our own fire prevention standards, the City has drawn heavily on these talented professional communities.

Resident staff of the Academy could choose from the broad variety of living arrangements available in the metropolitan area, from single-family homes to moderately priced apartments. Students at the Academy would find ample hotel

and motel space within a short drive of Wards Island. Sufficient space is available within the boundaries of the present site to erect a dormitory, if required.

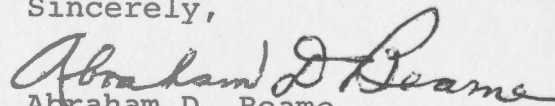
For residents and visitors alike, the city offers an unmatched concentration of educational institutions, sports and recreational facilities, and cultural attractions. New York has always been known as a diverse and stimulating urban center - the perfect setting for a national institution like the Academy.

The Academy will be welcome in New York. In addition, to the strong support of my administration, this proposal has been furthered by the work of two distinguished members of the City's Congressional delegation: Representatives Charles Rangel and John Murphy. Additional expressions of support are included in this submission, and others will be forthcoming in the near future.

In conclusion, I am proud that the City can help to quickly fulfill the goal of establishing a National Fire Academy by offering the Wards Island Training Center on the flexible and reasonable terms outlined in this proposal. New York continues to serve as a national resource, and I hope you will agree that our city can provide the best possible setting for the important mission of upgrading fire prevention and control efforts in America.

Thank you for your consideration. I have instructed the relevant City agencies to assist in providing any further information you may require in considering our proposal.

Sincerely,


Abraham D. Beame
M A Y O R

PROPOSAL FOR SUBMISSION TO THE
NATIONAL ACADEMY FOR FIRE PREVENTION
AND CONTROL SITE SELECTION BOARD
BY THE CITY OF NEW YORK

1. NAME AND ADDRESS OF PROPOSER:

Honorable Abraham D. Beame
Mayor of the City of New York
City Hall
New York, New York 10007

REPRESENTED BY:

Mr. Bruce Kirschenbaum
Assistant to the Mayor
New York City Washington Office
1825 K Street, N.W.
Washington, D.C. 20006
Telephone: (202) 223-6694

2. NAME AND ADDRESS OF LEGAL OWNER OF SITE:

The City of New York owns the land comprising the offered site. The New York State Urban Development Corporation (UDC) built a series of 9 buildings and other improvements upon the site for sale or lease to the City, for use as a fire training center.

The Urban Development Corporation is cooperating with the City in this proposal and will allow the City to sell or lease these buildings and site improvements, or parts thereof, to the National Fire Academy. The City will convey to the National Academy the land comprising the entire site, or parts thereof, subject in all cases to normally required approvals.

The President and Chief Executive Officer of the New York State Urban Development Corporation is:

Mr. Edwin C. Cohen
President and Chief Executive Officer
New York State Urban Development Corporation
1345 Avenue of the Americas
New York, New York 10019
Telephone: (212) 974-7000



THE WARDS ISLAND TRAINING CENTER, NEW YORK CITY

3. GENERAL DESCRIPTION OF SITE:a. ACREAGE, TOPOGRAPHY AND NATURAL FEATURES

The proposed site consists of a 27 acre fire training center which has been constructed adjacent to 68 acres of parkland which could potentially be available for future expansion. It is situated on Wards Island, New York, which is located among the three boroughs of Manhattan, Queens and The Bronx. The training center, which is partly constructed on landfill is adjoined on two sides by City parkland, by the East River on a third side, and by a large municipal water pollution control plant on its fourth side. It is primarily flat with the exception of a 10 foot high berm of raised earth which provides for visual and functional separation of the office and classroom education facilities from the demonstration and experimentation elements of the site. A 260 foot long wharf has been constructed out onto the East River as part of the training center.

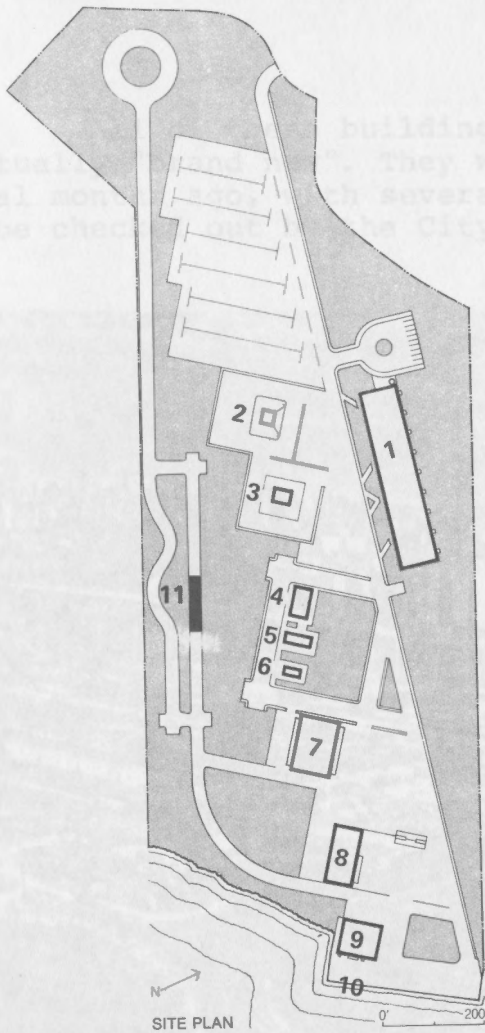
b. SIZE, TYPE, NUMBER UTILITY AND PHYSICAL CONDITION OF EXISTING BUILDING AND EQUIPMENTi. General

The site consists of nine buildings and several other physical improvements to the 27 acre tract of land. These other improvements include:

- . the aforementioned wharf
- . a simulated "subway tunnel"
- . gasoline and diesel fuel pumps
- . street "mock-ups"
- . roadways
- . a 300 car parking lot
- . complete site lighting (for 24 hour a day operations)
- . a 200,000 gallon water supply tank
- . a suction pit for drafting tests
- . an extra heavy-duty storm drainage system (to accommodate large water drain-offs from fire simulations)
- . a park and picnic area



FACILITIES AT THE WARDS ISLAND TRAINING CENTER



1. MAIN EDUCATION BUILDING

- 8 classrooms — 420 seats
- Multipurpose Auditorium — 550 seats
- Laboratory and Lecture Room — 75 seats
- Library
- Television Studio and Control Room
- Office Spaces for up to 100 Persons
- Conference Room

2. TRAINING TOWER

3. BASIC TRAINING BUILDING

- Simulation of Fires in both Ships and Buildings

4. SIMULATED "TAXPAYER"

5. SIMULATED "TENEMENT"

6. SIMULATED "FRAME DWELLING"

7. APPARATUS REPAIR AND DEVELOPMENT BUILDING

- Lifts and Diagnostic Facilities
- Classroom / Conference Room

8. BREATHING APPARATUS BUILDING

9. JOINT MARINE BUILDING AND SIMULATED FIRE HOUSE

- 3 Classrooms
- Office Space for up to 30 Persons

10. DEEPWATER WHARF

- All Connections for two boats

11. SIMULATED "TUNNEL"



All of these buildings and site improvements are virtually "brand new". They were substantially completed several months ago, with several "punch list" items remaining to be checked out by the City, UDC and the contractor.



THE WARDS ISLAND TRAINING CENTER IS READY FOR IMMEDIATE OCCUPANCY BY THE NATIONAL FIRE ACADEMY

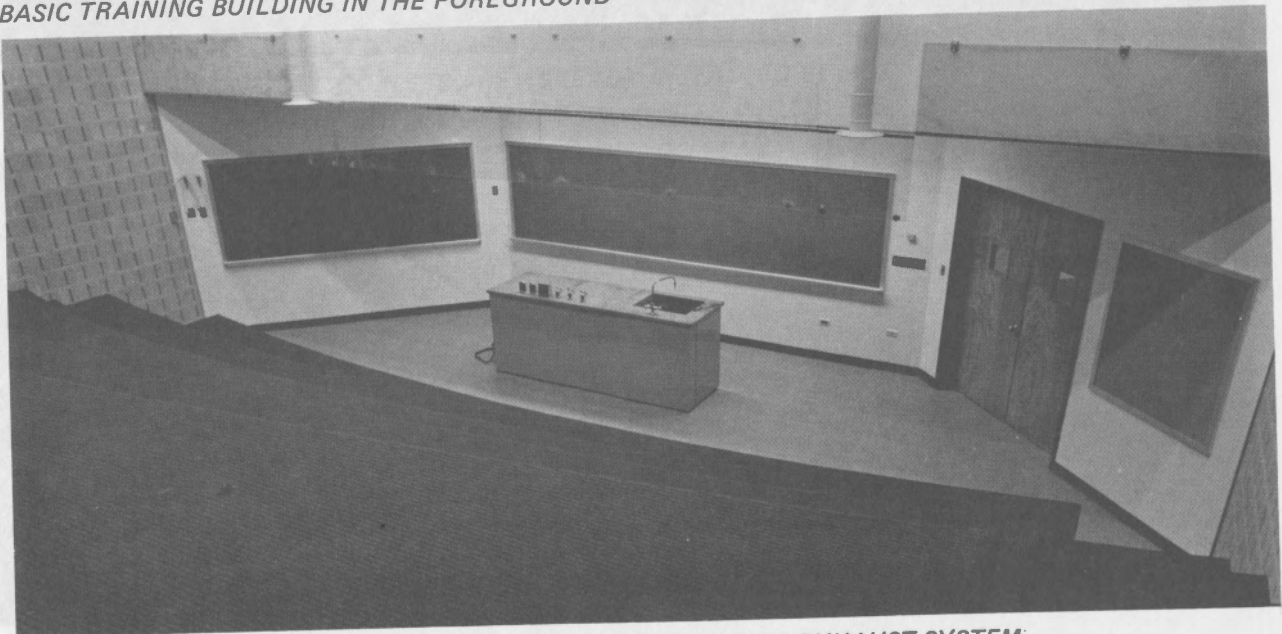
11. Description of Existing Buildings

MAIN EDUCATION BUILDING - 40,000 SQUARE FEET (GROSS)

The Main Education Building is the largest and most important structure on the site. It has 40,000 square feet of space (including bathrooms and service areas). Included in this building are eight classrooms with a total capacity of 420 students, a multipurpose auditorium capable of seating 550 persons, and a laboratory and lecture room with auditorium style seating for 75 persons. This lab is equipped with an especially powerful smoke baffle and exhaust system for use in both experiments and demonstrations.

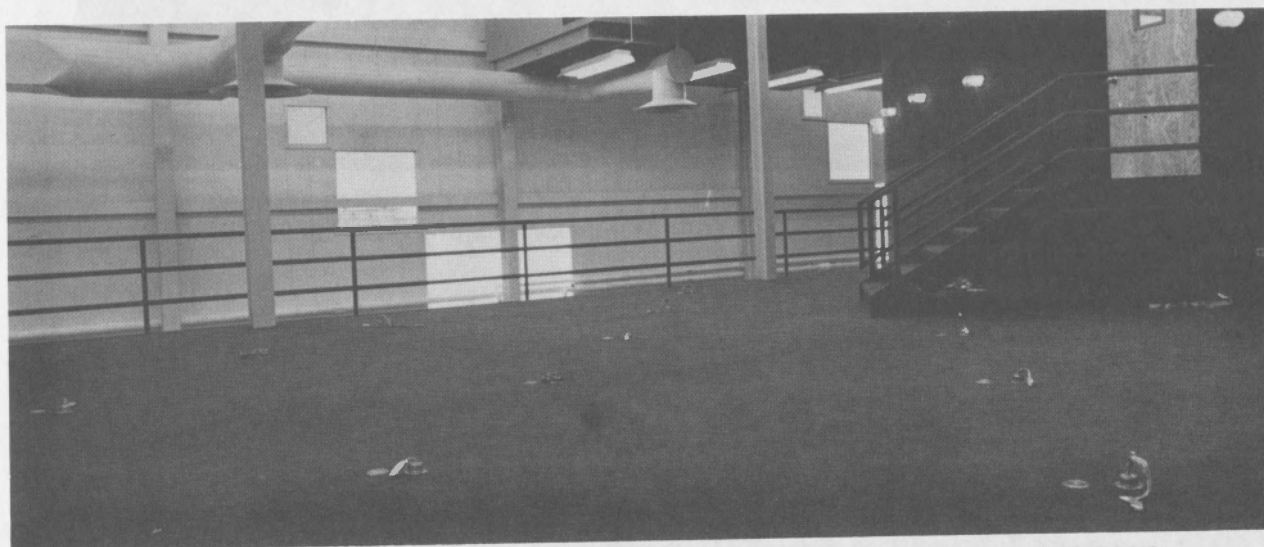


*THE MAIN EDUCATION BUILDING, WITH THE
BASIC TRAINING BUILDING IN THE FOREGROUND*

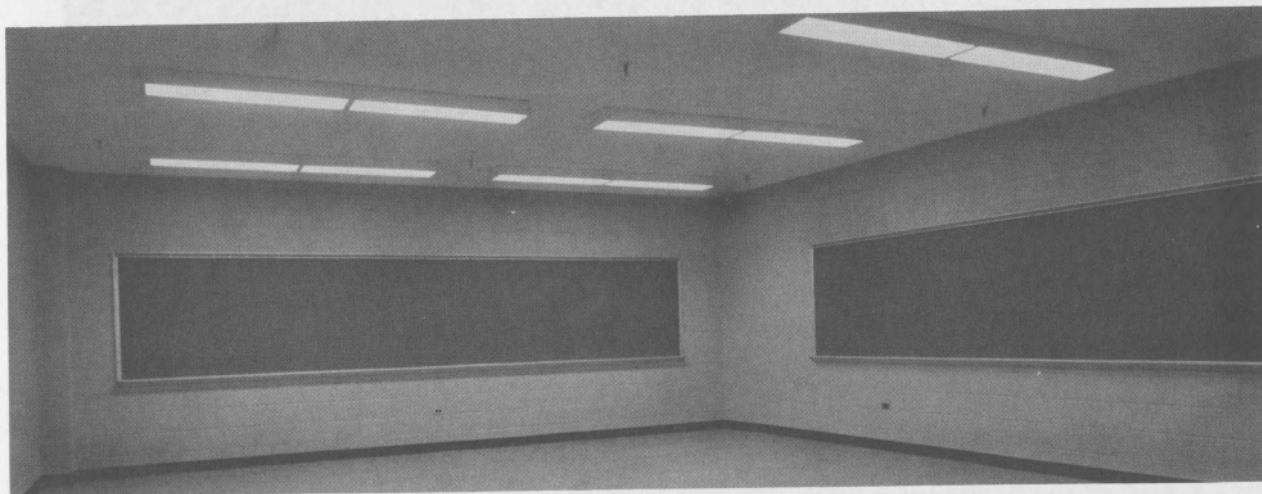


THE 75 SEAT LAB AND LECTURE ROOM HAS A SPECIAL SMOKE EXHAUST SYSTEM.

The Main Education Building also boasts a beautiful two story library, with a capacity for accommodating 11,000 volumes, catalogue cases, reader desks and display cases. Included for use by the National Fire Academy will be the New York Fire Department's excellent 7,000 volume fire service library. A large television studio and control room are located right in the building with provisions made for the possible future development of videotape programs for distribution around the country as well as closed circuit broadcast to the offices and classrooms located right on the site. A combination of permanently partitioned and flexibly arranged open office spaces are available in this building, accommodating up to 100 persons. Almost all of these desk spaces are already equipped with their own electricity and telephone connections. A large conference room which seats 40 persons is centrally located within the office area. Graphics, reproduction and photographic areas are also located within the building.



TELEPHONE AND ELECTRIC OUTLETS ARE ALREADY INSTALLED AT MOST DESK LOCATIONS



ONE OF THE EIGHT CLASSROOMS IN THE MAIN EDUCATION BUILDING

THE 550 SEAT MULTIPURPOSE AUDITORIUM

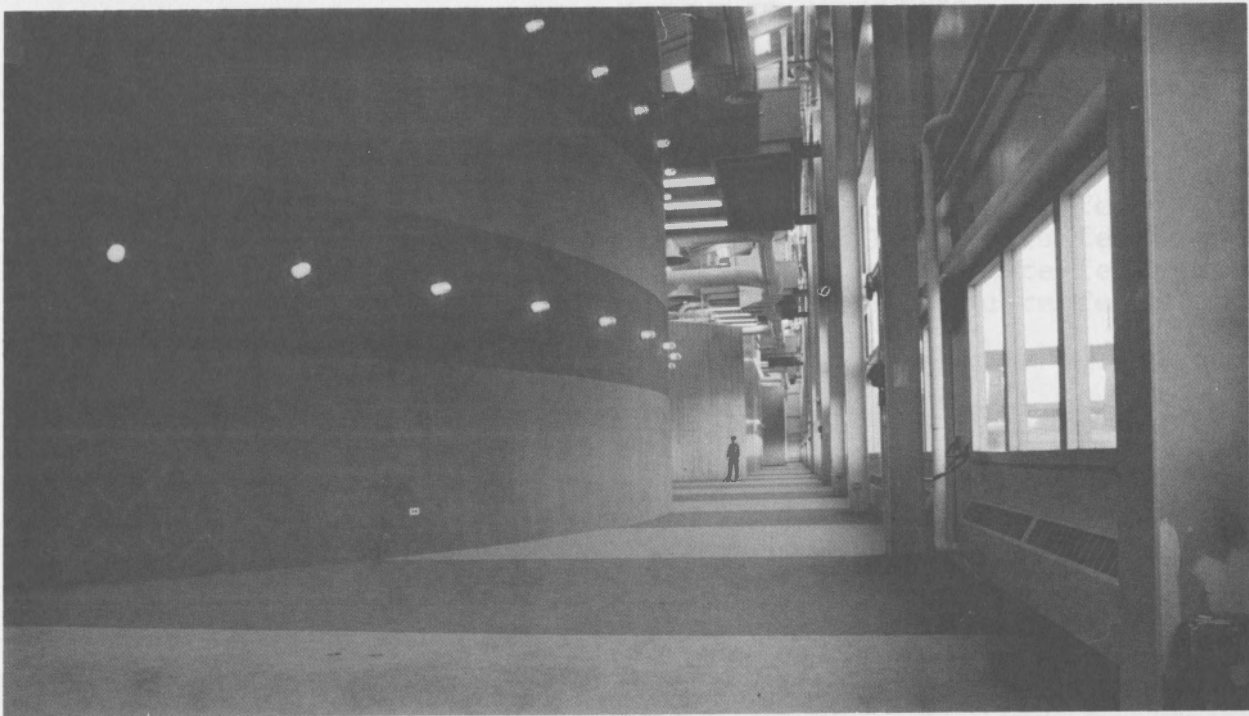
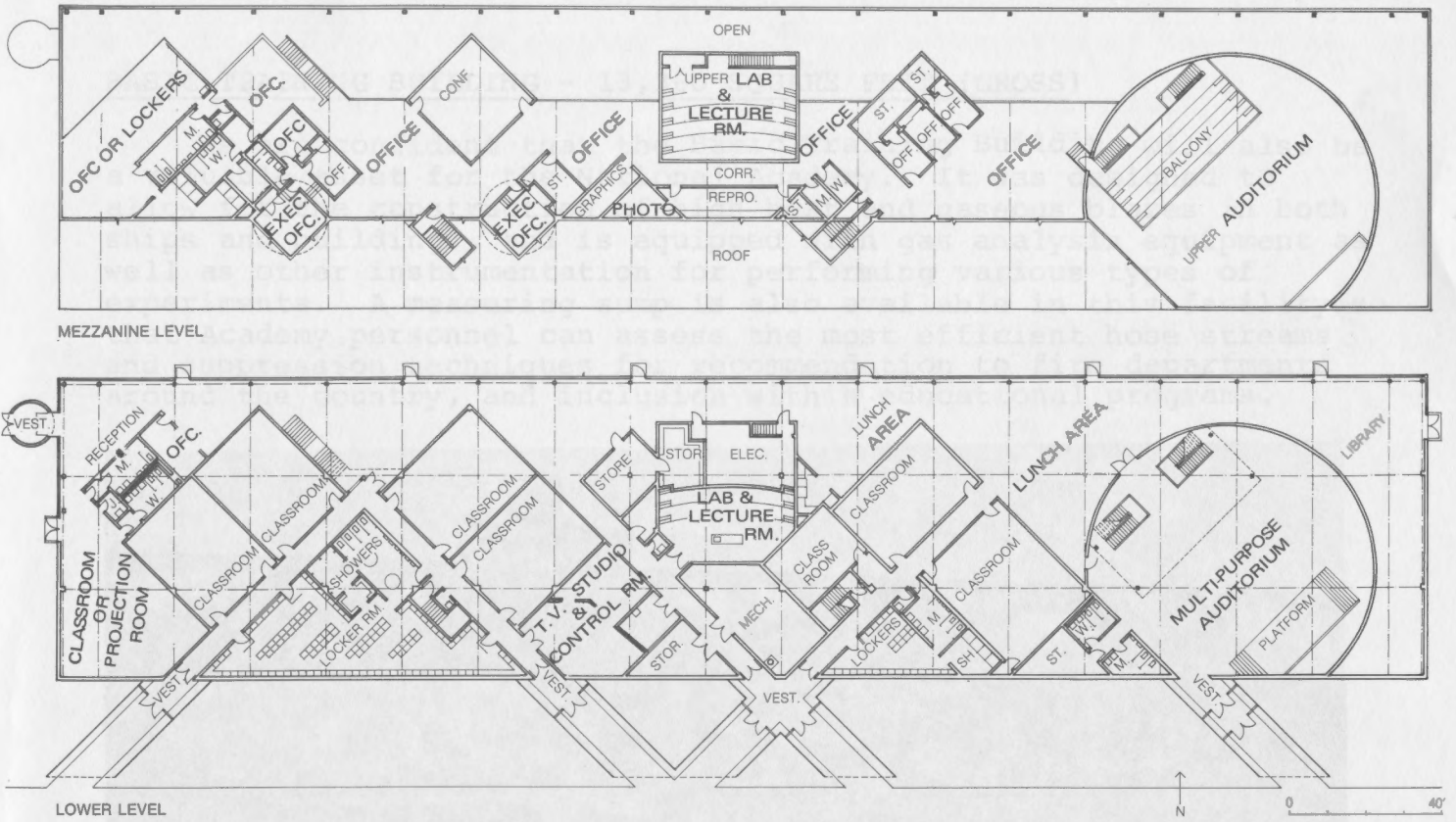


OFFICES OCCUPY THE SECOND FLOOR OF THE MAIN EDUCATION BUILDING
WHILE CLASSROOMS, AUDITORIUMS, AND PUBLIC SPACES LINE THE TWO STORY
MAIN HALL.



THE 550 SEAT MULTI-PURPOSE AUDITORIUM

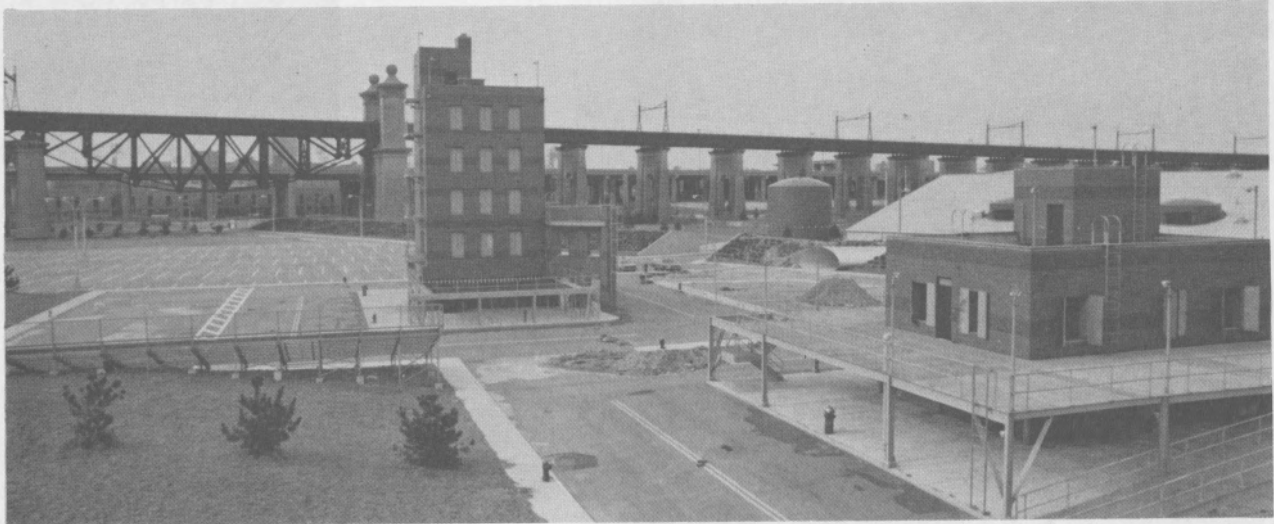
MAIN EDUCATION BUILDING



MAIN EDUCATION BUILDING - LOOKING WEST, PAST THE OUTSIDE OF THE MULTI-PURPOSE AUDITORIUM

BASIC TRAINING BUILDING - 13,360 SQUARE FEET (GROSS)

We are confident that the Basic Training Building will also be a valuable asset for the National Academy. It was designed to allow for the construction of high heat and gaseous blazes in both ships and buildings, and is equipped with gas analysis equipment as well as other instrumentation for performing various types of experiments. A measuring sump is also available in this facility so that Academy personnel can assess the most efficient hose streams and suppression techniques for recommendation to fire departments around the country, and inclusion within educational programs.



*THE BASIC TRAINING BUILDING IS TO THE RIGHT OF THE TRAINING TOWER.
THE 500 SEAT BLEACHERS ARE VISIBLE AT THE LOWER LEFT*

FOUR SIMULATION BUILDINGS - 22,558 TOTAL SQUARE FEET (GROSS)

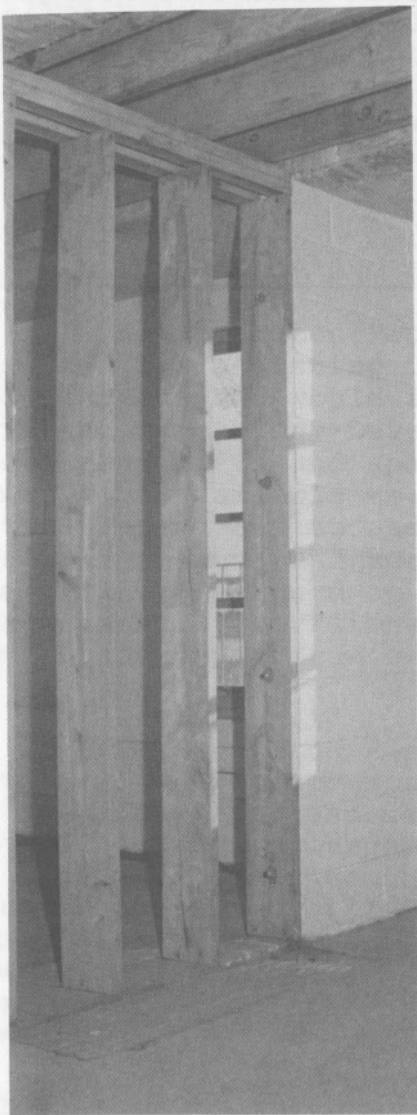
- . "Taxpayer" Structure - 6,898 square feet (gross)
- . "Tenement" Structure - 6,960 square feet (gross)
- . "Frame" Structure - 2,400 square feet (gross)
- . Training Tower - 6,300 square feet (gross)



*FROM LEFT TO RIGHT ON THIS "SIMULATED" CITY BLOCK ARE THE TAXPAYER,
TENEMENT AND FRAME STRUCTURES*



These are the four special buildings on the campus which are equipped to simulate a wide variety of structures and firefighting problems including "Tenements", "Taxpayers" (one story storefronts), and "frame dwellings". A training tower provides instructors and students with a variety of simulated building types, together with working standpipe and sprinkler systems.



AN EXAMPLE OF THE "EXPENDABLE STRUCTURE COMPONENT" USED IN THE SIMULATED STRUCTURES



A SIMULATION OF A SHIP'S HOLD IN THE BASIC TRAINING BUILDING

The "Taxpayer", "Tenement" and "Frame Dwelling" structures make use of what have been dubbed "expendable structural components"... parts of floors, ceilings and walls which are made of replaceable wooden pieces for the purpose of burning during training sessions, education program simulations, tests and experiments. Most of the partitions and bearing walls are constructed or lined with reinforced concrete with a special admixture, or fire brick, to resist high heat.

Virtually every type of fire hazard situation, ranging from rural bungalows to urban elevator skyscrapers can be safely simulated within this group of buildings, which are arranged in a typical city block. Tests of building materials, and fire detection and suppression equipment, together with demonstrations of techniques and procedures can be conducted in this controlled environment, where the same experiment can be safely replicated literally hundreds of times. In addition to its contributions to the Academy's programs, this facility would be a genuine and cost effective asset to both the NFPCA's Fire Technology Development Program and to the Commerce Department's Fire Research Center. Both of these units would benefit from the availability of such a well designed test site. They would undoubtedly operate in concert with the Academy and the New York Fire Department, who could supply manpower and other support for the various tests, evaluations and demonstrations which would be conducted.

APPARATUS REPAIR AND DEVELOPMENT BUILDING - 9,000 SQUARE FEET (GROSS)

The Apparatus Repair and Development Building would be ideally suited for assisting in virtually every element of the Academy's operations and would also be equipped to provide valuable support to the Technology Development Program of the NFPCA. This building contains lifts and specialized diagnostic and shop equipment which would be available to maintain fire apparatus and vehicles used by the Academy and to assist in the development and evaluation of new fire apparatus and accessories. A calibrated drafting pit has been specially designed to evaluate the capabilities of fire pumping equipment. Provisions have been made for the addition of a variety of other "apparatus oriented" facilities.

The Apparatus Repair and Development Building also contains a large conference room/classroom which was designed to be used for discussions and seminars concerning the subject of fire apparatus. Two large, 4,000 gallon gas and diesel fuel pumps are located adjacent to the building to service the many vehicles and apparatus which will be involved in operations at the site. The presence of these fuel pumps directly on the Academy's campus will save countless hours of shuttling to and from service stations or other installations for the provision of gas for the Academy's vehicles.

BREATHING APPARATUS BUILDING - 9,680 SQUARE FEET (GROSS)

The Breathing Apparatus Building would be an asset to efforts by the National Fire Administration and the Academy to improve the character and the quality of life support systems which are available to firefighters. Equipment for the testing and development of breathing apparatus would be located in this building's shops, together with compressors for replenishing the air consumed by the Academy's staff and students in demonstrations, tests and simulated fire operations.

It is anticipated that new equipment will be available to service and test the recently developed high compression, low weight NASA-Scott Air Masks. The presence of the Breathing Apparatus Building's equipment for replenishing compressed air directly on the site will undoubtedly diminish the time necessary to perform this vital function by obviating the need to "send out" to have tanks replenished.

JOINT MARINE BUILDING AND SIMULATED FIRE HOUSE COMPLEX - 11,000 SQUARE FEET (GROSS)

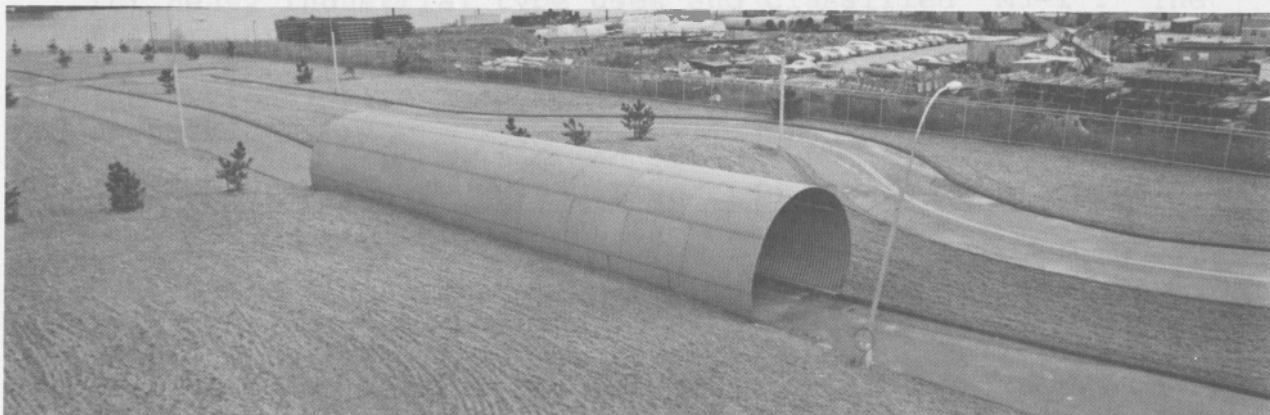
The Joint Marine Building and Simulated Fire House Complex, together with its adjoining 260 foot wharf and the planned periodic stationing of a New York City fire boat at this location will provide a useful focal point for the development of programs in Marine Fire Protection. The Marine Building contains two 35 seat classrooms and office space for up to 30 persons who could direct their efforts towards the development of programs in marine fire protection or other areas of interest to the Academy. The Simulated Fire House contains a mock-up of a typical fire house and is equipped with large observation windows so that a number of the different elements of fire house operations can be studied, and potentially improved. It also contains a 25 seat classroom. In addition to the training center's own 260 foot wharf, the Academy could also utilize the 1,500 foot wharf of the neighboring water pollution control plant.



FROM THE EAST RIVER, LOOKING INLAND -- THE 260 FOOT WARF, MARINE BUILDING AND SIMULATED FIRE HOUSE COMPLEX, BREATHING APPARATUS BUILDING AND THE APPARATUS REPAIR AND DEVELOPMENT BUILDING.

SIMULATED TUNNEL

A 100 foot long simulated subway tunnel has also been constructed on the site. The New York City Transit Authority has offered to install tracks and a subway car in this "tunnel" in order to provide a suitable facility for the development of techniques for dealing with subway fires and other emergencies.



BLEACHERS

Bleachers have been provided to seat 500 spectators for large outdoor lectures and demonstrations.

c. STATEMENT OF ZONING OR LAND USE RESTRICTIONS FOR SITE

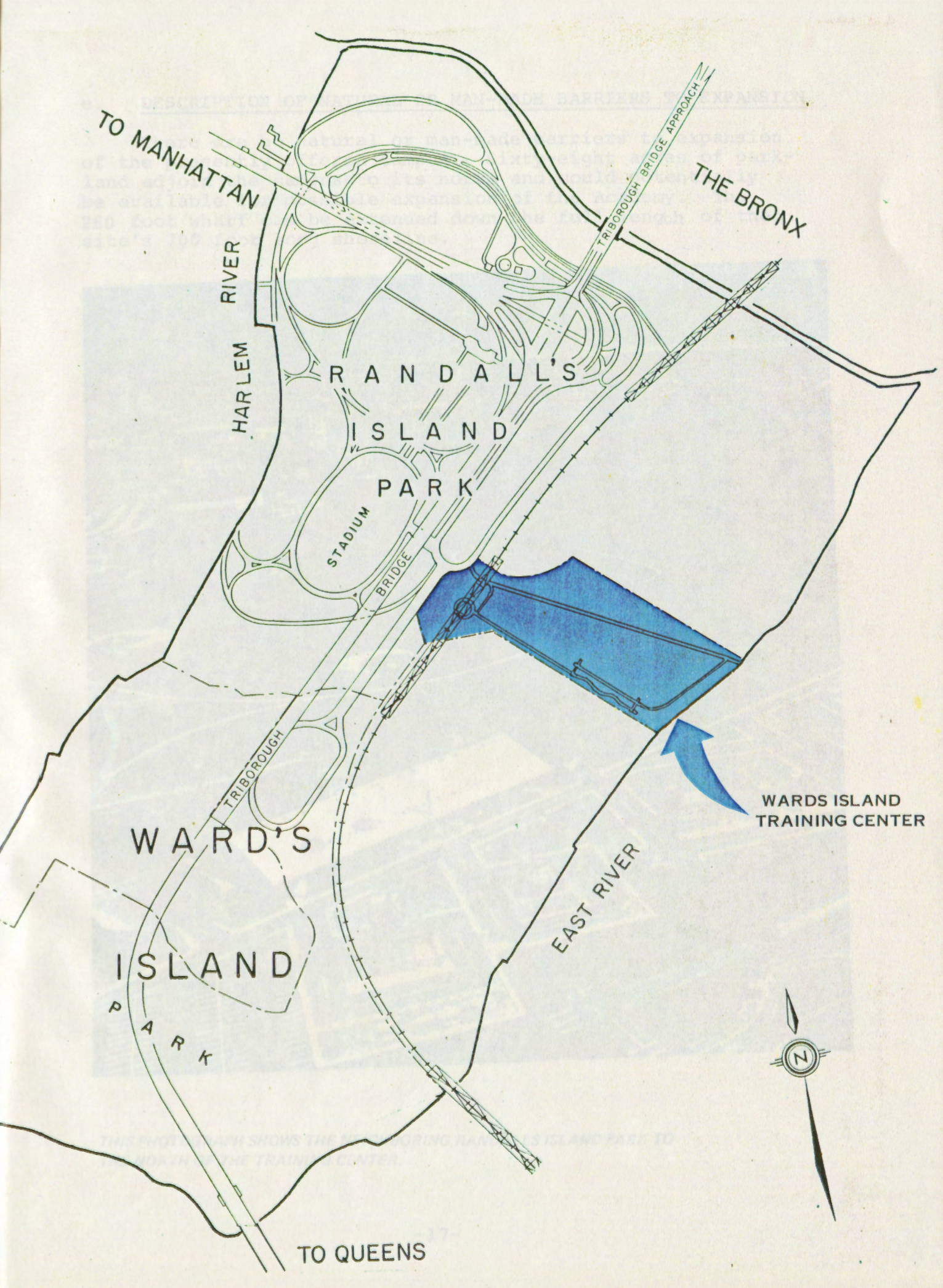
The entire 27 acre Wards Island training site is zoned for heavy industrial type uses and classified "M3-1". The 68 acre area directly contiguous to the northern boundary of the site, which has potential for expansion purposes of the National Fire Academy, is designated, mapped and used as parkland.

d. DESCRIPTION OF SURROUNDING LAND USE AND CONTIGUOUS ENVIRONMENT

The training center is adjoined on its western and northern sides by the Randall's Island City Park. The park consists of tennis courts, baseball and softball fields, bocci courts, walking and bicycling paths and roads. These facilities could be utilized by the Academy and its personnel, if desired. It is bounded on the east by the East River, a navigable waterway which connects the upper New York Bay with Long Island Sound. A large municipal water pollution control plant adjoins the site along its southern boundary.

A tall elevated railroad trestle passes from north to south just west of the training center's main campus. This trestle should not present any problems of access to park lands located to the west of the center, if expansion of the campus in that direction was desired.

The 22,000 seat Randall's Island Stadium is located just 350 feet west of the site and could be utilized by the National Academy for special presentations, gatherings of fire personnel or public relations programs.



TO MANHATTAN

HARLEM RIVER

RANDALL'S ISLAND PARK

STADIUM

BRIDGE

TRIBOROUGH BRIDGE APPROACH

THE BRONX

WARD'S

ISLAND PARK

EAST RIVER

WARDS ISLAND TRAINING CENTER

TO QUEENS



e. DESCRIPTION OF NATURAL OR MAN-MADE BARRIERS TO EXPANSION

There are no natural or man-made barriers to expansion of the presently offered campus. Sixty-eight acres of parkland adjoin the campus to its north and could potentially be available for possible expansion of the Academy. The 260 foot wharf can be extended down the full length of the site's 700 foot long shoreline.



THIS PHOTOGRAPH SHOWS THE NEIGHBORING RANDALLS ISLAND PARK TO THE NORTH OF THE TRAINING CENTER.

4. STATEMENT OF AVAILABILITY AND APPROXIMATE COST OF THE SITE AND IMPROVEMENTS THEREON

The Wards Island Campus, comprising 27 acres of land, nine buildings, and various other site improvements, is available for immediate acquisition and use by the National Fire Academy. The Center is presently 99% complete with only several "punch list" items remaining to be checked out by the City, the Urban Development Corporation and the contractors. As pointed out in Section 2, above, the UDC presently owns the nine buildings, roads, water systems and other site improvements comprising the Wards Island Training Center, having originally constructed them for New York with intentions of selling or leasing them to the City.

The UDC is cooperating with the City in this proposal and will assist in making immediately available to the Academy the buildings and site improvements comprising the Center for immediate sale or lease and conveyance to the National Fire Academy. A letter from Mr. Edwin C. Cohen, President and Chief Executive Officer of the UDC, attached to the appendix of this proposal, describes the high level of cooperation which UDC is contributing to this endeavor.

The National Academy would deal directly with the City in all matters pertaining to its acquisition of the site. The City, in turn, acting with the cooperation of the UDC, provides every assurance to the Site Selection Board that the site and its improvements can be delivered to the National Academy within reasonably short notice of its selection.

In order to best accommodate the various requirements of the Academy, the City has prepared a list of six options under which the National Fire Academy may acquire, through purchase or lease, the Wards Island Training Center. Under all of the purchase options the estimated prices which we are quoting include the land situated beneath the campus, or individual parts of the campus which the Academy may be interested in acquiring. Under the lease options, the land, comprising the 27 acre campus, would remain in the hands of the lessor. However, under both the lease and purchase arrangements, the National Fire Academy could potentially utilize some or all of the parkland adjoining the site, for expansion purposes, if necessary. The act of de-mapping parkland would of course require legislative approval.



The options which the City is making available to the Academy for its acquisition of the Wards Island Center are summarized immediately below and are explained in greater detail, with individual price estimates on the following pages.

BRIEF LIST OF OPTIONS

- OPTION I.A. PURCHASE BY THE NATIONAL FIRE ACADEMY OF ENTIRE CAMPUS FOR APPROXIMATELY \$14,000,000.
- OPTION I.B. LEASE BY THE NATIONAL FIRE ACADEMY OF ENTIRE CAMPUS FOR APPROXIMATELY \$1,206,000 PER ANNUM.
- OPTION II.A. PURCHASE BY THE NATIONAL FIRE ACADEMY OF SELECTED BUILDING(S) AND OTHER SITE IMPROVEMENTS.
- OPTION II.B. LEASE BY THE NATIONAL FIRE ACADEMY OF SELECTED BUILDING(S) AND OTHER SITE IMPROVEMENTS.
- OPTION III.A. PURCHASE BY THE NATIONAL FIRE ACADEMY OF INDIVIDUAL FACILITY ELEMENTS (OFFICES, CLASSROOMS, TEST STRUCTURES, LABORATORIES, SERVICE BUILDINGS, ETC.).
- OPTION III.B. LEASE BY THE NATIONAL FIRE ACADEMY OF INDIVIDUAL FACILITY ELEMENTS (OFFICES, CLASSROOMS, TEST STRUCTURES, LABORATORIES, SERVICE BUILDINGS, ETC.).

In addition to the six basic options listed above, the City is offering to the National Academy the opportunity to combine two or more of these options to create an acquisition arrangement which most directly serves the interests of the Academy, the NFPCA and the Congressional act which established these fine institutions.

Under a combination arrangement, the Academy could for example choose to purchase several buildings and site improvements under Option II.A., and also lease portions of additional buildings under Option III.B., while maintaining an option to purchase the remainder of the campus under Option I.A.

Should the National Academy decide not to immediately acquire the entire nine building complex under Option I.A., the City will extend to it a long term option to acquire additional elements of the campus, up to and including the entire campus, at prices based upon those now quoted for immediate purchase or lease. The City would pass along to the National Academy the extra finance carrying charges (@ 8-1/4% a year) which it will have to assume under such a deferred purchase or lease arrangement.

It is pointed out that the purchase prices and lease amounts quoted in each of the six options, do not include the cost of maintaining and operating the site. These costs would be borne by the National Fire Academy, with the exception of an annual pro-rated payment which the New York Fire Department would make, based upon the amount of campus facilities it utilizes each year.

Following factors:

1. The Wards Island site is of sufficient size and flexibility to accommodate both the full range of programs which the Academy may assume and the training needs of the New York Fire Department.
2. Both the Academy and the Fire Department will be involved in many similar functions including: preparation of instructional materials, video tapes and video cassettes; development and evaluation of, and training approaches in, the use of new educational equipment and technology; development of programs to enhance managerial and command performances in fire officers; etc. A cost effective process of pooling resources and expertise between the National Academy and the Fire Department will result in a maximization of the quality and quantity of programs administered in these and other areas, per dollar expended.
3. The Fire Department will make available to the National Academy the use of its fire companies, apparatus and manpower for research, program and equipment development and demonstrations, both at the Wards Island Center and in the laboratory of the streets and neighborhoods of New York - the most diverse fire research setting in the world.
4. The Fire Department will make available to the National Academy, for location in the Main Education Building, its renowned 7,000 volume fire service library.
5. The Fire Department will provide to the National Academy, and other units of the NFPA operating in New York, the assistance of its research and planning officers and civilian analysts.

OPTION I.B. LEASE BY THE NATIONAL FIRE ACADEMY OF CAMPUS
DETAILED LIST OF OPTIONS 0 PER ANNUM.

OPTION I.A. PURCHASE BY NATIONAL FIRE ACADEMY OF ENTIRE
CAMPUS FOR APPROXIMATELY \$14,000,000

Under this option, and for this price, the National Fire Academy would assume sole ownership and control of the 27 acre campus, with its buildings and improvements. As previously noted, the Academy could potentially utilize adjoining parkland, if necessary, for expansion purposes.

Under Option I.A., and under each of the other five options, we propose that the National Fire Academy and the New York Fire Department would formulate an agreement to facilitate a symbiotic sharing of manpower, program and facility resources of the two agencies. This agreement would be predicated upon the following factors:

1. The Wards Island site is of sufficient size and flexibility to accommodate both the full range of programs which the Academy may assume and the training needs of the New York Fire Department.
2. Both the Academy and the Fire Department will be involved in many similar functions including: preparation of instructional materials, video tapes and video cassettes; development and evaluation of, and training approaches in, the use of new educational equipment and technology; development of programs to enhance managerial and command performances in fire officers; etc. A cost effective process of pooling resources and expertise between the National Academy and the Fire Department will result in a maximization of the quality and quantity of programs administered in these and other areas, per dollar expended.
3. The Fire Department will make available to the National Academy the use of its fire companies, apparatus and manpower for research, program and equipment development and demonstrations, both at the Wards Island Center and in the laboratory of the streets and neighborhoods of New York - the most diverse fire research setting in the world.
4. The Fire Department will make available to the National Academy, for location in the Main Education Building, its renowned 7,000 volume fire service library.
5. The Fire Department will provide to the National Academy, and other units of the NFPCA operating in New York, the assistance of its research and planning officers and civilian analysts:

OPTION II.A.

PURCHASE BY NATIONAL FIRE ACADEMY OF
SELECTED BUILDINGS(S) AND OTHER SITE

OPTION I.B.

LEASE BY THE NATIONAL FIRE ACADEMY OF CAMPUS
FOR APPROXIMATELY \$1,206,000 PER ANNUM.

This option is virtually identical to Option I.A., except that it provides for the lease, instead of purchase by the National Fire Academy of the entire 27 acre campus.

The Academy could also exercise a long-term option to purchase any or all buildings or elements of the campus at any time during the period of the deferred purchase option. A substantial portion of the annual lease payments would be credited towards the deferred purchase price for the entire campus or its individual components.

Under this option, the ownership of the land beneath the nine buildings and other leased site improvements would remain with the lessor of the center, during the period of the lease. Upon the purchase by the National Fire Academy of these buildings or improvements, the land underneath them would be conveyed to the Academy.

PRICES FOR PURCHASE OF EACH OF THE MAJOR BUILDINGS
AND SITE IMPROVEMENTS AT THE MARLBOROUGH ISLAND CENTER

<u>FACILITY</u>	<u>PRICE</u>
MAIN EDUCATION BUILDING (40,000 sq.ft., gross)	\$3,416,000
TRAINING TOWER (6,300 sq.ft., gross)	572,000
BASIC TRAINING BUILDING (13,360 sq.ft., gross)	473,000
SIMULATED "TAXPAYER" STRUCTURE (6,890 sq.ft., gross)	386,000
SIMULATED "TENEMENT" STRUCTURE (6,960 sq.ft., gross)	374,000
SIMULATED "FRAME" STRUCTURE (2,400 sq.ft., gross)	150,000
APPARATUS REPAIR AND DEVELOPMENT BUILDING (11,000 sq.ft., gross)	831,000
BREATHING APPARATUS BUILDING (9,000 sq.ft., gross)	844,000

OPTION II.A.

PURCHASE BY NATIONAL FIRE ACADEMY OF
SELECTED BUILDING(S) AND OTHER SITE
IMPROVEMENTS AT THE BELOW QUOTED PRICES

Under this option, the National Fire Academy would assume sole ownership and control of one or more of the nine buildings and other site improvements at the Wards Island Center. The Academy would also receive ownership of the land situated beneath each of the buildings which it chooses to purchase, and could potentially obtain up to 68 acres of additional adjacent park land, for expansion purposes.

As pointed out in the introduction to this list of options, the Academy can, if it chooses to do so, combine its use of one or more initially purchased buildings with a lease or purchase of additional space or buildings, as its needs and finances require. The New York Fire Department would agree to a symbiotic sharing of all resources within the campus, regardless of ownership or leasehold of the buildings concerned.

TABLE #1

PRICES FOR PURCHASE OF EACH OF THE MAJOR BUILDINGS
AND SITE IMPROVEMENTS AT THE WARDS ISLAND CENTER

<u>FACILITY</u>	<u>PRICE</u>
MAIN EDUCATION BUILDING (40,000 sq.ft., gross)	\$3,416,000
TRAINING TOWER (6,300 sq.ft., gross)	572,000
BASIC TRAINING BUILDING (13,360 sq.ft., gross)	473,000
SIMULATED "TAXPAYER" STRUCTURE (6,898 sq.ft., gross)	386,000
SIMULATED "TENEMENT" STRUCTURE (6,960 sq.ft., gross)	374,000
SIMULATED "FRAME" STRUCTURE (2,400 sq.ft., gross)	150,000
APPARATUS REPAIR AND DEVELOPMENT BUILDING (11,000 sq.ft., gross)	831,000
BREATHING APPARATUS BUILDING (9,000 sq.ft., gross)	844,000

<u>FACILITY</u>	<u>PRICE</u>
JOINT MARINE BUILDING AND SIMULATED FIRE HOUSE COMPLEX.	\$ 770,000
(9,600 sq.ft., gross)	
WHARF	\$1,553,000
(260 feet long)	
ALL OTHER SITE IMPROVEMENTS	\$4,631,000
(includes water system, roads, parking lots, site lighting, landscaping, bleachers, simulated subway tunnel, etc.)	

OPTION II.B. LEASE BY THE NATIONAL FIRE ACADEMY OF
SELECTED BUILDING(S) AND OTHER SITE
IMPROVEMENTS FOR THE BELOW QUOTED AMOUNTS

This option is virtually identical to Option II.A., except that instead of offering to sell entire buildings or site improvements to the National Fire Academy, this option provides for the lease to the Academy of those same buildings.

Under this arrangement, the land beneath each of the leased buildings would remain in the hands of the lessor. However, as previously noted, the Academy could potentially utilize up to 68 acres of neighboring parkland for expansion purposes.

The lease amounts follow directly below.

JOINT MARINE BUILDING AND SIMULATED FIRE HOUSE COMPLEX	\$66,300
(9,600 sq.ft., gross)	
WHARF	133,800
(260 feet long)	
ALL OTHER SITE IMPROVEMENTS	399,800

TABLE #2

ANNUAL LEASE COSTS FOR INDIVIDUAL BUILDINGS
OR IMPROVEMENTS AT THE WARDS ISLAND CENTER

<u>FACILITY</u>	<u>ANNUAL LEASE COST</u>
MAIN EDUCATION BUILDING (40,000 sq.ft., gross)	\$294,300
TRAINING TOWER (6,300 sq.ft., gross)	49,300
BASIC TRAINING BUILDING. (13,360 sq.f.t, gross)	40,800
SIMULATED "TAXPAYER" STRUCTURE (6,898 sq.ft., gross)	33,300
SIMULATED "TENEMENT" STRUCTURE (6,960 sq.ft., gross)	32,200
SIMULATED "FRAME" STRUCTURE (2,400 sq.ft., gross)	12,900
APPARATUS REPAIR AND DEVELOPMENT BUILDING (11,000 sq.ft., gross)	71,600
BREATHING APPARATUS BUILDING (9,000 sq.ft., gross)	72,700
JOINT MARINE BUILDING AND SIMULATED FIRE HOUSE COMPLEX (9,600 sq.ft., gross)	66,300
WHARF (260 feet long)	133,800
ALL OTHER SITE IMPROVEMENTS	399,000



OPTION III. A.

PURCHASE BY THE NATIONAL FIRE ACADEMY OF
INDIVIDUAL FACILITY ELEMENTS (OFFICES,
CLASSROOMS, SERVICE BUILDINGS, TEST
STRUCTURES, LABORATORIES, ETC.) FOR THE
BELOW QUOTED PRICES

Under this option, the Academy would purchase selected offices, auditoriums, classrooms, labs, demonstration facilities, repair shops, etc., which it desires to utilize. As in the preceding two options, the Academy would be able to acquire additional elements of buildings, entire buildings, or the entire campus, together with adjoining parcels of land for expansion purposes, as its needs dictate.

This option has been specially conceived to enable the Academy to acquire the precise amount of physical plant which its budget or programs initially allow, while leaving maximum flexibility for rapid and reasonably priced expansion. If the Academy chose to commit itself to a modest sized operation, an arrangement could be effectuated whereby the New York Fire Department would operate those portions of the campus not needed by the Academy. To further this option, we have surveyed the New York Fire Department's future and maximum training needs and have completed a proposed plan for dividing up the facility elements of the site, between the Academy and the Fire Department.

Tables #4A and #4B summarize the results of this survey and present a list of those portions of the campus' facilities which would be available for purchase by the National Fire Academy under such an arrangement. These portions comprise an extremely large part of the total campus and would undoubtedly satisfy most every need of the Academy.

Table #3, which follows directly below, provides a statement of the estimated purchase prices for each of the major elements of the Wards Island Campus which would be of interest to the National Fire Academy.

STANDARD "TYPICAL" STRUCTURE	\$325,000
(6,898 sq.ft., gross)	
SIMULATED "TENEMENT" STRUCTURE	\$374,000
(8,960 sq.ft., gross)	
SIMULATED "FRAME" STRUCTURE	\$150,000
(2,400 sq.ft., gross)	

TABLE #3

PURCHASE PRICES FOR ENTIRE FACILITY ELEMENTS

MAIN EDUCATION BUILDING

Office Space	\$713,100
(5,000 sq.ft., net)	
Eight Classrooms	\$998,800
(7,000 sq.ft., net)	
Multi-Purpose Auditorium	\$713,100
(5,000 sq.ft., net)	
Lab and Lecture Room	\$171,400
(1,200 sq.ft., net)	
Library	\$287,000
(2,200 sq.ft., net)	
T.V. Studio	\$119,300
(400 sq.ft., net)	
Lunch Area	\$285,700
(2,000 sq.ft., net)	
Conference Room	\$128,000
(900 sq.ft., net)	
TRAINING TOWER	\$572,000
(6,300 sq.ft., gross)	
BASIC TRAINING BUILDING	\$473,000
(13,360 sq.ft., gross)	
SIMULATED "TAXPAYER" STRUCTURE	\$386,000
(6,898 sq.ft., gross)	
SIMULATED "TENEMENT" STRUCTURE	\$374,000
(6,960 sq.ft., gross)	
SIMULATED "FRAME" STRUCTURE	\$150,000
(2,400 sq.ft., gross)	

TABLE #A
SUGGESTED ALLOCATION OF CAMPUS
FACILITIES FOR JOINT PURCHASE
ON LEASE ARRANGEMENTS BETWEEN THE
ACADEMY AND THE FIRE DEPARTMENT

APPARATUS REPAIR AND DEVELOPMENT BUILDING

Lifts, Repair Floor & Diagnostic Facilities	\$ 757,800
(10,000 sq.ft., net)	
Classroom/Conference Room	\$ 74,500
(1,000 sq.ft., net)	

BREATHING APPARATUS BUILDING

Repair & Development Shops, Offices, Conference Room	\$ 470,800
(5,000 sq.ft., net)	

JOINT MARINE BUILDING AND SIMULATED
FIRE HOUSE COMPLEX

Classroom in Simulated Fire House Section . .	\$ 32,300
(400 sq.ft., net)	
Marine Building	\$ 544,100
(Includes 2 classrooms & Office space for 30 persons) (6,400 sq.ft., net)	

WHARF	\$1,553,000
(260 feet long)	

ALL OTHER SITE IMPROVEMENTS	\$4,631,000
(including water system, roads, parking lots, site lighting, landscaping, bleachers, simulated subway tunnel, etc.)	

As noted previously, the Academy could always purchase additional space and facilities, up to and including the entire campus, in addition to the suggested elements listed.

TABLE #4A

SUGGESTED ALLOCATION OF CAMPUS
FACILITIES FOR JOINT PURCHASE
OR LEASE ARRANGEMENTS BETWEEN THE
ACADEMY AND THE FIRE DEPARTMENT

(based on projected annual use levels)

<u>FACILITY ELEMENT</u>	<u>% AVAILABLE TO THE ACADEMY</u>	<u>% REQUIRED BY THE FIRE DEPT.</u>
MAIN EDUCATION BUILDING		
Office Space (5,000 sq.ft., net)	50%	50%
Eight Classrooms (7,000 sq. ft., net)	75%	25%
TRAINING TOWER (6,300 sq.ft., gross)	50%	50%
BASIC TRAINING BUILDING (13,360 sq.ft., gross)	50%	50%
SIMULATED "TAXPAYER" STRUCTURE (6,898 sq.ft., gross)	50%	50%
SIMULATED "FRAME STRUCTURE (2,400 sq.ft., gross)	50%	50%
BREATHING APPARATUS BUILDING		
Repair and Development Shops, Offices, Conference Room (5,000 sq.ft., net)	30%	70%

TABLE #2B

JOINT MARINE BUILDING AND SIMULATED
FIRE HOUSE COMPLEX

Classroom located in Simulated		
Fire House Section	50%	50%
Marine Building		
(Includes 2 classrooms and office	75%	25%
space for 30 persons)		
(6,400 sq.ft., net)		
WHARF		
(200 feet long)	75%	25%
ALL OTHER SITE IMPROVEMENTS		
(includes water system, roads,	50%	50%
parking lots, site lighting,		
landscaping, bleachers,		
simulated subway tunnel, etc.)		
REPAIR AND DEVELOPMENT BUILDING		
Repair Floor and	30%	70%
Diagnostic Facilities		
(13,000 sq. ft., net)		
Classroom/Conference Room	30%	70%
(1,000 sq. ft., net)		



TABLE #4B

The multi-purpose auditorium, lab and lecture room, library, T.V. studio, lunch area, conference room, apparatus lifts and repair floor and the automotive classroom are facility elements which, being subject to greatly varying levels of yearly demand, would be difficult to divide up between the Fire Department and the Academy. Therefore, under our proposal for joint ownership of the site, we would propose that the costs of the following facility elements be allocated as follows:

SUGGESTED ALLOCATION OF COSTS FOR
CERTAIN FACILITY ELEMENTS

<u>FACILITY ELEMENT</u>	<u>% ACADEMY</u>	<u>% FIRE DEPARTMENT</u>
MAIN EDUCATION BUILDING		
Multi-Purpose Auditorium (5,000 sq. ft., net)	90%	10%
Lab and Lecture Room (1,200 sq. ft., net)	80%	20%
Library (2,200 sq. ft., net)	70%	30%
T.V. Studio (400 sq. ft., net)	60%	40%
Lunch Area (2,000 sq. ft., net)	70%	30%
Conference Room (900 sq. ft., net)	60%	40%
APPARATUS REPAIR AND DEVELOPMENT BUILDING		
Lifts, Repair Floor and Diagnostic Facilities (10,000 sq. ft., net)	30%	70%
Classroom/Conference Room (1,000 sq. ft., net)	30%	70%

OPTION III.B.

LEASE BY THE NATIONAL FIRE ACADEMY OF
INDIVIDUAL FACILITY ELEMENTS (OFFICES,
CLASSROOMS, LABORATORIES, SERVICE
BUILDINGS, TEST STRUCTURES, ETC.)
FOR THE BELOW QUOTED PRICES

This option is virtually identical to Option III.A., except that instead of offering to sell individual elements of Wards Island facilities to the National Fire Academy, this option provides for the lease to the Academy of the same facilities.

A list of the annual payments which the City would ask to receive from the National Fire Academy for the lease of each of the facilities listed within Option III.A. follows below.

TABLE #5

ANNUAL LEASE COSTS FOR ENTIRE FACILITY ELEMENTS

<u>FACILITY ELEMENT</u>	<u>ANNUAL LEASE COST</u>
MAIN EDUCATION BUILDING	
Office Space. (5,000 sq. ft., net)	\$ 61,400
Eight Classrooms. (7,000 sq. ft., net)	\$ 86,057
Multi-Purpose Auditorium. (5,000 sq. ft., net)	\$ 61,400
Lab and Lecture Room. (1,200 sq. ft., net)	\$ 14,800
Library (2,200 sq. ft., net)	\$ 24,700
T.V. Studio (400 sq. ft., net)	\$ 10,300
Lunch Area. (2,000 sq. ft., net)	\$ 24,600
Conference Room (900 sq. ft., net)	\$ 11,000
TRAINING TOWER. (6,300 sq. ft., gross)	\$ 49,300

<u>FACILITY ELEMENT</u>	<u>ANNUAL LEASE COST</u>
BASIC TRAINING BUILDING (13,360 sq. ft., gross)	\$ 40,800
SIMULATED "TAXPAYER" STRUCTURE. (6,898 sq. ft., gross)	\$ 33,300
SIMULATED "TENEMENT" STRUCTURE. (6,960 sq. ft., gross)	\$ 32,200
SIMULATED "FRAME" STRUCTURE (2,400 sq. ft., gross)	\$ 12,900
APPARATUS REPAIR AND DEVELOPMENT BUILDING	
Lifts, Repair Floor and Diagnostic Facilities (10,000 sq. ft., net)	\$ 65,300
Classroom/Conference Room (1,000 sq. ft., net)	\$ 6,400
BREATHING APPARATUS BUILDING	
Repair and Development Shops, Offices, Conference Room. (5,000 sq. ft., net)	\$ 40,600
JOINT MARINE BUILDING AND SIMULATED FIRE HOUSE COMPLEX	
Classroom in Simulated Fire House Section (400 sq. ft., net)	\$ 2,800
Marine Building (includes 2 classrooms and office space for 30 persons) (6,400 sq. ft., net)	\$ 46,900
WHARF (260 feet long)	\$133,800
ALL OTHER SITE IMPROVEMENTS	\$399,000

5. DESCRIPTION OF NEARBY TRAINING AND EDUCATION INSTITUTIONS AND REPOSITORIES OF KNOWLEDGE AND INFORMATION; AND (6.) DESCRIPTION OF NEARBY FIRE RESEARCH AND TESTING FACILITIES.

To further the work of the Academy, New York City offers an unmatched concentration of educational institutions, research facilities, professional organizations, and other resources. Indeed, the City already can claim to be a leading center for fire science studies and firefighter training.

Present activities in this field include joint efforts by the New York Fire Department and the National Aeronautics and Space Administration in field-testing a prototype lightweight breathing apparatus, and in the development of standard safety and firefighting protocols in connection with the storage and transportation of liquefied natural gas. (Two LNG facilities are presently operating in New York City, with another -- the largest in the U.S. -- awaiting final Federal Power Commission approval).

The Polytechnic Institute of New York, located in Brooklyn, boasts extensive past experience, present work, and future commitments in fire science research. In joint projects with the Fire Department, Polytechnic scientists ignited controlled test fires in a condemned high-rise office building in Lower Manhattan and on a block of abandoned rowhouses in Brooklyn. The office building fire was carried out as part of extensive research now reflected in a stringent new fire code recently adopted by the City.

Polytechnic has advised the National Fire Protection and Control Administration on training programs for architects, builders, urban planners, interior designers, and others whose professions require a background in fire prevention and control.

Other relevant work by Polytechnic faculty members includes polymer flammability studies for the U.S. Bureau of Standards and NASA, fire safety analysis of the "atrium-type" hotel design for Portman Associates, and a subway safety review for the Washington Metro system.

Polytechnic is planning the establishment of a fire sciences research center, to be supported by private foundation sources, in a landmark Brooklyn firehouse made available by the City.

The Port Authority of New York and New Jersey (PANY & NJ) is another source of specialized fire control expertise. The Authority stages periodic controlled fire incidents for training purposes on the George Washington Bridge, and in the Holland and Lincoln Tunnels. In addition, PANY & NJ maintains an aircraft-fire

control training program for Port Authority Police assigned to Kennedy, LaGuardia, and Newark Airports. A training area with an aircraft shell is set aside at JFK Airport for this purpose.

The Nassau County volunteer fire training center -- one of the largest and most respected facilities for volunteer training -- is located near New York City in Bethpage, Long Island.

Apart from the Polytechnic Institute, major technical schools in New York City include the Pratt Institute of Technology and the Columbia University School of Engineering, which incorporates a school of mining.

John Jay College of Criminal Justice, located just 30 minutes away by car from Wards Island, offers one of the finest four year degree programs in fire sciences available in the country. A wide range of courses in fire prevention, fire engineering, fire command, investigation of arson, modern management techniques, information systems and data processing and industrial psychology are included within this institution's extensive curricula.

The Congress is an umbrella organization with over 500 members, among them construction firms, architectural and engineering concerns, building industry unions and public officials. A metropolitan area-based group, the Congress' officials estimate that 75 percent of its membership is engaged in national or international work.

The Congress represents a full cross-section of one of the nation's largest and most significant building industry communities. In addition, this organization provided vigorous support in the development of New York City's progressive new fire code.

Further interaction by Academy personnel with the engineering and construction professions would be aided by the presence in New York of the following major organizations:

- American Institute of Constructors
- American Institute of Consulting Engineers
- American Institute of Industrial Engineers
- American Society of Civil Engineers
- American Society of Safety Engineers, NYC Chapter

Because one major focus of the National Fire Academy will be the improvement of the quality of management in our nation's fire departments, the convenient location of the following management organizations in New York will undoubtedly be a matter of great interest to the Academy's board:

7. DESCRIPTION OF NEARBY "HANDS ON" FIREFIGHTING TRAINING FACILITIES, FIRE SERVICE ORGANIZATIONS AND ALLIED PROFESSIONS

Midtown Manhattan is the home of the Engineering Societies Building, a unique national center for this profession. This facility serves as the national headquarters for numerous professional groups with an aggregate membership of over 400,000, including the American Society of Laboratory Engineers, the American Society of Mechanical Engineers, the Institute of Electrical and Electronics Engineers, the American Institute of Mining Engineers, the American Institute of Chemical Engineers and the Illuminating Engineers Society. Professional activities in the building draw sixty to seventy thousand engineers from across the nation each year. This facility also houses the largest engineering library in the world.

To the extent that Academy programs require interaction with the building and design industry, the National Fire Prevention and Control Administration will find a representative and receptive partner in the New York Building Congress.

The Congress is an umbrella organization with over 500 members, among them construction firms, architectural and engineering concerns, building industry unions and public officials. A metropolitan area-based group, the Congress' officials estimate that 75 percent of its membership is engaged in national or international work.

The Congress represents a full cross-section of one of the nation's largest and most significant building industry communities. In addition, this organization provided vigorous support in the development of New York City's progressive new fire code.

Further interaction by Academy personnel with the engineering and construction professions would be aided by the presence in New York of the following major organizations:

- American Institute of Constructors
- American Institute of Consulting Engineers
- American Institute of Industrial Engineers
- American Society of Civil Engineers
- American Society of Safety Engineers, NYC Chapter

Because one major focus of the National Fire Academy will be the improvement of the quality of management in our nation's fire departments, the convenient location of the following management organizations in New York will undoubtedly be a matter of great interest to the Site Selection Board:

- American Management Association
- American Foundation for Management Research
- Graduate School of Business Administration, Columbia University
- Graduate School of Business Administration, New York University

In addition to the exceptional "hands on" fire training facilities available right on the Wards Island site, two excellent, specialized "hands on" training centers are located nearby. These facilities, which were mentioned in Sections 5 and 6 of this proposal, are the New York Port Authority's Tunnel and Aircraft Crash School and the Nassau County Fire Training Center, which specializes in the training of volunteer firemen.

The Training Center Site. Access ramps convey vehicles from the Bridge to the Center's Entrance, where ample parking facilities are available for 300 cars. Hundreds of additional spaces are located several hundred feet away, at the Randall's Island Stadium.

Average car travel times to the three major airports serving the Wards Island Training Center are as follows:

- .. LaGuardia Airport - 10 mins.
- .. John F. Kennedy International Airport - 30 mins.
- .. Newark Airport - 50 mins.

The Center is only 30 minutes away by car from mid-town Manhattan. The Port Authority Bus Terminal, located in mid-town, offers long distance bus connection to virtually every part of the Country.

Train service is available at Penn Station and Grand Central Station, which are also located in mid-town. A special high speed express, "The Metroliner" provides quick, comfortable rail transit between Washington D.C. and New York.

8. DESCRIPTION OF SURROUNDING OR NEARBY COMMUNITIES WITH RESPECT TO HEALTH FACILITIES, PUBLIC EDUCATION, RELIGIOUS AND CULTURAL OPPORTUNITIES, FAMILY HOUSING AND TRANSIENT RESIDENTIAL SERVICES (HOTELS, MOTELS).

CULTURAL

New York offers the world's richest concentration of cultural and recreational resources. The City boasts nearly 50 museums, over 30 Broadway and Off-Broadway theaters, and more than 400 moviehouses.

8. DESCRIPTION OF THE PROXIMITY OF PUBLIC TRANSPORTATION SERVICES AND HIGHWAYS

The Wards Island Training Center is directly served by a City bus line which is routed directly in front of the Center's gate and travels to and from Manhattan.

The Training Center can be approached by car from the North via the Bruckner Expressway, from the East and Long Island via the Grand Central Parkway and from Manhattan via the Franklin D. Roosevelt Drive. Each of these routes, together with many smaller roads running parallel to them, lead to the Triborough Bridge, which lies directly over the Training Center Site. Access ramps convey vehicles from the Bridge to the Center's Entrance, where ample parking facilities are available for 300 cars. Hundreds of additional spaces are located several hundred feet away, at the Randalls Island Stadium.

Average car travel times to the three major airports serving the Wards Island Training Center are as follows:

- . LaGuardia Airport - 10 mins.
- . John F. Kennedy International Airport - 50 mins.
- . Newark Airport - 60 mins.

The Center is only 30 minutes away by car from mid-town Manhattan. The Port Authority Bus Terminal, located in mid-town, offers long distance bus connection to virtually every part of the Country.

Train service is available at Penn Station and Grand Central Station, which are also located in mid-town. A special high speed express, "The Metroliner" provides quick, comfortable rail transit between Washington D.C. and New York.

9. DESCRIPTION OF SURROUNDING OR NEARBY COMMUNITIES WITH RESPECT TO HEALTH FACILITIES, PUBLIC EDUCATION, RELIGIOUS AND CULTURAL OPPORTUNITIES, FAMILY HOUSING AND TRANSIENT RESIDENTIAL SERVICES (HOTELS, MOTELS).

CULTURAL

New York offers the world's richest concentration of cultural and recreational resources. The City boasts nearly 50 museums, over 80 Broadway and Off-Broadway theaters, and more than 400 moviehouses.

Recreational facilities include five zoos, three botanical gardens, 18 miles of beaches, over 60 miles of bicycle paths, 47 miles of bridle paths, over 500 public tennis courts, and 11 golf courses. Public parkland, including the new Gateway National Park, approximately equals the area of Cleveland.

The New York metropolitan area is the home turf for two professional teams each in baseball, football, basketball, and ice hockey. Soccer, pro and amateur tennis, flat and harness racing, and boxing are other sports attractions.

EDUCATION

The City of New York maintains a public school system of over 900 schools, serving 1.1 million students. The public education program includes a unique network of specialized academic high schools and vocational schools ranging from fashion design to aviation trades. Over 800 private and parochial schools operate in the five boroughs.

The City and State support one of the nation's largest public systems in higher education, the City University of New York. All told, the metropolitan areas has 78 colleges and 40 graduate schools. Many of these institutions maintain evening and adult education degree-granting programs.

HOUSING

New York City and the immediately surrounding suburban counties offer housing opportunities unmatched anywhere in variety and price range. Two million single family houses dot the region. New York City has over two million residential apartments. Housing options range from brownstones to high-rise apartments, to detached one and two-family houses.

Landmark designations for historic districts and special zoning incentives pioneered in New York work to preserve and enhance many unique residential communities in all boroughs.

HOTELS AND MOTELS

Available transient accommodations in New York City include over 100,000 hotel and motel rooms, most concentrated in Mid-Manhattan. Daily rates range from \$17-65, with numbers of rooms available at each end of the scale.



HEALTH

New York City offers an unsurpassed level of health care for its citizens and visitors. Hundreds of hospitals, tens of thousands of practicing physicians and the availability of specialized burn centers in our City should satisfy virtually every health need of the Academy, its programs, Staff and Students.

RELIGION

Virtually every religious denomination in the United States is represented by a sizeable practicing community with houses of worship in New York.

10. DESCRIPTION OF COMMUNITY SUPPORT OR INTEREST IN SERVING AS THE ACADEMY LOCATION

This proposal is being made by the Mayor, who on behalf of the citizens of New York, has publicly welcomed the Academy to locate itself in our City. Considerable assistance in this effort has been given by two distinguished representatives from our City, Congressman John Murphy and Charles Rangel.

Additionally, the presidents of both of the major fire unions in the City, the Uniformed Fire Officers Association (UFOA) and the Uniformed Firefighters Association (UFA) have expressed their support for the proposal. A letter of support from Chief Edwin Jennings, President of the UFOA is included within this section. Additional letters of support from leaders of the community will be mailed separately to the Site Selection Board.

The New York Daily News has taken an editorial position strongly supporting the City's proposal. A copy of that editorial, which appeared on Wednesday, March 24, 1976, is included directly below.

THE 'FOR SALE' SIGN

—Is up on the new, \$13 million Fire Department training center on Wards Island, which the city cannot afford. Reps. Charles Rangel (D-Manhattan) and John Murphy (D-C-Staten Island) are trying to interest Washington in buying it as the site for its planned National Fire Academy.

The deal looks like a natural. The federal school couldn't hope to find a more up-to-date facility, or duplicate it at anywhere near the "manufacturer's list" price at which it is being offered. Go to it, congressmen. It sounds like we have an offer they can't refuse.

11. DESCRIPTION OF LOCAL CLIMATE AND ENVIRONMENTAL CHARACTERISTICS

A summary of climatological data for the City of New York, as prepared by the National Climatic Center of NOAA/Department of Commerce is included as part of this section.

The New York Metropolitan area is close to the path of most storm and frontal systems which move across the North American continent. Therefore, weather conditions affecting the city most often approach from a westerly direction. New York City can thus experience higher temperatures in summer and lower ones in winter than would otherwise be expected in a coastal area. However, the frequent passage of weather systems often helps reduce the length of both warm and cold spells, and is also a major factor in keeping periods of prolonged air stagnation to a minimum.

Although continental influence predominates, oceanic influence is by no means absent. During the summer local sea breezes - winds blowing onshore from the cool water surface - often moderate the afternoon heat. As would be expected, the effect of the sea breeze diminishes inland. On winter mornings, ocean temperatures which are warm relative to the land reinforce the effect of the city heat island and minimum temperatures are often 10 to 20 degrees lower in the inland suburbs than in the central city. The relatively warm water temperatures also delay the advent of winter snows and make heavy snowfalls rare before late December. Conversely, the lag in warming of water temperatures keeps spring temperatures relatively cool. One year-round measure of the ocean's influence is the small average daily variation in temperature; another is the average length of the frost-free season - more than 200 days.

Precipitation is moderate and distributed fairly evenly throughout the year. Most of the rainfall from May through October comes from thunderstorms. It is therefore usually of brief duration and sometimes intense. Heavy rains of long duration associated with tropical storms occur infrequently in late summer or fall. For the other months of the year precipitation is more likely to be associated with widespread storm areas, so that day-long rain, snow or a mixture of both is more common. Precipitation accompanying winter storms sometimes starts as snow, later changes to rain and perhaps briefly back to snow before ending. Coastal storms, occurring most often in the fall and winter months, produce on occasion considerable amounts of precipitation and have been responsible for record rains, snows, and high winds.

The average annual precipitation is reasonably uniform within the city but is higher in the northern and western suburbs and less on eastern Long Island. Annual snowfall totals also show a consistent increase to the north and west of the city with lesser amounts along the south shores and the eastern end of Long Island, reflecting the influence of the ocean waters. Relative humidity averages about the same over the metropolitan area except again that the immediate coastal areas are more humid than inland locations.

12. DESCRIPTION OF THE AVAILABILITY OF LOCAL VENDORS AND OTHER SUPPORT SERVICES

New York City is the nation's leading center of wholesale, retail, and service activity. Over 70,000 retailers, 25,000 wholesalers, and 57,000 service establishments are represented in the City. In each category, New York exceeds the totals for the next several largest cities combined.

13. DESCRIPTION OF THE AVAILABILITY OF WATER, UTILITIES AND SEWER FACILITIES

WATER

The water system at the Wards Island Center is supplied by normal City water supply at the property link of the site. The supply of water to the site is at 700 GPM into a 200,000 gallon ground level water tank whose sole purpose is to supply the necessary pressure and volume of water for training purposes and the domestic water required for the site.

In conjunction with this water tank system is a sophisticated compact pressure pumping system which is comprised of four major pumping units: one jockey pump which pumps at 100 GPM and whose sole purpose is to keep the 20,000 gallon water tank "topped off" and three major pumps each of which pumps at 1,000 GPM for a composite total of 3,000 GPM at 60 PSI. The volume of water may be increased to 4,000 GPM at 40 PSI by adjustments to the system. As the demand for water is made, each of the three 1,000 GPM pumps comes "on line" to maintain the required water volume and pressure.

The 200,000 gallon water tank supplies a large variety of hydrants, 35 in number and multiple training standpipe and sprinkler systems in the demonstration, test and simulation buildings.

There is a complete water piping system at the site's wharf to accommodate two large boats with all connections for wharfside operations.

ELECTRIC DISTRIBUTION SYSTEM

The main distribution system for electric power is by Con Edison through an above the ground transformer vault located on the site. The supply characteristic is 120/208 volts, three phase four wires with a main bus rating of 4,000 AMPS. This capacity supplies the entire power requirements for the nine buildings with adequate spares throughout for expansion.



The Education Building is backed up with a 225 KW generator for automatic emergency use. The quantity of power supplied by this equipment makes the Education Building 100% useable..

The Breathing Apparatus Building and the Marine Building and Simulated Fire House Complex are also backed up with a 225 KW generator which makes each of these buildings 100% useable during power problems.

A complete power system is available at wharfside for the operations of two large boats with all appropriate connections and accessories.

SEWAGE SYSTEM AND STORM WATER

The sewage system is of standard construction for the New York City area. Its effluent returns to the Randalls Island system which, in turn, is processed through the Wards Island Treatment Plant.

There is a complete sewage system at wharfside for dumping waste from tied-up boats. This waste is pumped into a holding tank which, in turn, is pumped into the Randalls Island system.

The storm water system is highly oversized to accommodate the run-off from the training operations and the standard rainfall for the area. This water, in turn, flows into the East River at several locations.

A P P E N D I X

CONTENTS

- A. Training Needs of the New York Fire Department
- B. Description of the Architectural Importance of the Wards Island Training Center
- C. Analysis of the Reasonability of the Prices for the Wards Island Campus, as Performed by Mr. Edward A. Downe, Cost Trends Editor of "Engineering News Record"
- D. Analysis of the Issue of Travel Time and Travel Distance Between the NFPCA Headquarters and the National Fire Academy.
- E. Letter of Support and Cooperation From the President of the New York State Urban Development Corporation.
- F. Letter of Support and Cooperation From the Fire Commissioner of New York City
- G. Letter of Support and Cooperation From the President of the Fire Officers Union

A. TRAINING NEEDS OF THE NEW YORK FIRE DEPARTMENT

The Wards Island Training Center was originally constructed for the purpose of strengthening the quality of fire education programs offered by the New York Fire Department. The City's fiscal condition and the unlikelihood of hiring new probationary firemen resulting in reduced facility requirements combined with the flexibility of the Center have led to the submission of this proposal, which offers the Wards Island Campus to the National Fire Academy.

The New York Fire Department must, however, retain the right to use the site permanently to fulfill its training needs following the acquisition of the center by the National Fire Academy, no matter which of the six basic purchase or lease options are selected. The exact form of this arrangement could be easily worked out following the formal selection of the site. As pointed out in great detail on page 24 of this proposal, the joint usage of the Wards Island Center should be mutually beneficial for the Academy and the Fire Department.

The survey which we conducted of the space needs and availabilities for the center indicated that because of the major differences in program focus and facility requirements of the Academy and the Fire Department, and because of the great amount of designed-in flexibility of the Wards Island Campus, there would be sufficient space for the Fire Department, even if the Academy were to expand its operations to encompass the full range of activities identified in the March 17, 1976, issue of the Federal Register, under "Option 2".

One exception to this rule was that the City might have to construct some additional office space if the total number of full-time faculty and professional staff employed on-site by the Academy exceeded 90 persons. This additional space would, of course, be built at the City's own expense. The necessity of building such an addition to the campus to accommodate the Fire Department's needs is certainly quite remote, at present.

B. DESCRIPTION OF THE ARCHITECTURAL IMPORTANCE OF THE WARDS ISLAND TRAINING CENTER

One of the most important reasons why we feel that the Wards Island Training Center should be selected as the site for the National Fire Academy is that the center possesses the architectural stature and design recognition necessary for such a nationally important and vital function, as the Academy.

The Wards Island Center has already received glowing reviews in numerous architectural journals, including a publication from Japan. (A copy of the Japanese article will be forwarded to the Board.) The Center's design excellence transcends mere aesthetics, for it has also been directed towards achieving a functional composition which responds more directly to the needs of fire education, than any other facility in the country.

One example of the careful planning that went into the design of the campus is the man-made berm of earth which rises ten feet off the ground, to functionally separate the quiet intellectual and scholarly environs of the Main Education Building from the activities ensuing at the demonstration, simulation and specialized buildings.

Similar functional articulation is achieved within the halls of the Main Education Building where each major type of space (classrooms, laboratory, auditorium) exists as a separate and free standing "mini-building". Each of the "mini-buildings" is covered in a different material. Architecture critic Paul Goldberger, writing in Progressive Architecture noted that the "interior street ...creates a sense of grandeur and community without using the traditional solutions of a formal hall or central court". A complete color re-print of Mr. Goldberger's article is included following this section.

It should also be pointed out that the architectural firm which designed the Wards Island Center - Hardy, Holzman, Pfeiffer Associates, is one of the most respected and well known firms specializing in the design of educational facilities.

Crossing signals

Paul Goldberger

February 1976



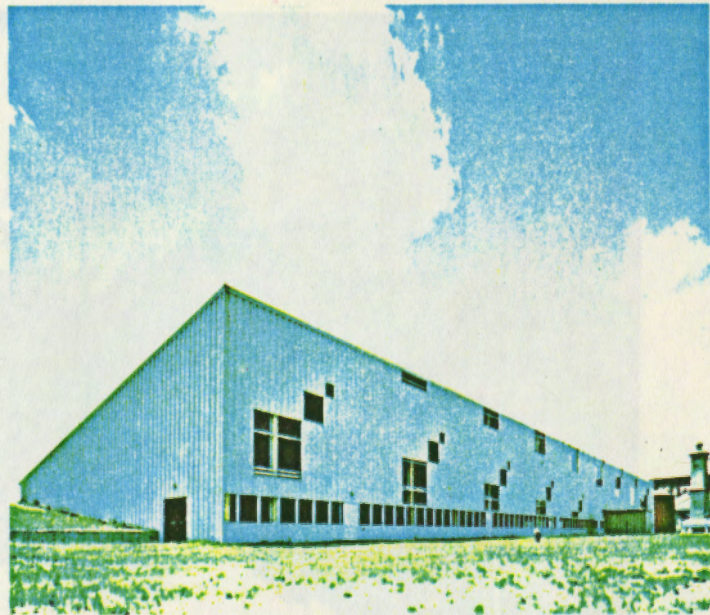
Progressive Architecture

At Hardy Holzman Pfeiffer's Firemen's Training Center in New York, the familiar is found in unfamiliar places, and things that look most real are least real.

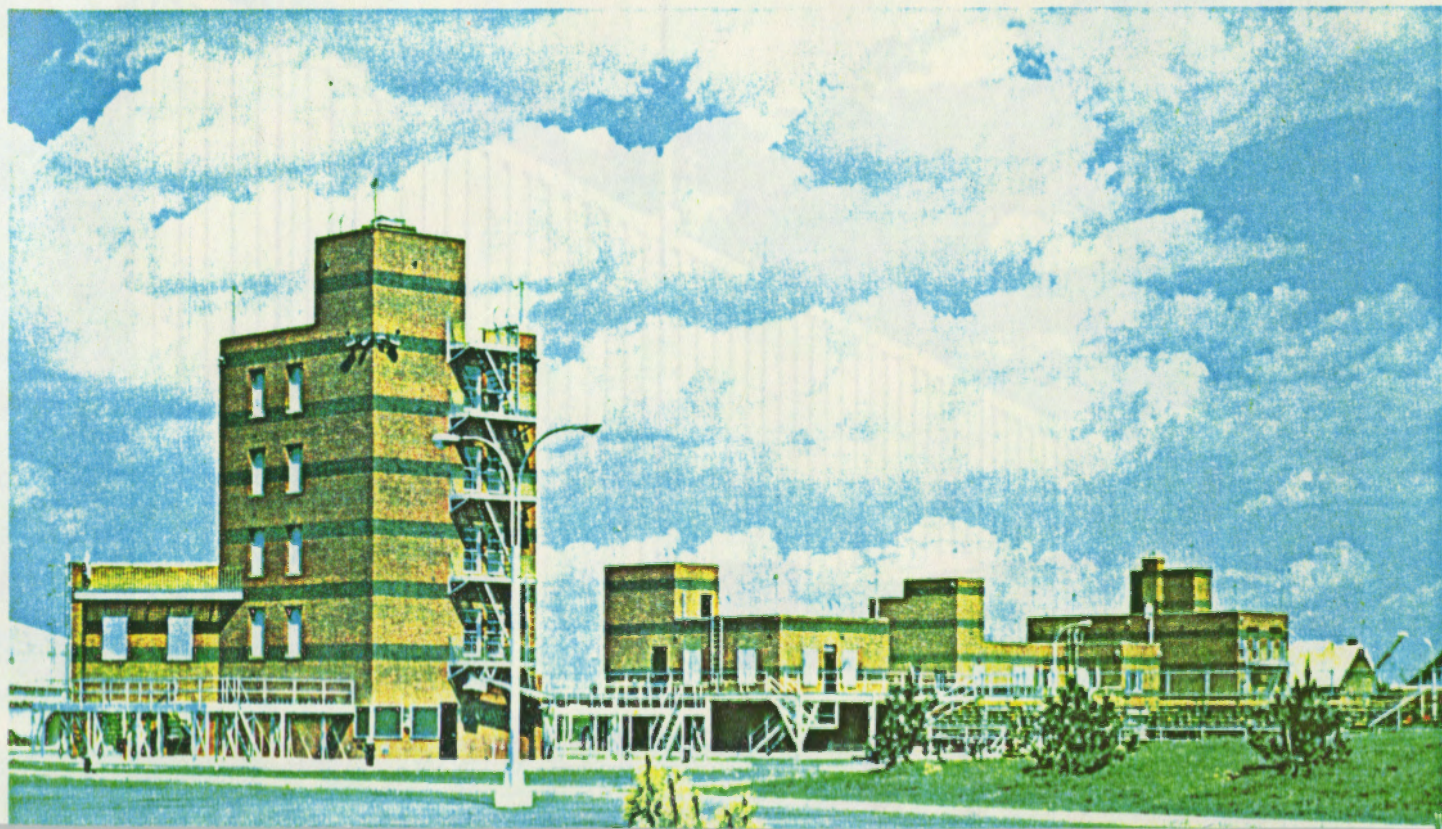
Hardy Holzman Pfeiffer, as a firm, does not welcome categorization. Its work is probably closer to the brashness of Charles Moore than anything else, but that hardly explains it—theirs is more an architecture of collage than Moore's is; it is rich in visual elements that gains its validity as much from juxtaposition as from its inherent meaning.

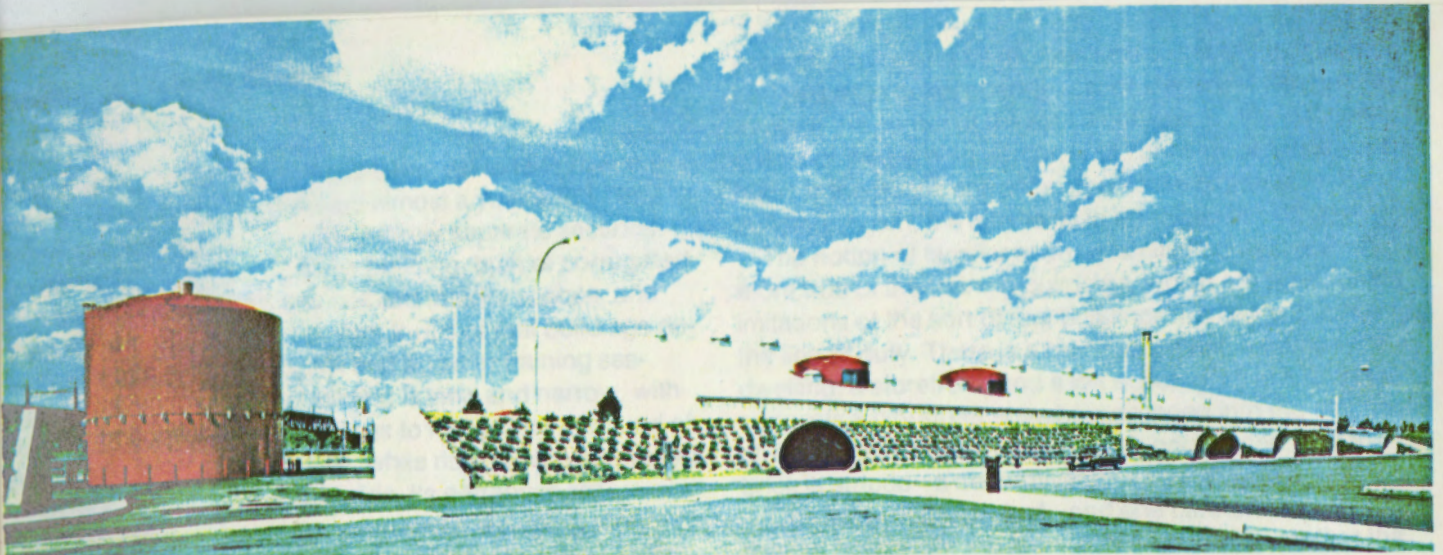
A case in point is the Firemen's Training Center on Ward's Island in New York City, a nine-building complex built by the New York State Urban Development Corporation as a turnkey developer for the city. (As a result of bu-

Author: Paul Goldberger is architecture critic of *The New York Times*.



Brick training buildings (below) "burn down" in training sessions.





The corrugated metal administration and education building (this page and facing page top) is entered by sewer ducts through bermed earth.



Firemen's Training Center

reaucratic complications, the city has yet to take over the \$11.2 million complex, finished almost a year ago.) The training center consists of two entirely separate sections—an administrative and teaching building, built of corrugated metal and glass, with loudly colored interior spaces, and the actual training buildings, mock-ups of real buildings designed to "burn down" again and again in training sessions. The administrative building is long and narrow, with a roof that is sloped so steeply as to merge into a mound of raised earth on the south side, while rising to the equivalent of several floors on the north side. Its entrances are huge red-painted sewer ducts set into the sloping roof.

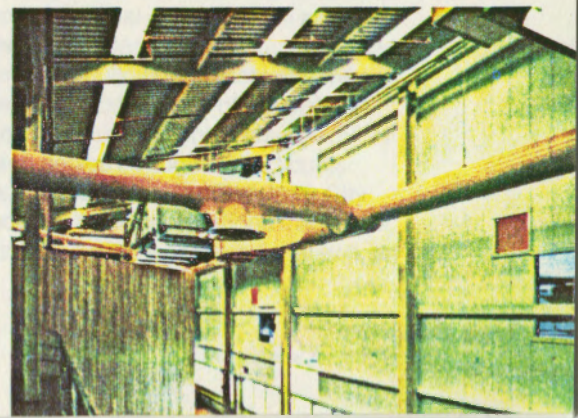
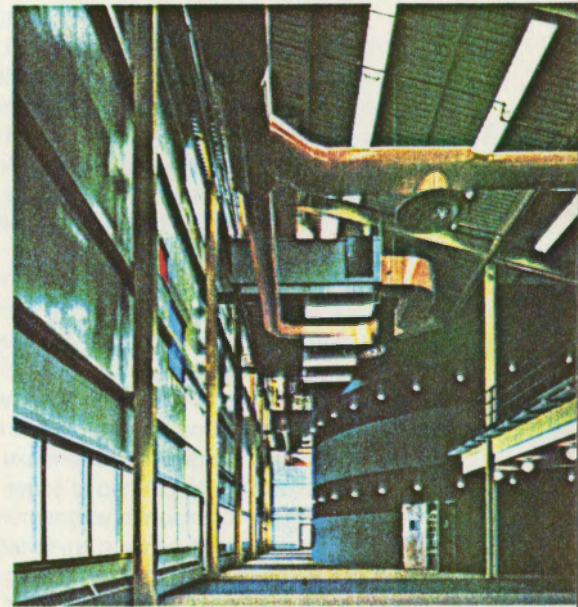
The duct entrances are a typical Hardy Holzman Pfeiffer element—an industrial form, given new meaning by its un-

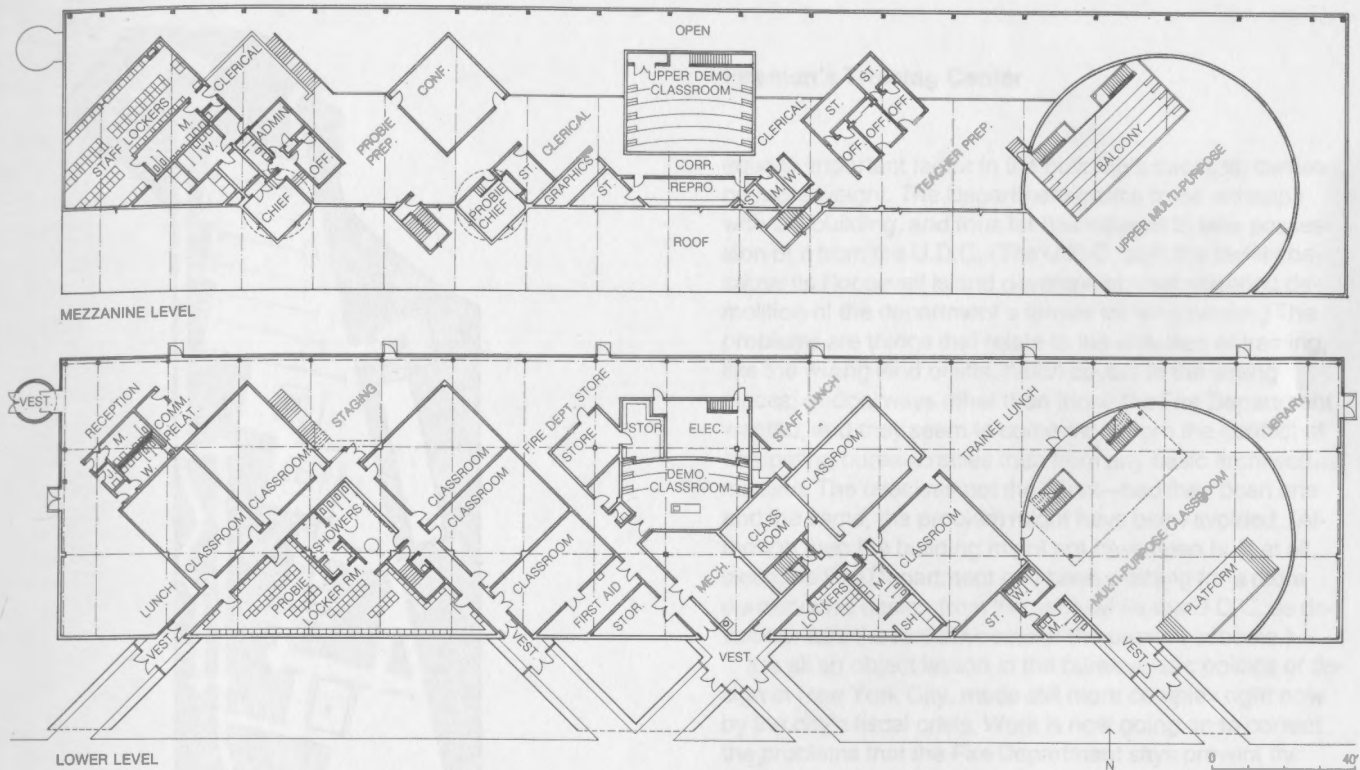
expected color and by its even less-expected role as an entrance. Large tanks operate in a similar vein—two are thrust through the center of the roof as offices for the administrators of the training center, while another serves as vestibule for the public entrance around the higher side of the building. Again, the familiar is in an unfamiliar context.

The notion of familiar in an unfamiliar context is even more true of the training buildings, which are affectionate imitations of the sort of real buildings firemen encounter in the line of duty. There is a mock tenement, a frame-type dwelling, a storefront, and a loft building, all in a row that suggests a city street somehow dropped into the emptiness of Ward's Island. The buildings are brick-faced, and the brick is striped—a decorative gesture that works well.

One irony of the project—and one cannot imagine that this did not delight the architects enormously—is that the training buildings, which are not real at all, look real, while

Inside the administration and education building (this page; plans facing page) room-size structures are set in a row along the 365-ft-long interior street. Each room is freestanding and each is sheathed in a different material.





the education and administrative building, which has a very real and traditional function, is far more radical in appearance. Furthermore, the very juxtaposition of these two types of buildings within the same complex is yet another part of Hardy Holzman Pfeiffer's collage like approach.

Like all successful collages, the training center is hardly a random assemblage. It is put together with a very traditional architectural intelligence, and this is why the administrative building, which seems sometimes on the verge of being rather silly, never goes over the edge, but continues to appear convincing. The red-duct entrances, for example, read at first glance like a joke, but in fact are a sensible and relatively cheap way to interpret in modern imagery, and within the constraints of modern economics, the idea of a formal entrance. It is more fun than just slapping a door in the front, and yet more practical than most other means of giving the building a hint of formal architectural experience.

Similarly, the interior of the education building, which has a surprisingly grand interior space running its 365-foot length, consists mainly of room-size structures set in a row as an interior street. Each is a freestanding object and is sheathed in a different material, such as tile, carpet, brick and wood. The gestures here are equally amusing, yet equally good at creating a sense of identity for each individual function within the space (the room-structures contain classrooms, conference areas, and multipurpose assembly space). And the "street" itself, the major space that is painted in bright colors and has the exposed mechanical equipment one has come to expect from Hardy Holzman Pfeiffer, creates a sense of grandeur and of community without using the traditional solutions of a large formal hall or central court. The street also has the advantage, thanks to its size, of being able to double as a housing for certain training functions in inclement weather.

The training building has one other gesture that seems more purely a case of design affectation—the fenestration pattern on the high, or north, side. This wall has a strip of

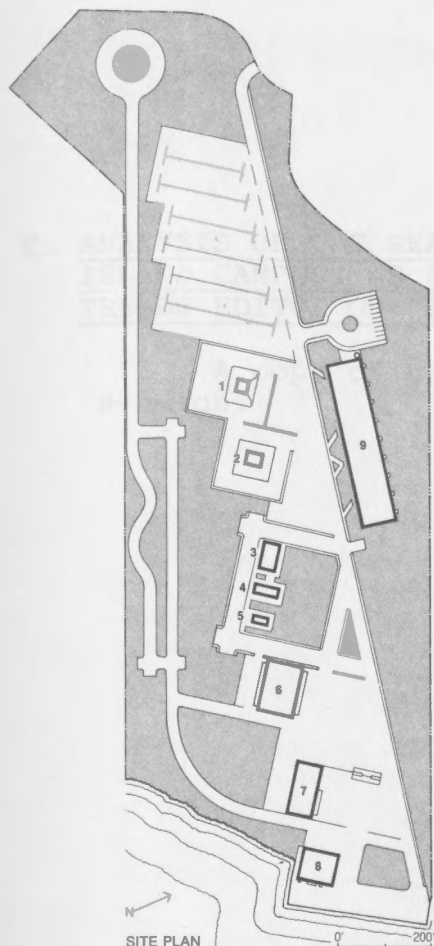
windows at eye level, as well as a pattern of large, medium and small windows above the strip, repeated along the wall at lower and lower levels until they disappear. The large windows are of clear glass, the medium ones are of dark gray glass and the small windows are of red glass. The inspiration, say the architects, was a filmstrip, and indeed the windows do seem like an animated pattern.

The gesture of the fenestration system has no real purpose. But it is entertaining and, while it tells us nothing about what goes on inside, neither does it interfere with what goes on inside. It adds to the normal function of a window (which, by the way, it fulfills well, since there are interesting views to be seen through the strip window) an additional experience that is not forced or overbearing, but pleasantly amusing.

Done by lesser hands it would in fact be overbearing, but that is the point—Hardy Holzman Pfeiffer's collages work because the firm is generally skillful enough to exercise a certain restraint as it composes its assemblage, and conservative enough to want to put most of its affectation to the service of traditional architectural ends, like the red ducts enhancing the experience of entering, the interior street enhancing the sense of community within the building, and the mock tenements and mock storefronts of the training buildings enhancing a sense of real urbanity.

Even the eccentric plan of the education building can be explained in terms of traditional goals. The classrooms had to be plain, boxy spaces by order of the fire department; to give the building a sense of spatial variety as well as to facilitate movement between the parts of the education building and the different training buildings, classrooms were grouped at 45-degree angles to the walls of the building, yielding diagonal axes for circulation which emerge out of the building at opposing angles through the red ducts.

To the conservative bureaucrats of the New York City Fire Department, of course, these explanations mean little, and talk of Hardy Holzman Pfeiffer's compositional skill, an



Aerial view of site looking toward Manhattan shows driver-training roads.



Firemen's Training Center

equally important factor in the building's success, carries no more weight. The Department claims to be unhappy with the building, and thus far has refused to take possession of it from the U.D.C. (The U.D.C. built the facility because its Roosevelt Island development necessitated demolition of the department's former training center.) The problems are things that relate to the specifics of training, like the wrong kind of lifts, hatch covers in the wrong places, or doorways other than those the Fire Department wanted, and they seem to come more from the conflict of competing bureaucracies than from any basic architectural mistake. The user was not the client—had they been one and the same, the problem might have been avoided. (Although then the building might not have been built at all, since the Fire Department had been pushing for a more conservative design from the start, while the U.D.C. as developer was the real advocate of the present scheme.)

It is all an object lesson in the bureaucratic politics of design in New York City, made still more complex right now by the city's fiscal crisis. Work is now going on to correct the problems that the Fire Department says prevent the building's proper use, but not the least of the ironies here is that once the city finally does take the building over from the U.D.C. (expected to be sometime this spring) there won't be much need for it. For one of the effects of the fiscal crisis is that no new firemen are being hired, and thus, except for mid-career programs, there will be little training to be done for a while in the new training center. □

Data

Project: Firemen's Training Center, New York, N.Y.

Architect: Hardy Holzman Pfeiffer Associates; Michael Ross, programming; C. E. John Way, Paul Buck, project architects, education building; M. Herbert Staruch, Neil Dixon, Marvin Wiehe, project architects, training buildings; James Sarfaty, Edward Dickman, Andrew Pettit, construction supervision.

Program: school for education and training firemen, with facilities for academic teaching, physical training, and driver education.

Site: Ward's Island, in the East River between Manhattan, Bronx, and Queens.

Structural system: reinforced concrete foundations. Steel frame and girders, open web steel joists, metal decking, education building; reinforced concrete (with special admixture to resist high heat), training buildings; brick and block, metal deck with concrete, metal deck on joists roof, service buildings.

Mechanical system: hot water boilers, baseboard radiation heat; chiller and air handler air conditioning, education building.

Major materials: insulated metal panel interior and exterior walls, acoustical metal deck ceiling, gypsum board on metal stud partitions, education building; brick exterior walls, exposed concrete and fire brick interior walls, exposed concrete ceiling, fire brick partitions, training buildings; brick exterior walls, glazed block interior walls, hung acoustical ceilings, gypsum board on metal stud partitions, service buildings.

Consultants: Lehr Associates, mechanical; Le Messurier Associates, structural; Golder Gass Associates, soils engineer.

Client: New York Urban Development Corporation, for the Fire Department of New York City.

Costs: \$11.2 million.

Photography: Norman McGrath.

April 9, 1976

C. ANALYSIS OF THE REASONABILITY OF THE PRICES FOR THE WARDS
ISLAND CAMPUS, AS PERFORMED BY MR. EDWARD A. DOWNE, COST
TRENDS EDITOR OF "ENGINEERING NEWS RECORD"

A copy of this analysis is included within this section.

The above conclusion is based upon data submitted to Engineering News-Record by various contractors throughout the country (a sample of which is attached). The above opinion is based on an assessment of geographical factors, such as local wage rates and materials prices. Further, in this case, buildings are comparable in only a very rough sense.

The average cost of putting up three major structures at the training center (namely, the main education building; the breathing apparatus building; and the land marine building) was \$70 per square foot. This figure was arrived at by dividing total cost by gross enclosed floor area.

Although it is difficult to find comparable buildings because of the specialized nature of those at the training center, a similar figure for a hospital built in Boston, Mass., and due to be completed this month was compared in the same way (total cost divided by gross enclosed floor area). It was found to cost \$73 per square foot.

Another building, which may be considered roughly comparable, is a Science Exhibition Building in St. Louis, Mo., which was completed in May 1975. The cost for this building was calculated at \$55 per square foot.

Finally, another building, with less specialized equipment, a law school in Houston, Texas and completed in December 1975, was found to cost \$61.15 per square foot.

According to our projection of the ENR Building Cost Index, we are expecting costs to rise 5.4% this year. However, because of slack demand this figure could be adjusted down somewhat due to contractor's cutting their profit margins in order to get business. None-the-less, we still think building costs will rise around 5% this year. In 1977, as business picks up, costs could be rising at an 8% annual rate during most of that year.

Edward A. Downe
Edward A. Downe
Cost Trends Editor
Engineering News-Record



Engineering News-Record

1221 Avenue of the Americas
New York, New York 10020

April 9, 1976

To Whom It May Concern:

In examining the construction costs of the various buildings which compose the Wards Island Training Center, I have found them to compare relatively favorably to the cost of putting up similar buildings in other parts of the country.

The above conclusion is based upon data submitted to Engineering News-Record by various contractors throughout the country (a sample of which is attached). The above opinion is based on an assessment of geographical factors, such as local wage rates and materials prices. Further, in this case, buildings are comparable in only a very rough sense.

The average cost of putting up three major structures at the training center (namely, the main education building; the breathing apparatus building; and the land marine building) was \$70 per square foot. This figure was arrived at by dividing total cost by gross enclosed floor area.

Although it is difficult to find comparable buildings because of the specialized nature of those at the training center, a similar figure for a hospital built in Boston, Mass., and due to be completed this month was compared in the same way (total cost divided by gross enclosed floor area). It was found to cost \$73 per square foot.

Another building, which may be considered roughly comparable, is a Science Exhibition Building in Baltimore, MD., which was completed in May 1975. The cost for this building was calculated at \$55 per square foot.

Finally, another building, with less specialized equipment, a law school in Houston, Texas and completed in December 1975, was found to cost \$31.15 per square foot.

According to our projection of the ENR Building Cost Index, we are expecting costs to rise 8.4% this year. However, because of slack demand this figure could be adjusted down somewhat due to contractor's cutting their profit margins in order to get business. None-the-less, we still think building costs will rise around 5% this year. In 1977, as business picks up, costs could be rising at an 8% annual rate during most of that year.



Edward A. Downe
Cost Trends Editor
Engineering News Record

D. ANALYSIS OF THE ISSUE OF TRAVEL TIME AND TRAVEL DISTANCE
BETWEEN THE NFPCA HEADQUARTERS AND THE NATIONAL FIRE
ACADEMY

(Substantially reprinted from the testimony of Congressmen Murphy and Rangel, as submitted to the Site Selection Board on March 22, 1976.)

When considering the issue of travel time and distance we should really look at all of the trips which members of the Academy staff will take, and not just those involving visits to the Fire Administration Offices. Certainly, if the Academy were located in or near Washington, the time taken for trips to the Administration offices would be minimized. However, the time that the Academy staff would spend shuttling between their offices and classrooms, and the buildings and ships where the techniques, procedures and equipment developed by them would be tested, evaluated and demonstrated, would be so great, that it would be totally disruptive to the goal of rapidly pursuing these projects.

Of course, this observation is predicated on the fact that there are no sites now available in the Washington Area able to offer the range of education, research, evaluation and media facilities which are available at the Wards Island Center.

I strongly support the suggestion being made by the City of New York and by Congressmen Murphy and Rangel that the Wards Island training facility be selected as the Site for the National Fire Academy. The New York State Urban Development takes great pride in the design and construction of this magnificent facility which we constructed and financed and which we feel will admirably serve the purposes of the Academy and the City.

I and the members of my staff will cooperate fully with the City of New York and the members of the Site Selection Board in facilitating the acquisition of the Wards Island site by the National Fire Academy.

Sincerely,

Edwin C. Cohen

E. LETTER OF SUPPORT AND COOPERATION FROM THE
PRESIDENT OF THE NEW YORK STATE URBAN DEVELOPMENT
CORPORATION

New York State
Urban Development Corporation

1345 Avenue of the Americas, New York, New York 10019 / (212) 974-7030

Edwin C. Cohen
President and Chief Executive Officer

April 23, 1976

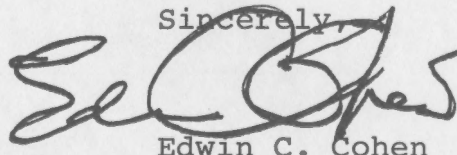
Mr. David M. McCormack
Chairman
Site Selection Board
National Fire Protection and
Control Administration
Department of Commerce
2400 M Street, N.W.
Washington, D.C. 20036

Dear Mr. McCormack:

I strongly support the suggestion being made by the City of New York and by Congressmen Murphy and Rangel that the Wards Island training facility be selected as the Site for the National Fire Academy. The New York State Urban Development takes great pride in the design and construction of this magnificent facility which we constructed and financed and which we feel will admirably serve the purposes of the Academy and the City.

I and the members of my staff will cooperate fully with the City of New York and the members of the Site Selection Board in facilitating the acquisition of the Wards Island site by the National Fire Academy.

Sincerely,



Edwin C. Cohen



FIRE DEPARTMENT

110 CHURCH STREET NEW YORK, N. Y. 10007

JOHN T. O'HAGAN
Fire Commissioner

April 23, 1976

Mr. David M. McCormack
Chairman
Site Selection Board
National Fire Protection and
Control Administration
Washington, D. C.

Dear Mr. McCormack:

The New York Fire Department appreciates the consideration by the Site Selection Board of our Ward's Island Training site as the location of the National Fire Academy.

The Ward's Island site will be immediately available, as we expect final completion in May, 1976. The training facilities are the most modern of any fire department, and are suitable for any training needs of the Academy. The installed facilities and the design of the entire site have been acclaimed in a number of published articles.

New York would be an excellent choice for the Academy, with the resources of the New York Fire Department to supplement the Academy. Also, New York City provides an unequalled fire laboratory for the staff and those attending the Academy, in addition to having ample facilities to accommodate both staff and students. Most importantly, the present availability of the site will permit the Academy to function immediately without delays for construction and procurement.

New York City was among the leaders in the effort to establish the National Fire Protection and Control Administration. We expect to be strong supporters of the NFPCA in its efforts to improve fire protection in the years ahead. We believe the establishment of the Academy in New York will be a major asset to achieve the goals and purposes of the NFPCA.

With kindest regards.

Sincerely,

John T. O'Hagan
Fire Commissioner



UNIFORMED
FIRE DEPARTMENT, CITY OF NEW YORK
FIRE OFFICERS
LOCAL 854, INTERNATIONAL ASSN. OF FIRE FIGHTERS, AFL-CIO
ASSOCIATION

225 BROADWAY ☆ NEW YORK, NEW YORK 10007 ☆ WORTH 2-7970

April 23, 1976

David M. McCormack
Chairman, Site Selection Board
National Academy for Fire Prevention & Control
Department of Commerce
Washington, D.C. 20036

Dear Mr. McCormack:

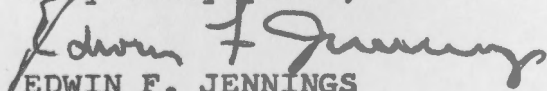
The Uniformed Fire Officers Association enthusiastically supports the proposal made by Mayor Beame concerning the site location of the National Fire Academy. As president of this association of more than 2200 Fire Officers of every supervisory rank in the New York Fire Department, I am pleased to join with management in a cooperative effort and recommend for your consideration, the existing and newly constructed Fire Training Center on Wards Island, New York City.

I have reviewed the testimony before the Site Selective Board by Congressmen Murphy and Rangel and by Chief Harris and fully concur with their presentations which emphasize the many advantages of locating the National Fire Academy on Wards Island.

We of Local 854, IAFF, are the fourth largest local in the International and represent the largest group of professional Fire Officers in the country. We would consider the addition of the National Fire Academy in our great city a compliment and in conjunction with the Fire Department pledge full cooperation to the National Fire Prevention and Control Administration.

It gives me pleasure to join with Mayor Beame in recommending the Wards Island facility which is ready for occupancy with minimal delay and will appeal to the firefighters of this nation. I respectfully suggest that the Site Selection Board visit the facility for an on site inspection. I would be pleased to accompany you or your staff at your convenience.

Very truly yours,


EDWIN F. JENNINGS
Battalion Chief
President

EFJ:gs

AFFILIATED WITH

NEW YORK STATE AFL-CIO

NEW YORK CITY CENTRAL LABOR COUNCIL AFL-CIO • MARITIME PORT COUNCIL OF GREATER NEW YORK & VICINITY
UNION LABEL & SERVICE TRADES COUNCIL OF GREATER NEW YORK & LONG ISLAND • NATIONAL SAFETY COUNCIL

-57-

