

**Torres Rojas, Genara**

---

**From:** rebecca.swadek@parks.nyc.gov  
**Sent:** Tuesday, January 20, 2015 10:22 AM  
**To:** Duffy, Daniel  
**Cc:** Torres Rojas, Genara; Van Duyne, Sheree; Ng, Danny  
**Subject:** Freedom of Information Online Request Form

Information:

First Name: Rebecca  
Last Name: Swadek  
Company: NYC Parks  
Mailing Address 1: 1234 Fifth Ave  
Mailing Address 2:  
City: NEW YORK  
State: NY  
Zip Code: 10029  
Email Address: [rebecca.swadek@parks.nyc.gov](mailto:rebecca.swadek@parks.nyc.gov)  
Phone: 2123601436  
Required copies of the records: Yes

List of specific record(s):

Contract LGA – 124.039 – Alley Pond Park Wetland Mitigation

**THE PORT AUTHORITY OF NY & NJ**

FOI Administrator

February 23, 2015

Ms. Rebecca Swadek  
NYC Parks  
1234 Fifth Avenue  
New York, NY 10029

Re: Freedom of Information Reference No. 15706

Dear Ms. Swadek:

This is in response to your January 20, 2015 request, which has been processed under the Port Authority's Freedom of Information Code (the "Code"), for a copy of "Contract LGA – 124.039 – Alley Pond Park Wetland Mitigation."

Material responsive to your request and available under the Code can be found on the Port Authority's website at <http://www.panynj.gov/corporate-information/foi/15706-C.pdf>. Paper copies of the available records are available upon request.

Pursuant to the Code, certain portions of the material responsive to your request are exempt from disclosure as, among other classifications, personal privacy.

Please refer to the above FOI reference number in any future correspondence relating to your request.

Very truly yours,



Daniel D. Duffy  
FOI Administrator

Enclosure

*4 World Trade Center, 18th Floor  
150 Greenwich Street  
New York, NY 10006  
T: 212 435 3642 F: 212 435 7555*

**THE PORT AUTHORITY  
OF NY & NJ**



CA2-123.039  
S/L

M.C.  
S.P.

LA GUARDIA AIRPORT

ALLEY POND PARK  
WETLAND MITIGATION

CONTRACT LGA-124.039

OCTOBER 1996

CONFIRMED COPY

This proposal is not complete unless bidder's  
signature appears on page 20

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

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Francis J. Lombardi,  
Chief Engineer

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ATTACHMENT A

ATTACHMENT B

APPENDIX A

APPENDIX B

SCHEDULE A

SCHEDULE B

SCHEDULE C

SCHEDULE D

INFORMATION FOR BIDDERS

1. FORM AND SUBMISSION OF PROPOSALS.

The Port Authority of New York and New Jersey, hereinafter called the "Authority" invites Proposals in the annexed form. Proposals will be received until 2:30 P. M. on Wednesday, October 23, 1996 in the office of the Chief Engineer of the Authority, Room 72W, One World Trade Center, New York, N. Y. 10048, at which time they will be opened and read in Room 72E. Each Proposal must be contained in the envelope furnished by the Authority, which shall be sealed and conspicuously endorsed with the bidder's name and the number of this Contract in the space provided. This Proposal shall not be unstapled or taken apart.

The Proposal must be submitted upon the blank form bound herewith and must give all information required (\*). The Proposal must be signed and the acknowledgment taken on the appropriate form following the Proposal.

No effort is made to emphasize any particular provision of the Contract, but bidders must familiarize themselves with every provision and its effect.

The Port Authority of New York and New Jersey, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

In addition, this Contract is subject to the requirements of Part 23 of Title 49 of the Code of Federal Regulations and Part 60-4 of Title 41 of the Code of Federal Regulations, (Department of Labor) Construction Contractors, Affirmative Action Requirements.

2. PAPERS ACCOMPANYING PROPOSALS.

Each Proposal must be accompanied by the following papers, which, unless otherwise indicated, should be enclosed with the Proposal:

---

(\*). While two or more copies of this booklet may be furnished to each prospective bidder, only two should be submitted. The extra copies are for the bidder's use.

(a) If the bidder be a corporation, a statement of the names and residences of its officers, which should be included on the page following the Proposal.

If the bidder be a partnership, a statement of the names and residences of its members, indicating which are general and which are special partners, which should be included on the page following the Proposal.

If the bidder be an individual, a statement of his residence, which should be included on the page following the Proposal.

(b) Either the Bid Bond bound herewith, duly executed by the bidder as principal and by one or more surety companies duly authorized to carry on the business of suretyship in the state(s) in which the construction site is located, whose names appear on the current list of the Treasury Department of the United States as acceptable as sureties upon federal contracts; or, in lieu of a Bid Bond,

A certified check, payable to the order of The Port Authority of New York and New Jersey, in the same amount appearing in the Bid Bond form, which check shall be separately delivered, prior to the time for the bid opening, to the Treasurer of the Authority, at the Cashier's Office, Room 69W, One World Trade Center, New York, N. Y. 10048. The Cashier's Office is open only on Tuesdays and Thursdays from 9:00 AM to 12 Noon. The bidder will be given proper receipt for his check.

- (c)
1. Certified financial statements, including applicable notes, reflecting the bidder's assets, liabilities, net worth, revenues, expenses, profit or loss and cash flow for the most recent calendar year or the bidder's most recent fiscal year.
  2. Where such certified financial statements are not available, then either reviewed or compiled statements from an independent accountant setting forth the information described in Paragraph 1, above.
  3. Where neither certified financial statements nor financial statements from an independent accountant are available, then financial statements containing the information described in Paragraph 1, above, prepared directly by the bidder. However, such financial statements must be accompanied by a signed copy of the bidder's most recent Federal income tax return and a statement in writing, signed by a duly authorized representative of the bidder, that such statements accurately reflect the current financial condition of the bidder.

Where statements submitted pursuant to either Paragraph 1 or 2, above, show the position of the bidder as of a date more than forty-five (45) days prior to the date on which Proposals are opened, the bidder shall also submit a statement in writing signed by a duly authorized representative of the bidder, that the present financial condition of the bidder is at least as good as that shown on the statements submitted.

4. A statement of work which the bidder has on hand, including any work on which a bid has been submitted, containing a description of the work, the dollar value, the location by city and state, the current percentage of completion and the expected date for completion.
5. Fill in below the name and address of the bidder's chief banking representative handling the bidder's account.

Banking Institution: FOR CDM ASSOCIATES  
Fleet Bank

Address: 97-77 Queens Blvd.  
Rego Park, NY 11374

Bank Representative: Tom Rogers

Telephone Number: (718) 997-4041

6. Fill in below the bidder's Federal Employer Identification Number (i.e., the number assigned to firms by the Federal Government for tax purposes); the bidder's Dun and Bradstreet number, if any; the name of any other credit service to which the bidder has furnished information and the number, if any, assigned by such service to the bidder's account.



Federal Employer Identification No.  
18-652-2363

Dun and Bradstreet No.

Other Credit Service

Account No.

Where statements submitted pursuant to either Paragraph 1 or 2, above, show the position of the bidder as of a date more than forty-five (45) days prior to the date on which Proposals are opened, the bidder shall also submit a statement in writing signed by a duly authorized representative of the bidder, that the present financial condition of the bidder is at least as good as that shown on the statements submitted.

4. A statement of work which the bidder has on hand, including any work on which a bid has been submitted, containing a description of the work, the dollar value, the location by city and state, the current percentage of completion and the expected date for completion.
5. Fill in below the name and address of the bidder's chief banking representative handling the bidder's account.

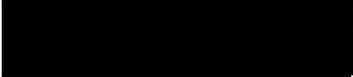
Banking Institution: FOR FELIX EQUITIES, INC.  
First Union National Bank

Address: 550 Broad St. (NJ152), 1st Floor  
Newark, N.J. 07102

Bank Representative: Mr. Alan Green, Sr. Vice President

Telephone Number: (201) 565-3262, 3909

6. Fill in below the bidder's Federal Employer Identification Number (i.e., the number assigned to firms by the Federal Government for tax purposes); the bidder's Dun and Bradstreet number, if any; the name of any other credit service to which the bidder has furnished information and the number, if any, assigned by such service to the bidder's account.

 (Felix Equities)

Federal Employer Identification No.  
18-118-6479

Dun and Bradstreet No.

Other Credit Service \_\_\_\_\_ Account No. \_\_\_\_\_

(d) The Form of Contract bound herewith, with the bidder's Lump Sum inserted in the clause thereof entitled "General Agreement". The amount must be given both in figures and in writing and, in case of discrepancy, the writing shall control. One copy of each addendum, if any, issued during the bidding period shall be initialled and attached to the Proposal, but any Proposal submitted without such addendum initialled and attached will nevertheless be construed as though such addendum had been initialled and attached.

(e) The bidder's analysis of bid filled in on the form furnished herewith. The Contractor will be required to furnish a more detailed analysis of bid at a later date in accordance with the requirements of the Section of Division 1 of the Specifications referring to the Analysis of Bid.

(f) A Certification of Nonsegregated Facilities filled in on the form attached hereto in Appendix A.

(g) If the bidder cannot make the certification required by the clause of the "Information for Bidders" entitled "Buy American Certificate," submit the statement and listing required by such clause.

3. QUALIFICATION INFORMATION.

At any time after the opening of Proposals, the Chief Engineer may give oral or written notice to one or more bidders to attend a pre-award meeting and to furnish the Authority with information relating to his qualifications to perform the Work, including the following, which information shall be furnished within seven (7) days thereafter:

- (1) A detailed list of all anticipated material suppliers and subcontractors and a detailed list of the plant and equipment which the bidder proposes to use, indicating which portions it already possesses.
- (2) Detailed information relating to work which the bidder has completed for others, including personal and corporate references, sufficient to enable the Authority to determine the Contractor's responsibility, experience and capacity to perform the Work. If required by the Chief Engineer, the foregoing information shall include information to demonstrate to the satisfaction of the Chief Engineer that the contractor has within the past five years been a contractor on at least one contract of the same general type, extent and complexity as the Contract on which the Proposal has been submitted, and completed the work skillfully, in a satisfactory manner and on time.
- (3) Information to supplement a) data shown in the financial statements and the statement of work on hand required to be submitted with the Proposal; and b) any statement submitted under the clause hereof entitled "Certification of No Investigation (Criminal or Civil Anti-Trust), Indictment, Conviction, Suspension, Debarment, Disqualification, Prequalification Denial or Termination, Etc; Disclosure of Other Required Information", or "Non-Collusive Bidding and Code of Ethics Certification; Certification of No Solicitation Based on Commission, Percentage, Brokerage, Contingent Fee or Other Fee".

- (4) Moreover, in the event that the bidder's performance on a past Port Authority or PATH contract or contracts has been rated less than satisfactory, the Chief Engineer may give oral or written notice to the bidder to furnish information demonstrating to the satisfaction of the Chief Engineer that, notwithstanding such rating, such performance was, in fact, satisfactory, or that the circumstances which gave rise to such unsatisfactory rating have changed or will not apply to performance of the Contract, and that such performance will be satisfactory.
- (5) If the bidder has performed a contract for the States of New York or New Jersey, or any governmental entity within such States and has filed a questionnaire or other document required to be submitted in order for the bidder to qualify to perform the contract, the bidder may be requested by the Chief Engineer to submit the most recent completed questionnaire or other such document, or if the most recent completed questionnaire or other such document is not available, to submit a written statement indicating the approximate date of the contract and the name of the governmental entity which awarded them the contract.
- (6) Any additional information relevant to the bidder's Proposal including information to supplement the bidder's initial analysis of bid.

In the event that any of the foregoing is requested and is not furnished within seven days thereafter or within such additional time as the Chief Engineer, in his sole discretion, may allow, the Authority may not be in a position to determine whether the bidder is qualified, whether the bidder understands the requirements of the contract or whether the bid is responsive and may, in its sole discretion, reject the bidder's Proposal.

The giving of such notice to the bidder in connection with any of the foregoing lists, statement or information shall not be construed as an acceptance of his Proposal. However, the Authority reserves the right in its sole and absolute discretion, to accept the Proposal of a bidder despite the fact that said bidder has not submitted any information, list or statement required pursuant to this Section within the above-stated time period.

4. ACCEPTANCE OR REJECTION OF PROPOSAL.

Within ninety (90) days after the opening of the Proposals, the Authority will accept one of the Proposals, if it accepts any. The acceptance of a Proposal will be only by mailing to or delivering at the office designated in the Proposal a notice in writing specifically indicating acceptance signed by an authorized representative on behalf of the Authority. No other act of the Authority, its Commissioners, officers, agents, or employees shall constitute acceptance of a Proposal. Such notice will state whether or not the Authority elects to require the bidder to furnish a Performance and Payment Bond. Rejection of a Proposal will be only by either (a) a notice in writing specifically stating that the Proposal is rejected, signed by an authorized representative on behalf of the Authority and mailed to or delivered at the office designated in the Proposal or (b) omission of the Authority to accept a Proposal within ninety (90) days after the opening of Proposals; and no other act of the Authority, its Commissioners, officers, agents or employees shall constitute rejection of a Proposal, including any counter offer or other act of the Authority, its Commissioners, officers, agents or employees.

The Authority reserves the unqualified right, in its sole and absolute discretion, to reject all Proposals or to accept that Proposal if any, which in its judgment will under all the circumstances best serve the public interest and to waive defects in any Proposal.

In the event that a successful bidder defaults upon the Contract by failing to furnish a satisfactory Performance and Payment Bond, if required, and the Authority terminates the Contract, the Authority reserves the option to accept the Proposal of any other bidder within ninety (90) days after the opening of Proposals, in which case such acceptance shall have the same effect as to such other bidder as though he were the originally successful bidder.

5. RETURN OF CERTIFIED CHECKS.

Within ten (10) days after the opening of the Proposals, the Authority will return all certified checks deposited by bidders, except those deposited by three bidders to be selected by the Authority, which will be returned within three days after one Proposal is accepted by the Authority; or if a Performance and Payment Bond is required, within three days after a satisfactory Performance and Payment Bond is furnished to the Authority; or if all Proposals are rejected, not later than three days after such rejection. The return of a bidder's check shall not, however, be deemed to be a rejection of his Proposal.

5A. AVAILABLE DOCUMENTS.

Certain documents, specified below, are available for reference and examination by bidders by contacting Mr. Sam Park at (212) 435-8686; 73E, One World Trade Center, New York, N.Y. during regular business hours. These documents were not prepared for the purpose of providing information for bidders upon the present Contract but they were prepared for other purposes, such as for other contracts or for design purposes for this or other contracts, and they do not form a part of this Contract. The Authority makes no representation or guarantee as to, and shall not be responsible for their accuracy, completeness or pertinence, and, in addition, shall not be responsible for the conclusions to be drawn therefrom. They are made available to the bidders merely for the purpose of providing them with such information as is in the possession of the Authority, whether or not such information may be accurate, complete or pertinent or of any value to the bidders.

Said documents are as follows:

- A. "Soil Data - Alley Pond Park Site 2" prepared by the Port Authority of NY & NJ.

For the Bidder's convenience, this document is attached hereto as Attachment A and made a part hereof.

- B. "La Guardia Airport (LGA) Runway 13-31 Safety Overrun - Wetlands Mitigation at Alley Pond Park - Environmental Subsurface Investigation" prepared by the Port Authority of NY & NJ.

6. DBE PROGRAM

This Contract is subject to the United States Department of Transportation regulations on Disadvantaged Business Enterprises (DBE's) contained in Part 23 of Title 49 of the Code of Federal Regulations a copy of which is annexed hereto and forms a part hereof. The following goal for DBE participation has been set for this Contract:

17% For firms owned and controlled by socially and economically disadvantaged individuals<sup>1</sup> and certified as DBE's by the Authority.

By bidding on this Contract, the bidder assures the Authority that it will meet the foregoing goal. If the bidder determines he cannot make this assurance he may nevertheless submit a bid but in such event he shall submit with the bid a separate writing which contains a statement of the percentage of DBE participation he anticipates.

Within three (3) working days of the opening of bids, the bidder shall submit to the Chief Engineer the names and addresses of DBE firms, a description of the work each is to perform, and the dollar value of each proposed DBE subcontract. The bidder shall also submit the completed form labelled "Schedule A" and "Schedule B" (if appropriate) for any firm he proposes as a DBE.

In the event that the bidder for this solicitation qualifies as a DBE, the contract goal shall be deemed to have been met.

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\* Instruction only (delete prior to printing). Insert a percentage goal suitable to the Work to be performed under the Contract or if goal is not appropriate omit entire clause.

<sup>1</sup> Individuals who are rebuttably presumed to be socially and economically disadvantaged include women, Blacks, Hispanics, Native Americans, Asian-Pacific Americans, and Asian-Indian Americans. A bidder may meet the DBE goal by using any combination of disadvantaged businesses.

A bidder who fails to meet the DBE goal for this Contract and fails to demonstrate to the Authority that the bidder has made good faith efforts to meet same shall not be eligible to be awarded the Contract. The following are illustrative of good faith efforts:

- (i) Attendance at a pre-bid meeting, if any, scheduled by the Authority to inform DBEs of subcontracting opportunities under a given solicitation;
- (ii) Advertisement in general circulation media, trade association publications, and minority-focused media for at least 20 days before bids or proposals are due. If 20 days are not available, publication for a shorter reasonable time is acceptable;
- (iii) Written notification to DBEs that their interest in the Contract is solicited;
- (iv) Efforts made to select portions of the work proposed to be performed by DBEs in order to increase the likelihood of achieving the stated goal;
- (v) Efforts to negotiate with DBEs for specific sub-bids including at a minimum;
  - (a) The names, addresses, and telephone numbers of DBEs that were contacted;
  - (b) A description of the information provided to DBEs regarding the plans and specifications for portions of the work to be performed; and
  - (c) A statement of why additional agreements with DBEs were not reached;
- (vi) Concerning each DBE, the bidder contacted but rejected as unqualified, and the reasons for the bidder's rejection;
- (vii) Efforts made to assist the DBEs contacted that need assistance in obtaining bonding or insurance required by the bidder or Authority.

After award, participation percentages shall be monitored throughout the performance of the Contract. The Engineer may request a written statement that sets forth the names of and amounts paid to DBE subcontractors and materialmen during the preceding month(s).

7. INSPECTION OF SITE.

Each bidder or his authorized representative must make proper arrangements with the Resident Engineer at the construction site before inspecting the construction site. To make such arrangements call Mr. Dan Hartigan at (718) 533-3539.

8. QUESTIONS BY BIDDERS.

Questions by prospective bidders concerning the Contract may be addressed to Mr. Sam Park, at (212) 435-8686 who, however is authorized only to direct the attention of prospective bidders to various portions of the Contract so that they may read and interpret such portions for themselves. Neither he nor any other employee or representative of the Authority is authorized to give interpretations of any portion of the Contract or to give information as to the requirements of the Contract in addition to that contained in the Contract. Interpretations of the Contract or additional information as to its requirements, where necessary, shall be communicated to bidders only by written addendum issued over the name of the Chief Engineer, which addendum shall be considered part of this Contract. Accordingly, nothing contained herein and no representation, statement or promise, oral or in writing, of the Authority, its Commissioners, officers, agents, representatives or employees shall impair or limit the effect of the warranties of the Contractor contained in the clause of the Form of Contract entitled "Contractor's Warranties" or elsewhere in this Contract. The provisions of this clause shall apply to questions addressed by prospective bidders both before and after their receipt of Contract Documents.

9. PREVAILING RATE OF WAGE CERTIFICATION

The bidders' attention is directed specifically to the clause of the Form of Contract entitled "Prevailing Rate of Wage" and to the fact that the Authority may require a certification in writing from the successful bidder, in such form as may be required pursuant to such clause, that he has paid and caused his subcontractors to pay at least the prevailing rate of wage and supplements required by such clause. This certification may be required prior to his receipt of any payment from the Authority hereunder as provided in the clauses of the Form of Contract entitled "Monthly Advances" and "Final Payment" or at any other time.

10. CERTIFICATION OF NO INVESTIGATION (CRIMINAL OR CIVIL ANTI-TRUST), INDICTMENT, CONVICTION, SUSPENSION, DEBARMENT, DISQUALIFICATION, PREQUALIFICATION DENIAL OR TERMINATION, ETC; DISCLOSURE OF OTHER REQUIRED INFORMATION

By bidding on this Contract, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that the bidder and each parent and/or affiliate of the bidder has not (a) been indicted or convicted in any jurisdiction; (b) been suspended, debarred, found not responsible or otherwise disqualified from entering into contracts with any governmental agency or been denied a government contract for failure to meet prequalification standards; (c) had a contract terminated by any governmental agency for breach of contract or for any cause related directly or indirectly to an indictment or conviction; (d) changed its name and/or Employer Identification Number (taxpayer identification number) following its having been indicted, convicted, suspended, debarred or otherwise disqualified, or had a contract terminated as more fully provided in (a), (b) and (c) above; (e) ever used a name, trade name or abbreviated name, or an Employer Identification Number different from those inserted in the Proposal; (f) been denied a contract by any governmental agency for failure to provide the required security, including bid, payment or performance bonds or any alternative security deemed acceptable by the agency letting the contract; (g) failed to file any required tax returns or failed to pay any applicable federal, state or local taxes; (h) had a lien imposed upon its property based on taxes owed and fines and penalties assessed by any agency of the federal, state or local government; (i) been, and is not currently, the subject of a criminal investigation by any federal, state or local prosecuting or investigative agency and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency; (j) had any sanctions imposed as a result of a judicial or administrative proceeding with respect to any professional license held or with respect to any violation of a federal, state or local environmental law, rule or regulation; and (k) shared space, staff, or equipment with any business entity.

The foregoing certification as to "(a)" through "(k)" shall be deemed to have been made by the bidder as follows: if the bidder is a corporation, such certification shall be deemed to have been made not only with respect to the bidder itself, but also with respect to each director and officer, as well as, to the best of the certifier's knowledge and belief, each stockholder with an ownership interest in excess of 10%; if the bidder is a partnership, such certification shall be deemed to have been made not only with respect to the bidder itself, but also with respect to each partner. Moreover, the foregoing certification, if made by a corporate bidder, shall be deemed to have been authorized by the Board of Directors of the bidder, and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of such certification as the act and deed of the corporation.

In any case where the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the signed bid a signed statement which sets forth in detail the reasons therefor. If the bidder is uncertain as to whether it can make the foregoing certification, it shall so indicate in a signed statement furnished with its bid, setting forth an explanation for its uncertainty.

Notwithstanding that the certification may be an accurate representation of the bidder's status with respect to the enumerated circumstances provided for in this clause as requiring disclosure at the time that the bid is submitted, the bidder agrees to immediately notify the Authority in writing of any change in circumstances during the period of irrevocability, or any extension thereof.

The foregoing certification or signed statement shall be deemed to have been made by the bidder with full knowledge that it would become a part of the records of the Authority and that the Authority will rely on its truth and accuracy in awarding this Contract. In the event that the Authority determines at any time prior or subsequent to the award of the Contract that the bidder has falsely certified as to any material item in the foregoing certification; willfully or fraudulently submitted any signed statement pursuant to this clause which is false in any material respect; or has not completely and accurately represented its status with respect to the circumstances provided for in this clause as requiring disclosure, the Authority may determine that the bidder is not a responsible bidder with respect to its bid on this Contract or with respect to future bids and may, in addition to exercising any other rights or remedies available to it, exercise any of the rights or remedies set forth in the clause of the Form of Contract entitled "Rights and Remedies of Authority". In addition, bidders are advised that knowingly providing a false certification or statement pursuant hereto may be the basis for prosecution for offering a false instrument for filing (see e.g., New York Penal Law, Section 175.30 et seq.). Bidders are also advised that the inability to make such certification will not in and of itself disqualify a bidder, and that in each instance the Authority will evaluate the reasons therefor provided by the bidder.

As used in this clause, the following terms shall mean:

Affiliate - An entity in which the parent of the bidder owns more than fifty percent of the voting stock, or an entity in which a group of principal owners which owns more than fifty percent of the bidder also owns more than fifty percent of the voting stock.

Agency or Governmental Agency - Any federal, state, city or other local agency, including departments, offices, quasi-public agencies, public authorities and corporations, boards of education and higher education, public development corporations, local development corporations and others.

Employer Identification Number - The tax identification number assigned to firms by the Federal government for tax purposes.

Investigation - Any inquiries made by any federal, state or local criminal prosecuting agency and any inquiries concerning civil anti-trust investigations made by any federal, state or local governmental agency. Except for inquiries concerning civil anti-trust investigations, the term does not include inquiries made by any civil government agency concerning compliance with any regulation, the nature of which does not carry criminal penalties, nor does it include any background investigations for employment, or Federal, state, and local inquiries into tax returns.

Officer - Any individual who serves as chief executive officer, chief financial officer, or chief operating officer of the bidder by whatever titles known.

Parent - An individual, partnership, joint venture or corporation which owns more than 50% of the voting stock of the bidder.

Space Sharing - Space shall be considered to be shared when any part of the floor space utilized by the submitting business at any of its sites is also utilized on a regular or intermittent basis for any purpose by any other business or not-for-profit organization, and where there is no lease or sublease in effect between the submitting business and any other business or not-for-profit organization that is sharing space with the submitting business.

Staff Sharing - Staff shall be considered to be shared when any individual provides the services of an employee, whether paid or unpaid, to the bidder and also, on either a regular or irregular basis, provides the services of an employee, paid or unpaid, to one or more other business(es) and/or not-for-profit organization(s), if such services are provided during any part of the same hours the individual is providing services to the bidder or if such services are provided on an alternating or interchangeable basis between the bidder and the other business(es) or not-for-profit organization(s). "The services of an employee" should be understood to include services of any type or level, including managerial or supervisory. This type of sharing may include, but is not limited to, individuals who provide the following services: telephone answering, receptionist, delivery, custodial, and driving.

Equipment Sharing - Equipment shall be considered to be shared whenever the bidder shares the ownership and/or the use of any equipment with any other business or not-for-profit organization. Such equipment may include, but is not limited to, telephones or telephone systems, photocopiers, computers, motor vehicles, and construction equipment. Equipment shall not be considered to be shared under the following two circumstances: when, although the equipment is owned by another business or not-for-profit organization, the bidder has entered into a formal lease for the use of the equipment and exercises exclusive use of the equipment; or when the bidder owns equipment that it has formally leased to another business or not-for-profit organization, and for the duration of such lease the bidder has relinquished all right to the use of such leased equipment.

11. NON-COLLUSIVE BIDDING AND CODE OF ETHICS CERTIFICATION;  
CERTIFICATION OF NO SOLICITATION BASED ON COMMISSION, PERCENTAGE,  
BROKERAGE, CONTINGENT FEE OR OTHER FEE

By bidding on this Contract, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that: (a) the prices in its bid have been arrived at independently without collusion, consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; (b) the prices quoted in its bid have not been and will not be knowingly disclosed, directly or indirectly, by the bidder prior to the official opening of such bid to any other bidder or to any competitor; (c) no attempt has been made and none will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition; (d) this organization has not made any offers or agreements, or given or agreed to give anything of value (see definition of "anything of value" appearing in the clause of the Form of Contract entitled "No Gifts, Gratuities, Offers of Employment, etc.") or taken any other action with respect to any Authority employee or former employee or immediate family member of either which would constitute a breach of ethical standards under the Code of Ethics and Financial Disclosure dated as of April 11, 1996 (a copy of which is available upon request to the individual named in the clause hereof entitled "Questions by Bidders"), nor does this organization have any knowledge of any act on the part of an Authority employee or former Authority employee relating either directly or indirectly to this organization which constitutes a breach of the ethical standards set forth in said Code; (e) no person or selling agency, other than a bona fide employee or bona fide established commercial or selling agency maintained by the bidder for the purpose of securing business, has been employed or retained by the bidder to solicit or secure this Contract on the understanding that a commission, percentage, brokerage, contingent or other fee would be paid to such person or selling agency.

The foregoing certification as to "(a)", "(b)", "(c)", "(d)" and "(e)" shall be deemed to have been made by the bidder as follows: if the bidder is a corporation, such certification shall be deemed to have been made not only with respect to the bidder itself, but also with respect to each parent, affiliate, director and officer of the bidder, as well as, to the best of the certifier's knowledge and belief, each stockholder of the bidder with an ownership interest in excess of 10%; if the bidder is a partnership, such certification shall be deemed to have been made not only with respect to the bidder itself, but also with respect to each partner. Moreover, the foregoing certification, if made by a corporate bidder, shall be deemed to have been authorized by the Board of Directors of the bidder, and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of such certification as the act and deed of the corporation.

In any case where the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the signed bid a signed statement which sets forth in detail the reasons therefor. If the bidder is uncertain as to whether it can make the foregoing certification, it shall so indicate in a signed statement furnished with its bid, setting forth in such statement the reasons for its uncertainty.

Notwithstanding that the bidder may be able to make the foregoing certification at the time the bid is submitted, the bidder shall immediately notify the Authority in writing during the period of irrevocability of bids on this Contract or any extension of such period, of any change of circumstances which might under this clause make it unable to make the foregoing certification or required disclosure. The foregoing certification or signed statement shall be deemed to have been made by the bidder with full knowledge that it would become a part of the records of the Authority and that the Authority will rely on its truth and accuracy in awarding this Contract. In the event that the Authority should determine at any time prior or subsequent to the award of this Contract that the bidder has falsely certified as to any material item in the foregoing certification or has willfully or fraudulently furnished a signed statement which is false in any material respect, or has not fully and accurately represented any circumstance with respect to any item in the foregoing certification required to be disclosed, the Authority may determine that the bidder is not a responsible bidder with respect to its bid on this Contract or with respect to future bids on Authority contracts and may, in addition to exercising any other rights or remedies it may have, exercise any of the rights or remedies set forth in the clause of the Form of Contract entitled "Rights and Remedies of the Authority".

In addition, bidders are advised that knowingly providing a false certification or statement pursuant hereto may be the basis for prosecution for offering a false instrument for filing (see e.g., New York Penal Law, Section 175.30 et seq.). Bidders are also advised that the inability to make such certification will not in and of itself disqualify a bidder, and that in each instance the Authority will evaluate the reasons therefor provided by the bidder.

12. BIDDER ELIGIBILITY FOR AWARD OF CONTRACTS - DETERMINATIONS BY AN AGENCY OF THE STATE OF NEW YORK OR NEW JERSEY CONCERNING ELIGIBILITY TO RECEIVE PUBLIC CONTRACTS

Bidders are advised that the Authority has adopted a policy to the effect that in awarding its contracts it will honor any determination by an agency of the State of New York or New Jersey that a bidder is not eligible to bid on or be awarded public contracts because the bidder has been determined to have engaged in illegal or dishonest conduct or to have violated prevailing rate of wage legislation.

The policy permits a bidder whose ineligibility has been so determined by an agency of the State of New York or New Jersey to submit a bid on a Port Authority contract and then to establish that it is eligible to be awarded the contract on which it has bid because (i) the state agency determination relied upon does not apply to the bidder, or (ii) the state agency determination relied upon was made without affording the bidder the notice and hearing to which the bidder was entitled by the requirements of due process of law, or (iii) the state agency determination was clearly erroneous or (iv) the state agency determination relied upon was not based on a finding of conduct demonstrating a lack of integrity or a violation of a prevailing rate of wage law.

The full text of the resolution adopting the policy may be found in the Minutes of the Authority's Board of Commissioners meeting of September 9, 1993.

13. BUY AMERICAN CERTIFICATE

By submitting a bid on this Contract, the bidder certifies that more than 60% (by cost) of the steel and manufactured products for this Contract are produced in the United States (as defined in the clause of Chapter VII of the Contract entitled "Buy American - Steel and Manufactured Products For Construction Contracts") provided that components of unknown origin are considered to have been produced or manufactured outside the United States. A list of articles, materials, and supplies excepted from this provision is included in Chapter VII hereof.

If the bidder cannot make this certification, he shall submit with his bid a signed statement stating that he will not meet the Buy American requirements and shall list below all products which are not produced in the United States. Bidders are advised that failure to meet the Buy American provisions may require the Authority to reject that bidder's proposal.

PRODUCT

COUNTRY OF ORIGIN

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It is the intent of the Contract that the products provided under this Contract comply with the Buy American provisions of this Contract. If the Contract documents inadvertently prohibit the bidder from making the above certification, the bidder shall notify by telephone the person listed in the clause entitled "Questions by Bidders". Such notification shall be made a minimum of five days prior to the date for receipt of proposals.

In addition, where the Contract documents permit substitutions in accordance with the clause of Division 1 entitled "Substitution" and where items are specified in the Contract generically without being specifically identified, items that are not produced in the United States will not be approved if the effect of such approval will be a violation of the Buy American provisions by the Contractor.

PROPOSAL

To The Port Authority of New York and New Jersey:

The undersigned (\*)

C.D.M. ASSOCIATES, INC./FELIX EQUITIES, INC., JV

(hereinafter called "the Contractor") hereby offers to perform all the obligations and to assume all the duties and liabilities of the Contractor provided for in the annexed Contract, at the price inserted by the undersigned in the clause of the Form of Contract entitled "General Agreement".

This offer shall be irrevocable for 90 days after the date on which The Port Authority of New York and New Jersey opens this Proposal.

To induce the acceptance of this Proposal, the undersigned hereby makes each and every certification, statement, assurance, representation and warranty made by the Contractor in said Contract. Moreover as a condition to receipt and consideration by the Authority of the Proposal whether or not it is accepted, the undersigned agrees that all information of any nature whatsoever, regardless of the form of the communication, received from the undersigned (including its officers, agents, or employees) by the Authority, its Commissioners, officers, agents or employees, and notwithstanding any statement therein to the contrary, has not been given in confidence and may be used or disclosed by or on behalf of the Authority without liability of any kind except as may arise under letters patent of the undersigned, if any.

Unless expressly stated otherwise, the Information for Bidders, all papers required by it and submitted in connection herewith at any time, said Form of Contract, and all papers made part of the Contract by the terms of the Form of Contract are made part of this Proposal.

The undersigned hereby designates the following as his office (\*\*):  
C.D.M. ASSOCIATES, INC./FELIX EQUITIES, INC. J.V.  
53-44 97th Place  
Corona, NY 11368

The telephone number of the bidder is:  
(718) 699-1800

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- (\*) (1) Insert bidder's name. If a corporation, give state of incorporation, using the phrase, "a corporation organized under the laws of the State of \_\_\_\_\_."  
If a partnership, give full names of partners, using also the phrase, "co-partners doing business under the firm name of \_\_\_\_\_."  
If an individual using a trade name, give individual name, using also the phrase, "an individual doing business under the trade name of \_\_\_\_\_."
- (2) If a joint venture, give the information required in (1) above for each participant in the joint venture.
- (\*\*) Insert office address.

PROPOSAL

To The Port Authority of New York and New Jersey:

The undersigned (\*) CDM ASSOCIATES INC./FELIX EQUITIES, INC., J.V., corporations organized under the laws of the State of New York

(hereinafter called "the Contractor") hereby offers to perform all the obligations and to assume all the duties and liabilities of the Contractor provided for in the annexed Contract, at the price inserted by the undersigned in the clause of the Form of Contract entitled "General Agreement".

This offer shall be irrevocable for 90 days after the date on which The Port Authority of New York and New Jersey opens this Proposal.

To induce the acceptance of this Proposal, the undersigned hereby makes each and every certification, statement, assurance, representation and warranty made by the Contractor in said Contract. Moreover as a condition to receipt and consideration by the Authority of the Proposal whether or not it is accepted, the undersigned agrees that all information of any nature whatsoever, regardless of the form of the communication, received from the undersigned (including its officers, agents, or employees) by the Authority, its Commissioners, officers, agents or employees, and notwithstanding any statement therein to the contrary, has not been given in confidence and may be used or disclosed by or on behalf of the Authority without liability of any kind except as may arise under letters patent of the undersigned, if any.

Unless expressly stated otherwise, the Information for Bidders, all papers required by it and submitted in connection herewith at any time, said Form of Contract, and all papers made part of the Contract by the terms of the Form of Contract are made part of this Proposal.

The undersigned hereby designates the following as his office (\*\*): Felix Equities, Inc.  
P.O. Box 650, Rt. 202-Lovell St.  
Lincolndale, N.Y. 10540

The telephone number of the bidder is: Felix Equities, Inc.  
(914) 248-8500

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- (\*) (1) Insert bidder's name. If a corporation, give state of incorporation, using the phrase, "a corporation organized under the laws of the State of \_\_\_\_\_."  
If a partnership, give full names of partners, using also the phrase, "co-partners doing business under the firm name of \_\_\_\_\_."  
If an individual using a trade name, give individual name, using also the phrase, "an individual doing business under the trade name of \_\_\_\_\_."
- (2) If a joint venture, give the information required in (1) above for each participant in the joint venture.
- (\*\*) Insert office address.

SIGNATURE AND CERTIFICATE OF AUTHORITY(\*)

Dated, October 21 1996

(Signature of individual or name of corporation or partnership) CDM ASSOCIATES, INC.

(Signature of agent, partner or corporate officer) Benjamin Schutzman  
By(\*\*) (\*\*\*)  
President

(Acknowledgment of signature to be taken on proper form on

following page(s))

CERTIFICATE OF AUTHORITY, IF BIDDER  
IS A CORPORATION

I, the undersigned, as Secretary of the corporation submitting the foregoing Proposal, hereby certify that under and pursuant to the by-laws and resolutions of said corporation, each officer who has signed said Proposal on behalf of the corporation is fully and completely authorized so to do.

(Corporate Seal)

James A. Powderly

- (\*) If bidder is a joint venture, insert signatures as appropriate for one participant of the joint venture on this page and attach and complete an additional signature sheet in the same form as appears on this page for each other participant as required.
- (\*\*) If Proposal is signed by an officer or agent, give title and address.
- (\*\*\*) NOTE: The foregoing signature shall be deemed to have been provided with full knowledge that the foregoing Proposal, the accompanying Contract booklet, as well as any certification, statement, assurance, representation, warranty, schedule or other document submitted by the bidder with the Proposal will become a part of the records of the Authority and that the Authority will rely in awarding the Contract on the truth and accuracy of such Proposal and each such certification, statement, assurance, representation, warranty and schedule made therein by the Contractor. Knowingly submitting a false statement in connection with any of the foregoing may be the basis for prosecution for offering a false instrument for filing (see, e.g., N.Y. Penal Law, Section 175.30 et seq.).

SIGNATURE AND CERTIFICATE OF AUTHORITY(\*)

Dated, 10/21 1996

(Signature of individual or name of corporation or partnership)

FELIX EQUITIES, INC.

(Signature of agent, partner or corporate officer)

William J. Vescio, V.P.

By(\*\*) (\*\*\*)

(Acknowledgment of signature to be taken on proper form on following page(s))

CERTIFICATE OF AUTHORITY, IF BIDDER IS A CORPORATION

I, the undersigned, as Secretary of the corporation submitting the foregoing Proposal, hereby certify that under and pursuant to the by-laws and resolutions of said corporation, each officer who has signed said Proposal on behalf of the corporation is fully and completely authorized so to do.

Albert A. French, Secty.

(Corporate Seal)

- (\*) If bidder is a joint venture, insert signatures as appropriate for one participant of the joint venture on this page and attach and complete an additional signature sheet in the same form as appears on this page for each other participant as required.
- (\*\*) If Proposal is signed by an officer or agent, give title and address.
- (\*\*\*) NOTE: The foregoing signature shall be deemed to have been provided with full knowledge that the foregoing Proposal, the accompanying Contract booklet, as well as any certification, statement, assurance, representation, warranty, schedule or other document submitted by the bidder with the Proposal will become a part of the records of the Authority and that the Authority will rely in awarding the Contract on the truth and accuracy of such Proposal and each such certification, statement, assurance, representation, warranty and schedule made therein by the Contractor. Knowingly submitting a false statement in connection with any of the foregoing may be the basis for prosecution for offering a false instrument for filing (see, e.g., N.Y. Penal Law, Section 175.30 et seq.).

ACKNOWLEDGMENT (\*)

ACKNOWLEDGMENT OF BIDDER, IF A CORPORATION

New York

State of.....)
Queens ) SS.:
County of.....)

On this...21st...day of..October....., 1996, before me personally came and appeared Benjamin Schutzman....., to me known, who, being by me duly sworn, did depose and say that he resides at ..... that he is the ....President.....of.CDM ASSOCIATES, INC....., the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation; and that he signed his name thereto by like order.

Joseph Messina

(Seal) .....
Joseph Messina, Notary Public

ACKNOWLEDGMENT OF BIDDER, IF A PARTNERSHIP

State of New York, No. 41-5003209

State of.....) Qualified in Queens County
) SS.:
County of.....) Commission Expires October 19, 1998

On this.....day of....., 199 , before me personally came and appeared....., to me known and known to me to be one of the members of the firm of ..... described in and who executed the foregoing instrument and he acknowledged to me that he executed the same as and for the act and deed of said firm.

(Seal) .....

ACKNOWLEDGMENT OF BIDDER, IF AN INDIVIDUAL

State of.....)
) SS.:
County of.....)

On this.....day of....., 199 , before me personally came and appeared.....to me known and known to me to be the person described in and who executed the foregoing instrument and he acknowledged to me that he executed the same.

(Seal) .....

(\*) If bidder is a joint venture, insert signature as appropriate for one participant of the joint venture on this page and attach and complete an additional Acknowledgment sheet in the same form as appears on this page for each other participant as required.

ACKNOWLEDGMENT (\*)

ACKNOWLEDGMENT OF BIDDER, IF A CORPORATION

New York

State of.....)
Westchester ) SS.:
County of.....)

On this.....22.....day of..November....., 1996, before me personally came and appeared..William J. Vescio....., to me known, who, being by me duly sworn, did depose and say that he resides at ..... that he is the ..Vice President.....of.FELIX EQUITIES INC....., the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation; and that he signed his name thereto by like order.

Tom Castrovinci

(Seal) .....
Tom Castrovinci, Notary Public,

ACKNOWLEDGMENT OF BIDDER, IF A PARTNERSHIP

State of New York, No. 4883459
Qualified in Westchester County
) SS.:

State of.....)
County of.....) Commission Expires January 26, 1997

On this.....day of....., 199 , before me personally came and appeared....., to me known and known to me to be one of the members of the firm of ..... described in and who executed the foregoing instrument and he acknowledged to me that he executed the same as and for the act and deed of said firm.

(Seal) .....

ACKNOWLEDGMENT OF BIDDER, IF AN INDIVIDUAL

State of.....)
) SS.:
County of.....)

On this.....day of....., 199 , before me personally came and appeared.....to me known and known to me to be the person described in and who executed the foregoing instrument and he acknowledged to me that he executed the same.

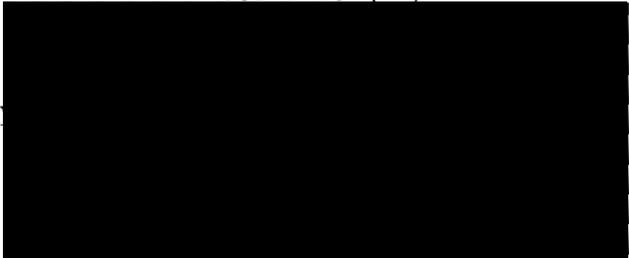
(Seal) .....

(\*) If bidder is a joint venture, insert signature as appropriate for one participant of the joint venture on this page and attach and complete an additional Acknowledgment sheet in the same form as appears on this page for each other participant as required.

STATEMENT ACCOMPANYING PROPOSAL(\*)

Names and Residences of Officers, If Bidder  
is a Corporation

C.D.M. ASSOCIATES

Name	Title	Residence (**)
Benjamin Schutzman	President	
James A. Powderly	Vice Pres./Sect	
Adele Brdley	Treasurer	

Names and Residences of Partners, If Bidder  
is a Partnership

Name	General or Limited Partner	Residence (**)
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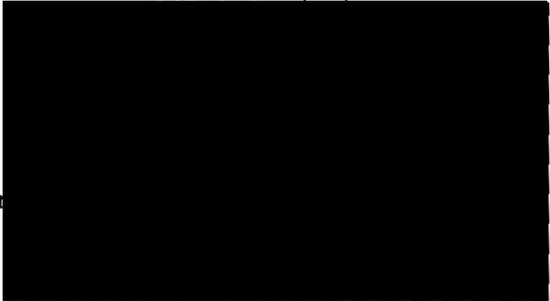
Bidder's Residence, If an Individual (\*\*)

(\*) If bidder is a joint venture, insert signature as appropriate for one participant of the joint venture on this page and attach and complete an additional Statement Accompanying Proposal sheet in the same form as appears on this page for each other participant as required.

(\*\*) Give Street and Number of Residence. Do not give business address.

STATEMENT ACCOMPANYING PROPOSAL(\*)

Names and Residences of Officers, If Bidder  
is a Corporation

Name	Title	Residence (**)
Felix M. Petrillo	President	
William J Vescio	Vice President	
Albert A. French	Secr'y/Treasurer	

Names and Residences of Partners, If Bidder  
is a Partnership

Name	General or Limited Partner	Residence (**)
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Bidder's Residence, If an Individual (\*\*)

(\*) If bidder is a joint venture, insert signature as appropriate for one participant of the joint venture on this page and attach and complete an additional Statement Accompanying Proposal sheet in the same form as appears on this page for each other participant as required.

(\*\*) Give Street and Number of Residence. Do not give business address.

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned (\*)

CDM ASSOCIATES, INC./FELIX EQUITIES, INC. - A JOINT VENTURE  
53-44 97TH PLACE - CORONA, NEW YORK 11368

as principal(s); and (†)

UNITED STATES FIDELITY AND GUARANTY COMPANY  
2500 WESTCHESTER AVENUE  
PURCHASE, NEW YORK 10577

as surety are hereby held and firmly bound unto The Port Authority of New York and New Jersey (herein called the "Authority") in the penal sum of Two Hundred Thousand Dollars (\$200,000.00), for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed this 22ND day of OCTOBER, 1996

The condition of the above obligation is such that whereas the above named principal(s) has submitted to the Authority a certain Proposal, bound herewith and hereby made a part hereof, to perform the obligations of the Contractor under a contract in writing, known as Contract LGA-124.039 "La Guardia Airport - Alley Pond Park Wetland Mitigation" now therefore

- (a) If said Proposal shall not be accepted, or
- (b) If said Proposal shall be accepted and the Authority does not require the principal(s) to furnish a Performance and Payment Bond, or

- 
- (\*) (1) Insert bidder's name. If a corporation, give the state of incorporation using the phrase "a corporation organized under the laws of the \_\_\_\_\_".  
If a partnership, give full names of partners, using also the phrase, "co-partners doing business under the firm name of \_\_\_\_\_".  
If an individual using a trade name, give individual name, using also the phrase, "an individual doing business under the trade name of \_\_\_\_\_".
- (2) If a joint venture, give the information required in (1) above for each participant in the joint venture.
- (†) Insert name of surety.

- (c) If said Proposal shall be accepted and the Authority requires the principal(s) to furnish a Performance and Payment Bond and either the principal(s) furnishes a Performance and Payment Bond satisfactory to the Authority in accordance with the requirements of said Proposal or the Authority does not terminate the Contract as provided therein on account of the failure to furnish such a bond,

Then, this obligation shall be void, otherwise the same shall remain in full force and effect; it being expressly understood and agreed that the liability of the surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The surety, for value received, hereby stipulates and agrees that the obligations of said surety and its bond shall be in no way impaired or affected by any extensions of the times within which the Authority may receive or accept such Proposal or within which the principal(s) may furnish a Performance and Payment Bond or by any waiver by the Authority of any of the requirements of said Proposal; and said surety does hereby waive notice of any such extensions or waivers.

IN WITNESS WHEREOF, the principal(s) and surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

CDM ASSOCIATES, INC./FELIX EQUITIES, INC.  
A JOINT VENTURE

\_\_\_\_\_  
Principal(\*)

(Seal)

By(\*\*) Benjamin Schutzman, CDM Assoc.  
By(\*\*) William J. Vescio, Felix Eq., Inc.  
UNITED STATES FIDELITY AND GUARANTY COMPANY

\_\_\_\_\_  
Surety

Suraya K. Kieffer

(Seal)

By) \_\_\_\_\_  
Suraya K. Kieffer, Attorney-in-Fact

- 
- (\*) If bidder is a joint venture, insert signature and information required as appropriate for one participant of the joint venture on this page and attach and complete an additional sheet in the same form as appears on this page for each other participant as required.
- (\*\*) If bond is signed by an officer or agent, give title; if signed by a corporation, affix corporate seal.

ACKNOWLEDGMENT (\*)

ACKNOWLEDGMENT OF BIDDER, IF A CORPORATION

New York

State of.....)
Queens ) SS.:
County of.....)

On this...21st.....day of..October....., 1996, before me personally came and appeared Benjamin Schutzman....., to me known, who, being by me duly sworn, did depose and say that he resides at ....., that he is the ....President.....of CDM ASSOCIATES, INC....., the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation; and that he signed his name thereto by like order.

Joseph Messina

(Seal) .....
Joseph Messina, Notary Public

ACKNOWLEDGMENT OF BIDDER, IF A PARTNERSHIP

State of New York, No. 41-5003209

State of.....) Qualified in Queens County
) SS.:
County of.....) Commission Expires October 19, 1998

On this.....day of....., 199 , before me personally came and appeared....., to me known and known to me to be one of the members of the firm of ..... described in and who executed the foregoing instrument and he acknowledged to me that he executed the same as and for the act and deed of said firm.

(Seal) .....

ACKNOWLEDGMENT OF BIDDER, IF AN INDIVIDUAL

State of.....)
) SS.:
County of.....)

On this.....day of....., 199 , before me personally came and appeared.....to me known and known to me to be the person described in and who executed the foregoing instrument and he acknowledged to me that he executed the same.

(Seal) .....

(\*) If bidder is a joint venture, insert signature as appropriate for one participant of the joint venture on this page and attach and complete an additional Acknowledgment sheet in the same form as appears on this page for each other participant as required.

ACKNOWLEDGMENT (\*)

ACKNOWLEDGMENT OF BIDDER, IF A CORPORATION

New York
State of.....)
Westchester ) SS.:

County of.....)
On this.....22.....day of..October....., 1996, before me personally came and appeared..William J. Vescio....., to me known, who, being by me duly sworn, did depose and say that he resides at . . . . ., that he is the ..Vice President.....of.FELIX EQUITIES INC....., the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation; and that he signed his name thereto by like order.

Arthur J. Walsh
(Seal) .....

ACKNOWLEDGMENT OF BIDDER, IF A PARTNERSHIP

Arthur J. Walsh, Notary Public,
State of New York, No. 4778522
State of.....) Qualified in Putnam County
) SS.: Term Expires April 30, 1997
County of.....)

On this.....day of....., 199 , before me personally came and appeared....., to me known and known to me to be one of the members of the firm of ..... , described in and who executed the foregoing instrument and he acknowledged to me that he executed the same as and for the act and deed of said firm.

(Seal) .....

ACKNOWLEDGMENT OF BIDDER, IF AN INDIVIDUAL

State of.....)
) SS.:

County of.....)
On this.....day of....., 199 , before me personally came and appeared.....to me known and known to me to be the person described in and who executed the foregoing instrument and he acknowledged to me that he executed the same.

(Seal) .....

(\*) If bidder is a joint venture, insert signature as appropriate for one participant of the joint venture on this page and attach and complete an additional Acknowledgment sheet in the same form as appears on this page for each other participant as required.

FORM OF CONTRACT

CHAPTER I

GENERAL PROVISIONS

1. DEFINITIONS.

To avoid undue repetition, the following terms whenever they occur in this Form of Contract or any of the other papers forming a part of the Contract shall be construed as follows:

"Contract" shall mean, in addition to this Form of Contract, the Information for Bidders, the Proposal, the Authority's acceptance, the Specifications and the Contract Drawings (including written addenda issued over the name of the Chief Engineer), all of which are made part hereof as though herein set forth in full. The Contract as so defined shall constitute the complete and exclusive statement of the terms of the agreement between the parties and the Contract may not be explained or supplemented by course of dealing, usage of trade or course of performance.

The term "days" or "calendar days" in reference to a period of time shall mean consecutive calendar days, Saturdays, Sundays and holidays, included.

The term "construction site" or words of similar import shall mean Alley Pond Park in Douglaston, Queens, N.Y. and the vicinity thereof.

"Work" shall mean all structures, equipment, plant, labor, materials (including materials and equipment, if any, furnished by the Authority) and other facilities and all other things necessary or proper for or incidental to the wetland mitigation at Alley Pond Park in Douglaston, Queens, N.Y.; and "performance of Work" and words of similar import shall mean the furnishing of such facilities and the doing of such things.

"Equipment" and "plant" shall include construction equipment and plant rented as agent for the Authority.

"Work required by the Contract Drawings and Specifications in their present form" or words of similar import shall include all Work required by the Specifications in their present form (whether or not shown upon the Contract Drawings), all Work shown upon the Contract Drawings in their present form (whether or not mentioned in the Specifications) and all Work involved in or incidental to the accomplishment of the results intended by the Specifications and Contract Drawings in their present form (whether or not mentioned therein or shown thereon).

"Extra Work" shall mean Work required by the Chief Engineer, Assistant Chief Engineer - Construction or Engineer of Construction pursuant to the clause hereof entitled "Extra Work Orders" which is in addition to that required by the Contract Drawings and Specifications in their present form.

"Contract Drawings" shall mean the Contract Drawings designated in the clause of the Specifications entitled "Contract Drawings" and except as used in the phrase "Contract Drawings in their present form", shall include any future alterations and revisions of said drawings.

"Shop Drawings" shall mean all drawings, diagrams, illustrations, schedules, including supporting data, which are specifically prepared for this Contract and submitted by the Contractor pursuant to the requirements of the Specifications or the Engineer to illustrate some portion of the Work. The terms "shop drawings" "placing drawings" and "working drawings" are used interchangeably in this Contract.

"Catalog Cuts" shall mean all standard drawings, diagrams, illustrations, brochures, schedules, performance charts and instructions submitted by the Contractor pursuant to the requirements of the Specifications or the Engineer to illustrate some portion of the Work.

"Chief Engineer" shall mean the Chief Engineer of the Authority for the time being, or his successor in duties, acting personally.

"Director" shall mean the Director of Aviation of the Authority for the time being, or his successor in duties for the purpose of this Contract, acting personally or through his authorized representative for the purpose of this Contract, who is at present the Authority's Director of Aviation Operations.

"Engineer" shall mean the Chief Engineer, acting either personally or through his duly authorized representatives acting within the scope of the particular authority vested in them.

"Assistant Chief Engineer - Construction" shall mean the Assistant Chief Engineer - Construction of the Authority for the time being, or his successor in duties, acting personally.

"Engineer of Construction" shall mean the designated Engineer of Construction for the facility at which the Work is being performed or his successor in duties, acting personally.

"Inspector" shall mean any representative of the Engineer designated by him as Inspector and acting within the scope of the particular authority vested in him.

The term "permanent construction" shall include all construction, installation, structures, equipment and materials (including materials and equipment, if any, furnished by the Authority) to be constructed, installed or left by the Contractor at or about the construction site (or elsewhere in the possession of the Authority) after the completion of the Work (whether or not they are yet delivered or installed), even though they are subsequently to be removed by others. The terms, "permanent installation", "permanent structure", "permanent materials", and words of similar import shall have the same meaning as the term "permanent construction".

"Subcontractor" shall mean anyone who performs Work (other than or in addition to the furnishing of materials, plant or equipment) at or about the construction site, directly or indirectly for or in behalf of the Contractor (and whether or not in privity of contract with the Contractor), but shall not include any person who furnished merely his own personal labor or his own personal services or who performs Work which consists only of the operation of construction equipment of which he is the lessor.

"Materialman" shall mean anyone who furnishes materials, plant or equipment to the Contractor or any subcontractor for use at or about the construction site in the performance of Work.

"Materialman" or "subcontractor", however, shall exclude the Contractor or any subsidiary or parent of the Contractor or any person, firm or corporation which has a substantial interest in the Contractor or in which the Contractor or the parent or the subsidiary of the Contractor, or an officer or principal of the Contractor or of the parent or the subsidiary of the Contractor has a substantial interest, provided, however, that for the purpose of the clause hereof entitled "Assignments and Subcontracts" the exclusion in this paragraph shall not apply to anyone but the Contractor himself.

"Workingman" or "workman" shall mean any employee of the Contractor or of a subcontractor who performs personal labor or personal services at the construction site.

"Lump Sum" shall mean the amount stipulated in the clause hereof entitled "General Agreement".

"Notice" shall mean a written notice.

Whenever they refer to the Work or its performance, "directed", "required" "permitted", "ordered" ",designated", ",prescribed" and words of similar import shall mean directed, required permitted, ordered, designated or prescribed by the Engineer; and "approved", "acceptable", "satisfactory" and words of similar import shall mean approved by or acceptable or satisfactory to the Engineer; and "necessary", "reasonable", "proper", "correct" and words of similar import shall mean necessary, reasonable, proper or correct in the judgment of the Engineer.

Whenever "including", "such as" or words of similar import are used, the specific things thereafter enumerated shall not limit the generality of the things preceding such words.

2. GENERAL AGREEMENT.

The Contractor agrees to perform wetland mitigation at Alley Pond Park in Douglaston, Queens, N.Y. and to furnish all structures, equipment, plant, labor, materials and other facilities and to do all other things necessary or proper therefor or incidental thereto, all in strict accordance with the Contract Drawings and Specifications and any future changes therein; and the Contractor further agrees to assume and perform all other duties and obligations imposed upon him by this Contract. The furnishing of equipment and plant, however, shall be subject to the provisions of the clause hereof entitled "Agency for Rental of Construction Equipment".

The Authority agrees to pay to the Contractor and the Contractor agrees to accept from the Authority, in full consideration for the performance by the Contractor of his duties and obligations under this Contract and the whole thereof, a compensation of \_\_\_\_\_

Two Million Three Hundred Forty-Five Thousand

\_\_\_\_\_ Dollars Zero Cents (\$2,345,000.00)\*

(throughout this Contract called the "Lump Sum"), and such compensation only, subject only to the express provisions of this Contract specifically setting forth actual, defined additions to or deductions from such compensation.

The enumeration in this Form of Contract and in the Specifications of particular things to be furnished or done at the Contractor's expense, or without cost or expense to the Authority, or without additional compensation to the Contractor shall not be deemed to imply that only things of a nature similar to those enumerated shall be so furnished and done; but the Contractor shall perform all Work as required without other compensation than that specifically provided, whatsoever changes may be made in the Contract Drawings and Specifications, whatsoever Work may be required in addition to that required by the Contract Drawings and Specifications in their present form, and whatsoever obstacles or unforeseen conditions may arise or be encountered.

\* For sales tax exemptions, see clause entitled "Exemptions from New York State and New York City Sales Taxes".

3. AUTHORITY ACCESS TO RECORDS.

The Authority shall have access during normal business hours to all records and documents of the Contractor relating to any amounts for which the Contractor has been compensated, or claims he should be compensated, by the Authority by payment determined on any basis other than by payment of a lump sum or unit price amount agreed upon in writing by the Contractor and the Authority. The Contractor shall obtain for the Authority similar access to similar records and documents of subcontractors. Such access shall be given or obtained both before and within a period of one year after Final Payment to the Contractor; provided, however, that if within the aforesaid one year period the Authority has notified the Contractor in writing of a pending claim by the Authority under or in connection with this Contract to which any of the aforesaid records and documents of the Contractor or of his subcontractors relate either directly or indirectly, then the period of such right of access shall be extended to the expiration of 6 years from the date of Final Payment with respect to the records and documents involved.

No provision in this Contract giving the Authority a right of access to records and documents is intended to impair or affect any right of access to records and documents which the Authority would have in the absence of such provision.

3A. AGENCY FOR RENTAL OF CONSTRUCTION EQUIPMENT.

1. General Provisions

The Contractor further agrees to act as the agent of the Authority, subject to the provisions of this numbered clause relating to such agency for the rental of all construction equipment necessary or desirable for or incidental to the performance of the Contract (other than construction equipment owned and also used by the Contractor or owned and also used by any subcontractor) and, in the exercise of such agency, to assume all the obligations and duties imposed upon him by this Contract. The Contractor may authorize any subcontractor to act as his subagent for rental of such equipment for use by such subcontractor, subject to all the provisions of this Contract. "Construction equipment" as used in this numbered clause shall include plant.

The Authority will pay the rental charges for said equipment directly to the lessors thereof, but the charges so paid shall be deducted from the compensation payable to the Contractor under the Contract; provided, however, that the Authority will pay such charges, and the Contractor is authorized by the Authority to act as such agent, to the extent only that the charges payable for such rental do not exceed the compensation payable to the Contractor under the Contract; and provided further that the Contractor performs all the obligations relating to said agency imposed upon him by this Contract.

The Authority will provide the Contractor with a statement to be furnished by him and the subcontractors to such lessors which will identify this Contract as the one under which the Contractor is authorized to rent said equipment and which will identify the site to which delivery must be made. The Contractor shall arrange for delivery of said equipment directly to the construction site. Payment of the rental charges therefor shall be made by the Authority on the basis of invoices made out to the Authority in which is contained the place of delivery and on which the Contractor has certified by endorsement that such construction equipment is being or has been used in the performance of the the Contract, said invoices to be submitted through the Contractor to the Authority at the time said equipment is put into use at the construction site. In the event said invoices are not submitted promptly, at the time stated above, but are submitted at a time when, by reason of prior advances and payments to the Contractor or for his account, the amounts still payable to the Contractor in connection with the Contract are insufficient to pay said invoices, then the Authority shall not be liable to the lessors for any amounts in excess of said amounts still payable to the Contractor which remain in the possession of the Authority.

Notwithstanding the above agency arrangement, the Authority shall not be liable to lessors of construction equipment for any amounts except rental charges based on time of use of such equipment, and the Contractor's agency is limited accordingly. All obligations incurred by the Contractor or subcontractors for any other expenses, including repairs and damages for breach of the rental agreement, shall be obligations incurred by the Contractor or subcontractors as principal not as agent of the Authority. Moreover, as between the Authority and the Contractor, the Contractor shall be responsible for all amounts due to lessors of construction equipment notwithstanding the above agency arrangement.

The Contractor shall indemnify the Authority against any claim of any kind whatsoever made against the Authority by a lessor of construction equipment and the Contractor assumes the risk of all claims against him by any lessor of construction equipment, including in both cases, claims in connection with a subcontractor.

The agency provided for under this numbered clause shall not relieve the Contractor of any of his duties and obligations elsewhere provided for under this Contract.

## 2. Option Not to Act as Agent

Notwithstanding the provisions of (1) above, the Contractor shall have the right to elect not to act as the agent of the Authority for the rental of any particular item or items of said construction equipment, in which event, with regard to any such rentals by the Contractor as principal and not agent, the provisions of (1) of this numbered clause shall be inapplicable as well as those provisions of the clause of the Form of Contract entitled "Exemptions From New York State and New York City Sales Taxes", which relate to rental of construction equipment.

4. EXEMPTION FROM NEW YORK STATE AND NEW YORK CITY SALES TAXES.

A. Materials Incorporated in Permanent Construction

The attention of the Contractor is directed to the following provision of the New York State and New York City Sales and Compensating Use Tax Act:

#1115. Exemptions from sales and use taxes. (a) Receipts from the following shall be exempt from the tax on retail sales imposed under subdivision (a) of section eleven hundred five and the compensating use tax imposed under section eleven hundred ten:

(15) Tangible personal property sold to a contractor, subcontractor or repairman for use in erecting a structure or building of an organization described in subdivision (a) of section eleven hundred sixteen, or adding to, altering or improving real property, property or land of such an organization, as the terms real property, property or land are defined in the real property tax law; provided, however, no exemption shall exist under this paragraph unless such tangible personal property is to become an integral component part of such structure, building or real property.

The Authority is an exempt organization of the type described in subdivision (a) of section eleven hundred sixteen.

In view of the foregoing, the Contractor should not include in his price(s) any amounts for New York State and New York City sales and compensating use taxes on such tangible personal property.

If (i) any claim is made against the Contractor by the State of New York or City of New York for such sales or compensating use taxes, or (ii) any claim is made against the Contractor by a materialman or a subcontractor on account of a claim against such materialman or subcontractor by the State of New York or City of New York for such sales or compensating use taxes, then the Authority will reimburse the Contractor in an amount equal to the amount of such tax required to be paid in accordance with the requirements of law, provided that:

(a) the Contractor, or the Contractor and any such subcontractor, as the case may be, have complied with such rules and regulations as may have been promulgated relating to the claiming of the exemption from such taxes and have filed all the forms and certificates required by the applicable laws, rules and regulations in connection therewith; and

(b) The Authority is afforded the opportunity before any payment of tax is made, to contest said claim in the manner and to the extent that the Authority may choose and to settle or satisfy said claim and such attorney as the Authority may designate is authorized to act for the purpose of contesting, settling and satisfying said claim; and

(c) the Contractor, or the Contractor and any such subcontractor, as the case may be, give immediate notice to the Authority of any such claim, cooperate with the Authority and its designated attorney in contesting said claim and furnish promptly to the Authority and said attorney all information and documents necessary or convenient for contesting said claim, said information and documents to be preserved for six years after the date of Final Payment or longer if such a claim is pending or threatened at the end of such six years.

If the Authority elects to contest any such claim, it will bear the expense of such contest.

#### B. Rental of Construction Equipment

The rental by the Contractor or subcontractor of construction equipment not owned by the Contractor or subcontractors for use in the performance of the Contract will also not be subject to New York State or New York City sales or compensating use taxes, provided that:

- (1) the Contractor's and any subcontractor's use of construction equipment rented from others, and any agreement for such rental, is based upon the agency arrangement provided for in the clause hereof entitled "Agency for Rental of Construction Equipment" and the Contractor and subcontractors have performed all their obligations under said clause;
- (2) delivery of said equipment is to the construction site;
- (3) the Contractor or subcontractor has furnished to the lessor the statement from the Authority identifying this Contract as the one under which the Contractor or subcontractor has been authorized to rent said equipment and identifying the construction site to which delivery must be made;
- (4) the invoice for said equipment is made out to the Authority and prescribes the place of delivery; and

(5) the amounts payable for rental of said equipment do not exceed the amount of compensation payable in connection with the Work.

In view of the above, the Contractor should not include in his price(s) any amounts for New York State and New York City sales and compensating use taxes on such rentals of equipment.

If (i) any claim is made against the Contractor by the State or City of New York for sales or compensating use taxes on such rental of construction equipment or (ii) any claim is made against the Contractor by a materialman, lessor or a subcontractor on account of a claim against such materialman, lessor or subcontractor by the State or City of New York for sales or compensating use taxes on rental of said equipment, then the Authority will reimburse the Contractor in an amount equal to the amount of such tax required to be paid in accordance with the requirements of law, provided that the provisos listed above in this numbered clause as (a) through (c) and (1) through (5) are complied with.

If the Authority elects to contest any such claim, it will bear the expense of such contest.

5. PERFORMANCE AND PAYMENT BOND.

If the Authority shall in its sole discretion so elect at the time of accepting the Contractor's Proposal, the Contractor shall furnish a bond for the faithful performance of all obligations imposed upon him by the Contract and also for the payment of all lawful claims of subcontractors, materialmen and workmen arising out of the performance of the Contract. Such bond shall be in the form bound herewith entitled, "Performance and Payment Bond", shall be in a penal sum equal to the Lump Sum and such bond shall be signed by one or more sureties\* satisfactory to the Authority. The bond may be executed on a separate copy of such form not physically attached to this Contract booklet. In any case, both the form of bond bound herewith and any unattached executed copy thereof shall form a part of this Form of Contract as though herein set forth in full.

At any time after the opening of Proposals, the Authority may give notice to one or more bidders to advise the Authority as to the names of their proposed sureties. Within forty-eight hours thereafter each bidder so notified shall so advise the Authority. The giving of such notice to a bidder shall not be construed as an acceptance of his Proposal, and omission to give such notice shall not be construed as an election by the Authority not to require a bond.

If the Authority elects to require the Contractor to furnish a bond, he shall deliver such bond to the Authority within seven days after receipt by him of the acceptance of his Proposal, and the sureties thereon shall be as proposed by him, provided, that if the Authority has theretofore given notice to him that his proposed sureties or any of them are not satisfactory, the bond shall be executed by other sureties satisfactory to the Authority.

The Authority shall give notice to the Contractor within ten (10) days after receipt of the Performance and Payment Bond as to whether or not such bond is satisfactory.

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\* Sureties must be corporations (commonly known as "surety companies"), authorized to do business as sureties in the state(s) in which the construction site is located, whose names appear on the current list of the Treasury Department of the United States in effect at the time of submission of the Performance and Payment Bond to the Authority as acceptable as sureties to the Treasury Department. In addition, the aggregate underwriting limitations on any one risk as set forth in the aforementioned list of the Treasury Department of the sureties shall equal or exceed the penal sum of the Performance and Payment Bond.

In the event of a default by the Contractor in his obligation to furnish a satisfactory bond within seven (7) days after he received an acceptance of his Proposal, such default shall entitle the Authority in its discretion to terminate this Contract at any time within forty-five (45) days after the acceptance of the Proposal, without any liability on the part of the Authority. Inasmuch as the damages to the Authority resulting from a termination by it upon the failure of the Contractor to furnish a satisfactory bond will include items whose accurate amount will be difficult or impossible to compute, such damages shall be liquidated in the sum of the following amounts:

- (a) The excess, if any, of the Lump Sum in the Proposal finally accepted over that in the Proposal of the Contractor; and
- (b) The expense of such new advertisement of the Contract, if any, as may be deemed necessary by the Authority; and
- (c) The sum of \$200.00 for each day after the receipt by the Contractor of the acceptance of his Proposal that the performance of the Contract is not commenced by reason of the failure of the Contractor to furnish the required bond.

In the recovery of the damages above specified, the Authority may proceed against the sum represented by the certified check deposited with it or against the Bid Bond and take such other action as it may deem best in the public interest.

If the Contractor furnishes a bond in accordance with the requirements of the Authority under this numbered clause, the Authority shall reimburse the Contractor for the net amount actually paid by him to the surety or sureties as the premium on such bond. The Contractor shall deliver to the Engineer receipts from the surety or sureties evidencing such payment and the amount thereof. Within fifteen days after receipt of such evidence satisfactory to the Engineer, the Authority shall pay to the Contractor by check the amount provided in this numbered clause.

If at any time the Authority shall be or become dissatisfied with any surety or sureties then upon any bond furnished in accordance with the requirements of the Authority, or if for any other reason such bond shall cease to be adequate security to the Authority, the Contractor shall, within five days after notice from the Authority so to do, substitute a new bond in such form and sum and signed by such other sureties as may be necessary in the opinion of the Authority to constitute adequate security.

## CHAPTER II

### ADJUSTMENTS AND PAYMENTS

#### 6. ADJUSTMENTS OF LUMP SUM.

If any Work required by the Contract Drawings and Specifications in their present form shall be countermanded or reduced, the Engineer shall have full authority on behalf of both parties to make such adjustment by way of reduction in the Lump Sum as he may in his sole discretion deem equitable and reasonable, and in making such adjustment, no allowance to the Contractor shall be made for anticipated profits.

The Chief Engineer shall have authority to agree in writing with the Contractor for adjustments by way of reduction in the Lump Sum in lieu of those for which provision is heretofore made in this numbered clause.

7. COMPENSATION FOR EXTRA WORK.

The Chief Engineer shall have authority to agree in writing with the Contractor on behalf of the Authority upon lump sum or other compensation for Extra Work in lieu of the compensation for which provision is hereinafter made in this numbered clause.

If such agreement on compensation is not made and Extra Work be performed, the Contractor's compensation shall be increased by the following amounts and such amounts only:

- (a) In the case of Extra Work performed by the Contractor personally, an amount equal to the actual net cost in money of the labor and materials required for such Extra Work, plus twenty per cent (20%) of such net cost, plus such rental for equipment (other than small tools) required for such Extra Work as the Engineer deems reasonable.
- (b) In the case of Extra Work performed by a subcontractor, an amount equal to the actual net cost in money of the labor and materials required for such Extra Work, plus twenty per cent (20%) of such net cost plus such rental for equipment (other than small tools) required for such Extra Work as the Engineer deems reasonable, plus seven per cent (7%) of the sum of the foregoing cost, percentage of cost, and rental.

As used in this numbered clause (and in this clause only):

"Labor" means foremen, surveyors, laborers, mechanics and other employees below the rank of superintendent, exclusive of timekeepers, directly employed at the construction site, whether employed by the Contractor or by the subcontractors, subject to the Engineer's authority to determine what employees of any category are "required for Extra Work" and as to the portion of their time allotted to Extra Work; and "cost of labor" means the wages actually paid to and received by such employees plus a proper proportion of (a) vacation allowances and union dues and assessments which the employer actually pays pursuant to contractual obligation upon the basis of such wages, and (b) taxes actually paid by the employer pursuant to law upon the basis of such wages. "Employees" as used above means only the employees of one employer.

"Materials" means temporary and consumable materials as well as permanent materials; and "cost of materials" means the price (including taxes actually paid by the Contractor pursuant to law upon the basis of such materials) for which such materials are sold for cash by the manufacturers or producers thereof, or by regular dealers therein, whether or not such materials are purchased directly from the manufacturer, producer or dealer (or if the Contractor is the manufacturer or producer thereof, the reasonable cost to the Contractor of the manufacture and production), plus the reasonable cost of delivering such materials to the construction site in the event that the price paid to the manufacturer, producer or dealer does not include delivery and in case of temporary materials, less their salvage value, if any.

"Work day" in reference to an item of equipment means a day other than a Saturday, Sunday or legal holiday except that if the particular item of equipment is actually utilized at the construction site by the Contractor or subcontractors under this or any other Contract with the Authority on a Saturday, Sunday or legal holiday said day shall be deemed a work day.

The rental for equipment, whether owned by the Contractor or subcontractors or rented from others and notwithstanding the actual price of any rental or actual costs associated with such equipment, shall be computed by the Engineer on the basis of the following:

- (1) (a) Hourly rental for those items of equipment listed in the "Rental Rate Blue Book" (published by Dataquest, a company of The Dunn and Bradstreet Corporation, 1290 Ridder Park Drive, San Jose, California 95131-2398), (hereinafter called "the Blue Book") shall be 100% of the applicable rates as listed in said book, reduced to an hourly basis (see formula below). The edition of this publication to be used shall be the one in effect on the date of the actual rental of the equipment. The "Estimated Operating Cost per Hour" as set forth for such item of equipment in the Blue Book shall be added to the hourly rental for each hour that such equipment is actually engaged in performing Extra Work. No amount for operating cost will be allowed during periods when such equipment is not actually engaged in performing Extra Work (i.e. standby rental time). None of the provisions of the Blue Book shall be deemed referred to or included in this Contract except as specifically set forth in this Section.
- (b) If no listing of rental rate and/or hourly operating cost for the item of equipment is in the Blue Book, the Engineer shall determine the reasonable rate of rental and/or hourly operating cost of the particular item of equipment by such other means as he finds appropriate.

(2) When utilizing the rental rates appearing in the Blue Book, the Engineer shall determine the applicable rate and the hourly rental determined therefrom by applying the following criteria:

(a) The rate to be applied for an item of equipment used on a particular Extra Work order shall be the daily, weekly or monthly rates from the foregoing publication based on the total number of work days or portions thereof that a particular item of equipment or substitute item of equipment is at the construction site for use by the Contractor or subcontractors whether under this Contract or any other contract with the Authority. Included within this period will be (i) work days of idleness of the equipment at the construction site whether such idleness results from acts or omissions of the Contractor, Authority or third persons, breakdowns in the equipment or any other cause, (ii) work days on which the equipment is removed from the construction site solely to enable the performance of repairs thereon, and (iii) work days intervening between the removal of equipment from the construction site for repairs and the delivery to the construction site of the same or substitute equipment. The number of work days in the period for each rate shall be as indicated below:

Three work days or less	-	daily rate
More than three work days but not more than fifteen work days	-	weekly rate
More than fifteen work days	-	monthly rate

The pro rata portion which one hour bears to the applicable rate shall be determined in accordance with the following formula:

Hourly rate based on daily rental	1/8 of daily rental from Blue Book
Hourly rate based on weekly rental	1/40 of weekly rental from Blue Book
Hourly rate based on monthly rental	1/176 of monthly rental from Blue Book

(b) The rental rate shall be multiplied by the applicable regional adjustment factor shown for such item of equipment in the Blue Book. The adjustment factor shall not apply to the hourly operating cost.

(c) If the Engineer should determine that the nature or size of the equipment used by the Contractor in connection with Extra Work is larger or more elaborate, as the case may be, than the size or nature of the minimum equipment determined by the Engineer to be suitable for the Extra Work, the reasonable rental will not be based upon the equipment used by the Contractor but will be based on the smallest or least elaborate equipment determined by the Engineer to have been suitable for the performance of the Extra Work.

- (3) In the case of equipment utilized only for Extra Work:
- (a) in addition to amounts determined as provided in subparagraphs (1) and (2) above, there will be added to the rental as computed above the reasonable cost of transporting such equipment to and from the construction site, and
  - (b) notwithstanding the number of hours during which such equipment is utilized, the minimum rental therefor will be for a period of eight hours.

In computing the Contractor's compensation insofar as it is based upon Extra Work, and notwithstanding any provision to the contrary appearing in the Blue Book, no consideration shall be given to any items of cost or expense not expressly set forth above, it being expressly agreed that the costs and percentage additions hereinbefore provided cover items of cost and expense to the Contractor of any type whatsoever, including administration, overhead, taxes (other than those enumerated above), clean-up, consumables including gas and oil, drafting (including printing or other reproduction), coordination, field measurements, maintenance, repairs, insurance, profit to the Contractor and small tools.

Whenever any Extra Work is performed (whether by the Contractor directly or through a subcontractor), the Contractor shall, at the end of each day, submit to the Engineer (a) daily time slips showing the name and number of each workman employed on such Work, the number of hours which he is employed thereon, the character of his duties, and the wages to be paid to him, (b) a memorandum showing the state and federal taxes based on such wages, and vacation allowances and union dues and assessments which the employer actually pays pursuant to contractual obligation upon the basis of such wages (c) a memorandum showing the amount and character of the materials furnished for such Work, from whom they were purchased and the amount to be paid therefor, and (d) a memorandum of equipment used in the performance of such Work, together with the rental claimed therefor. Such memoranda and time slips are for the purpose of enabling the Engineer to determine the amounts to be paid by the Authority under this numbered clause; and accordingly, they shall constitute a condition precedent to such payment and the failure of the Contractor to furnish them with respect

to any Work shall constitute a conclusive and binding determination on his part that such Work is not Extra Work and shall constitute a waiver by the Contractor of claims for payment for such Work. In the event that the Chief Engineer and the Contractor shall agree in writing upon a lump sum or other compensation for Extra Work in lieu of compensation as provided in the second paragraph of this clause, the daily time slips and memoranda required by this paragraph shall not be required subsequent to the date on which such agreement has been reached.

8. MONTHLY ADVANCES.

On or about the fifteenth day of each month, the Engineer shall (upon receipt from the Contractor of such information as he may require, including a certification in writing, in such form as may be required pursuant to the clause hereunder entitled "Prevailing Rate of Wage", that he has paid and caused his subcontractors to pay at least the prevailing rate of wage and supplements required by such clause) estimate and certify to the Authority the approximate amount of Work performed and compensation earned by the Contractor up to that time showing separately:

- (a) The amount of Work (other than Extra Work) performed by the Contractor up to that time and a sum bearing the same proportion to the Lump Sum, excluding the amount of Ninety Thousand Dollars (\$90,000.00) for Maintenance Of Tidal Wetland Planting and Fifteen Thousand Dollars (\$15,000.00) for Maintenance Of Permanent (Landscape) Planting, as the Work performed (other than Extra Work) bears to the Work performed and to be performed (other than Extra Work).
- (b) The increases, if any, in the Contractor's compensation for which provision is specifically made elsewhere in this Contract.

Prior to the issuance of the Certificate of Final Completion For All Work Excluding Maintenance Of Tidal Wetland Planting And Maintenance Of Permanent (Landscape) Planting, as an aid to the Contractor and to facilitate his performance, the Authority shall within fifteen days after the receipt of each such monthly certificate, advance to the Contractor by check the sums so certified, minus, however, either ten per cent (10%) of the sum certified pursuant to subparagraph (a) of this numbered clause or five percent (5%) of the Lump Sum, excluding the amount of Ninety Thousand Dollars (\$90,000.00) for Maintenance Of Tidal Wetland Planting and Fifteen Thousand Dollars (\$15,000.00) for Maintenance Of Permanent (Landscape) Planting, whichever is less, and minus all prior advances and payments to the Contractor or for his account, and minus payments by the Authority to lessors of construction equipment.

After issuance of the Certificate of Final Completion For All Work Excluding Maintenance Of Tidal Wetland Planting And Maintenance Of Permanent (Landscape) Planting, payment of the remainder of the total compensation earned by the Contractor will be paid as provided in the clause hereof entitled "Final Payment for all Work excluding Maintenance of Tidal Wetland Planting and Maintenance of Permanent (Landscape) Planting", except for the amount of Ninety Thousand Dollars (\$90,000.00) for Maintenance Of Tidal Wetland Planting And Fifteen Thousand Dollars (\$15,000.00) for Maintenance of Permanent (Landscape) Planting, which will be payable as follows:

- (a) During the sixty (60)-month period for the Maintenance of Tidal Wetland Planting, specified in the Section of the Specifications entitled "Tidal Wetland Seeding, Planting and Maintenance" and Contract Drawing LS-1, upon submission of a monthly invoice by the Contractor for maintenance performed during the preceding month and certification to the Authority by the Engineer for the satisfactory performance of such maintenance of such maintenance performed during such preceding month, the Authority shall, within fifteen (15) calendar days after the receipt of each such invoice and certification, advance to the Contractor by check the sum of One Thousand Five Hundred Dollars (\$1,500.00) for satisfactory maintenance provided by the Contractor during such month, upon certification by the Engineer to that effect.
- (b) During the twelve (12)-month period for the Maintenance of Permanent (Landscape) Planting, specified in the Section of the Specifications entitled "Maintenance of Permanent Planting" and Contract Drawing LS-1, upon submission of a monthly invoice by the Contractor for maintenance performed during the preceding month and certification to the Authority by the Engineer for the satisfactory performance of such maintenance performed during such preceding month, the Authority shall, within fifteen (15) calendar days after the receipt of each such invoice and certification, advance to the Contractor by check the sum of One Thousand Two Hundred Fifty (\$1,250.00) for satisfactory maintenance provided by the Contractor during such month, upon certification by the Engineer to that effect.

Within seven days of receipt of any sum attributable to Work performed by a subcontractor or materialman or within such later period as is provided in the subcontract or purchase agreement, the Contractor shall advance to the subcontractor or materialman said sum, less such amount, if any, as the Contractor is authorized to retain under the subcontract or purchase agreement.

Notwithstanding the above, the Authority shall have the right, at its sole discretion, to directly pay the subcontractors and material suppliers who perform Work for or furnish materials to the Contractor in connection with the Work of this Contract.

Prior to certifying any amount for payment hereunder, the Engineer may require that the Contractor submit a certification accurately and fully setting forth the total amount due and payable to each subcontractor and supplier for Work performed or materials provided by such subcontractor or supplier in connection with the Work of this Contract. Any payment made by the Authority to a subcontractor or supplier pursuant to the provisions of this numbered clause shall be made in reliance upon such certification and all such payments shall be considered as advances to the Contractor of the compensation payable hereunder. No such payment shall relieve the Contractor of any of its obligations hereunder.

Furthermore, within fifteen (15) days of the Contractor's receipt of the Authority's acceptance of the Contractor's Proposal, the Contractor shall submit to the Engineer a listing of all subcontract and material supply agreements entered into by the Contractor for the performance of Work required by this Contract. Such listing shall include the names and addresses of each such subcontractor and supplier and the amounts payable under each such agreement. As and when any modifications are made to such agreements or any additional subcontracts or supply agreements are entered into, the Contractor shall inform the Engineer of such and shall indicate the amounts payable thereunder.

Nothing contained herein shall be deemed to create any additional rights in such subcontractors or suppliers or to alter the rights of the Authority as such are set forth in the clause hereof entitled "Withholding of Payments".

9. FINAL PAYMENT FOR ALL WORK EXCLUDING MAINTENANCE OF TIDAL WETLAND PLANTING AND MAINTENANCE OF PERMANENT (LANDSCAPE) PLANTING.

After the rendition of the Certificate of Final Completion For All Work Excluding Maintenance Of Tidal Wetland Planting And Maintenance Of Permanent (Landscape) Planting and upon receipt from the Contractor of such information as may be required, the Engineer shall certify in writing to the Authority and to the Contractor the total compensation earned by the Contractor, excluding the amount of Ninety Thousand Dollars (\$90,000.00) for Maintenance of Tidal Wetland Planting and Fifteen Thousand Dollars (\$15,000.00) for Maintenance of Permanent (Landscape) Planting as provided in the Clause herein entitled "Monthly Advances".

If so required, the Contractor shall thereupon (i) certify to the Authority in writing, in such form as may be required pursuant to the clause hereunder entitled "Prevailing Rate of Wage", that he has paid and caused his subcontractors to pay at least the prevailing rate of wage and supplements required by such clause and (ii) furnish to the Authority a detailed sworn statement of all claims, just and unjust, of subcontractors, materialmen and other third persons then outstanding and which he has reason to believe may thereafter be made on account of the Work.

Within thirty days after issuance of such certificate of total compensation earned for all Work excluding Maintenance of Tidal Wetland Planting and Maintenance of Permanent (Landscape) Planting (or within thirty days after receipt of the documents provided for in the immediately preceding paragraph, if required), the Authority shall pay to the Contractor by check the amount stated in said certificate, less all other payments and advances whatsoever to or for the account of the Contractor. All prior estimates and payments excluding Maintenance of Tidal Wetland Planting and Maintenance of Permanent (Landscape) Planting shall be subject to correction in this payment, which is throughout this Contract called the Final Payment For All Work Excluding Maintenance Of Tidal Wetland Planting And Maintenance Of Permanent (Landscape) Planting.

The acceptance by the Contractor, or by anyone claiming by or through him, of Final Payment For All Work Excluding Maintenance Of Tidal Wetland Planting And Maintenance Of Permanent (Landscape) Planting shall be and shall operate as a release to the Authority of all claims and of all liability to the Contractor for all things done or furnished in connection with the Contract (excluding payment for Maintenance of Tidal Wetland Planting and Maintenance of Permanent (Landscape) Planting) and for every act and neglect of the Authority and others relating to or arising out of the Contract, including claims arising out of breach of contract and claims based on claims of third persons, excepting only his claims for reimbursement for certain sales taxes as hereinbefore provided. No payment, however, final or otherwise, shall operate to release the Contractor or his sureties from any obligations in connection with this Contract or the Performance and Payment Bond.

9A. FINAL PAYMENT FOR ALL WORK.

After the rendition of the Certificate of Final Completion For All Work (including Maintenance Of Tidal Wetland Planting and Maintenance Of Permanent (Landscape) Planting), which may be referred to elsewhere herein as the Certificate of Final Completion, and upon receipt from the Contractor of such information as may be required, the Engineer shall certify in writing to the Authority and to the Contractor the total compensation earned by the Contractor, including the amount of Ninety Thousand Dollars (\$90,000.00) for Maintenance of Tidal Wetland Planting and Fifteen Thousand Dollars (\$15,000.00) for Maintenance of Permanent (Landscape) Planting as provided in the Clause herein entitled "Monthly Advances".

If so required, the Contractor shall thereupon (i) certify to the Authority in writing, in such form as may be required pursuant to the clause hereunder entitled "Prevailing Rate of Wage", that he has paid and caused his subcontractors to pay at least the prevailing rate of wage and supplements required by such clause and (ii) furnish to the Authority a detailed sworn statement of all claims, just and unjust, of subcontractors, materialmen and other third persons then outstanding and which he has reason to believe may thereafter be made on account of the Work.

Within thirty days after issuance of such certificate of total compensation earned (or within thirty days after receipt of the documents provided for in the immediately preceding paragraph, if required), the Authority shall pay to the Contractor by check the amount stated in said certificate, less all other payments and advances whatsoever to or for the account of the Contractor. All prior estimates and payments shall be subject to correction in this payment, which is throughout this Contract called the Final Payment For All Work or Final Payment.

The acceptance by the Contractor, or by anyone claiming by or through him, of Final Payment For All Work shall be and shall operate as a release to the Authority of all claims and of all liability to the Contractor for all things done or furnished in connection with the Contract and for every act and neglect of the Authority and others relating to or arising out of the Contract, including claims arising out of breach of contract and claims based on claims of third persons, excepting only his claims for reimbursement for certain sales taxes as hereinbefore provided. No payment, however, final or otherwise, shall operate to release the Contractor or his sureties from any obligations in connection with this Contract or the Performance and Payment Bond.

The Contractor's agreement as provided in this Clause 9A. and Clause 9. above shall be deemed to be based upon the consideration forming part of this Contract as a whole and not to be gratuitous; but in any event even if deemed gratuitous and without consideration, such agreement as provided in this Clause 9A. and Clause 9. above shall nevertheless be effective. Such release shall include all claims, whether or not in litigation and even though still under consideration by the Authority or the Engineer. Such release shall be effective notwithstanding any purported reservation of right by the Contractor to preserve such claim. The acceptance of any check designated as "Final Payment" or bearing any similar designation shall be conclusively presumed to demonstrate the intent of the Contractor that such payment was intended to be accepted as final, with the consequences provided in this numbered clause, notwithstanding any purported reservation of rights.

The Contractor agrees that he shall not be entitled to, and hereby waives any right he might otherwise have to, and shall not seek any judgment whether under this Contract or otherwise for any such Final Payment or for an amount equivalent thereto or based thereon, or for any part thereof, if such judgment would have the effect of varying, setting aside, disregarding or making inapplicable the terms of this numbered clause or have the effect in any way of entitling the Contractor to accept such Final Payment or an amount equivalent thereto or based thereon or any part thereof other than in the same fashion as a voluntary acceptance of a Final Payment subject to all the terms of this Contract including this numbered clause, unless and until the Contractor should obtain a judgment on any claim arising out of or in connection with this Contract (including a claim based on breach of contract) for an amount not included in said Final Payment. In any case in which interest is allowable on the amount of the Final Payment, such interest shall be at the rate of 6% per annum for the period, if any, in which such interest is due.

10. WITHHOLDING OF PAYMENTS.

If (1) the Contractor fails to perform any of his obligations under this Contract or any other agreement between the Authority and the Contractor (including his obligation to the Authority to pay any claim lawfully made against him by any materialman, subcontractor or workman or other person which arises out of or in connection with the performance of this Contract or any other agreement with the Authority) or (2) any claim (just or unjust) which arises out of or in connection with this Contract or any other agreement between the Authority and the Contractor is made against the Authority or (3) any subcontractor under this Contract or any other agreement between the Authority and the Contractor fails to pay any claims lawfully made against him by any materialman, subcontractor, workman or other third person which arises out of or in connection with this Contract or any other agreement between the Authority and the Contractor or if in the opinion of the Chief Engineer any of the aforesaid contingencies is likely to arise, then the Authority shall have the right, in its discretion, to withhold out of any payment (final or otherwise and even though such payment has already been certified as due) such sums as the Chief Engineer may deem ample to protect it against delay or loss or to assure the payment of just claims of third persons, and to apply such sums in such manner as the Chief Engineer may deem proper to secure such protection or satisfy such claims. All sums so applied shall be deducted from the Contractor's compensation. Omission by the Authority to withhold out of any payment, final or otherwise, a sum for any of the above contingencies, even though such contingency has occurred at the time of such payment, shall not be deemed to indicate that the Authority does not intend to exercise its right with respect to such contingency. Neither the above provisions for rights of the Authority to withhold and apply monies nor any exercise or attempted exercise of, or omission to exercise, such rights by the Authority shall create any obligation of any kind to such materialmen, subcontractors, workmen or other third persons.

Until actual payment to the Contractor, his right to any amount to be paid under this Contract (even though such amount has already been certified as due) shall be subordinate to the rights of the Authority under this numbered clause.

If, however, the payment of any amount due to the Contractor shall be improperly delayed by the fault of the Authority, the Authority shall pay the Contractor interest thereon at the rate of six percent (6%) per annum for the period of delay, it being agreed that such interest shall be in lieu of and in liquidation of any damages to the Contractor because of such delay.

### CHAPTER III

#### PROVISIONS RELATING TO TIME

##### 11. TIME FOR COMPLETION AND DAMAGES FOR DELAY.

The Contractor shall complete the performance of all Work under this Contract, excluding the Maintenance of Tidal Wetland Planting and Maintenance of Permanent (Landscape) Planting, within 600 calendar days after receipt by him of the acceptance of his Proposal.

The Contractor shall not commence the performance of the Work until the later of the following dates:

- (a) If a Performance and Payment Bond is required, the date of receipt by him of notice from the Authority that the Performance and Payment Bond furnished by him is satisfactory;
- (b) If Chapter V of the "Form of Contract" contains a clause entitled "Insurance Procured by Contractor", the date of receipt by him of notice from the Authority that the insurance procured by him pursuant to said clause is satisfactory, as evidenced by the certificate to be furnished in accordance with said clause.

The time for completion shall not be extended on account of the time required to furnish the documents referred to in subparagraphs (a) and (b) above, but the Authority shall give notice to the Contractor within ten days after receipt of the Performance and Payment Bond or certificate of insurance as to whether or not such bond or insurance is satisfactory.

The Contractor's obligations for the performance and completion of the Work within the time or times provided for in this Contract are of the essence of this Contract. The Contractor guarantees that he can and will complete the performance of the Work within the time hereinbefore stipulated or within the time as extended in accordance with the clause hereof entitled "Extensions of Time". Inasmuch as the damage and loss to the Authority which will result from delay in completing the performance of the Work within the time herein stipulated will include items of loss whose amount will be incapable or very difficult of accurate estimation, the damages to the Authority for each calendar day by which the Contractor does not complete performance of the Work within the time or times above stipulated, or within such time or times as extended in accordance with the clause hereof entitled "Extensions of Time", shall be liquidated in the sum of Two Hundred Dollars (\$200.00) per calendar day.

12. EXTENSIONS OF TIME.

The time above provided for completion of any part of the Contract shall be extended (subject, however, to the provisions of this numbered clause) only if in the opinion of the Engineer the Contractor is necessarily delayed in completing such part by such time solely and directly by a cause which meets all the following conditions:

1. Such cause is beyond the Contractor's control and arises without his fault;
2. Such cause comes into existence after the opening of Proposals on this Contract and neither was nor could have been anticipated by investigation before such opening.

Variations in temperature and precipitation shall be conclusively deemed to have been anticipated before opening of such Proposals on this Contract except to the extent that the actual monthly average temperature varies from a temperature which is 10 per cent (10%) above or below the monthly normal temperature and except to the extent that the actual number of days of precipitation (of 0.1 inch or more) per month exceeds a number equal to two plus the normal number of days of precipitation per month.

In any case, the variations in temperature and precipitation described in the immediately preceding sentence will be cause for an extension of time only if occurring between the actual time of commencement of the Work at the construction site and the time for completion stipulated in the clause hereof entitled "Time for Completion and Damages for Delay" (or such time as extended as provided for herein). In the case of portions of months the number of days will be pro-rated by the Engineer. Temperature and precipitation shall be as recorded by the U. S. Weather Bureau in its publications, including that entitled "Local Climatological Data with Comparative Data", which is applicable to the area in which the Work is to be performed, and in the case of precipitation, the normal number of days of precipitation (of 0.1 inch or more) per month as abstracted from the aforementioned publications are as follows:

<u>Month</u>	<u>Normal number of days per month on which precipitation exceeds 0.1 inch</u>
January	7
February	7
March	8
April	7
May	6
June	6
July	5
August	7
September	6
October	6
November	7
December	7

In any event, even though a cause of delay meets all the above conditions, an extension shall be granted only to the extent that (i) the performance of the Work is actually and necessarily delayed and (ii) the effect of such cause cannot be anticipated and avoided or mitigated by the exercise of all reasonable precautions, efforts and measures (including planning, scheduling and rescheduling), whether before or after the occurrence of the cause of delay, and an extension shall not be granted for a cause of delay which would not have affected the performance of the Contract were it not for the fault of the Contractor or for other delay for which the Contractor is not entitled to an extension of time.

Any reference herein to the Contractor shall be deemed to include subcontractors and materialmen, whether or not in privity of contract with the Contractor, and employees and others performing any part of the Contract and all the foregoing shall be considered as agents of the Contractor.

The period of any extension of time shall be that necessary to make up the time actually lost, subject to the provisions of this numbered clause, and shall be only for the portion of the Contract actually delayed. The Engineer may defer all or part of his decision on an extension and any extension may be rescinded or shortened if it subsequently is found that the delays can be overcome or reduced by the exercise of reasonable precautions, efforts and measures.

As a condition precedent to an extension of time, the Contractor shall give written notice to the Engineer within 48 hours after the time when he knows or should know of any cause which might under any circumstances result in delay for which he claims or may claim an extension of time (including those causes which the Authority is responsible for or has knowledge of), specifically stating that an extension is or may be claimed, identifying such cause and describing, as fully as practicable at the time, the nature and expected duration of the delay and its effect on the various portions of the Contract. Since the possible necessity for an extension of time may materially alter the scheduling, plans and other actions of the Authority, and since, with sufficient opportunity, the Authority might if it so elects attempt to mitigate the effect of a delay for which an extension of time might be claimed, and since merely oral notice may cause disputes as to the existence or substance thereof, the giving of written notice as above required shall be of the essence of the Contractor's obligations and failure of the Contractor to give written notice as above required shall be a conclusive waiver of an extension of time.

It shall in all cases be presumed that no extension, or further extension, of time is due unless the Contractor shall affirmatively demonstrate to the satisfaction of the Engineer that it is. To this end the Contractor shall maintain adequate records supporting any claim for an extension of time, and in the absence of such records, the foregoing presumption shall be deemed conclusive.

13. IDLE SALARIED MEN AND EQUIPMENT.

If any salaried men or equipment of the Contractor or any subcontractor are necessarily kept continuously idle and wholly unoccupied at the construction site for a full day on each of two or more full days on which they would be engaged in the performance of the Work but for causes due solely to acts or omissions of the Authority or the Engineer occurring after the opening of Proposals on this Contract, and if such idleness is not due to any cause within the control of the Contractor or of any of his subcontractors or materialmen or his or their employees, then the Authority shall pay to the Contractor and the Contractor shall accept (in addition to any sums otherwise payable under this Contract, and in full satisfaction of and in liquidation of all claims for damages because of such act or omission of the Authority or the Engineer) an amount equal to that which the employer actually pays such salaried employees during such full days of idleness, plus a proper proportion of vacation allowances and union dues and assess-

ments actually paid by the employer pursuant to contractual obligations on the basis of such salaries, and a proper proportion of the taxes actually paid by the employer pursuant to law upon the basis of such salaries and plus such rental for such idle equipment as the Engineer deems reasonable. The rental for idle equipment shall be computed by the Engineer in accordance with the provisions of the clause of the Form of Contract entitled "Compensation for Extra Work"; provided, however, that the seven per cent (7%) of the rental to be paid in accordance with said clause in the case of equipment utilized by subcontractors shall not be payable in connection with such idle equipment; and provided further that the provisions of subparagraph (3) of said clause shall not be applicable to such idle equipment.

The Contractor shall give written notice to the Engineer before the end of the second of the above mentioned 2 or more full days (whether or not the Authority is aware of the existence of any circumstances which might constitute a basis for payment under this numbered clause), specifically stating that salaried men or equipment have been kept idle under circumstances which might result in payment under this numbered clause; and he shall furnish with such notice, for all the days that have occurred, and shall in addition furnish at the end of each additional day of the above mentioned 2 or more full days, (a) a memorandum showing the name, payroll title, salary rate and employer of each of the salaried men claimed to have been kept idle at the construction site, and taxes based upon their salaries and the holiday and vacation allowances and union dues and assessments which the employer must actually pay pursuant to contractual obligations based on their salaries, and (b) a memorandum of the equipment claimed to be kept idle, together with the amount claimed as rental therefor. Said notice and memoranda are for the purpose of enabling the Engineer to verify the Contractor's claim at the time, and of enabling him to take such steps as may be necessary to remedy the conditions upon which the claim is based. The furnishing of such notice and memoranda shall be a condition precedent to payment under this numbered clause, so that the day on which notice is given shall be counted as not later than the second of the above mentioned 2 or more full days and no subsequent day shall be counted for which the above memoranda are not furnished at the end of such day.

14. DELAYS TO CONTRACTOR.

As between the Contractor and the Authority, the Contractor assumes the risk of all suspensions of or delays in performance of the Contract, regardless of the length thereof, arising from all causes whatsoever, whether or not relating to this Contract, including wrongful acts or omissions of the Authority, its officers, agents, employees and contractors, except only to the extent, if any, that compensation or an extension of time may be due as expressly provided for elsewhere in this Contract for such suspension or delays and except to the extent, if any, that compensation may be agreed to by the Chief Engineer in writing pursuant to the clause hereof entitled "Compensation for Extra Work" for impact costs incurred by the Contractor in connection with the performance of Extra Work. Subject only to such exceptions, the Contractor shall bear the burden of all costs, expenses and liabilities which he may incur in connection with such suspensions or delays, and all such suspensions, delays, costs, expenses and liabilities of any nature whatsoever, whether or not provided for in this Contract, shall conclusively be deemed to have been within the contemplation of the parties.

Notwithstanding any provisions of this Contract, whether relating to time of performance or otherwise, the Authority makes no representation or guaranty as to when the construction site or any part thereof will be available for the performance of the Contract or as to whether conditions at the construction site will be such as to permit the Contract to be performed thereon without interruption or by any particular sequence or method or as to whether the performance of the Contract can be completed by the time required under this Contract or by any other time.

Wherever in connection with this Contract it is required, expressly or otherwise, that the Authority shall perform any act relating to the Contract, including making available or furnishing any real property, materials, or other things, no guaranty is made by the Authority as to the time of such performance and the delay of the Authority in fulfilling such requirement shall not result in liability of any kind on the part of the Authority except only to the extent, if any, that an extension of time or compensation may be due as expressly provided for elsewhere in this Contract.

15. CANCELLATION FOR DELAY.

If the performance of the Contract or any portion of it shall, in the opinion of the Chief Engineer, be materially delayed, whether or not through the fault of the Contractor, by any cause which affects the Contractor's ability to perform the Contract without affecting to the same degree the Authority's own ability to perform it, either directly or through others, the Authority shall have the right at any time during the existence of such delay to cancel this Contract as to any portion not yet performed, without prejudice to the rights, liabilities and obligations of the parties under this Contract arising out of portions already performed, provided, however, that such right of cancellation shall not exist if the delay be due to any wrongful act or omission of the Authority. In the event of such cancellation, no allowance shall be made for anticipated profits.

## CHAPTER IV

### CONDUCT OF CONTRACT

#### 16. AUTHORITY OF DIRECTOR.

If at any time it shall be, from the viewpoint of the Authority, impracticable or undesirable in the judgment of the Director to proceed with or continue the performance of the Contract or any part thereof, whether or not for reasons beyond the control of the Authority, he shall have authority to suspend performance of any part or all of the Contract until such time as he may deem it practicable or desirable to proceed. Moreover, if at any time it shall be, from the viewpoint of the Authority, impracticable or undesirable in the judgment of the Director to proceed with or continue the performance of the Contract or any part thereof for reasons beyond the control of the Authority, he shall have authority to cancel this Contract as to any or all portions not yet performed and as to any materials not yet installed even though delivered. Such cancellation shall be without prejudice to the rights and obligations of the parties arising out of portions already performed, but no allowance shall be made for anticipated profits.

#### 16A. AUTHORITY OF CHIEF ENGINEER

Inasmuch as the public interest requires that the project to which this Contract relates shall be performed in the manner which the Authority, acting through the Chief Engineer, deems best, the Chief Engineer shall have absolute authority to determine what is or is not necessary or proper for or incidental to the portion thereof specified in the clause hereof entitled "General Agreement" and the Contract Drawings and Specifications shall be deemed merely his present determination on this point. In the exercise of this authority, he shall have power to alter the Contract Drawings and Specifications; to require the performance of Work not required by them in their present form, even though of a totally different character from that now required; and to vary, increase and diminish the character, quantity and quality of, or to countermand, any Work now or hereafter required. Such variation, increase, diminution or countermanding need not be based on necessity but may be based on convenience.

To resolve all disputes and to prevent litigation the parties to this Contract authorize the Chief Engineer to decide all questions of any nature whatsoever arising out of, under, or in connection with, or in any way related to or on account of, this Contract (including claims in the nature of breach of Contract or fraud or misrepresentation before or subsequent to acceptance of the Contractor's Proposal and claims of a type which are barred by the provisions of this Contract) and his decision shall be conclusive, final and binding on the parties. His decision may be based on such assistance as he may find desirable. The effect of his decision shall not be impaired or waived by any negotiations or settlement offers in connection with the question decided, whether or not he participated therein himself, or by any prior decision of the Engineer or others, which prior decisions shall be deemed subject to review, or by any termination or cancellation of this Contract, provided, however that notwithstanding the decision reached by

the Chief Engineer in a review of determinations by the Assistant Chief Engineer for Construction and Engineer of Construction that a particular item of Work is not Extra Work the Contractor shall be compensated therefor as provided in written orders of the Assistant Chief Engineer for Construction and Engineer of Construction expressly and unmistakably indicating his intention to treat Work described therein as Extra Work issued in accordance with the provisions of the clause hereof entitled "Extra Work Orders" for amounts not in excess of \$25,000 and subject to the aggregate limit specified in said clause.

All such questions shall be submitted in writing by the Contractor to the Chief Engineer for his decision, together with all evidence and other pertinent information in regard to such questions, in order that a fair and impartial decision may be made. In any action against the Authority relating to any such question the Contractor must allege in his complaint and prove such submission, which shall be a condition precedent to any such action. No evidence or information shall be introduced or relied upon in such an action that has not been so presented to the Chief Engineer.

17. AUTHORITY AND DUTIES OF ENGINEER.

In the performance of the Contract, the Contractor shall conform to all orders, directions and requirements of the Engineer and shall perform the Contract to the satisfaction of the Engineer at such times and places, by such methods and in such manner and sequence as he may require, and the Contract shall at all stages be subject to his inspection. The Engineer shall determine the amount, quality, acceptability and fitness of all parts of the Work and shall interpret the Contract Drawings, Specifications and any orders for Extra Work. The Contractor shall employ no equipment, materials, methods or men to which the Engineer objects, and shall remove no materials, equipment or other facilities from the construction site without permission. Upon request, the Engineer shall confirm in writing any oral order, direction, requirements or determination.

The Contractor is requested to orally advise the Engineer of questions as they arise. Although such advice will not substitute for the written notice and information for which requirements are set forth elsewhere herein, it is anticipated that it will facilitate prompt decisions on the part of the Engineer and others.

The enumeration herein or in the Specifications of particular instances in which the opinion, judgment, discretion or determination of the Engineer shall control or in which the Contract shall be performed to his satisfaction or subject to his inspection, shall not imply that only the matters of a nature similar to those enumerated shall be so governed and performed, but without exception the entire Contract shall be so governed and so performed.

18. NOTICE REQUIREMENTS.

No claim against the Authority shall be made or asserted in any action or proceeding at law or in equity, and the Contractor shall not be entitled to allowance of such claim, unless the Contractor shall have complied with all requirements relating to the giving of written notice of the information with respect to such claim as provided in this numbered clause. The failure of the Contractor to give such written notice and information as to any claim shall be conclusively deemed to be a waiver by the Contractor of such claim, such written notice and information being conditions precedent to such claim. As used herein "claim" shall include any claim arising out of, under, or in connection with, or in any way related to or on account of, this Contract (including claims in the nature of breach of Contract or fraud or misrepresentation before or subsequent to acceptance of the Contractor's Proposal and claims of a type which are barred by the provisions of this Contract) for damages, payment or compensation of any nature or for extension of any time for performance of any part of this Contract.

The requirements as to the giving of written notice and information with respect to claims shall be as follows:

1. In the case of any claims for Extra Work, extension of time for completion, idle salaried men and equipment, or any other matter for which requirements are set forth elsewhere in this Contract as to notice and information, such requirements shall apply.
2. In the case of all other types of claim, notice shall have been given to the Engineer, personally, as soon as practicable, and in any case, within 48 hours, after occurrence of the act, omission, or other circumstance upon which the claim is or will be based, stating as fully as practicable at the time all information relating thereto. Such information shall be supplemented with any further information as soon as practicable after it becomes or should become known to the Contractor, including daily records showing all costs which the Contractor may be incurring or all other circumstances which will affect any claim to be made, which records shall be submitted to the Engineer, personally.

The above requirements for notices and information are for the purpose of enabling the Authority to avoid waste of public funds by affording it promptly the opportunity to cancel or revise any order, change its plans, mitigate or remedy the effects of circumstances giving rise to a claim or take such other action as may seem desirable and to verify any claimed expense or circumstances as they occur, and the requirements herein for such notice and information are essential to this Contract and are in addition to any notice required by statute with respect to suits against the Authority.

The above referred to notices and information are required whether or not the Authority is aware of the existence of any circumstances which might constitute a basis for a claim and whether or not the Authority has indicated it will consider a claim.

No act, omission, or statement of any kind shall be regarded as a waiver of any of the provisions of this numbered clause or may be relied upon as such waiver except only either a written statement signed by the Executive Director of the Authority or a resolution of the Commissioners of the Authority expressly stating that a waiver is intended as to any particular provision of this numbered clause, and more particularly no discussion, negotiations, consideration, correspondence, or requests for information with respect to a claim by any Commissioner, officer, employee or agent of the Authority shall be construed as a waiver of any provision of this numbered clause or as authority or apparent authority to effect such a waiver.

Since merely oral notice or information may cause disputes as to the existence or substance thereof, and since notice, even if written, to other than the Authority representative above designated to receive it may not be sufficient to come to the attention of the representative of the Authority with the knowledge and responsibility of dealing with the situation only notice and information complying with the express provisions of this numbered clause shall be deemed to fulfill the Contractor's obligation under this Contract.

19. EQUAL EMPLOYMENT OPPORTUNITY.

During the performance of this Contract, the Contractor agrees as follows:

(a) The Contractor will not discriminate against any employee or applicant for employment because of race, creed, sex, color or national origin, and will take affirmative action to insure that they are afforded equal employment opportunities without discrimination because of race, creed, sex, color or national origin. Such action shall be taken with reference, but not be limited to: recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff or termination, rates of pay or other forms of compensation, and selection for training or retraining, including apprenticeship and on-the-job training.

(b) The Contractor shall send to each labor union or representative of workers with which he has or is bound by a collective bargaining or other agreement or understanding, a notice, to be provided by the State Commission for Human Rights, advising such labor union or representative of the Contractor's agreement under clauses (a) through (h) (hereinafter called "non-discrimination clauses"). If the Contractor was directed to do so by the Authority as part of the bid or negotiation of this Contract, the Contractor shall request such labor union or representative to furnish him with a written statement that such labor union or representative will not discriminate because of race, creed, sex, color or national origin and that such labor union or representative either will affirmatively cooperate, within the limits of its legal and contractual authority, in the implementation of the policy and provisions of these non-discrimination clauses or that it consents and agrees that recruitment, employment, and the terms and conditions of employment under this Contract, shall be in accordance with the purposes and provisions of these non-discrimination clauses. If such labor union or representative fails or refuses to comply with such a request that it furnish such a statement, the Contractor shall promptly notify the State Commission for Human Rights of such failure or refusal.

(c) The Contractor shall post and keep posted in conspicuous places, available to employees and applicants for employment, notices to be provided by the State Commission for Human Rights setting forth the substance of the provisions of clauses (a) and (b) and such provisions of the State's laws against discrimination as the State Commission for Human Rights shall determine.

(d) The Contractor shall state, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, that all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, sex, color or national origin.

(e) The Contractor shall comply with the provisions of Sections 291-299 of the Executive Law and the Civil Rights Law, shall furnish all information and reports deemed necessary by the State Commission for Human Rights under these non-discrimination clauses and such sections of the Executive Law, and shall permit access to his books, records and accounts by the State Commission for Human Rights, the Attorney General and the Industrial Commissioner for the purposes of investigation to ascertain compliance with these non-discrimination clauses and such sections of the Executive Law and Civil Rights Law.

(f) This Contract may be forthwith canceled, terminated or suspended, in whole or in part, by the Authority upon the basis of a finding made by the State Commission for Human Rights that the Contractor has not complied with these non-discrimination clauses, and the Contractor may be declared ineligible for future contracts made by or on behalf of the State, the Authority or other public authority or agency of the State, until he has satisfied the State Commission for Human Rights that he has established and is carrying out a program in conformity with the provisions of these non-discrimination clauses. Such finding shall be made by the State Commission for Human Rights after conciliation efforts by the Commission have failed to achieve compliance with these non-discrimination clauses and after a verified complaint has been filed with the Commission, notice thereof has been given to the Contractor by the Commission and an opportunity has been afforded him to be heard publicly before the State Commissioner of Human Rights or his designee. Such sanctions may be imposed and remedies invoked independently of or in addition to sanctions and remedies otherwise provided by law.

(g) The Contractor shall include the provisions of clauses (a) through (f) in every subcontract or purchase order in such a manner that such provisions will be binding upon each subcontractor or vendor as to operations to be performed within the State of New York. The Contractor shall take such action in enforcing such provisions of such subcontract or purchase order as the Authority may direct, including sanctions or remedies for non-compliance. If the Contractor becomes involved in or is threatened with litigation with a subcontractor or vendor as a result of such direction by the Authority, the Contractor shall promptly so notify the General Counsel to the Authority, requesting him to intervene and protect the interests of the Authority.

(h) The provisions of this numbered clause which refer to the State Commission for Human Rights, the Attorney General and the Industrial Commissioner are inserted in this Contract for the benefit of such parties, as well as for the benefit of the Authority, and said Commission, Commissioner and the Attorney General shall have a direct right of action against the Contractor to effectuate the intent of this clause.

19A. AFFIRMATIVE ACTION PROGRAMS

The Contractor assures that it will undertake an affirmative action program as required by 14 CFR Part 152, Subpart E, to insure that no person shall on the grounds of race, creed, color, national origin, or sex be excluded from participating in any employment activities covered in 14 CFR Part 152, Subpart E. The Contractor assures that no person shall be excluded on these grounds from participating in or receiving the services or benefits of any program or activity covered by this subpart. The Contractor assures that it will require that its covered suborganizations provide assurances to the Contractor that they similarly will undertake affirmative action programs and that they will require assurances from their suborganizations, as required by 14 CFR Part 152, Subpart E, to the same effect.

20. PREVAILING RATE OF WAGE.

The Contractor shall pay or provide (and shall cause all subcontractors to pay or provide) to his or their workmen, laborers and mechanics (who are employed by him or them to work on an hourly or daily basis at any trade or occupation at or about the construction site) at least the prevailing rate of wage and supplements for others engaged in the same trade or occupation in the locality in which the Work is being performed as determined by the Engineer.

The provisions of this numbered clause are inserted in this Contract for the benefit of such workmen, laborers and mechanics as well as for the benefit of the Authority; and if the Contractor or any subcontractor shall pay or provide any such workman, laborer or mechanic less than the rates of wages and supplements above described, such workman, laborer or mechanic shall have a direct right of action against the Contractor or such subcontractor for the difference between the wages and supplements actually paid or provided and those to which he is entitled under this clause. If such workman, laborer or mechanic is employed by any subcontractor whose subcontract does not contain a provision substantially similar to the provisions of this clause (requiring the payment or provision of at least the above minimum, and providing for a cause of action in the event of the subcontractor's failure to pay or provide such wages and supplements) such workman, laborer or mechanic shall have a direct right of action against the Contractor. The Authority shall not be a necessary party to any action brought by any workman, laborer or mechanic to obtain a money judgment against the Contractor or any subcontractor pursuant to this numbered clause.

Nothing herein contained shall be construed to prevent the Contractor or any subcontractor from paying higher rates of wages or providing higher supplements than the minimum hereinbefore prescribed; and nothing herein contained shall be construed to constitute a representation or guarantee that the Contractor or any subcontractor can obtain workmen, laborers and mechanics for the minimum hereinbefore prescribed.

The Engineer may at any time request that the Contractor certify in writing that he has paid or provided (and has caused all subcontractors to pay or provide) at least the prevailing rates of wage and supplements required by this numbered clause and the Contractor shall comply with any such request within ten (10) calendar days of his receipt thereof. The Contractor shall include in his certification such detail as the Engineer may require with respect to hourly wages and supplements actually paid or provided by the Contractor or any subcontractor to each of his or their laborers, workmen and mechanics employed as described in this numbered clause.

The Contractor's failure to comply with any provision of this numbered clause shall be deemed a substantial breach of this Contract.

20A. MINIMUM WAGE RATES.

At the direction of the Federal Aviation Administration, the attention of bidders is directed particularly to the Schedule of Minimum Wage Rates attached to the Contract and made a part hereof.

The minimum wage rates as established by the Secretary of Labor are subject to change at any time before the award of the Contract except that if the change is made within five days after the opening of bids and the award is made within thirty days after the bids are opened, or ninety days after the date of wage decisions, whichever is earlier, the change is not effective. Such a change is necessary in order to comply with a decision of the U. S. Department of Labor.

21. EXTRA WORK ORDERS.

No Extra Work of a cost in excess of \$25,000 shall be performed except pursuant to written orders of the Chief Engineer expressly and unmistakably indicating his intention to treat the Work described therein as Extra Work; and, no Extra Work of a cost of \$25,000 or less shall be performed except pursuant to written orders of the Chief Engineer, Assistant Chief Engineer - Construction or the Engineer of Construction expressly and unmistakably indicating his intention to treat the Work described therein as Extra Work; and, exclusive of Extra Work expressly authorized by or pursuant to a resolution of the Commissioners of the Authority or its Committee on Construction, the Chief Engineer and, subject to the foregoing limitation, the Assistant Chief Engineer - Construction and the Engineer of Construction, shall have authority to order any item of Extra Work, if the cost thereof to the Authority together with the cost of all other Extra Work previously ordered and not expressly authorized as aforesaid will not in the aggregate be in excess of the sum specified in the letter of acceptance of the Contractor's Proposal as the limit on such authority to order Extra Work; provided, however, that Extra Work in excess of such aggregate amount may be ordered as above provided to the extent expressly authorized in a writing signed by the Executive Director of the Authority delegating authority vested in him pursuant to the By-Laws or a resolution of the Commissioners of the Authority or its Committee on Construction and in the case of Extra Work ordered by the Assistant Chief Engineer - Construction or Engineer of Construction to the extent expressly authorized in a writing signed by the Chief Engineer delegating authority vested in the Executive Director as aforesaid, which in turn was vested in him by the Executive Director.

In the absence of such an order signed by the Chief Engineer in the case of Extra Work of a cost in excess of \$25,000 and by the Chief Engineer or Assistant Chief Engineer - Construction or Engineer of Construction in the case of Extra Work of a cost of \$25,000 or less, if the Engineer shall direct, order or require any Work, whether orally or in writing, which the Contractor deems to be Extra Work, the Contractor shall nevertheless comply therewith, but shall within twenty-four hours give written notice thereof to the Chief Engineer and the Engineer, stating why he deems it to be Extra Work, and shall moreover furnish to the Engineer time slips and memoranda as required by the clause hereof entitled "Compensation for Extra Work". Said notice, time slips and memoranda are for the purpose of affording to the Chief Engineer an opportunity to verify the Contractor's claim at the time and (if he desires so to do) to cancel promptly such order, direction or requirement of the Engineer, of affording to the Engineer an opportunity of keeping an accurate record of the materials, labor and other items involved, and generally of affording to the Authority an opportunity to take such action as it may deem desirable in light of the Contractor's claims. Accordingly, the failure of the Contractor to serve such notice or to furnish such time slips and memoranda shall be deemed to be a conclusive and binding determination on his part that the direction, order or requirement of the Engineer does not involve the performance of Extra Work, and shall be deemed to be a waiver by the Contractor of all claims for additional compensation or damages by reason thereof, such written notice, time slips and memoranda being a condition precedent to such claims.

22. PERFORMANCE OF EXTRA WORK.

The provisions of this Form of Contract relating generally to Work and its performance shall apply without exception to any Extra Work required and to the performance thereof. Moreover, the provisions of the Specifications relating generally to the Work and its performance shall also apply to any Extra Work required and to the performance thereof, except to the extent that a written order in connection with any particular item of Extra Work may expressly provide otherwise.

23. TITLE TO MATERIALS.

All materials to become part of the permanent construction shall be and become the property of the Authority upon delivery at the construction site or upon being especially adapted for use in or as a part of the permanent construction, whichever may first occur, subject however to the Contractor's assumption of risk under the clause hereof entitled "Risks Assumed by Contractor", subparagraph (a).

The Contractor shall promptly furnish to the Authority such bills of sale and other instruments as may be required by it, properly executed, acknowledged and delivered, assuring to it title to such materials, free of encumbrances and shall mark or otherwise identify all such materials as the property of the Authority.

24. ASSIGNMENTS AND SUBCONTRACTS.

Any assignment or other transfer by the Contractor of this Contract or any part hereof or of any of his rights hereunder or of any monies due or to become due hereunder and any delegation of any of his duties hereunder without the express consent in writing of the Authority shall be void and of no effect as to the Authority, provided, however, that the Contractor may subcontract portions of the Work to such persons as the Engineer may, from time to time, expressly approve in writing. For each individual, partnership or corporation proposed by the Contractor as a subcontractor, the Contractor shall submit to the Authority a certification or, if a certification cannot be made, a statement by such person, partnership or corporation to the same effect as the certification or statement required from the Contractor pursuant to the clauses of the "Information For Bidders" entitled "Certification of No Investigation (Criminal or Civil Anti-Trust), Indictment, Conviction, Suspension, Debarment, Disqualification, Prequalification Denial or Termination, Etc; Disclosure of Other Required Information" and "Non-Collusive Bidding and Code of Ethics Certification; Certification of No Solicitation Based on Commission, Percentage, Brokerage, Contingent Fee or Other Fee". All further subcontracting by any subcontractor shall also be subject to such approval of the Engineer. Approval of a subcontractor may be conditioned on (among other things) the furnishing, without expense to the Authority, of a surety bond guaranteeing payment by the subcontractor of claims of materialmen, subcontractors, workmen and other third persons arising out of the subcontractor's performance of any part of the Work.

No consent to any assignment or other transfer, and no approval of any subcontractor, shall under any circumstances operate to relieve the Contractor of any of his obligations; no subcontract, no approval of any subcontractor and no act or omission of the Authority or the Engineer shall create any rights in favor of such subcontractor and against the Authority; and as between the Authority and the Contractor, all assignees, subcontractors, and other transferees shall for all purposes be deemed to be agents of the Contractor. Moreover, all subcontracts and all approvals of subcontractors shall be and, regardless of their form, shall be deemed to be conditioned upon performance by the subcontractor in accordance with this Contract; and if any subcontractor shall fail to perform the Contract to the satisfaction of the Engineer, the Engineer shall have the absolute right to rescind his approval forthwith and to require the performance of the Contract by the Contractor personally or through other approved subcontractors.

25. CLAIMS OF THIRD PERSONS.

The Contractor undertakes to pay all claims lawfully made against him by subcontractors, materialmen and workmen, and all claims lawfully made against him by other third persons arising out of or in connection with or because of the performance of this Contract and to cause all subcontractors to pay all such claims lawfully made against them.

26. CERTIFICATES OF PARTIAL COMPLETION.

If at any time prior to the rendition of the Certificate of Final Completion, any portion of the permanent construction has been satisfactorily completed, and if in the judgment of the Engineer such portion of the permanent construction is not necessary for the operations of the Contractor but will be immediately useful to and is needed by the Authority for other purposes, the Engineer may render to the Authority and to the Contractor a certificate in writing to that effect (herein called a Certificate of Partial Completion), and thereupon or at any time thereafter the Authority may take over and use the portion of the permanent construction described in such Certificate and exclude the Contractor therefrom.

The rendition of a Certificate of Partial Completion shall not be construed to constitute an extension of the Contractor's time to complete the portion of the permanent construction to which it relates in the event that he has failed to complete the same in accordance with the terms of this Contract. Moreover, the acceptance of a Certificate of Partial Completion by the Authority shall not operate to release the Contractor or his sureties from any obligations under or upon this Contract or the Performance and Payment Bond.

27. CERTIFICATE OF FINAL COMPLETION FOR ALL WORK EXCLUDING MAINTENANCE OF TIDAL WETLAND PLANTING AND MAINTENANCE OF PERMANENT (LANDSCAPE) PLANTING.

After the satisfactory completion of all Work whatsoever required (excluding Maintenance of Tidal Wetland Planting And Maintenance Of Permanent (Landscape) Planting) and the making of such tests and inspections as may be necessary or desirable, the Engineer shall render to the Authority and to the Contractor a certificate in writing (herein called the Certificate Of Final Completion For All Work excluding Maintenance Of Tidal Wetland Planting And Maintenance Of Permanent (Landscape) Planting) certifying that in his opinion all Work under this Contract Excluding Maintenance Of Tidal Wetland Planting And Maintenance Of Permanent (Landscape) Planting, including Extra Work, has been completed in accordance with the Contract Drawings and Specifications and the requirements of the Engineer, and certifying the date as of which it was so completed.

The rendition of the Certificate Of Final Completion For All Work Excluding Maintenance Of Tidal Wetland Planting And Maintenance Of Permanent (Landscape) Planting shall not be construed to constitute an extension of the Contractor's time for performance in the event that he has failed to complete the Work in accordance with the terms of this Contract. Moreover, the acceptance of the Certificate Of Final Completion For All Work Excluding Maintenance Of Tidal Wetland Planting And Maintenance Of Permanent (Landscape) Planting by the Authority shall not operate to release the Contractor or his sureties from any obligations under or upon this Contract or the Performance and Payment Bond.

27A. CERTIFICATE OF FINAL COMPLETION FOR ALL WORK.

After the satisfactory completion of all Work whatsoever required (including Maintenance Of Tidal Wetland Planting And Maintenance Of Permanent (Landscape) Planting) and the making of such tests and inspections as may be necessary or desirable, the Engineer shall render to the Authority and to the Contractor a certificate in writing (herein called the Certificate Of Final Completion For All Work or Certificate of Final Completion) certifying that in his opinion all Work under this Contract, including Extra Work, has been completed in accordance with the Contract Drawings and Specifications and the requirements of the Engineer, and certifying the date as of which it was so completed.

The rendition of the Certificate of Final Completion For All Work Excluding Maintenance Of Tidal Wetland Planting And Maintenance Of Permanent (Landscape) Planting shall not be construed to constitute an extension of the Contractor's time for performance in the event that he has failed to complete the Work in accordance with the terms of this Contract. Moreover, the acceptance of the Certificate of Final Completion For All Work Excluding Maintenance Of Tidal Wetland Planting And Maintenance Of Permanent (Landscape) Planting by the Authority shall not operate to release the Contractor or his sureties from any obligations under or upon this Contract or the Performance and Payment Bond.

27B. NO GIFTS, GRATUITIES, OFFERS OF EMPLOYMENT, ETC.

During the term of this Contract, the Contractor shall not offer, give or agree to give anything of value either to an Authority employee, agent, job shopper, consultant, construction manager or other person or firm representing the Authority, or to a member of the immediate family (i.e, a spouse, child, parent, brother or sister) of any of the foregoing, in connection with the performance by such employee, agent, job shopper, consultant, construction manager or other person or firm representing the Authority of duties involving transactions with the Contractor on behalf of the Authority, whether or not such duties are related to this Contract or any other Authority contract or matter. Any such conduct shall be deemed a material breach of this Contract.

As used herein "anything of value" shall include but not be limited to any (a) favors, such as meals, entertainment, transportation (other than that contemplated by the Contract or any other Authority contract), etc., which might tend to obligate the Authority employee to the Contractor, and (b) gift, gratuity, money, goods, equipment, services, lodging, discounts not available to the general public, offers or promises of employment, loans or the cancellation thereof, preferential treatment or business opportunity. Such term shall not include compensation contemplated by this Contract or any other Authority contract.

Where used in this clause, the term "Authority" shall be deemed to include all subsidiaries of the Authority. Currently, those subsidiaries are the Port Authority Trans-Hudson Corporation (PATH) and the Newark Legal and Communications Center.

In addition, during the term of this Contract, the Contractor shall not make an offer of employment or use confidential information in a manner proscribed by the Code of Ethics and Financial Disclosure dated as of April 11, 1996 (a copy of which is available upon request to the Office of the Secretary of the Authority).

The Contractor shall include the provisions of this clause in each subcontract entered into under this Contract.

CHAPTER V

WARRANTIES MADE AND LIABILITY ASSUMED  
BY THE CONTRACTOR

28. CONTRACTOR'S WARRANTIES.

The Contractor represents and warrants:

(a) That he is financially solvent, that he is experienced in and competent to perform the type of services contemplated by this Contract, that the facts stated or shown in any papers submitted or referred to in connection with his Proposal are true, and, if the Contractor be a corporation, that it is authorized to perform this Contract;

(b) That he has carefully examined and analyzed the provisions and requirements of this Contract and inspected the construction site, that from his own investigations he has satisfied himself as to the nature of all things needed for the performance of this Contract, the general and local conditions and all other matters which in any way affect this Contract or its performance, and that the time available to him for such examination, analysis, inspection and investigations was adequate;

(c) That the Contract is feasible of performance in accordance with all its provisions and requirements and that he can and will perform it in strict accordance with such provisions and requirements;

(d) That no Commissioner, officer, agent or employee of the Authority is personally interested directly or indirectly in this Contract or the compensation to be paid hereunder; and

(e) That, except only for those representations, statements or promises expressly contained in this Contract, no representation, statement or promise, oral or in writing, of any kind whatsoever by the Authority, its Commissioners, officers, agents, employees or consultants has induced the Contractor to enter into this Contract or has been relied upon by the Contractor, including any with reference to: (1) the meaning, correctness, suitability, or completeness of any provisions or requirements of this Contract; (2) the nature, existence or location of materials, structures, obstructions, utilities or conditions, surface or subsurface, which may be encountered at the construction site; (3) the nature, quantity, quality or size of the materials, equipment, labor and other facilities needed for the performance of this Contract; (4) the general or local conditions which may in any way affect this Contract or its performance; (5) the price of the Contract; or (6) any other matters, whether similar to or different from those referred to in (1) through (5) immediately above, affecting or having any connection with this Contract, the bidding thereon, any discussions thereof, the performance thereof or those employed therein or connected or concerned therewith.

Moreover, the Contractor accepts the conditions at the construction site as they may eventually be found to exist and warrants and represents that he can and will perform the Contract under such conditions and that all materials, equipment, labor and other facilities required because of any unforeseen conditions (physical or otherwise) shall be wholly at his own cost and expense, anything in this Contract to the contrary notwithstanding.

Nothing in the Contract Drawings or Specifications or any other part of the Contract is intended as or shall constitute a representation by the Authority as to the feasibility of performance of this Contract or any part thereof. Moreover, the Authority does not warrant or represent either by issuance of the Contract Drawings and Specifications or by any provision of this Contract as to time for performance or completion or otherwise that the Contract may be performed or completed by the times required herein or by any other times.

The Contractor further represents and warrants that he was given ample opportunity and time and by means of this paragraph was requested by the Authority to review thoroughly all documents forming this Contract prior to opening of Proposals on this Contract in order that he might request inclusion in this Contract of any statement, representation, promise or provision which he desired or on which he wished to place reliance; that he did so review said documents, that either every such statement, representation, promise or provision has been included in this Contract or else, if omitted, that he expressly relinquishes the benefit of any such omitted statement, representation, promise or provision and is willing to perform this Contract without claiming reliance thereon or making any other claim on account of such omission.

The Contractor further recognizes that the provisions of this numbered clause (though not only such provisions) are essential to the Authority's consent to enter into this Contract and that without such provisions, the Authority would not have entered into this Contract.

29. RISKS ASSUMED BY THE CONTRACTOR.

The Contractor assumes the following distinct and several risks, whether they arise from acts or omissions (whether negligent or not) of the Contractor, of the Authority, or of third persons, or from any other cause, and whether such risks are within or beyond the control of the Contractor, excepting only risks which arise solely from affirmative acts done by the Authority subsequent to the opening of Proposals on this Contract with actual and wilful intent to cause the loss, damage and injuries described in subparagraphs (a) through (c) below:

(a) The risk of loss or damage to the permanent construction prior to the rendition of the Certificate of Final Completion (other than loss or damage to the portions of the permanent construction with respect to which Certificates of Partial Completion have been issued), and the Contractor shall forthwith repair, replace and make good any such loss or damage to the permanent construction without cost to the Authority;

(b) The risk of claims, fines or penalties, just or unjust, made by third persons or assessed by courts or governmental agencies or entities against the Contractor or the Authority on account of injuries (including wrongful death), loss, damage or liability of any kind whatsoever arising or alleged to arise out of or in connection with the performance of the Work (whether or not actually caused by or resulting from the performance of the Work) or out of or in connection with the Contractor's operations or presence at or in the vicinity of the construction site or Authority premises, including claims against the Contractor or the Authority for the payment of workers' compensation, whether such claims, fines or penalties are made or assessed and whether such injuries, damage, loss and liability are sustained at any time both before and after the rendition of the Certificate of Final Completion;

(c) The risk of loss or damage to any property of the Contractor, and of claims made against the Contractor or the Authority for loss or damage to any property of subcontractors, materialmen, workmen and others performing the Work, occurring at any time prior to completion of removal of such property from the construction site or Authority premises or the vicinity thereof.

The Contractor shall indemnify the Authority against all claims described in subparagraphs (b) and (c) above and for all expense incurred by it in the defense, settlement or satisfaction thereof, including expenses of attorneys, except where indemnity would be precluded by New York State General Obligations Law, Section 5-322.1 or by other applicable law. If so directed, the Contractor shall defend against any claim described in subparagraphs (b) and (c) above, in which event he shall not without obtaining express advance permission from the General Counsel of the Authority raise any defense involving in any way jurisdiction of the tribunal, immunity of the Authority, governmental nature of the Authority or the provisions of any statutes respecting suits against the Authority. Unless a claim is one which the Contractor is not required to indemnify the Authority against as described in the first sentence of this paragraph, such defense shall be at the Contractor's cost.

The provisions of this numbered clause shall also be for the benefit of the Commissioners, officers, agents and employees of the Authority, so that they shall have all the rights which they would have under this numbered clause if they were named at each place above at which the Authority is named, including a direct right of action against the Contractor to enforce the foregoing indemnity, except, however, that the Authority by action of its Board of Commissioners may at any time in its sole discretion and without liability on its part cancel the benefit conferred on any of them by this numbered clause, whether or not the occasion for invoking such benefit has already arisen at the time of such cancellation.

Neither the issuance of a Certificate of Completion nor the making of Final Payment shall release the Contractor from his obligations under this numbered clause. Moreover, neither the enumeration in this numbered clause nor the enumeration elsewhere in this Contract of particular risks assumed by the Contractor or of particular claims for which he is responsible shall be deemed (a) to limit the effect of the provisions of this numbered clause or of any other clause of this Contract relating to such risks or claims, (b) to imply that he assumes or is responsible for risks or claims only of the type enumerated in this numbered clause or in any other clause of this Contract, or (c) to limit the risks which he would assume or the claims for which he would be responsible in the absence of such enumerations.

Inasmuch as the Authority has agreed to indemnify the City of New York against claims of the types described in subparagraph (b) above made against said city, the Contractor's obligation under subparagraph (b) above shall include claims by said city against the Authority for such indemnification, including those arising from acts or omissions (whether negligent or not) of said city.

30. NO THIRD PARTY RIGHTS.

Nothing contained in this Contract is intended for the benefit of third persons, except to the extent that the Contract specifically provides otherwise by use of the words "benefit" or "direct right of action".

31. INSURANCE REQUIREMENTS

In order to reduce the cost of this Contract, the Authority will procure and will maintain in force and pay the premiums on:

1. A policy of primary public liability (Comprehensive - Commercial General Liability, including Contractual) insurance on which the Contractor and the subcontractors will be insureds issued by an insurance company satisfactory to the Authority, with current coverage limits of \$2 million per occurrence, combined single limit for bodily injury and property damage liability.
2. Policies of excess public liability insurance from various insurers, with combined coverage limits of \$23 million per occurrence excess of the primary \$2 million insurance coverage.
3. A policy of workers' compensation and employer's liability insurance fulfilling the Contractor's and the subcontractor's obligations under the applicable State Workers' Compensation Law for those employees of the Contractor and the subcontractors employed pursuant to this Contract in operations conducted at or from the site of the Work hereunder. Coverage under this policy may, as appropriate, include one or more of the following endorsements:
  - (a) Longshoremen's and Harbor Workers' Compensation Act Coverage Endorsement. (Applies when performing work on or around navigable waters).
  - (b) Maritime Coverage Endorsement (Applies to masters or members of the crews of vessels, if vessels are used).
  - (c) Federal Employer's Liability Act Coverage Endorsement. (May apply to railroad related Work).

Determination in any instance as to the appropriateness of the included coverage described in (a), (b) and (c) above will be made based upon information to be provided by the Contractor relating to the mode of performance of Work to be done under the Contract.

4. A policy of builder's risk insurance, covering the improvements or other Work to be effectuated by the Contractor and the subcontractors, with coverage limits of \$50 million per occurrence for all locations combined (subject to a \$50 million annual aggregate for flood and earthquake damage and a limit of \$10 million per occurrence for damage to property in-transit). The deductible is \$10,000 per occurrence for all losses except those caused by flood and earthquake, and \$50,000 per occurrence with respect to flood and earthquake. The policy form contains various exclusions, including but not limited to the following property exclusions: automobiles; aircraft; and Contractors' and subcontractors' machinery, tools, and equipment and property of a similar nature, including forms, shoring, scaffolding and similar property, not intended to become a permanent part of a building or structure. The Contractor and the subcontractors must refer to the policy form to determine all properties and perils included and excluded and to determine their rights and responsibilities as insureds under the policy form. Coverage for the aforesaid builder's risk insurance has been placed. Certain provisions of the proposed policy form with respect to such coverage are under discussion. A copy of the proposed policy form provided on behalf of the underwriters in connection with such coverage (and, upon finalization, a copy of the actual policy form) may be examined during normal business hours by the Contractor, or at the Contractor's request, by any of the subcontractors performing Work for the Contractor under this Contract, at the office of the General Manager, Risk Management of the Port Authority. The Contractor and the subcontractors are responsible for payment for all losses within the deductibles and losses not covered by the builder's risk policies.

The current policies described in (1), (2) and (3) of this numbered clause are on file and available for examination in the office of the General Manager, Risk Management, The Port Authority of NY and NJ, 241 Erie Street, Room 306, Jersey City, New Jersey 07310-1397. These policies under (1) and (2) are subject to certain liability coverage exclusions, which include, but are not limited to, exclusions from liability from claims arising from pollution and exposure to asbestos.

The Contractor and subcontractors shall comply with all obligations of the insured under or in connection with all of the policies described in clauses (1) through (4) above.

The Authority shall have the right at any time and from time to time at its option to procure insurance substituting in whole or in part for any or all of the policies described in (1) through (4) above or to require that the Contractor and the subcontractors themselves obtain insurance substituting in whole or part for that above referred to, provided always, however, that the Contractor and the subcontractors shall be afforded coverage as stipulated by the Authority and the Authority shall either pay the premiums on such substitute insurance or reimburse the Contractor and the subcontractors therefor.

Neither the procurement of the above insurance or any substitute insurance nor the extent of the coverage or the limits of liability thereunder shall be construed to be a limitation on the nature or extent of the Contractor's obligations, or to relieve the Contractor of any such obligations, and the procurement of the above insurance is only for the purpose of reducing the cost of the Contract without constituting any representation by the Authority as to the adequacy of the insurance to protect the Contractor against the obligations imposed on him by law (except the applicable State Workers' Compensation Law) or by this or any other Contract.

Notwithstanding any provision of this clause, however, no subcontractor shall be or have the right to be covered under the policies of insurance above referred to until he has been expressly approved in writing by the Engineer, as required under this Contract, and such approval may be withheld, among other reasons, until execution by the subcontractor of agreements affirming his obligations provided in this clause with respect to the above insurance.

The provisions of this numbered clause are not intended to create any rights in the Contractor other than rights which may be available to him under said policies themselves, whatever such rights may be. Moreover, the Authority makes no representation or guaranty, either by the provisions of this numbered clause or otherwise, as to the effect of or the coverage under said policies, and no employee or agent of the Authority is authorized to make any such representation or guaranty, either by the provisions of this numbered clause or otherwise, as to the effect of or the coverage under said policies, and no employee or agent of the Authority is authorized to make any such representation or guaranty or to offer any interpretation of or information on said policies. The Contractor warrants and represents that he has examined and is familiar with the above stated coverages and that in submitting his Proposal he has relied solely on his own interpretation thereof and not on any representations or statements, oral or written, of the Authority, its Commissioners, officers, agents, employees, consultants or contractors.

All negotiations and adjustments with any insurer concerning payment for any loss, the risk of which is borne by the Contractor under this Contract, shall be the responsibility of and shall be conducted by the Contractor unless the applicable policy provides otherwise. The Contractor shall, however, inform the Engineer of the progress of all such negotiations and notify him sufficiently in advance of all meetings thereon so that he or his representatives may attend said negotiations if they so desire.

The Authority shall be entitled to all returned premiums, dividends and credits which may become payable at any time for any reason whatsoever in connection with the aforementioned insurance. The Contractor hereby assigns to the Authority all such returned premiums, dividends and credits and the subcontractors shall be deemed to have assigned to the Authority all such returned premiums, dividends and credits by becoming subcontractors under this Contract. The Contractor shall execute and cause the subcontractors to execute any instrument necessary or convenient to evidence the Authority's right to such returned premiums, dividends and credits.

Notwithstanding any payment by the Authority of any insurance premiums, the Authority shall not be deemed the employer of any employees hired by the Contractor or any subcontractor covered by such insurance nor shall it be liable for any of the obligations of such employer.

The Contractor and the subcontractors shall cooperate to the fullest extent with the Authority in all matters relating to the aforementioned insurance and shall comply with all requirements of all insurance policies procured by the Authority. They shall also at their own expense furnish the Engineer or his duly authorized representative with copies of all payrolls, correspondence, papers, records and other things necessary or convenient for dealing with or defending against any claims and for procuring or administering the aforementioned insurance including furnishing the name of any of their employees, officers, or agents whose presence or testimony is necessary or convenient in any negotiations or proceedings involving such insurance.

## CHAPTER VI

### RIGHTS AND REMEDIES

#### 32. RIGHTS AND REMEDIES OF AUTHORITY.

The Authority shall have the following rights in the event the Chief Engineer shall deem the Contractor guilty of a breach of any term whatsoever of this Contract:

- (a) The right to take over and complete the Work or any part thereof as agent for and at the expense of the Contractor, either directly or through other contractors.
- (b) The right to cancel this Contract as to any or all of the Work yet to be performed.
- (c) The right to specific performance, an injunction or any other appropriate equitable remedy.
- (d) The right to money damages.

For the purpose of this Contract, breach shall include but not be limited to the following, whether or not the time has yet arrived for performance of an obligation under this Contract: a statement by the Contractor to any representative of the Authority indicating that he cannot or will not perform any one or more of his obligations under this Contract; any act or omission of the Contractor or any other occurrence which makes it improbable at the time that he will be able to perform any one or more of his obligations under this Contract; any suspension of or failure to proceed with any part of the Work by the Contractor which makes it improbable at the time that he will be able to perform any one or more of his obligations under this Contract; any false certification at any time by the Contractor as to any material item certified pursuant to the clauses of the Information For Bidders entitled "Certification of No Investigation (Criminal or Civil Anti-Trust), Indictment, Conviction, Suspension, Debarment, Disqualification, Prequalification Denial or Termination, Etc; Disclosure of Other Required Information" and "Non-Collusive Bidding and Code of Ethics Certification; Certification of No Solicitation Based on Commission, Percentage, Brokerage, Contingent Fee or Other Fee", or the willful or fraudulent submission of any signed statement pursuant to such clauses which is false in any material respect; or the Contractor's incomplete or inaccurate representation of its status with respect to the circumstances provided for in such clauses.

The enumeration in this numbered clause or elsewhere in this Contract of specific rights and remedies of the Authority shall not be deemed to limit any other rights or remedies which the Authority would have in the absence of such enumeration; and no exercise by the Authority of any right or remedy shall operate as a waiver of any other of its rights or remedies not inconsistent therewith or to estop it from exercising such other rights or remedies.

33. RIGHTS AND REMEDIES OF CONTRACTOR.

Inasmuch as the Contractor can be adequately compensated by money damages for any breach of this Contract which may be committed by the Authority, the Contractor expressly agrees that no default, act or omission of the Authority shall constitute a material breach of this Contract, entitling him to cancel or rescind it or (unless the Engineer shall so direct) to suspend or abandon performance.

34. PERFORMANCE OF WORK AS AGENT FOR CONTRACTOR.

In the exercise of its right to take over and complete Work as agent for the Contractor, for which provision is made in the clause hereof entitled "Rights and Remedies of the Authority", the Authority shall have the right to take possession of and use or permit the use of any and all plant, materials, equipment and other facilities provided by the Contractor for the purpose of the Work and the Contractor shall not remove any of the same from the site of the Work without express permission. Unless expressly directed to discontinue the performance of all Work, the Contractor shall continue to perform the remainder thereof in such manner as in no way will hinder or interfere with the portions taken over by the Authority.

In the certificate of total compensation earned, for which provision is made in the clause hereof entitled "Final Payment", the Engineer shall separately state the amount of Work performed by the Authority as agent for the Contractor, shall credit to the Authority the cost thereof, and shall credit to the Contractor the compensation earned thereby; and the difference between them shall be payable by the Contractor to the Authority, or vice versa as the case may be. If such difference is in its favor, the Authority may deduct it from any moneys due the Contractor, and if such moneys be insufficient, the balance thereof shall be payable to it on demand; if in the Contractor's favor, it shall constitute part of the Final Payment.

The exercise by the Authority of its right to take over the Work shall not release the Contractor or his sureties from any of his or their obligations or liabilities under this Contract or the Performance and Payment Bond.

35. NO ESTOPPEL OR WAIVER.

The Authority shall not be precluded or estopped by any acceptance, certificate or payment, final or otherwise, issued or made under this Contract or otherwise issued or made by it, the Engineer, or any officer, agent or employee of the Authority, from showing at any time the true amount and character of Work performed, or from showing that any such acceptance, certificate or payment is incorrect or was improperly issued or made; and the Authority shall not be precluded or estopped, notwithstanding any such acceptance, certificate or payment, from recovering from the Contractor any damages which it may sustain by reason of any failure on his part to comply strictly with this Contract, and any moneys which may be paid to him or for his account in excess of those to which he is lawfully entitled.

Neither the acceptance of the Work or any part thereof, nor any payment therefor, nor any order or certificate issued under this Contract or otherwise issued by the Authority, the Engineer, or any officer, agent or employee of the Authority, nor any permission or direction to continue with the performance of Work, nor any performance by the Authority of any of the Contractor's duties or obligations, nor any aid lent to the Contractor by the Authority in his performance of such duties or obligations, nor any other thing done or omitted to be done by the Authority, its Commissioners, officers, agents or employees shall be deemed to be a waiver of any provision of this Contract or of any rights or remedies to which the Authority may be entitled because of any breach thereof, excepting only a resolution of its Commissioners, providing expressly for such waiver. No cancellation, rescission or annulment hereof, in whole or as to any part of the Work, because of any breach hereof, shall be deemed a waiver of any money damages to which the Authority may be entitled because of such breach. Moreover, no waiver by the Authority of any breach of this Contract shall be deemed to be a waiver of any other or any subsequent breach.

CHAPTER VII

35A. FEDERAL AVIATION ADMINISTRATION REQUIREMENTS

(1) Airport Improvement Program (AIP) Project. The Work in this Contract is included in AIP Project No. \* which is being undertaken and accomplished by the Port Authority of New York and New Jersey (Authority) in accordance with the terms and conditions of a grant agreement between the Authority and the United States, under the Airport and Airway Improvement Act of 1982 (AAIA) (P.L. 97-248, 49 U.S.C. 2201 et seq.) and Part 152 of the Federal Aviation Regulations (FAR) (14 CFR Part 152), pursuant to which the United States has agreed to pay a certain percentage of the costs of the project that are determined to be allowable project costs under that Act. The United States is not a party to this Contract and no reference in this Contract to the FAA or any representative thereof, or to any rights granted to the FAA or any representative thereof, or the United States, by the Contract, makes the United States a party to this Contract.

(2) Consent to Assignment. The Contractor shall obtain the prior written consent of the Authority to any proposed assignment of any interest in or part of this Contract.

(3) Veteran's Preference. In the employment of labor (except in executive, administrative, and supervisory positions), preference shall be given to veterans of the Vietnam era and disabled veterans. However, this preference shall apply only where the individuals are available and qualified to perform the work to which the employment relates.

(4) FAA Inspection and Review. The Contractor shall allow any authorized representative of the FAA to inspect and review any Work or materials used in the performance of this Contract.

(5) Health and Safety Requirements. It is a condition of this Contract, and shall be made a condition of each subcontract entered into pursuant to this Contract, that the Contractor and any subcontractor shall not require any laborer or mechanic employed in the performance of the Contract to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health or safety, as determined under Construction Safety and Health Standards Title 29 CFR Part 1926 and other occupational and health standards (29 CFR Part 1910) promulgated by the United States Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (CWHSSA).

(6) Rights to Inventions - Materials. All rights to inventions and materials generated under this Contract are subject to regulations issued by the FAA and the recipient of the Federal grant under which this Contract is executed.

\* This project number will be subsequently supplied.

(7) Disadvantaged Business Enterprises. It is the policy of the Department of Transportation that disadvantaged business enterprises shall have the maximum opportunity to participate in the performance of this Contract.

(a) The Contractor agrees to ensure that disadvantaged business enterprises have the maximum opportunity to participate in the performance of subcontracts. In this regard the Contractor shall take all necessary and reasonable steps in accordance with 49 CFR Part 23 to ensure that disadvantaged business enterprises have the maximum opportunity to compete for and perform subcontracts. Contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of this Contract.

(8) Contract Termination. A breach of paragraph (4) above may be grounds for termination of the contract.

(9) Minimum Wages.

(a) All laborers and mechanics employed or working upon the site of the Work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents therefor) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1 (b) (2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to laborers and mechanics, subject to the provisions of subparagraph (d) below; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of Work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a) (4). Laborers or mechanics performing Work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, that the employer's payroll records accurately set forth the time spent in each classification in which Work is performed. The wage determination (including any additional classification and wage rates conformed under (b) (i) 3. of this Section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the Work in a prominent and accessible place where it can easily be seen by the workers.

(b) (i) The Engineer shall be the designated ("contracting officer") for this Contract, pursuant to 29 CFR 5.2 (e), and shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the Contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

1. Except with respect to helpers as defined in 29 CFR 5.2 (n) (4), the Work to be performed by the classification requested is not performed by a classification in the wage determination; and
2. The classification is utilized in the area by the construction industry; and
3. The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
4. With respect to helpers as defined in 29 CFR 5.2 (n) (4), such a classification prevails in the area in which the Work is performed.

(ii) If the Contractor and the laborers or mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

- (iii) In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (iv) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs b.(ii) or (iii) of this paragraph, shall be paid to all workers performing Work in the classification under this Contract from the first day on which Work is performed in the classification.
- (c) Whenever the minimum wage rate prescribed in the Contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly wage rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (d) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

(10) Withholding. The Federal Aviation Administration shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this Contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the Contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of work, all or part of the wages required by the Contract, the Federal Aviation Administration may, after written notice to the Contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(11) Payrolls and Basic Records.

- (a) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the Work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found, under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the cost anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage ratios prescribed in the applicable programs.

(b) (i) The Contractor shall submit weekly for each week in which any Contract Work is performed a copy of all payrolls to the Authority. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under subparagraph 5.5(a)(3)(i) of Regulations, 29 CFR Part 5. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

(ii) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the Contract and shall certify the following:

1. That the payroll for the payroll period contains the information required to be maintained under subparagraph 5.5(a)(3)(i) of Regulations, 29 CFR Part 5 and that such information is correct and complete;
2. That each laborer or mechanic (including each helper, apprentice and trainee) employed on the Contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations 29 CFR Part 3;
3. That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of Work performed, as specified in the applicable wage determination.

- (iii) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(ii) of this section.
  - (iv) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.
- (c) The Contractor or subcontractor shall make the records required under paragraph (a) of this section available for inspection, copying or transcription by authorized representatives of the Department of Transportation, Federal Aviation Administration or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, the Federal Aviation Administration may, after written notice to the Contractor, the Authority, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(12) Apprentices, Trainees and Helpers.

- (a) Apprentices. Apprentices will be permitted to Work at less than the predetermined rate for the Work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the United States Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of Work actually performed. In addition, any

apprentice performing Work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the Work actually performed. Where a Contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeymans' hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the Work performed until an acceptable program is approved.

- (b) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to Work at less than the predetermined rate for the Work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification, by the United States Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated

with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of Work actually performed. In addition, any trainee performing Work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the Work performed until an acceptable program is approved.

- (c) Equal Employment Opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.
- (d) Helpers. Helpers will be permitted to work on a project if the helper classification is specified on an applicable wage determination or is approved pursuant to the conformance procedure set forth in 29 CFR 5.5(a) (1) (ii). The allowable ratio of helpers to journeymen employed by the Contractor or subcontractor on the job site shall not be greater than two helpers for every three journeymen (in other words, not more than 40 percent of the total number of journeymen and helpers in each contractor's or in each subcontractor's own work force employed on the job site). Any worker listed on a payroll at a helper wage rate, who is not a helper as defined in 29 CFR 2.5(n) (4), shall be paid not less than the applicable wage rate on the wage determination for classification of Work actually performed. In addition, any helper performing Work on the job site in excess of the ratio permitted shall be paid not less than the applicable journeyman's (or laborer's, where appropriate) wage rate on the wage determination for the Work actually performed.

(13) Compliance With Copeland Act Requirements. The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this Contract.

(14) Compliance With Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this Contract.

(15) Disputes Concerning Labor Standards. Disputes arising out of the labor standards provisions of this Contract shall not be subject to the general disputes clause of this Contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts, 5, 6 and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

(16) Certification of Eligibility.

- (a) By entering into this Contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (b) No part of this Contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- (c) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.
- (d) The Contractor shall submit an executed copy of the form on the next page, entitled "Contractor's Certification Of Eligibility", with his Proposal.

CONTRACTOR'S CERTIFICATION OF ELIGIBILITY

The Bidder certifies, by submission of this Proposal or acceptance of this Contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this bid that it will include this Clause without modification in all lower tier transactions, solicitations, bids, proposals, contracts, and subcontracts. Where the Bidder/Offeror/Contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this Solicitation/Proposal.

That, the information above is true and complete to the best of my knowledge.

C.D.M. ASSOCIATES, INC.

BENJAMIN SCHUTZMAN, PRES.

\_\_\_\_\_  
Name and Title (please print)

Benjamin Schutzman

10/21/96

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

NOTE: The penalty for making false statements in offers is prescribed in 19 U.S.C. 1001

CONTRACTOR'S CERTIFICATION OF ELIGIBILITY

The Bidder certifies, by submission of this Proposal or acceptance of this Contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this bid that it will include this Clause without modification in all lower tier transactions, solicitations, bids, proposals, contracts, and subcontracts. Where the Bidder/Offeror/Contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this Solicitation/Proposal.

That, the information above is true and complete to the best of my knowledge.

FELIX EQUITIES, INC.

WILLIAM J. VESCIO, VICE PRESIDENT

\_\_\_\_\_  
Name and Title (please print)

William J. Vescio

10/22/96

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

NOTE: The penalty for making false statements in offers is prescribed in 19 U.S.C. 1001

(17) Contract Work Hours and Safety Standards Act. Note: As used in the following, the terms "laborers" and "mechanics" include watchmen and guards.

- (a) Overtime Requirements. No Contractor or subcontractor contracting for any part of the Contract Work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any Work week in which he or she is employed on such Work to Work in excess of eight hours in any calendar day or in excess of 40 hours in such Work week unless such laborer or mechanic receives compensation at a rate not less than 1 1/2 times his basic rate of pay for all hours worked in excess of eight hours in any calendar day or in excess of 40 hours in such Work week, whichever is greater.
- (b) Violation, Liability for Unpaid Wages, Liquidated Damages. In the event of any violation of the clause set forth in subparagraph (a) of the paragraph, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed, with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (a) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to Work in excess of eight hours or in excess of the standard work week of 40 hours without payment of the overtime wages required by the Clause set forth in subparagraph (a) of this paragraph.
- (c) Withholding for Unpaid Wages and Liquidated Damages. The FAA shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of Work performed by the Contractor or subcontractor under any such Contract or any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (b) of this paragraph.

(d) Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the Clauses contained in 29 CFR 5.5(a) (1) through (10), the Clauses set forth in subparagraph (a) through (d) of this paragraph, a Clause requiring the subcontractors to include these Clauses in any lower tier subcontracts and also such other Clauses as the Federal Aviation Administration may by appropriate instructions require. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the Clauses set forth in subparagraphs (a) through (d) of this paragraph and the Clauses in 29 CFR 5.5.

(18) Contracts Subject only to Contract Work Hours and Safety Standards Act.

(a) The Contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the Contract for all laborers and mechanics, including guards and watchmen, working on the Contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid.

(b) The records to be maintained under paragraph (a) above shall be made available by the Contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the Department of Transportation, Federal Aviation Administration and the Department of Labor, and the Contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

(19) Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR Part 5.5(a) (1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a Clause requiring the subcontractors to include these Clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by of any subcontractor or lower tier subcontractor with all the Contract Clauses in 29 CFR Part 5.5.

(20) Contract Termination: Debarment. A Breach of Contract Clauses in 29 CFR 5.5 may be grounds for termination of the Contract, and for the debarment as a Contractor and a subcontractor as provided in 29 CFR 5.12.

(21) During the performance of this Contract, the Contractor agrees as follows (This entire Clause shall be included in all federally funded construction contracts exceeding \$10,000.):

- (a) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, sex or national origin.

Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices (to be provided) setting forth the provisions of this Nondiscrimination Clause.

- (b) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
- (c) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice (to be provided) advising the said labor union or workers representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (d) The Contractor will comply with all provisions of Executive Order 11246 of 24 September 1965, as amended, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (e) The Contractor will furnish all information and reports required by Executive Order 11246 of 24 September 1965, as amended, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the Comptroller General of the United States, Department of Transportation, FAA and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

- (f) In the event of the Contractor's noncompliance with the nondiscrimination Clauses of this Contract or with any of the said rules, regulations, or orders, this Contract may be cancelled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further government contracts or Federally- assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of 24 September 1965, as amended, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of 24 September 1965, as amended, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (g) The Contractor will include the portion of the sentence immediately preceding paragraph a. and the provisions of Paragraphs a. through g. in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of 24 September 1965, as amended, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontractor or purchase order as the Federal Aviation Administration may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Federal Aviation Administration, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

(22) Contractors and subcontractors may satisfy the requirements of Paragraph B of Section 204 of Executive Order 11246 of September 24, 1965, as amended by complying with any of the following:

- (a) Stating in the Invitations for Bids that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin, or
- (b) Including appropriate insignia in display or other advertising as prescribed by the Department of Labor, or
- (c) Using a single advertisement grouped with other advertisements under a caption which clearly states that all employers in the group assure all qualified applicants will have equal consideration for employment without regard to race, color, religion, sex, or national origin, or
- (d) Using the phrase "an equal opportunity employer" in a single advertisement in clearly distinguishable type.

(23) The following notices are to be posted per paragraphs A and C of Section 204 of Executive Order 11246 of September 24, 1965, as amended:

EQUAL EMPLOYMENT OPPORTUNITY IS THE LAW - DISCRIMINATION IS PROHIBITED BY THE CIVIL RIGHTS ACT OF 1964 AND BY EXECUTIVE ORDER NO. 11246

Title VI of the Civil Rights Act of 1964 - Administered by:

THE EQUAL EMPLOYMENT OPPORTUNITY COMMISSION

Prohibits discrimination because of Race, Color, Religion, Sex, or National Origin by Employers with 75 or more employees, by Labor Organizations with a hiring hall of 75 or more members, by Employment Agencies, and by Joint Labor-Management Committees for Apprenticeship or Training. After July 1, 1967, employees and labor organizations with 50 or more employees or members will be covered; after July 1, 1968, those with 25 or more will be covered.

ANY PERSON

Who believes he or she has been discriminated against

SHOULD CONTACT

THE EQUAL EMPLOYMENT OPPORTUNITY COMMISSION  
1800 G Street N.W. Washington, D.C. 20506

Executive Order No. 11246 - Administered by:

THE OFFICE OF FEDERAL CONTRACT COMPLIANCE

Prohibits discrimination because of Race, Color, Religion, Sex or National Origin, and requires affirmative action to ensure equality of opportunity in all aspects of employment.

By all Federal Government Contractors and Subcontractors, and by Contractors Performing Work Under a Federally Assisted Construction Contract, regardless of the number of employees in either case.

ANY PERSON

Who believes he or she has been discriminated against

SHOULD CONTACT

THE OFFICE OF FEDERAL CONTRACT COMPLIANCE  
U.S. Department of Labor, Washington, D.C. 20210

(24) This Contract (if the Contract price exceeds \$100,000) and all Work performed thereunder is subject to the Clean Air Act and the Federal Water Pollution Control Act. Accordingly,

- (a) The Contractor hereby represents that any facility to be used in the performance of this Contract or to benefit from this Contract is not listed on the Environmental Protection Agency (EPA) List of Violating Facilities.
- (b) The Contractor agrees to comply with all the requirements of Section 306 of the Clean Air Act and Section 508 of the Clean Water Act, Executive Order 11738, Environmental Protection Agency Regulation (40 CRF Part 15) and all regulations issued thereunder.
- (c) The Contractor agrees that as a condition for award of this Contract he will notify the Authority of the receipt of any communication from the EPA indicating that a facility to be utilized for performance of or benefit from this Contract is under consideration to be listed on the EPA List of Violating Facilities.
- (d) The Contractor agrees that he will include or cause to be included in any subcontract under this Contract which exceeds \$100,000 the criteria and requirements in these subparagraphs (a) through (d).

(25) For all projects involving airport location, a major runway extension, or runway location:

- (a) The Contractor hereby represents that said projects will be located, designed, constructed, and operated so as to comply with applicable air and water quality standards.
- (b) The Contractor agrees that he will include or cause to be included in any subcontract under this Contract the requirements of subparagraph (a).

- (26) (a) The Contractor hereby represents that in the performance of this Contract, he will adhere to all state and local regulations concerning air and water pollution controls (unless contrary to Federal requirements), secure necessary permits and inspections, and conduct his operations so as to minimize affects on the surrounding environment, all to the same extent as if the Authority were a private corporation.
- (b) The Contractor agrees that he will include or cause to be included in any subcontract under this Contract the requirements of subparagraph (a).

(27) During the performance of this Contract, the Contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

- (a) Compliance with Regulations. The Contractor shall comply with the regulations relative to nondiscrimination in Federally-assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations) which are herein incorporated by reference and made a part of this Contract.
- (b) Nondiscrimination. The Contractor, with regard to the work performed by it during the Contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the Contract covers a program set forth in Appendix B of the Regulations.
- (c) Solicitations for Subcontracts, Including Procurements of Materials and Equipment. In all solicitations either by competitive bidding or negotiation made by the Contractor for Work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this Contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
- (d) Information and Reports. The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Authority or the Federal Aviation Administration to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information the Contractor shall so certify to the Authority or the Federal Aviation Administration as appropriate, and shall set forth what efforts it has made to obtain the information.

- (e) Sanctions for Noncompliance. In the event of the Contractor's noncompliance with the nondiscrimination provisions of this Contract, the Authority shall impose such Contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
- (1) withholding of payments to the Contractor under the Contract until the Contractor complies, and/or
  - (2) cancellation, termination, or suspension of the Contract, in whole or in part.
- (f) Incorporation of Provisions. The Contractor shall include the provisions paragraphs a through e in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations or directives issued pursuant thereto. The Contractor shall take such action with respect to any subcontract or procurement as the Authority or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, however, that, in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request the Authority to enter into such litigation to protect the interests of the Authority and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.
- (g) Breach of Contract Terms - Sanctions. Any violation or breach of the terms of the Contract on the part of the Contractor/sub-contractor may result in the suspension or termination of this Contract or such other action which may be necessary to enforce the rights of the parties of this agreement.
- (29) Certification - Foreign Trade Restrictions. The Contractor or Subcontractor, by submission of a bid and/or execution of this Contract, certifies that it:
- (a) is not owned or controlled by one or more citizens or nationals of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR);

- (b) has not knowingly entered into any contract or subcontract for this project with a contractor that is a citizen or national of a foreign country on said list, or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list; and,
- (c) has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

Unless the restrictions of this Clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to a Contractor who is unable to certify to the above. Thereafter, if the Contractor knowingly procures or subcontracts for the supply of any product or service of a foreign country on the said list for use on the project, the Federal Aviation Administration may direct, through the Authority, cancellation of the Contract at no cost to the Government or the Authority.

Further, the Contractor agrees that, it will incorporate this provision for certification without modification in each contract and in all lower tier subcontracts. The Contractor may rely upon the certification of a prospective subcontractor unless it has knowledge that the certification is erroneous.

The Contractor shall provide immediate written notice to the Authority if the Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The subcontractor agrees to provide immediate written notice to the Contractor, if at any time it learns that its certification was erroneous by reason of changed circumstances.

This certification is a material representation of fact upon which reliance was placed when making the award. If it is later determined that the Contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct, through the Authority cancellation of the Contract or subcontract for default at no cost to the Government or the Authority.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a Contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

(30) BUY AMERICAN - STEEL AND MANUFACTURED PRODUCTS PRODUCTS FOR CONSTRUCTION CONTRACTS

- (a) The Aviation Safety and Capacity Extension Act of 1990 provides that preference be given to steel and manufactured products produced in the United States when funds are expended pursuant to a grant issued under the Airport Improvement Program. The following terms apply:
- (1) Steel and manufactured products. As used in this clause, steel and manufactured products include (1) steel produced in the United States or (2) a manufactured product produced in the United States, if the cost of its components mined, produced or manufactured in the United States exceeds 60 percent of the cost of all its components and final assembly has taken place in the United States. Components of foreign origin of the same class or kind as the products referred to in subparagraphs (b) (1) or (2) shall be treated as domestic.
  - (2) Components. As used in this clause, components means those articles, materials, and supplies incorporated directly into steel and manufactured products.
  - (3) Cost of Components. This means the costs for production of the components, exclusive of final assembly labor costs.
- (b) The Contractor agrees that more than 60% (by cost) of the steel and manufactured products to be used by the Contractor, subcontractors, materialmen, and suppliers in the performance of this Contract will be produced in the United States or will be otherwise exempt under one of the following:
- (1) that the U. S. Department of Transportation has determined, under the Aviation Safety and Capacity Expansion Act of 1990, that the products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality;
  - (2) that the U. S. Department of Transportation has determined, under the Aviation Safety and Capacity Expansion Act of 1990, that domestic preference would be inconsistent with the public interest; or
  - (3) that inclusion of domestic material will increase the cost of the Contract by more than 25 percent.

(31) List of Supplies/Materials that the U.S. Government Has Determined Are Not Produced In the United States In Sufficient and Reasonably Available Quantities And of Sufficient Quality (JAN 1991)

Acetylene, black.	Diamonds, industrial, stones and abrasives.
Agar, bulk.	Emetine, bulk.
Anise.	Ergot, crude.
Antimony, as metal or oxide	Erthrityl tetranitrate.
Asbestos, amosite chrysolite, and crocidolite.	Fair linen, altar.
Bananas.	Fibers of the following types: abaca, abace, agave, coir, flax, jute, jute, burlaps, palmyra and sisal.
Bauxite.	Goat and kidskins.
Beef, corned, canned.	Graphite, natural, crystalline, crucible grade.
Beef Extract	Handsewing needles.
Bephenium Hydroxynapthoate.	Hemp yarn.
Bismuth.	Hog bristles for brushes.
Books, trade, text technical, or scientific; newspapers; pamphlets; magazines; periodicals; printed briefs and films, not printed in the United States and for which domestics editions are not available.	Hyoscine, bulk.
Brazil nuts, unroasted.	Ipecac, root.
Cadmium, ores and flue dust.	Iodine, crude.
Calcium cyanamide.	Kaurigum.
Capers.	Lac.
Cashew nuts.	Leather, sheepskin, hair type.
Castor beans and castor oil.	Lavender oil.
Chalk, English.	Manganese.
Chestnuts.	Menthol, natural bulk.
Chicle.	Mica.
Chrome ore or chromite.	Microprocessor chips (brought onto a construction site as separate units for incorporation into building systems during construction or repair and alteration of real property.)
Cinchona bark.	Nickel, primary, in ingots, pigs, shots, cathodes, or similar forms; nickel oxide and nickel salts.
Cobalt, in cathodes, rondelles, or other primary ore and metal forms.	Nitroguanidine (also known as picrite).
Cocoa beans.	Nux vomica, crude.
Coconut and coconut meat, unsweetened, in shredded, desiccated or similarly prepared form.	Oiticica oil.
Coffee, raw or green bean.	Olive oil.
Colchicine alkaloid, raw.	
Copra.	
Cork, wood or bark and waste.	
Cover glass, microscope slide.	
Cryolite, natural.	
Dammar gum.	

List of Supplies/Materials that the U.S. Government Has  
Determined Are Not Produced In the United States In Sufficient  
and Reasonably Available Quantities And of Sufficient Quality  
(Jan 1991) (CONTINUED)

Olives (Green), pitted or unpitted, or stuffed, in bulk.  
Opium, crude.  
Oranges, mandarin, canned  
Petroleum, crude oil, unfinished oils, and finished products (see definitions below)  
Pine needle oil.  
Platinum and related group metals, refined, as sponge, powder, ingots, or cast bars.  
Pyrethrum flowers.  
Quartz crystals.  
Quebracho.  
Quinidine.  
Quinine.  
Rabbit fur felt.  
Radium salts, source and special nuclear materials.  
Rosettes.  
Rubber, crude and latex.  
Rutile.  
Santonin, crude.  
Secretin.  
Shellac.  
Silk, raw and unmanufactured.  
Spare and replacement parts for equipment of foreign manufacture, and for which domestic parts are not available.  
Spices and herbs, in bulk.  
Sugars, raw.  
Swords and scabbards.  
Talc, block, steatite.  
Tantalum.  
Tapioca flour and cassava,  
Tartar, crude; tartaric acid and cream of tartar in bulk.  
Tea in bulk.  
Thread, metallic (gold).  
Thyme oil.  
Tin in bars, blocks, and pigs.  
Triprolidine hydrochloride.  
Tungsten.  
Vanilla beans.  
Venom, cobra.  
Wax, canauba.  
Woods; logs, veneer, and lumber of the following species: Alaskan yellow cedar, angelique, balsa, ekki, greenhart, lignum vitae, mahogany, and teak.  
Yarn, 50 Denier rayon.

List of Supplies/Materials that the U.S. Government Has  
Determined Are Not Produced In the United States In Sufficient  
and Reasonably Available Quantities And of Sufficient Quality  
(Jan 1991) (CONTINUED)

Petroleum terms are used as follows:

"Crude oil" means crude petroleum, as it is produced at the wellhead, and liquids (under atmospheric conditions) that have been recovered from mixtures of hydrocarbons that existed in a vaporous phase in a reservoir and that are not natural gas products.

"Finished products" means any one or more of the following petroleum oils, or a mixture or combination of these oils, to be used without further processing except blending by mechanical means:

(A) "Asphalt" a solid or semi-solid cementitious material that (1) gradually liquefies when heated, (2) has bitumens as its predominating constituents, and (3) is obtained in refining crude oil.

(B) "Fuel Oil" a liquid or liquefiable petroleum product burned for lighting or for the generation of heat or power and derived directly or indirectly from crude oil, such as kerosene, range oil distillate fuel oils, gas oil, diesel fuel, topped crude oil, or residues.

(C) "Gasoline" - a refined petroleum distillate that, by its consumption, is suitable for use as a carburant in internal combustion engines.

(D) "Jet Fuel" - a refined petroleum distillate used to fuel jet propulsion engines.

(E) "Liquefied gases" - hydrocarbon gases recovered from natural gas or produced from petroleum refining and kept under pressure to maintain a liquid state at ambient temperatures.

(F) "Lubricating oil" - a refined petroleum distillate or specially treated petroleum residue used to lessen friction between surfaces.

(G) "Naptha" - a refined petroleum distillate falling with a distillation range overlapping the higher gasoline and the lower kerosenes.

List of Supplies/Materials that the U.S. Government Has  
Determined Are Not Produced In the United States In Sufficient and  
Reasonably Available Quantities And of Sufficient Quality (Jan 1991)  
(CONTINUED)

(H) "Natural gas products" - liquids (under atmospheric conditions) including natural gasoline, that -

(1) are recovered by a process of absorption, adsorption, compression, refrigeration, cycling, or a combination of these processes, from mixtures of hydrocarbons that existed in a vaporous phase in a reservoir, and

(2) when recovered and without processing in a refinery: definitions of products contained in subdivision (B), (C), and (G) above.

(I) "Residual fuel oil" - a topped crude oil or viscous residuum that, as obtained in refining or after blending with other fuel oil, meets or is the equivalent of MILSPEC Mil F 859 for Navy Special Fuel Oil and any more viscous fuel oil, such as No. 5 or Bunker C.

"Unfinished oils" means one or more of the petroleum oils listed under "Finished products" above, or a mixture or combination of these oils, that are to be further processed other than by blending by mechanical means.

## CHAPTER VIII

### MISCELLANEOUS

#### 36. SUBMISSION TO JURISDICTION.

The Contractor hereby irrevocably submits himself to the jurisdiction of the Courts of the State of New York and to the jurisdiction of the Courts of the State of New Jersey in regard to any controversy arising out of, connected with, or in any way concerning the Proposal or this Contract. The Contractor agrees that service of process on the Contractor in relation to such jurisdiction may be made, at the option of the Authority, either by registered or certified mail addressed to the applicable office as provided for in the clause hereof entitled "Service of Notices on the Contractor", by registered or certified mail addressed to any office actually maintained by the Contractor or by actual personal delivery to the Contractor if the Contractor be an individual, to any partner if the Contractor be a partnership or to an officer, director or managing or general agent if the Contractor be a corporation.

Such service shall be deemed to be sufficient when jurisdiction would not lie because of the lack of basis to serve process in the manner otherwise provided by law. In any case, however, process may be served as stated above whether or not it might otherwise have been served in a different manner.

#### 37. PROVISIONS OF LAW DEEMED INSERTED.

Each and every provision of law and clause required by law to be inserted in this Contract shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included therein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party, the Contract shall forthwith be physically amended to make such insertion.

#### 38. INVALID CLAUSES.

If any provision of this Contract shall be such as to destroy its mutuality or to render it invalid or illegal, then, if it shall not appear to have been so material that without it the Contract would not have been made by the parties, it shall not be deemed to form part thereof but the balance of the Contract shall remain in full force and effect.

39. NON-LIABILITY OF THE AUTHORITY REPRESENTATIVES.

Neither the Commissioners of the Authority nor any officer, agent, or employee thereof shall be charged personally by the Contractor with any liability or held liable to him under any term or provision of this Contract, or because of its execution or attempted execution, or because of any breach hereof.

40. SERVICE OF NOTICES ON THE CONTRACTOR.

Whenever provision is made in this Contract for the giving of any notice to the Contractor, its deposit in any post office or post office box, enclosed in a postpaid wrapper addressed to the Contractor at his office, or its delivery to his office, shall be sufficient service thereof as of the date of such deposit or delivery, except to the extent, if any, otherwise provided in the clause entitled "Submission to Jurisdiction". Until further notice to the Authority the Contractor's office will be that stated in his Proposal. Notices may also be served personally upon the Contractor; or if a corporation, upon any officer, director, or managing or general agent; or if a partnership upon any partner.

41. MODIFICATION OF CONTRACT.

No change in or modification, termination or discharge of this Contract, in any form whatsoever, shall be valid or enforceable unless it is in writing and signed by the party to be charged therewith or his duly authorized representative, provided, however, that any change in or modification, termination or discharge of this Contract expressly provided for in this Contract shall be effective as so provided.

The authority of any person to order Extra Work or to alter the Contract Drawings and Specifications does not include the power to cancel, modify or waive any provision of the Form of Contract, and no officer or other representative of the Authority shall have the power so to do unless and until hereafter so authorized by or pursuant to a resolution of the Commissioners of the Authority or by or pursuant to a resolution of their appropriate Committee.

PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS that we, the undersigned (\*) Contractor and surety company (or companies), as principal and surety (or sureties), respectively,

Contractor

Surety

C.D.M. ASSOCIATES, INC. \*/  
FELIX EQUITIES, INC. \* A Joint Venture  
53-44 97th Place  
Corona, New York 11368

UNITED STATES FIDELITY  
AND GUARANTY COMPANY  
6225 Smith Avenue  
Baltimore, Maryland 21209

\* Corporations Organized Under The Laws of the State of New York

(\*) Insert names of the Contractor and surety company (or companies) in the appropriate columns. If space is insufficient add rider.

If the Contractor is a corporation, give the state of incorporation, using also the phrase "a corporation organized under the laws of .....".

If the Contractor is a partnership, give full names of partners, using the phrase "co-partners doing business under the firm name of .....".

If the Contractor is an individual using a trade name, give individual name, using also the phrase "an individual doing business under the trade name of .....".

are hereby held and firmly bound unto The Port Authority of New York and New Jersey (herein called the "Authority") in the penal sum of

.....  
TWO MILLION THREE HUNDRED FORTY-FIVE THOUSAND  
.....Dollars

NO  
and.....Cents (\$2,345,000.00.....), for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, representatives, executors, administrators, successors and assigns. Each surety, however, if there is more than one, shall be jointly and severally liable for said penal sum.

Signed this \_\_\_\_\_ 9th \_\_\_\_\_ day of December \_\_\_\_\_ 1996

The condition of the above obligation is that

WHEREAS, the above named principal has entered into a Contract in writing with the Authority, a copy of which is hereby made a part of this bond as though herein set forth in full and which is designated Contract LGA-124.039 "La Guardia Airport - Alley Pond Park Wetland Mitigation" and

WHEREAS, the Authority has required this bond for the faithful performance of all obligations imposed by said Contract and also for the payment of all lawful claims of subcontractors, materialmen and workmen arising out of the performance of said Contract;

NOW, if the said principal shall well and faithfully do and perform the things agreed by him to be done and performed according to the terms and true intent and meaning of said Contract and if all lawful claims of subcontractors, materialmen and workmen arising out of the performance of said Contract are paid, then this obligation shall be void, otherwise the same shall remain in full force and effect; it being expressly understood and agreed that, provided the sureties shall comply with the provisions hereof, the aggregate liability of all sureties for any and all claims hereunder shall in no event exceed the penal amount of this obligation as hereinbefore stated.

This undertaking is for the benefit of the Authority and all subcontractors, materialmen and workmen having lawful claims arising out of the performance of said Contract, and all such subcontractors, materialmen and workmen (as well as the Authority itself) shall have a direct right of action upon this bond; but the rights and equities of such subcontractors, materialmen and workmen shall be subject and subordinate to those of the Authority.

The sureties, for value received, hereby stipulate and agree that the obligations of said sureties and their bond shall be in no way impaired or affected by any extensions of time, modification, omission, addition or change in or to the said Contract or the construction to be performed thereunder, or by any supervision or inspection or omission to supervise or inspect the construction, or by any payment thereunder before the time required therein, or by any waiver of any provision or condition thereof (whether precedent or subsequent), or by any assignment, subletting or other transfer thereof or of any part thereof or of any construction to be performed or any moneys due or to become due thereunder; and said sureties do hereby waive notice of any and all of such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby expressly stipulate and agree that any and all things done and omitted to be done by and in relation to assignees, subcontractors and other transferees shall have the same effect as to said sureties as though done by or in relation to said principal.

The sureties shall give the General Counsel of the Authority the following notices:

- (a) Written notice of an intent to pay any claim of a subcontractor, materialman or workman hereunder;
- (b) Written notice within five days of the institution of an action by a subcontractor, materialman or workman hereunder.

The sureties shall not pay the claim of any subcontractor, materialman or workman hereunder until the expiration of thirty days after receipt by said General Counsel of notice under either subparagraph (a) or (b) above, describing the claim to be paid.

IN WITNESS WHEREOF, the principal and the sureties have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

By (\*) ..... James A. Powderly, V.P. C.D.M. ASSOCIATES, INC./  
 FELIX EQUITIES, INC., A JOINT VENTURE  
 CDM ASSOCIATES, INC. Principal

By (\*) ..... William J. Vescio, V.P.  
 FELIX EQUITIES, INC.

(Seal) ..... UNITED STATES FIDELITY AND  
 GUARANTY COMPANY  
 Surety  
 Suraya K. Kieffer  
 By (+) ..... Suraya K. Kieffer,  
 Attorney-in-Fact

APPROVED AS TO ACCEPTABILITY OF SURETIES:

Frank J. Puglisi  
 .....  
 Credit Manager

December 17th  
 ....., 1996

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(\*) If bond is signed by an officer or agent, give title; if signed by a corporation, affix corporate seal.

(+) Add signatures of additional sureties, if any.

ACKNOWLEDGMENT(\*)

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

New York

State of.....)
Queens ) SS.:
County of.....)

On this...11th...day of..December....., 1996, before me personally came and appeared James A. Powderly....., to me known, who, being by me duly sworn, did depose and say that he resides at [redacted]....., that he is the ...Vice President.....of CDM ASSOCIATES, INC....., the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation; and that he signed his name thereto by like order.

Arthur J. Walsh

(Seal) .....
Arthur J. Walsh, Notary Public

ACKNOWLEDGMENT OF PRINCIPAL, IF A PARTNERSHIP

State of New York, No. 4778522

State of.....) Qualified in Putnam County
) SS.: Term Expires April 30, 1997
County of.....)

On this.....day of....., 199 , before me personally came and appeared....., to me known and known to me to be one of the members of the firm of ..... described in and who executed the foregoing instrument and he acknowledged to me that he executed the same as and for the act and deed of said firm.

(Seal) .....

ACKNOWLEDGMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of.....)
) SS.:
County of.....)

On this.....day of....., 199 , before me personally came and appeared.....to me known and known to me to be the person described in and who executed the foregoing instrument and he acknowledged to me that he executed the same.

(Seal) .....

AFFIX ACKNOWLEDGMENT AND JUSTIFICATION OF SURETY

ACKNOWLEDGMENT (\*)

ACKNOWLEDGMENT OF PRINCIPAL, IF A CORPORATION

New York

State of.....)
Westchester ) SS.:
County of.....)

On this.....9th.....day of..December....., 1996, before me personally came and appeared..William J. Vescio....., to me known, who, being by me duly sworn, did depose and say that he resides at ..... that he is the ..Vice President.....of..FELIX EQUITIES INC....., the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the seals affixed to said instrument is such seal; that it was so affixed by order of the directors of said corporation; and that he signed his name thereto by like order.

Tom Castrovinci

(Seal) .....
Tom Castrovinci, Notary Public,

ACKNOWLEDGMENT OF PRINCIPAL, IF A PARTNERSHIP

State of.....) State of New York, No. 4883459
Qualified in Westchester County
) SS.:
County of.....) Commission Expires January 26, 1997

On this.....day of....., 199 , before me personally came and appeared....., to me known and known to me to be one of the members of the firm of ..... described in and who executed the foregoing instrument and he acknowledged to me that he executed the same as and for the act and deed of said firm.

(Seal) .....

ACKNOWLEDGMENT OF PRINCIPAL, IF AN INDIVIDUAL

State of.....)
) SS.:
County of.....)

On this.....day of....., 199 , before me personally came and appeared.....to me known and known to me to be the person described in and who executed the foregoing instrument and he acknowledged to me that he executed the same.

(Seal) .....

AFFIX ACKNOWLEDGMENT AND JUSTIFICATION OF SURETY

SPECIFICATIONS

DIVISION 1 - GENERAL PROVISIONS

1. CONSTRUCTION REQUIRED BY THE SPECIFICATIONS.

These Specifications relate generally to the wetland mitigation at Alley Pond Park in Douglaston, Queens, N.Y.

These Specifications require the doing of all things necessary or proper for or incidental to the matter referred to in the immediately preceding paragraph, as shown on the Contract Drawings in their present form. In addition, all things shown on the Contract Drawings even though not expressly mentioned in these Specifications, all things mentioned in these Specifications even though not shown on the Contract Drawings, and all things not specified either on the Contract Drawings, or in the Specifications but involved in carrying out their intent and in the complete and proper execution of the matter referred to in the immediately preceding paragraph are required by these Specifications; and the Contractor shall perform the same as though they were specifically delineated, described and mentioned.

In case of a conflict between a requirement of the Contract Drawings and a requirement in Division 1 of the Specifications, the requirement of Division 1 shall control. In case of a conflict between a requirement contained in other Divisions of the Specifications and a requirement of the Contract Drawings, the requirement of the Contract Drawings shall control.

Some Sections of the Specifications make cross references to construction specified in other Sections of the Specifications, including cross references intended to avoid duplication by the bidders in quoting prices and to point out some of the necessity for coordination. Such cross references are not intended to be complete or all inclusive, and the Contractor shall ascertain for himself both the nature and the extent of all construction which may be related to that under each Section of the Specifications whether or not expressly referred to.

Some Sections of the Specifications contain a general description of the construction under such Sections. Such description is merely a very general one and is not intended to outline the construction required by the Specifications and Contract Drawings. Accordingly, such description shall be construed as in aid of and supplemental to, but in no case limiting, impairing or decreasing, the requirements elsewhere set forth with respect to the construction to be performed.

The Contractor's compensation for all construction whatsoever referred to in the Specifications and Contract Drawings in their present form, even though the need for certain items of such construction may be contingent upon future occurrences or determinations or upon other circumstances, shall be deemed to be included in the price(s) quoted by the Contractor in the Form of Contract unless the Specifications or Contract Drawings expressly state that compensation in addition to such price shall be payable for such items of construction. The express statement in some cases to the effect that certain construction shall be without additional cost to the Authority shall not impair the application of this paragraph in other cases.

The distribution of various parts of the construction among the Divisions and Sections of the Specifications or among the Contract Drawings is not intended as a representation of the most effective or logical method of organizing, scheduling, or subcontracting the construction, and the Contractor shall ascertain for himself how to do so unless otherwise expressly prescribed in this Contract.

In all cases the provisions of the second paragraph of this numbered Section shall control.

## 2. AVAILABLE PROPERTY.

Subject to the conditions elsewhere stated herein, those areas to be occupied by the permanent construction will be made available to the Contractor upon the commencement of his first operations at the construction site, together with an area shown cross-hatched on Contract Drawing No. G-3 and designated "Area Available For Contractor's Use".

Any additional property which the Contractor desires for his operations shall be obtained by him at his own expense.

The Contractor will be permitted to use only so much of the aforesaid areas as is necessary for the performance of the Contract, and he must at all times so conduct his operations as not to encroach upon or block the portions used by others. The Engineer may at any time make joint or exclusive assignments of particular portions thereof, either to the Contractor or to others, and may take over and use for other purposes any portions which, in the opinion of Engineer, are not required for the performance of the Contract.

The Contractor shall daily clean up the areas made available to him so that they are free at all times of refuse, rubbish, scrap material or debris.

3. CONDITIONS AND PRECAUTIONS.

A. Construction Site Conditions

1. Do not park personal automobiles on any grass or unauthorized area. Free parking of personal automobiles in any of the public parking lots will not be permitted.
2. Restrict smoking to areas designated by the Engineer for this purpose.
3. Limit the maximum height of construction equipment to twenty-five (25) feet unless otherwise shown on the Contract Drawings or expressly approved by the Engineer.
4. Place "Water" identification signs on all water vehicles or water tanks which are to be used for the transportation or storage of water during the course of the Work at the construction site.
5. Do not place temporary structures or store materials or equipment required in the performance of the Work within any of the buildings on the construction site without specific prior approval of the Engineer.
6. Do not store petroleum or combustible products, or any other flammable materials, within any buildings or in any area at the construction site.
7. Maintain haul routes in a satisfactory condition, and repair damage to such routes, resulting from the Contractor's operations. Unless otherwise approved by the Engineer, clean haul routes each work period and remove earth or other materials which fall or are otherwise placed on such routes during the performance of Work.
8. Protect against damaging existing lights, pavement, curbs and other construction that is to remain. Such construction which is damaged, either directly or indirectly, by the Contractor during the performance of the Contract, whether negligently or not, shall be restored to the condition which existed prior to such damage.
9. Take all precautions necessary for protection of persons, traffic and property during dust or fragment generating operations, concrete mixing or placing, or other operations which may stain, soil or damage property or injure persons.

10. Provide sound suppression devices on gasoline and diesel powered construction equipment and pneumatic tools as required to maintain noise exposures below the limits specified in the Code of Federal Regulations (CFR) 29 CFR 1926 Occupational Safety and Health Regulations for Construction (OSHA). Maintain such sound suppression devices in proper operating condition throughout the time of their use, and adjust and repair as required to maintain noise within exposure levels stipulated in 29 CFR 1926.52, Table D-2.
11. Do not burn or bury debris of any type on the construction site, or wash waste materials down sewers or into waterways.
12. Do not operate ultrasonic, X-ray, radio-type transmitter, magnetic or similar electro-magnetic devices which affect or may affect the operation of airport navigaids, unless specific prior approval for their operation or use has been granted by the Engineer.
13. Perform such duties as the Engineer may direct and as may be necessary in the opinion of the Engineer for the rerouting of traffic in the performance of the Work, including the the erection of timber barricades in accordance with "Timber Barricades".

B. Hours of Work:

1. Perform Work only between the hours of 8:00 AM to 4:30 PM, Monday thru Friday.
2. Do not perform Work outside of these time periods, or on a legal holiday of the state(s) in which Work is being performed, unless otherwise permitted by the Engineer.

C. Timber Barricades:

1. Materials and temporary constructions for barricades shall remain property of the Contractor unless otherwise shown on the Contract Drawings.
2. Provide new materials, or undamaged previously used materials in serviceable condition conforming to requirements specified herein.
3. Barricades shall be timber units of the following types fabricated of Douglas fir or hem-fir West Coast Lumber Inspection Bureau (WCLIB) standard grade, or approved equal. Provide and locate units as shown on the Contract Drawings. Maintain, clean and relocate as required to protect motorists, pedestrians, aircraft and workers throughout Work of this Contract.
  - a. Type I (Automobile): Timber curb with square end at traffic egress end and taper end at traffic approach end.

(1) Equip curb with cylindrical orange plastic markers, with mounting base and white reflective band.

D. No requirement of or omission to require any precautions under this Contract shall be deemed to limit or impair any responsibility or obligation assumed by the Contractor under or in connection with this Contract and the Contractor shall at all times maintain adequate protection to safeguard the public and all persons engaged in the Work and shall take such precautions as will accomplish such end, without undue interference with the public or the operations of the Authority.

4. OPERATIONS OF OTHERS.

During the time that the Contractor is performing the Contract, other persons will be engaged in other operations on or about the construction site including work under various contracts, maintenance and operations of the park, and vehicular and pedestrian traffic, all of which shall remain uninterrupted.

The Contractor shall so plan and conduct his operations as to work in harmony with others engaged at the construction site and not to delay, endanger or interfere with the operations of others (whether or not specifically mentioned above), all to the best interests of the Authority and the public and as may be directed by the Engineer.

5. LABOR ACTIONS

Whenever any labor strike, slowdown, work stoppage, picketing or other labor action which might interfere with the performance of the Contract, or of other Authority or PATH contracts or the operation of any Authority or PATH facility occurs at the construction site or at any other Authority or PATH facility as a result of the Contractor's (or its subcontractor's) utilization of particular means, methods or manpower to perform the Work required by the Contract, the Contractor shall pursue all remedies which are appropriate and available to him to avoid such interference.

6. CONTRACTOR'S MEETINGS.

The Contractor shall conduct job progress and coordination meetings with subcontractors in his field office every two weeks, or as frequently as job conditions require or the Engineer may request. The Engineer shall be notified and, at his option, may attend these meetings. The Contractor shall prepare and distribute minutes to the Engineer and the subcontractors within forty-eight (48) hours of the day following the meetings.

The Contractor shall attend separate job progress and coordination meetings with the Engineer every two weeks, or at times otherwise requested by the Engineer.

7. CONTRACT DRAWINGS.

The Contract Drawings which accompany and form a part of these Specifications bear the general title "The Port Authority of New York and New Jersey - LGA-124.039 - La Guardia Airport - Alley Pond Park Wetland Mitigation" and are separately numbered and entitled as follows:

<u>Drawing No.</u>	<u>Title</u>
<u>GENERAL</u>	
G-1	TITLE AND APPROVAL SHEET
G-2	REGIONAL LOCATION PLAN
G-3	LOCATION PLAN, INDEX OF DRAWINGS & LEGEND
<u>LANDSCAPE</u>	
LS-1	SPECIFICATION NOTES
LS-2	SPECIFICATION NOTES
LS-3	PLANT SCHEDULE & NOTES
LS-4	EXISTING CONDITIONS PLAN & TOPOGRAPHY
LS-5	REMOVALS PLAN / GRADING PLAN
LS-6	REMOVALS PLAN / STAGING PLAN
LS-7	FINAL GRADING PLAN & PLANTING PLAN
LS-8	BUFFER & REMOVALS GRADING PLAN-1
LS-9	BUFFER & REMOVALS GRADING PLAN-2
LS-10	BUFFER PLANTING PLAN-1
LS-11	BUFFER PLANTING PLAN-2
LS-12	EXISTING CROSS SECTIONS
LS-13	CROSS SECTIONS
LS-14	DITCH & INLET CHANNEL SECTIONS
LS-15	DETAILS - 1
LS-16	DETAILS - 2
LS-17	DETAILS - 3

The Contract Drawings do not show all of the details of the Work and are intended only to illustrate the character and extent of the Work to be performed. Accordingly, they may be supplemented during the performance of the Work by the Engineer or by the Contractor subject to the approval of the Engineer, to the extent necessary to further illustrate the Work.

An indication on the Contract Drawings of the existence, nature or location of any utilities, structures, obstructions, conditions or materials does not constitute a representation as to the conclusions to be drawn therefrom nor a representation that no others exist in addition to those shown, even in the same location; nor does the absence of any indication on said drawings of the existence, nature or location of any utilities, structures, obstructions, conditions or materials constitute a representation that none exist.

After the Contract has been executed, the Contractor will be furnished six (6) copies of the Specifications and Contract Drawings without charge.

8. SHOP DRAWINGS, CATALOG CUTS AND SAMPLES

The Contractor shall specifically prepare for this Contract all Shop Drawings which may be required in addition to the Contract Drawings or in addition to any other drawings which the Engineer may issue in supplementing the Contract Drawings.

The specific requirements elsewhere set forth in the Specifications for furnishing Shop Drawings, Catalog Cuts and samples for any particular portion of the Contract shall not limit the obligation of the Contractor to furnish Shop Drawings, Catalog Cuts and samples for any other portion when so required by the Engineer.

The Contractor shall submit for review and approval a schedule of the dates on which he plans to furnish such Shop Drawings, Catalog Cuts and samples in accordance with instructions transmitted with the Authority's acceptance of the Proposal. Such schedule shall include the estimated number of drawings, catalogue cuts, pages of calculations and samples to be submitted. A complete schedule shall be delivered to the Engineer for his approval within 30 days after receipt by the Contractor of the acceptance of the Proposal.

After checking and verifying all field measurements and after complying with applicable procedures specified hereunder, the Contractor shall submit to the Engineer for review and approval, in accordance with the approved schedule of Shop Drawing submissions, or for other action if so indicated by the Engineer, four copies and two reproducibles, unless otherwise requested, of all Shop Drawings which will bear a specific written indication that the Contractor has reviewed the submission for conformance to the requirements of the Contract Drawings and Specifications. All submissions shall be identified as the Engineer may require. The data shown on the Shop Drawings shall be complete with respect to quantities, dimensions, conformance to the specified performance and design criteria, materials, test results and similar information to enable the Engineer to review the submittal as required.

The Contractor shall also submit nine copies to the Engineer for review and approval pursuant to the approved submittal schedule, of all Catalog Cuts and samples for conformance to the requirements of the Contract Drawings and Specifications. All Catalog Cuts and samples shall have been reviewed by the Contractor and shall be accompanied by a specific written indication that the Contractor has reviewed the submittal for conformance with the Contract Drawings and Specifications and shall be identified clearly as to material, supplier, manufacturer's procedures and pertinent data such as catalog numbers and the use for which intended.

Before submission of each Shop Drawing, Catalog Cut and sample, the Contractor shall have determined and verified all quantities, dimensions, conformance to the specified performance and design criteria, installation requirements, materials, catalog numbers and similar data with respect thereto and reviewed and coordinated each Shop Drawing or Catalog Cut with other Shop Drawings and Catalog Cuts and with other requirements of the Work.

At the time of each submission, the Contractor shall give the Engineer specific written notice of each variation in any Shop Drawing, Catalog Cut and sample from the requirements of the Contract Drawings or Specifications and, in addition, shall cause a specific notation of each such variation to be made on each submittal to the Engineer, for review and approval of each such variation.

The Engineer's review and approval of Shop Drawings, Catalog Cuts or samples shall not relieve the Contractor from responsibility for any variation from the requirements of the Contract Drawings or Specifications unless the Contractor has in writing called the Engineer's attention to each such variation at the time of submission as required hereunder and the Chief Engineer has given written approval of each by an express specific written notation thereof incorporated in or accompanying the Shop Drawing, Catalog Cut or sample approval. Approval of Shop Drawings, Catalog Cuts and samples which are inconsistent with the requirements of the Contract Drawings and Specifications shall not be deemed to waive or change such requirements or to relieve the Contractor of his obligations to perform such requirements unless the Chief Engineer shall expressly and specifically state that he is waiving or changing such requirements, as stated above.

Where a Shop Drawing, Catalog Cut or sample is required no related Work shall be performed prior to the Engineer's review and approval of the submission.

In preparing the Shop Drawings, the Contractor may adopt a sheet of any reasonable size which best suits his needs, but having adopted such size, all sheets thereafter of a similar nature shall be of the same size as that adopted. Each drawing shall have a margin on the top, bottom and right-hand side of one-half inch and on the left hand side a margin of one and one-half inches.

Upon receipt of the submittal, the Engineer will review the Shop Drawing, Catalog Cut or sample for conformance to the design information and materials shown on the Contract Drawings and contained in the Specifications. Approval by the Engineer shall not constitute a complete review or approval of the means, methods, techniques, sequences or procedures of construction, except where a specific means, method, technique, sequence or procedure of construction is specifically delineated in or required by the Contract Drawings or Specifications, and the approval shall not constitute a review and approval in regard to safety precautions or programs incident thereto. The review and approval of a separate item will not in itself indicate approval of the assembly in which the item functions. Any design shown on the Shop Drawings and prepared by the Contractor, his subcontractors, their detailers, or their professional engineers is the complete responsibility of the Contractor.

Within the number of working days hereinafter specified after receipt of the Shop Drawing prints, the Engineer shall approve or not approve the same or require corrections or additions to be made thereon. When a shop drawing is not approved or if additions or corrections are required, the Engineer shall return within this period one of the four copies submitted and the Contractor shall make the revisions, corrections or additions shown thereon to be made. He shall resubmit four prints and one brownline (reproducible) showing the drawing corrected as required. The Contractor shall direct specific attention in writing to revisions other than the corrections called for by the Engineer on the previous submittal. Each drawing shall be corrected as required until the approval of the Engineer is obtained. After each resubmission, the Engineer shall have the number of working days hereinafter specified in which to approve revisions or corrections.

The number of working days within which the Engineer shall advise the Contractor as to whether the Shop Drawings are approved, not approved, or require corrections or additions to be made thereto shall be as follows, except that 20 working days shall be required for the Engineer to review shop drawings submitted with design calculations.

<u>No. of Dwgs. Submitted Within 5 Consecutive Working Days for Each Discipline*</u>	<u>No. of Working Days for Engineer To Review Shop Drawings</u>
Up to 50	10
51 to 75	15
More than 75	20

\* Disciplines shall be defined as follows: Structural, Architectural, Civil, Geotechnical, Mechanical, Electrical, Traffic and Environmental.

As soon as approval has been given to any Shop Drawing or Catalog Cut, the Contractor shall within five days send to the Engineer six prints, except that when the Engineer specifically so directs, nine prints shall be sent. After approval thereof, no change will be permitted thereon unless approved in writing by the Engineer.

Before final payment for the Work is made, the Contractor shall furnish to the Engineer one set of Shop Drawings, which have previously been prepared by the Contractor in accordance with requirements elsewhere specified in these Specifications, all clearly revised, completed and brought up to date showing the permanent construction as actually made. These drawings shall be in the form of Mylar reproducibles, from which clear prints can be made.

All drawings, data, calculations and other papers of any type whatsoever, whether in the form of writing, figures or delineations, which are prepared in connection with this Contract and submitted to the Authority shall become the property of the Authority. The Authority shall have the non-exclusive right to use or permit the use of all such drawings, data and other papers and any ideas or methods represented thereby for any purpose and at any time without additional compensation. No such papers shall be deemed to have been given in confidence. Any statement or legend to the contrary in connection with such drawings, data or other papers and in conflict with the provisions of this paragraph shall be void and of no effect.

9. SUBSTITUTION.

Where a proprietary item or make is specified or mentioned herein or called for or mentioned on the Contract Drawings and the phrases "similar and equal to" or "approved equal" are used in connection therewith, the utilization of any other item or make will be deemed a substitution. Substitution for the proprietary item or make specifically named may be made only in accordance with the Section hereof entitled "Workmanship and Materials" and in accordance with the following.

Whenever materials or equipment are specified or described in the Contract Drawings or Specifications by using the name of a proprietary item or the name of a particular supplier, the naming of the item is intended to establish the type, function and quality required. Unless the name is followed by words indicating that no substitution is permitted, materials or equipment of another supplier or manufacturer may be accepted by the Engineer if sufficient information and proof is submitted by the Contractor to permit the Engineer to determine that the material or equipment proposed is equivalent or equal to that named and the Engineer approves the substitution. The procedure for review by the Engineer will include the following. Requests for review of substitute items of material and equipment will not be accepted by the Engineer from anyone other than the Contractor. If the Contractor wishes to furnish or use a substitute item of material or equipment, the Contractor shall make a timely written application to the Engineer for approval thereof, certifying that the proposed substitution will perform at least the identical functions and achieve at least the identical results called for by the specified product and otherwise be equal to the specified product with regard to, but not limited to, durability, maintenance, strength, energy costs and record of proven performance. The application shall state that the evaluation and approval of the proposed substitution shall not delay the Contractor's completion of the Work as required by the Contract, whether or not approval of the substitution will require a change in the construction and, in no event will the Contractor be granted an extension of time for completion of any portion of the Work for reasons related directly or indirectly to the evaluation of the proposed substitution or to the proposed substitution itself. Any variations of the proposed substitution from that specified shall be identified in the application, and maintenance, repair and replacement services for the substitution shall be indicated. The Engineer may require the Contractor to furnish at the Contractor's expense additional laboratory test data concerning the proposed substitution.

Such submission to the Engineer shall be made only by including the requested substitution in the list of materials required to be submitted to the Engineer in accordance with the Section hereof entitled "Inspections and Rejections" within forty-five calendar days after the receipt of the acceptance of the Contractor's Proposal. After the approval of said list, no substitutions will be permitted, except that a brand or make named in the Specifications may be submitted for approval in lieu of a brand or make on said list. Any such submission shall not imply, or impose on the Engineer, any obligation whatsoever to discuss, disclose or justify the reasons for his opinion, approval, acceptance or rejection.

The Engineer shall be the sole judge of as to whether a proposed substitution will be approved, and no substitution shall be ordered or utilized without the Engineer's prior written approval. The Engineer may require Contractor to furnish at Contractor's expense a special performance guarantee or other assurance with respect to any approved substitution. Furthermore, the approval of any substitute proprietary item or make shall not in any way entitle the Contractor to additional compensation therefor.

Notwithstanding such approval, however, the Contractor assumes the risk that such approved substitute item or make is not equal to that shown or specified and if at any time the substitution shall appear not to be so equal he shall replace the substitution with that originally shown on the Contract Drawings or called for in the Specifications at his own cost and reimburse the Authority for any loss occurring on account of the substitution failing to be equal, notwithstanding that it had been previously approved for use by the Engineer.

The construction called for by the Contract Drawings and Specifications may be adapted for a particular proprietary item or make of material or equipment. Therefore, if any construction not required by the Contract Drawings or Specifications in their present form is necessary or desirable because of the use of substitute item or make of material or equipment (even though such other item or make is approved by the Engineer), such construction shall be furnished or performed by the Contractor at his expense and subject to the approval of the Engineer.

10. WORKMANSHIP AND MATERIALS.

Workmanship and materials shall in every respect be free from defects of any kind and shall be in accordance with the best modern practice and whenever the Contract Drawings, Specifications or directions of the Engineer admit of a doubt as to what is permissible or fail to note the quality of any construction the interpretation which calls for the best quality is to be followed. Workmanship shall conform to applicable Specifications, manufacturer's instructions and recommendations for installation of products for the applications shown on the Contract Drawings, all of which shall be subject to the provisions of the Section of Division 1 GENERAL PROVISIONS entitled "Inspections and Rejections".

Materials and Equipment incorporated into the Work shall be new except as may be otherwise herein specifically required, and shall comply with make, size, type and quality specified, or as specifically approved in writing by the Chief Engineer in accordance with the Section of Division 1 GENERAL PROVISIONS entitled "Substitution".

Reference to standards of any society, institution, association, or governmental authority in the Specifications or on the Contract Drawings, whether specific or by implication, shall mean for such standards which are part of the building code in effect for Work of this Contract the edition date published in such code; and such references which are not part of the building code, shall mean the latest edition date in effect at the time of opening of Proposals upon the present Contract unless specifically stated otherwise.

If required by the Engineer, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment to be employed by the Contractor in performing the Work. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the approved instructions of the applicable supplier except as otherwise provided in the Contract Drawings or Specifications.

In case of a discrepancy between a description or requirement in the Contract Drawings and Specifications for any material or equipment and a catalog number or other designation for the same material or equipment (even though stated to be acceptable), the description or requirements shall control.

In various paragraphs of these Specifications, references may be made to certain standard or tentative specifications or requirements of various organizations. Unless otherwise stated, these references are to be construed as referring to the specifications and requirements in effect on the date set for opening bids upon the present Contract.

All inventions, ideas, designs and methods contained in the Specifications and Contract Drawings in which the Authority has or may acquire patent, copyright or other property rights are hereby expressly reserved for the exclusive use of the Authority. The Specifications and Contract Drawings contain confidential information which is disclosed only to enable this Contract to be performed. Said Specifications and Drawings must not be used for any purpose detrimental to the interest of the Authority and must not be produced or copied in whole or in part or used for furnishing information to others without the written consent of the Authority, provided, however, that the Contractor may, when the performance of the Contract so requires, furnish said information to others for the purpose of engaging or informing subcontractors and materialmen.

If, in accordance with this Contract, the Contractor furnishes research, development or consultative services in connection with the performance of the Contract and if in the course of such research, development or consultation patentable subject matter is produced by the Contractor, its officers, agents, employees, subcontractors or materialmen, the Authority shall have, without cost or expense to it, an irrevocable, non-exclusive, royalty-free license to make, have made, and use, either itself or by anyone on its behalf, such subject matter in connection with any activity now or hereafter engaged in or permitted by the Authority. Promptly upon request by the Authority, the Contractor shall furnish or obtain from the appropriate person a form of license satisfactory to the Authority, but as between the Contractor and the Authority the license herein provided for shall nevertheless arise for the benefit of the Authority immediately upon the production of said subject matter and shall not await formal exemplification in a written license agreement as provided for above. Such license may be transferred by the Authority to its successors, immediate or otherwise, in the operation or ownership of any real or personal property now or hereafter owned or operated by the Authority, but such license shall not be otherwise transferable. The FAA shall have the same rights as the Authority under this paragraph.

The right to use all patented material, compositions of matter, manufactures, apparatus, appliances, processes of manufacture or types of construction required in connection with this Contract shall be obtained by the Contractor without separate or additional compensation whether the same is patented before, during or after the performance of the Contract.

The Contractor shall indemnify the Authority against and save it harmless from all loss and expense incurred in the defense, settlement or satisfaction of any claims in the nature of patent infringement arising out of or in connection with the Authority's use, in accordance with the preceding two paragraphs of this numbered clause, of such patentable subject matter or patented material, compositions of matter, manufactures, apparatus, appliances, processes of manufacture or types of construction. If requested by the Authority and if notified promptly in writing of any such claim, the Contractor shall conduct all negotiations with respect to and defend such claim without expense to the Authority. If the Authority be enjoined from using any of the facilities which form the subject matter of this Contract and as to which the Contractor is to indemnify the Authority against patent claims, the Authority may, at its option and without thereby limiting any other right it may have hereunder or at law or in equity, require the Contractor to supply, temporarily or permanently, facilities not subject to such injunction and not infringing any patent or to remove all such facilities and refund the cost thereof to the Authority or to take such steps as may be necessary to ensure compliance by the Authority with such injunction, all to the satisfaction of the Authority and all without cost or expense to the Authority.

#### 11. INSPECTIONS AND REJECTIONS.

All Work and all construction, processes of manufacture and methods of construction involved in or related to the performance of the Work shall be at all times and places subject to the inspection of the Engineer, acting personally or through his Inspectors, and the enumeration in these Specifications of particular portions of such Work, construction, processes of manufacture or methods of construction which will or may be inspected by the Engineer or such Inspectors shall not be deemed to imply that only such Work, construction, processes of manufacture and methods of construction will or may be so inspected. The Engineer shall be the judge of the quality and suitability of the Work, construction, processes of manufacture and methods of construction for the purposes for which they are used or to be used. Should they fail to meet his approval they shall be forthwith reconstructed, made good, replaced or corrected, as the case may be, by the Contractor at his own expense. Rejected material shall be removed immediately from the site. The fact that the Inspectors have approved the materials and workmanship shall not relieve the Contractor from his obligation to supply other material and workmanship when so ordered by the Engineer.

The Contractor, at his own expense, shall furnish such facilities and give such assistance for inspection as the Engineer may direct. In the case of materials required by the Specifications to be inspected in the factory or plant, and in the case of any other items which the Engineer may designate, the Contractor shall secure for the Engineer and his Inspectors free access to all parts of such factories or plants and shall furnish to the Engineer three copies of purchase orders, two copies of mill shipping statements and four copies of shipping statements. Moreover, in the case of such materials to be factory or plant inspected, the Contractor shall give at least ten days' notice to the Engineer of his intention to commence the manufacture or preparation of such materials.

Other than the materials and equipment specifically required to be inspected at the manufacturer's factory or plant, all materials will be inspected at the construction site and any portions thereof which are rejected by the Engineer shall be immediately removed from the construction site by the Contractor and shall be replaced with new materials by the Contractor at his own expense.

In the case of materials to be inspected at the construction site, the Contractor shall submit a list of all such materials in triplicate to the Engineer for his approval prior to ordering same. The list shall be submitted within forty-five calendar days after receipt of the notice of acceptance and shall contain the following information:

(a) Classification of submittal in accordance with the following:

Class I - A submittal for record of an expressly specified item.

Class II - A submittal of an item which conforms to an express generic specification or a submittal which is deemed by the Contractor to be identical to an expressly specified item.

Class III - A submittal which is deemed by the Contractor to be functionally equivalent but not identical to a specified item.

- (b) In the case of Class II and Class III, the Contractor shall supply adequate information to the Engineer to enable the Engineer to compare the specified item and the proposed substitution. Information shall include, but need not be limited to, technical specifications, Catalog Cuts, drawings, references to existing installations and test data, or any other data required by the Engineer.
- (c) In the case of fabricated materials for which Shop Drawings are to be prepared, a brief description of the material and the statement "see Shop Drawings".
- (d) In the case of materials or equipment listed in manufacturer's catalogs, the list shall contain the vendor's name, the manufacturer's name, brand name, style designation, catalog number and, where the Specifications require catalog cuts, the statement "see catalog cut".
- (e) In the case of materials or equipment for which Shop Drawings are not to be prepared, and which are not listed in any catalog, the list shall contain a complete description of the material or equipment, which shall be in sufficient detail to describe completely the materials or equipment and quality thereof.

Within ten working days after receipt of said list, the Engineer shall notify the Contractor of which items are approved and which disapproved. Within two working days thereafter, the Contractor shall resubmit a new list covering those items which were disapproved. After each such re-submission the Engineer shall have a similar period of ten days in which to approve or disapprove.

Should materials or equipment be delivered to the construction site without having been placed on the aforementioned list and approved, it shall be immediately removed from the construction site by the Contractor at his own expense.

12. MANUFACTURERS' CERTIFICATION.

Where materials and equipment are required by these Specifications to conform to certain standard or tentative specifications or requirements of any organizations, including American Society for Testing and Materials, American National Standards Institute, Association Rules for Grading Lumber, Federal Specifications, National Electrical Manufacturers Association, American Association of State Highway and Transportation Officials, American Water Works Association and the International Municipal Signal Association, the Contractor shall furnish to the Engineer the manufacturer's written certification that each of the materials or equipment conforms to the foregoing standard or tentative specifications. The certification shall be delivered to the Engineer prior to installation of the materials to which it refers. Such certifications shall not be binding or conclusive on the Authority and may be rejected at any time by the Engineer if incorrect, improper or otherwise unsatisfactory in his opinion.

13. NO RELEASE OF CONTRACTOR.

Any provision of this Contract for testing, inspection or approval, and any actual testing, inspection or approval, of any materials, workmanship, plant, equipment, drawings, program, methods of procedure, or of any other thing done or furnished or proposed by the Contractor to be done or furnished in connection with the Contract is for the benefit of the Authority not the Contractor. Any approval of such things shall be construed merely to mean that at that time the Engineer knows of no good reason for objecting thereto. No such provision for testing or inspection, no omission of testing or inspection, and no such approval shall release the Contractor from his full responsibility for the accurate and complete performance of the Contract in accordance with the Contract Drawings and Specifications or from any duty, obligation or liability imposed upon him by the Contract or from responsibility for injuries to persons or damage to property.

14. ERRORS AND DISCREPANCIES.

If, in the performance of the Contract, the Contractor discovers any errors or omissions in the Contract Drawings or Specifications, or in the marks, lines and elevations furnished by the Authority in the construction undertaken and executed by him, he shall immediately notify the Engineer and the Engineer shall promptly verify the same.

If with the knowledge of such error or omission and prior to the correction thereof, the Contractor proceeds with any construction affected thereby, he shall do so at his own risk and the construction so done shall not be considered as construction done under and in performance of this Contract unless and until approved and accepted.

15. ACCIDENTS AND FIRST AID PROVISIONS.

The Contractor shall promptly report in writing to the Engineer and to the Authority's Manager, Claims Administration all accidents whatsoever arising out of or in connection with the performance of the Contract, whether on or adjacent to the construction site, which result in death, injuries or property damage, giving full details and statements of witnesses. In addition, if death or serious injuries or serious damage is caused, the accident shall be reported immediately by telephone to both of the said representatives of the Authority.

The Contractor shall provide at the construction site such equipment and medical facilities as are necessary to supply first aid service, in case of accident, to any who may be injured in the progress of the Contract. He shall have standing arrangements for the removal and hospital treatment of any person who may be injured while engaged in the performance of the Contract.

If any claim is made by any third person against the Contractor or any subcontractor on account of any accident, the Contractor shall promptly report the fact in writing to the aforementioned representatives of the Authority, giving full details of the claim.

16. SAFETY PROVISIONS.

In the performance of the Contract, the Contractor shall exercise every precaution to prevent injury to workers and the public or damage to property.

He shall, at his own expense, provide temporary structures, place such watchmen, design and erect such barricades, fences and railings, give such warnings, display such lights, signals and signs, exercise such precaution against fire, adopt and enforce such rules and regulations, and take such other precautions as may be necessary, desirable or proper, or as may be directed.

The Contractor shall employ for Work of the Contract a competent person conforming to the requirements of the Code of Federal Regulations 29 CFR 1926.32(f) who shall be designated by the Contractor as authorized to perform the duties required by 29 CFR 1926 et seq. as applicable for Work of this Contract.

Obtain and submit to the Engineer one copy of material safety data sheet (MSDS) conforming to the requirements of 29 CFR 1910.1200(g) for each hazardous chemical utilized for permanent and consumable materials employed for Work of this Contract.

The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. The Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss, including but not limited to:

a) all employees on the Work, the public, and other persons and entities who may be affected thereby;

b) all the Work, materials and equipment to be incorporated therein, whether in storage on or off the site; and

c) other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and underground facilities not designated for removal, relocation or replacement in the course of construction.

The Contractor's duties and responsibilities for the safety and protection of the Work shall continue until such time as all the Work is completed and the Contractor has removed all workers, material and equipment from the construction site, or the issuance of the Certificate of Final Completion, whichever shall occur last.

Until fire protection needs are supplied by permanent facilities under this Contract, install and maintain temporary fire protection facilities. Comply with requirements of National Fire Protection Association NFPA 10 "Standard for Portable Fire Extinguishers" and NFPA 241 "Standard for Safeguarding Construction, Alteration and Demolition Operations".

The Contractor shall employ only such men as are physically fit and are free from contagious or communicable diseases.

He shall use only machinery and equipment adapted to operate with the least possible noise, and shall so conduct his operations that annoyance to occupants of nearby property and the general public will be reduced to a minimum.

The bringing of intoxicating substances onto the construction site and the use or consumption of intoxicating substances at the construction site are prohibited. It shall be the responsibility of the Contractor to insure that all employees of the Contractor and of all subcontractors, materialmen and any other persons under contract to or under the control of the Contractor shall comply with the provisions of this paragraph.

The Contractor shall daily clean up all refuse, rubbish, scrap materials and debris caused by his operations, to the end that at all times the construction site shall present a neat, orderly and workmanlike appearance. Before the Certificate of Final Completion of Work will be issued, the Contractor shall remove all surplus materials, falsework, temporary fences and other temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from his operations and shall put the construction site in a neat, orderly condition.

In the event the Contractor encounters at the construction site, material reasonably believed to be asbestos, polychlorinated biphenyl (PCB) or any other hazardous material, the Contractor shall immediately stop Work in the area affected and report the condition in writing to the Engineer. Work in the affected area shall not thereafter be resumed by the Contractor except upon the issuance of a written order to that effect from the Engineer.

Within 15 days of the acceptance of his Proposal, the Contractor shall submit to the Engineer, for his review and approval, the Contractor's Safety Program which shall comply with all applicable federal, state, municipal and local and departmental laws and shall include, among other things, the designation by the Contractor of a qualified individual to administer such Safety Program.

17. DAILY PROGRESS, EQUIPMENT AND LABOR REPORTS.

The Contractor shall furnish to the Engineer at the end of each day, a memorandum showing for that day (a) the construction performed, (b) the equipment used, (c) a statement of any unusual happening that occurred, and (d) the number of men in each trade classification that were employed. Such memorandum shall not be deemed to be a substitute for the notices, time slips, memoranda or other data required under the clauses of the Form of Contract relating to compensation for Extra Work.

18. LAWS AND ORDINANCES.

In order to effectuate the policy of the Authority, the Contractor shall comply with all provisions of federal, state, municipal, local and departmental laws, ordinances, rules, regulations and orders which would affect the Contract and the performance thereof and those engaged therein if said Contract were being performed for a private corporation, except where stricter requirements are contained in the Specifications or Contract Drawings, in which event the latter requirements shall apply. However, the Contractor shall not apply for any permits, licenses or variances in the name of or on behalf of the Authority, but shall do so in his own name where required by law, regulation or order or by the immediately preceding sentence. Nor shall the Contractor apply for any variance in his own name without first obtaining the approval of the Authority.

The Port Authority has applied for the "Right of Entry" permit in connection with this Contract in its own name. The Contractor shall comply with all provisions of the said permit, attached hereto and made a part hereof as Attachment B.

19. IDENTIFICATION.

No person will be permitted on or about the construction site without a pass, permit or identification badge approved by the Engineer. The Contractor shall provide such passes, permits or identification badges for his employees, subcontractors and materialmen whenever necessary. Identification badges shall be worn in a conspicuous and clearly visible position by all employees of the Contractor whenever they are working at the construction site.

20. SIGNS.

No advertisement or sign, other than the name and address of the Contractor, will be permitted on any fences, temporary structures or elsewhere on the construction site and such advertisement will be permitted only upon the condition that it is first approved by the Engineer. In any event, the advertisement shall not exceed six feet by eight feet in overall dimensions.

21. CONTRACTOR'S FIELD OFFICE AND REPRESENTATIVE.

At a readily accessible point on or near the construction site, the Contractor shall maintain a field office provided with a telephone.

During the performance of any Work at the construction site, the Contractor shall have a representative thereat who shall be authorized by the Contractor to receive and put into effect promptly all orders, directions and instructions from the Engineer. The Contractor's representative shall be provided, at all times, with a conformed copy of this Contract and a set of the Contract Drawings.

Orders and directions may be given orally by the Engineer and shall be received and promptly obeyed by the Contractor or his representative or any superintendent, foreman or other employee of the Contractor who may have charge of the particular part of the Work in relation to which the orders or directions are given. A confirmation in writing of such orders or directions will be given by the Engineer when so requested by the Contractor.

22. SURVEYS.

The Engineer will establish a bench mark and a base line at or adjacent to the location of the Contractor's operations. The Contractor shall perform all surveys which may be required for the performance of the Contract. He shall carefully preserve any base line and bench mark which may be established by the Engineer.

The Contractor shall, in addition, furnish to the Engineer, without additional compensation therefor, any or all information and data regarding points, lines, grades, elevations and other survey information established by the Contractor during the performance of the Contract.

Surveys and measurements of quantities for purposes of computing Contractor's compensation shall be made by the Contractor as directed by and in the presence of, or jointly with, the Engineer, at the Engineer's option. Computations of quantities for payment shall be made by the Contractor and shall be subject to the approval of the Engineer.

23. TEMPORARY STRUCTURES.

Unless otherwise provided in this Contract, the Contractor shall determine the need for and shall design, furnish and construct all barricades, fences, staging, falsework, formwork, shoring, scaffolding and other temporary structures required in the performance of the Contract, whether or not of the type enumerated in the Specifications or on the Contract Drawings, including those which would be required by law or regulation if this Contract were being performed for a private corporation. All such temporary structures shall be of adequate strength for the purposes for which they are constructed and shall be provided with graphics, warning signs and warning lights as required to inform personnel and the public of the hazards being protected against, and the Contractor shall maintain them in satisfactory condition. The design and drawings for such structures are to be prepared by the Contractor, and when requested by the Engineer they shall be submitted for his review before being used. Neither such approval, however, nor any requirements of the Engineer, the Specifications or the Contract Drawings shall relieve the Contractor of his responsibility for the design, construction and use of the temporary structures or from any obligations and risks imposed on him under this Contract, and any such approval or requirements shall be deemed merely to relate to minimum standards and not to indicate that the temporary structures are adequate or that they meet the Contractor's obligations under this Contract.

Temporary structures shall be painted with an approved dark color paint and shall be repainted whenever necessary during the period that the Contract is being performed. Upon completion of all Work under this Contract, the temporary structures shall be removed from the construction site.

24. PERMIT AND REQUIREMENTS FOR WELDING.

Prior to the commencement of any cutting or welding operations at the construction site, the Contractor shall notify the Engineer and obtain an Authority cutting and welding permit. The Authority will issue this permit without payment of a fee, and application forms may be obtained from any Resident Engineer of the Authority, at his office at the facility. Unless otherwise approved by the Engineer, all cutting and welding operations shall be performed in accordance with the conditions which form a part of said permit. The permit application must be filled out and submitted in duplicate to the Engineer at least forty-eight hours prior to commencing welding or cutting operations at the construction site.

25. FINAL INSPECTION.

When, in the opinion of the Contractor, the construction is completed and ready for final inspection, he shall so notify the Engineer in writing and the Engineer will give said construction (including any portions with respect to which Certificates of Partial Completion have been issued) a minute and thorough inspection. Before any Certificate of Final Completion will be issued, any defects or omissions noted on this inspection must be corrected by the Contractor.

26. WARRANTIES.

The Specifications may provide for certain warranties of portions of the permanent construction. These warranties are intended for the greater assurance of the Authority and not as a substitute for rights which the Authority might otherwise have. Although such warranties shall be enforceable as provided, neither any requirement of this Contract with respect to warranties by the Contractor nor any guarantee or warranty given to the Contractor or the Authority by any manufacturer shall be deemed to be a limitation upon any rights which the Authority would have, either expressed or implied, in the absence of such guarantees or warranties.

27. TEMPORARY UTILITY SERVICES

Operate and maintain temporary services and facilities in a safe and efficient manner. Modify as required throughout progress of the Contract, and remove from Authority property when no longer required, or replaced by the use of completed permanent facilities as approved by the Engineer.

Make arrangements for securing, and pay all costs for heat, light, power, water, and other services which may be required for the performance of the Contract.

28. TEMPORARY SANITARY FACILITIES

Make arrangements for securing and pay all costs for temporary toilets, wash facilities and drinking water including toilet tissue, paper towels, paper cups and similar disposable materials for use by the Contractor, subcontractors, materialmen or other persons over whom the Contractor has control. Comply with regulations and health codes, which would be applicable if the Authority were a private corporation, for the type, number, location, operation and maintenance of fixtures and facilities. Install facilities where directed by the Engineer, and remove from Authority property when no longer required.

29. ANALYSIS OF BID

Within fifteen calendar days after acceptance of the Proposal, the Contractor shall prepare a detailed analysis of bid on forms furnished by the Authority with all of the spaces filled in without exception, and containing such information as the Engineer may require for each of the items enumerated in such form.

30. PROGRESS SCHEDULE - PREPARATION, UPDATING & REPORTING  
(PRECEDENCE DIAGRAM METHOD)

The Contractor shall at its own expense prepare, maintain and update detailed progress schedules for the approval of the Engineer, all as described in this Section. The schedules shall be prepared in such a manner as to permit the orderly planning, organization, and execution of the Work and shall be sufficiently detailed to accurately depict all the Work required by the Contract. Progress schedule updates shall include the depiction and reporting of the actual performance and progress of the Work, as specified in the third paragraph of this Section. Each progress schedule shall include a Network Diagram and all supporting data, all of which shall be developed using the Precedence Diagram Method (PDM) and shall, among other things, identify a Critical Path through the network. Each progress schedule shall bear the signature of the Contractor's authorized representative.

The progress schedules/graphics required by this Contract shall be produced using Primavera/Primavision, Artemis, or other computer software that has been developed specifically to manage construction schedules and is approved by the Engineer.

Progress schedules shall graphically represent in the Network Diagrams the logical sequence and duration of each of the Activities necessary to complete the Contract in accordance with the requirements of the Contract. Progress schedules shall include Activities involving the procurement and delivery of construction materials and equipment, whether such materials and equipment are furnished by the Authority, the Contractor or by others. The information provided in progress schedules shall also include, but not be limited to, the interdependencies between the Contractors' Activities and all other Activities required for the successful completion of the Contract, e.g., those to be performed by utility companies, by the Authority's forces, or by other entities. Moreover, each progress schedule shall include time allowances for, among other things, obtaining permits; preparing shop drawings, designs, samples and other submittals; and obtaining approvals by the Engineer. Milestones as well as other significant dates provided for in the Contract shall be identified. A sample Network Diagram appears at the end of this Section.

A. PROGRESS SCHEDULE TERMINOLOGY

Each progress schedule shall utilize the following terms, as described below:

1. Activity

A discrete item of Work with a Duration which can be clearly defined; a synonym for task. Unless otherwise permitted in writing by the Engineer, an Activity's Duration shall be not more than 30 calendar days and not less than 7 calendar days.

2. Activity Description

A textual explanation of an Activity. The Activity Description shall be limited to 250 characters.

3. Activity Number

An alphanumeric code which uniquely identifies an Activity. The Activity Number shall consist of 8 characters or less and be comprised only of numbers and letters.

4. Actual Finish Date

The date upon which an Activity is actually completed.

5. Actual Start Date

The date upon which an Activity actually begins.

6. Alternative Solutions

An analysis of the various options for dealing with encountered or anticipated Contract problems. It is developed to assist in determining the best method(s) of preventing or correcting any impediments to the progress of the Work. Alternative Solutions shall indicate impacts on scheduling and resources.

7. Analysis Report

A report which displays the impacts of all variances reported in the Current Progress Schedule. The Analysis Report focuses attention on the impacts of variances between planned and actual performance, so as to support an assessment of such impacts. The Analysis Report shall include Alternative Solutions.

## 8. Bar Chart

A schedule display designed to complement the Network Diagram. The Bar Chart is a traditional Gantt chart, to which the Early Start Dates, Early Finish Dates, Late Start Dates, Late Finish Dates, and Critical Path have been added.

## 9. Calendar

An integral part of the data base for developing the progress schedule, the Calendar incorporates into the data base each of the days which fall within the period during which Work is to be performed and indicates whether each such day is a working or non-working day. The base time unit used in the Calendar shall be one calendar day.

## 10. Constraint

A relationship between two Activities representing restrictions on the start or completion of subsequent Activities. Constraints do not represent Work and may cause either positive or negative Lag. There are four basic types of Constraints:

- . Finish to Start
- . Start to Start
- . Finish to Finish
- . Start to Finish

## 11. Critical Path

The longest path through the network in estimated total elapsed time from the start of the first Activity through the completion of the last Activity. The Critical Path consists of a series of Activities which must be completed on their scheduled completion dates in order for the Contract to be completed on schedule.

## 12. Critical Path Symbol

A symbol used in Bar Charts and Network Diagrams to indicate which Activities are on the Critical Path.

## 13. Current Progress Schedule

The most recent progress schedule which has been approved by the Engineer.

## 14. Duration

The estimated and/or actual length of time required to fully perform a specific Activity. The Duration is expressed in calendar days.

15. Early Finish Date

The date upon which an Activity can be completed if it is begun on the Early Start Date.

16. Early Start Date

The earliest date upon which an Activity can begin.

17. Estimate to Complete

An estimate of the number of days, person hours or physical asset units which will be required to complete an Activity or all Work under the Contract. This estimate is made while such Activity or Work is in progress.

18. Estimate at Completion

An estimate of the total number of days, person hours or physical asset units which will have been expended at the completion of an Activity or a group of Activities or of all Work under the Contract. During performance of the Contract, the Estimate at Completion is equal to the number of days, hours or physical asset units expended on such Activity, group of Activities to date, plus the Estimate to Complete.

19. Free Float

The amount of time by which an Activity may be delayed without affecting the start of succeeding Activities.

20. Hammock

A designation, inserted between at least two Activities in a network, which summarizes the total Durations of and interval between such Activities. Hammock Activities shall be designated "HAM" in a code field.

21. Lag

The interval between the completion of a Predecessor Activity and the start of a Successor Activity. For example, ten days of positive Lag will cause the Successor Activity to begin ten days after the Predecessor Activity has been completed. Negative Lag will cause the Activities to overlap. The amount of Lag between each Activity shall be clearly represented on the Network Diagram.

22. Late Finish Date

The latest date by which an Activity must be completed if the succeeding Activity is to be started on schedule.

23. Late Start Date

The latest date by which an Activity must be started to allow completion by the Late Finish Date.

24. Milestone

A significant point in the performance of the Work. A milestone has no Duration, and represents the start of a portion of the Work or the completion of a portion of the Work. A milestone may also represent either the beginning or the completion of a task or action being performed by entities other than the Contractor (e.g., obtaining a permit, notification to proceed with certain Work, etc.).

25. Negative Float or Negative Slack

A negative amount of time between the planned completion date and Late Finish Date of an Activity. An Activity with Negative Float or Slack must be completed ahead of schedule if the Work is to be completed on time. Negative Float or Slack usually indicates the need for corrective and/or preventive action to complete the Work on schedule.

26. Network Diagram

A logic diagram prepared according to the Precedence Diagram Method, which displays each Activity required for the performance of the Contract in the sequence in which it is to be performed.

27. Original Progress Schedule

The detailed progress schedule first approved by the Engineer as provided for in B4 hereof. The Original Progress Schedule shall be referred to as "Revision 0". Each time a different Current Progress Schedule is developed, the revision number must be increased by 1, and the old schedule must be archived, so as to permit an audit trail.

28. Precedence Diagram Method (PDM)

A particular type of graphic representation of all Activities and Constraints. The Activities are represented by nodes; the Constraints are represented by lines between nodes. A sample PDM Network Diagram appears at the end of this Section. (See description of "Sample Network Diagram").

29. Predecessor Activity

An Activity which is a prerequisite to commencement of another Activity.

30. Preliminary Progress Schedule

A detailed progress schedule for Work to be performed within the first one hundred days after the acceptance of the Contractor's Proposal.

31. Successor Activity

An Activity which cannot be started or completed without the prior completion or partial completion of a Predecessor Activity.

32. Total Float

The amount of time by which an Activity or series of Activities may be delayed without affecting the date of completion of the Work.

33. Sample Network Diagram

To assist the Contractor in preparing his progress schedule, a sample Network Diagram has been appended at the end of this Section. The sample is intended merely for the Contractor's guidance. The types of data shown are the types of data expected to be shown on the Contractor's Network Diagram. However, the information presented in the sample Network Diagram should not be misinterpreted as either representing a plan for the Contractor's Network Diagram or a depiction of the level of detail which will be required in such diagram.

B. SUBMITTAL, REVIEW & APPROVAL

1. Within 30 calendar days of the acceptance of the Contractor's Proposal, the Contractor shall submit to the Engineer for approval 3 computer printout copies and one computer diskette of a detailed Preliminary Progress Schedule containing the Contractor's proposed plan and schedule of Work to be performed within the first one hundred days after acceptance of the Proposal. The Preliminary Progress Schedule shall be prepared with the same level of detail as required in this Section for the Original Progress Schedule.

2. The Engineer will review the Preliminary Progress Schedule and return it to the Contractor with comments or approval within fifteen calendar days. If it is not approved, the Contractor shall revise the Preliminary Progress Schedule in accordance with the Engineer's comments, and resubmit 6 computer printout copies and one computer diskette of it for the Engineer's approval, within 7 calendar days of the receipt by the Contractor of the Engineer's comments. Until such time as the Engineer approves it, the Contractor shall resubmit the Preliminary Progress Schedule as required by the Engineer by the same time and in the same format as required in this paragraph for the initial resubmission.
  
3. Within 90 calendar days of the acceptance of the Contractor's Proposal, the Contractor shall submit to the Engineer for approval 6 computer printout copies and one computer diskette of a proposed Original Progress Schedule containing the Contractor's projected plan and schedule to complete all Work required by the Contract within the time(s) for completion required by the Contract. The Original Progress Schedule shall include Hammock Activities to indicate compliance with the Contract time(s) for completion. A schedule showing time(s) for completion other than those required by the Contract will not be approved. Along with the submission of his proposed Original Progress Schedule the Contractor shall also submit one copy of all of the following supporting data which shall form part of the progress schedule:
  - a. A listing of all Activities and Activity Descriptions sorted by Activity number.
  - b. Tabular schedules sequenced by Total Float, Early Start Dates and Late Start Dates. A sample tabular schedule appears at the end of this Section.
  - c. A tabular network logic report which indicates for each Activity, by number and description:
    - All Predecessor and Successor Activities by number and description
    - Duration
    - Constraint type
    - Lag

A sample tabular network logic report appears at the end of this Section.

4. The Engineer will review the proposed Original Progress Schedule and return it to the Contractor with comments, or approval as the Original Progress Schedule, within fifteen calendar days. If the proposed schedule is not approved, the Contractor shall revise it in accordance with the Engineer's comments and resubmit six computer print-out copies and one computer diskette of it for the Engineer's approval, within fifteen calendar days of the receipt by the Contractor of the Engineer's comments. Until such time as the Engineer approves it, the Contractor shall resubmit his proposed Original Progress Schedule as requested by the Engineer by the same time and in the same format as required by this paragraph for the initial resubmission.
5. Within 7 calendar days of the date on which the proposed Original Progress Schedule is first approved by the Engineer, the Contractor shall furnish to the Engineer 6 additional computer printout copies and one computer diskette of the Original Progress Schedule as well as all supporting data referred to in paragraph 3 above.
6. All copies of the Network Diagrams shall be submitted on sheets 22 inches by 34 inches. Each sheet shall have match lines indicating the interface between sheets.
7. After the approval of any progress schedule required by this Section no changes shall be made therein without the approval of the Engineer. Moreover any approval required by this Section shall be effectuated only by a writing over the signature of the Engineer. No other act or omission on the part of the Authority shall be deemed to constitute such approval. The Contractor shall not be entitled to any damages by reason of the failure of the Engineer to give timely approval or comments on any progress schedule submitted hereunder.

C. SCHEDULE UPDATING

1. The Contractor shall submit to the Engineer not less frequently than once a month, on a date specified by the Engineer, an update of the then Current Progress Schedule. The updated progress schedule shall include at least the following:
  - (a) A revised Network Diagram indicating completed Activities, Activities in progress, revised Durations of Activities, revised logical sequence of Activities, the revised Critical Path, and extensions of time, if any.

- (b) An indication of Activities and/or Milestones which are behind schedule by at least 30 calendar days (commonly evidenced by Negative Float). All such Activities or Milestones shall be addressed in an Analysis Report.
  - (c) Revised supporting data, which shall include all information required by B3 of this Section for the Original Progress Schedule submitted.
2. Within seven calendar days after receipt by the Engineer of an updated progress schedule, the Contractor shall meet with the Engineer for the purpose of reviewing and obtaining the Engineer's approval of it.
  3. The Engineer may require the Contractor to furnish a revised update which shall include any other information he may request to assist him in evaluating the Contractor's progress, including but not limited to the following: manpower loading charts and equipment schedules; multiple shifts or overtime to maintain approved schedules; a Bar Chart; Estimates to Complete; Estimates at Completion; Hammock Activities.

In the event that the Engineer requests the Contractor to revise the updated schedule submitted, and/or to submit such additional information, the Contractor shall make the requested revisions and/or submit the updated schedule to the Engineer for approval along with the additional information requested within 7 calendar days of the Engineer's request.

4. The Contractor acknowledges and agrees that if an Activity with Free Float is delayed for any reason, he will not thereby become entitled to an extension of time.

#### D. GENERAL

Should the Contractor fail to comply with any provision of this Section, the Authority shall have the right in its discretion to withhold out of any payment (final or otherwise and even though such payment has already been certified as due) such sums as it deems necessary or desirable, all as more fully provided in the clause of the Form of Contract entitled "Withholding of Payments".

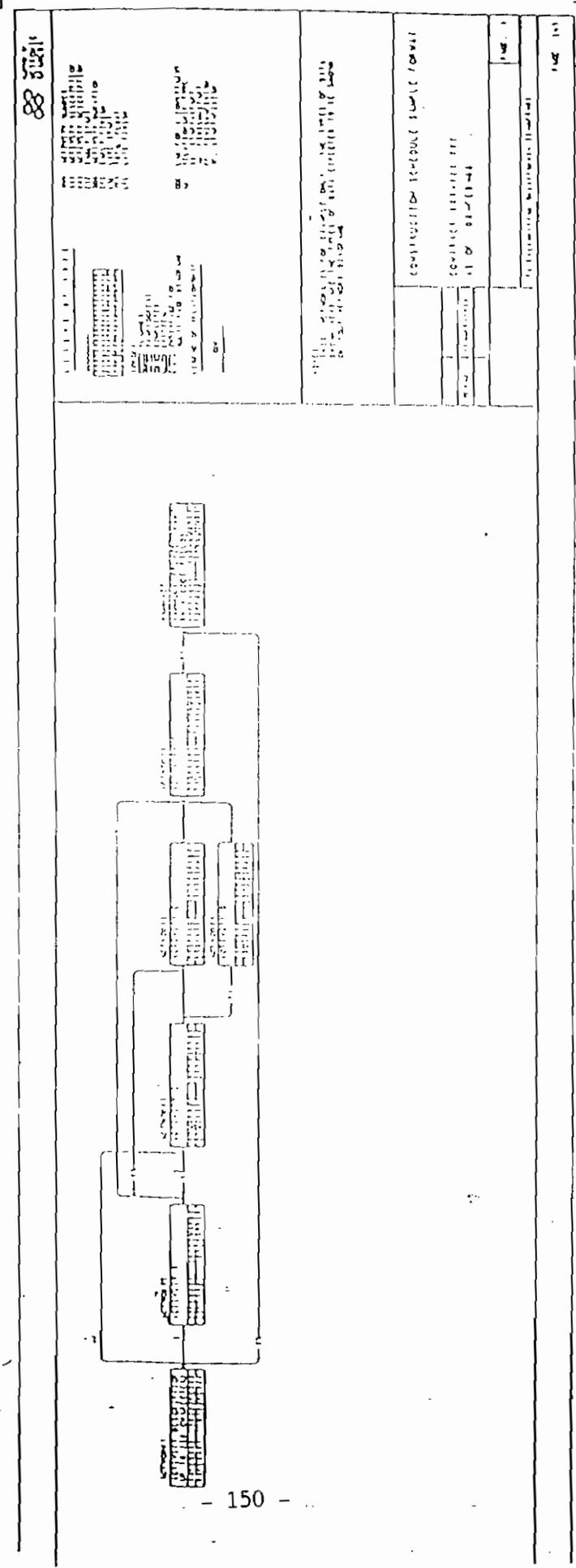
Neither the acceptance, review or approval of any progress schedule or other data submitted by the Contractor pursuant to this Section, nor any other action on the part of the Authority under this Section shall in any way be deemed as a representation by the Authority that the Contractor can or will be permitted to follow a particular schedule or sequence

of operations or that by following any such schedule or sequence he can or will complete the Work by the time(s) required by the Contract or by any other time(s). Nor shall the approval of any progress schedule or other such data relieve the Contractor of his obligation to complete the Contract by the time(s) required in the Form of Contract, even though the schedule approved may be inconsistent with such completion.

Any approval under this Section shall be construed merely to mean that the Engineer knew of no good reason at that time to object thereto. No acceptance, review or approval or any other action under this Section shall limit, affect or impair the Contractor's obligation to perform all Work by time(s) required by the Contract and in accordance with all other provisions of the Contract.

The performance of the Work by the time(s) required in the Form of Contract after taking into account extensions to which the Contractor may be entitled under the clause "Extensions of Time", may require the use by the Contractor of overtime labor, additional shifts or additional plant and equipment and/or other measures. In any event, the Contractor shall anticipate, avoid and mitigate the effects of all delays, whether or not such delays involve Activities with Free Float. The Engineer shall have the right at any time when in his judgment the Work is not proceeding in accordance with the approved progress schedule or at any time when it is likely that the Work might not be completed by the time(s) required in the Form of Contract even though the Contractor is proceeding in accordance with the approved progress schedule, to order the Contractor without additional compensation, to employ additional shifts to increase the number of men employed, to use additional plant or equipment, or to take such other steps as may be necessary or required to assure the completion of the various operations within the time(s) allotted therefor in the approved schedule or by the aforesaid completion time(s).

No action on the part of the Contractor pursuant to this Section shall be construed as a request by him for an extension of the time(s) for completion required by the Contract. A request for an extension of time shall be deemed made only if it complies with the requirements of the clause of the Form of Contract entitled "Extensions of Time". No extension of the time(s) for completion shall be inferred because of any action, omission to act, or statement on behalf of the Authority pursuant to this Section. Extension of time, if any, shall be granted only pursuant to the clause of the Form of Contract entitled "Extensions of Time".



(THIS NETWORK DIAGRAM IS AN EXAMPLE ONLY. THE TYPES OF DATA SHOWN HERE ARE THE TYPES OF DATA EXPECTED TO BE SHOWN ON YOUR NETWORK DIAGRAMS)

NOTE: This logic report is an  
 example only. The types of  
 data shown are the types  
 of data expected to be  
 shown on your reports.

SAMPLE CONSTRUCTION SCHEDULE  
 TABULAR NETWORK LOGIC REPORT  
 CONTRACT XX-XX-XX.XXX

Network Logic sorted by Predecessor then Successor

Predecessor (PAX)	Activity Number	Constraint Type	LAG	Duration	Activity Description	Hatchcode Code Field	Predecessor/Successor Activity Description
ACTH0001		SS					ACTIVITY A 250 CHARACTERS MAX.
ACTH0006	HATCHACT	FF					ACTIVITY F
ACTH0001		SS		73	HATCHACT (PLACE 'HACH' IN A CODE FIELD)	HACH	
ACTH0002		FS	2	10	ACTIVITY DESCRIPTION UP TO 250 CHARACTERS MAX.		HATCHACT (PLACE 'HACH' IN A CODE FIELD)
ACTH0003		FS	-4				ACTIVITY B ACTIVITY C
ACTH0001		FS	2				ACTIVITY DESCRIPTION UP TO 250 CHARACTERS MAX.
ACTH0002		SS		20	ACTIVITY D		ACTIVITY C ACTIVITY E ACTIVITY F
ACTH0003		SS					ACTIVITY DESCRIPTION UP TO 250 CHARACTERS MAX.
ACTH0004		FF		25	ACTIVITY C		ACTIVITY D ACTIVITY E
ACTH0005		FS					ACTIVITY DESCRIPTION UP TO 250 CHARACTERS MAX.
ACTH0006		FF		15	ACTIVITY D		ACTIVITY C
ACTH0002		SS					ACTIVITY B
ACTH0003		FS		22	ACTIVITY E		ACTIVITY D ACTIVITY E
ACTH0004		FS					ACTIVITY F
ACTH0005		FS		21	ACTIVITY F		ACTIVITY B ACTIVITY D ACTIVITY E
ACTH0006	HATCHACT	FF					ACTIVITY F

Daily Plan 801 60-001-00  
 As of Date: 8-FEB-88  
 Sequenced by Early Start Activities  
 Revision No. 3

NOTE: This tabular schedule is an  
 example only. The types of  
 data shown here are the types  
 of data expected to be shown  
 in your tabular schedules.

SAMPLE CONSTRUCTION SCHEDULE  
 TABULAR SCHEDULE  
 CONTRACT XXX-XXX-XXX

ACT NO	Activity Description	OUT	IN	EARLY		FINISH		LATE	TOTAL	START	FINISH	LATE	TOTAL	START	FINISH
				START	FINISH	START	FINISH								
HMMACT	HAMMOCK (PLACE 'MAX' IN A CODE FIELD)	70	1	2/8/88	5/19/88	2/8/88	5/19/88	0	0						
ACT10004	ACTIVITY D	15	0	2/8/88	4/4/88	2/15/88	4/4/88	05	05	2/8/88	4/4/88	4/4/88	4/4/88	2/8/88	4/4/88
ACT10001	ACTIVITY	15	10	2/8/88	2/22/88	2/8/88	2/22/88	0	0	2/8/88	2/22/88	2/22/88	2/22/88	2/8/88	2/22/88
ACT10002	ACTIVITY B	20	0	2/25/88	3/23/88	2/25/88	4/20/88	0	0	2/25/88	4/20/88	4/20/88	4/20/88	2/25/88	4/20/88
ACT10003	ACTIVITY C	25	0	3/1/88	4/1/88	3/1/88	4/1/88	0	0	3/1/88	4/1/88	4/1/88	4/1/88	3/1/88	4/1/88
ACT10005	ACTIVITY C	12	0	4/5/88	4/20/88	4/5/88	4/20/88	0	0	4/5/88	4/20/88	4/20/88	4/20/88	4/5/88	4/20/88
ACT10006	ACTIVITY F	21	0	4/21/88	5/19/88	4/21/88	5/19/88	0	0	4/21/88	5/19/88	5/19/88	5/19/88	4/21/88	5/19/88

DIVISION 2

SECTION 02221

EXCAVATION, BACKFILLING AND FILLING

PART 1 - GENERAL

1.01 SUMMARY

A. This Section specifies requirements for excavation, backfilling and filling.

B. Definitions

1. As used herein, excavation shall mean the removal of existing pavement, concrete foundations and all materials other than bedrock (ledge rock) encountered within the limits of excavation that are not specified to be removed under the Section entitled "CUTTING, PATCHING AND REMOVAL".

2. As used herein, backfilling shall mean the filling of excavations made for construction purposes and shall extend only to existing grades or design grades, whichever are lower.

3. As used herein, filling shall mean the placement of fill material in conformity with requirements of this Section at or above existing grades.

1.02 REFERENCES

American Society for Testing and Materials (ASTM)

ASTM D 472 Standard Test Method for Particle-Size Analysis of Soils

ASTM D 1556 Standard Test Method for Density of Soil in Place by the Sand-Cone Method

ASTM D 1587 Standard Test Method for Determining Compaction Characteristics of Soil Using Modified Effort (56,000 ft. lb/ft<sup>3</sup> (2,700 kN/m<sup>3</sup>))

ASTM D 2167 Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method

ASTM D 2922 Standard Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)

ASTM D 3017 Standard Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth)

ASTM D 4318 Standard Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils

New Jersey Interagency Engineering Committee (NJIEC)

Standard Soil Aggregate Gradations

### 1.03 JOB CONDITIONS

#### A. Protect excavations as follows:

1. Prevent water from entering excavated areas and, if it does, remove it immediately to maintain a dry condition at all times.
2. Dispose of water in a manner not to cause injury to the public health or damage to public or private property.
3. If water enters excavated areas and weakens or disturbs underlying soil, remove the weakened or disturbed soil and replace it in conformance with 3.02 A.5.
4. Where shown on the Slo Lead Drawings or specs applied for protection of adjacent existing or structures or where required by performance of the Work, secure the sides of excavations against movement as follows:
  - a. Install sheet piling or sheeting held in place by waling and bracing members. Top of sheeting shall extend at least six inches above ground.
  - b. Do not excavate below the bottom of sheet piling or sheeting except as necessary to install sheeting.
  - c. Fill voids behind sheeting immediately with material conforming to T-12 designation defined in 2.01 A.1 or otherwise approved by the Engineer.
  - d. Comply with all other provisions of the Specifications that may impose additional or stricter requirements.

5. For excavations extending to a depth of 5 feet or more, and where sheeting is not required to conform with provisions of 1.03 A.4 above, excavate slopes to a safe angle of repose, or protect trench excavations by use of a portable trench shield.
  6. Restore all areas impacted by excavation to their original condition, matching pavement types and sections to meet original pavement grades.
- B. Do not traverse paved areas with tracked vehicles or equipment such as carry-all scrapers which may damage such pavement unless protected to the satisfaction of the Engineer.
  - C. Do not place fill or backfill on frozen subgrade.
  - D. Do not perform rolling or other compaction at any time when the ground water level is above a plane two feet below the surface to be compacted. When the ground water level is above such plane, lower it by approved methods and maintain it below such level prior to and during the compaction operations.
  - E. Protect from damage trees and other vegetation that are to remain in place.

#### 1.04 SUBMITTALS

See Appendix "A" for submittal requirements.

#### 1.05 MEASUREMENTS

#### 2.01 MATERIALS

##### A. FILL

1. Unless otherwise shown on the Contract Drawings, fill shall consist of clean sand and gravel containing no organic matter, conforming to the following NJDEC Standard Soil Aggregate Gradations:

Total Percent Passing by Weight  
NJIEC Designation:

<u>Sieve Sizes</u>	I-7	I-10	I-12
4 inch		100	100
2 inch		80-100	
1 inch	100		
3/4 inch		60-100	70-100
1/2 inch	80-100		
No. 4		40-100	
No. 8	35-100		
No. 16	25-90	20-70	
No. 50	5-50	5-40	0-75
No. 100	0-8	0-30	
No. 200	0-2	0-20	0-5

2. The Contract Drawings show the locations in which each designation of fill is required.

B. Backfill

1. Unless otherwise shown on the Contract Drawings, material shall conform to the requirements for I-12 designation, subject to 2.01 B.2 below.
2. Where the entire backfill is above the water table, material conforming to the requirements for I-10 designation may be used in lieu of I-12 designation, except under foundations, aircraft pavements and utilities.

C. Sources

1. When fill and backfill materials are provided by the Authority, the location of the stockpile and NJIEC designation (if applicable) are shown on the Contract Drawings. Samples of material will not be required for testing.
2. Material excavated at the construction site shall be used for fill or backfill to the extent that it conforms with the requirements specified in 2.01 A.1 and 2.01 B.1 as noted on contract drawings. Samples shall be submitted for testing by the Engineer for conformance with the requirements of the section.
3. If sufficient quantities of material are unavailable from sources described in 2.01 C.1 and 2 above, furnish material from sources off site.

## PART 3 - EXECUTION

### 3.01 PREPARATION

#### A. Clearing and Grubbing

Remove trees, clear and grub areas to be excavated or in which construction is to be performed, as follows:

1. Remove trees, stumps, all roots larger than 2 inches in diameter and all matted root systems.
2. Remove all topsoil, debris, organic matter and any other objectionable material not suitable for use as backfill or fill or for support of structures or pavements.
3. Backfill all holes and other low spots resulting from clearing and grubbing with material conforming with 2.01 B before proceeding with compaction of fill as specified in 3.03 or with other construction in the area.

### 3.02 EXCAVATION

#### A. General

1. Excavation shall consist of the removal of materials as defined in 1.01 B.1., and the removed materials shall be segregated as suitable and unsuitable and stockpiled as shown on the Contract Drawings.
2. When excavation of bedrock (ledge rock) is required as shown on the Contract Drawings, the provisions for removal are specified in the section entitled "ROCK EXCAVATION".
3. Excavate to elevations required for installation of permanent construction in such manner as not to disturb the subgrade below such elevations.
4. Where existing foundations or other existing construction are encountered which may cause void spots, remove them to a minimum of two feet below subgrade for pavement or structure.
5. Should bottom of excavation be weakened or disturbed or carried below required depth:
  - a. Under footings - compact bottom as specified in 3.03 below and replace over-excavation with concrete of the same class and type as that specified for the footing or foundation.

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b. Elsewhere - Compact bottom as approved by the Engineer and refill with material conforming to I-12 designation defined in 2.01 A.1.

6. Perform excavation around and adjacent to existing structures, pipes and conduits which are to remain in place, without damage to or movement of existing construction. Use hand excavation to locate and expose near-surface structures, pipes and conduits. When excavation is to be performed under such structures, pipes and conduits, support them in a manner as approved by the Engineer to ensure uninterrupted operation of the supported items.

B. Dewatering

1. Where excavations are to extend below the water table, prior to placement of any permanent construction or filling or backfilling any excavated area, lower the water table in such an area to two feet below the elevation of the required subgrade and maintain this condition until the construction or pavement is placed thereon.

2. Dewater in a manner to prevent the loss of ground due to the migration of soil fines into the dewatering system.

C. Trenching for Utilities

1. Shape bottom of trench to uniform invert section.

2. When excavating for utilities which may be subject to lateral movement or bottom heave, conform with requirements shown on the Contract Drawings.

D. Disposal of Excavated Material

All debris and all material either unsuitable for use in excess of that required for backfill or fill, shall be disposed of away from the construction site, except that the Engineer may direct that such materials be disposed of at a facility fill stockpile shown on the Contract Drawings.

E. Restrictions

1. Do not place backfill until the Engineer has inspected and approved the work and indicated where backfill may be placed.

2. Leave all pipe joints exposed until all tests on such pipe, required by other Sections of the Specifications, have been performed.
3. Remove all temporary structures, sheet piles, sheeting, bracing and forms and all organic materials and debris of every nature, taking care, upon the removal of sheet piling, sheeting and temporary supports, not to cause movement of adjacent ground or structures or create the danger of a slide.

### 3.03 PLACEMENT AND COMPACTION

#### A. Equipment

1. Steel vibratory rollers shall have provision for regulation of vibration frequency. The Engineer shall be informed of the type and size of equipment to be used before the start of any compaction efforts.
2. Placement and spreading equipment shall be reviewed and approved by the Engineer.
3. Unless otherwise shown on the Contract Drawings, pneumatic-tired rollers shall have minimum weight of 20 tons and a tire pressure of between 60 and 150 psi as directed by the Engineer. For aircraft pavements, the minimum roller weight shall be 50 tons.
4. When mechanical tampers are to be used, the Engineer shall be informed of the type and size of equipment before compaction starts with the equipment on line.

#### B. Compaction Requirements

Backfill and fill shall be compacted to achieve a density of 95 percent of the maximum density as determined by Procedure C of ASTM D 1557, except where alternate density requirements are approved by the Engineer or shown on the Contract Drawings.

#### 1. Subgrade, excavated and existing surfaces

Compaction of subgrade, excavated and existing surfaces will consist of a proof rolling operation performed as follows:

1. Compact surface with a minimum of six passes of an approved vibratory steel roller operated at a speed not to exceed three miles per hour and at the optimum operating frequency recommended by the manufacturer.

2. In areas where surface consists of a fine grained soil, compact with a minimum of six passes of an approved pneumatic-tired roller.
3. Overlap passes of roller a minimum of six inches.
4. In areas where use of a roller is impractical, compact surface while at or near optimum moisture content with mechanical tampers.

D. Backfill and Fill

1. Moisture content of backfill and fill material shall be within a range of plus or minus two percent of optimum, as determined by Procedure C of ASTM D 1557.
2. Backfill, conforming with I-12 gradation, and fill, conforming with I-7 and I-12 gradation, shall be placed in 14-inch, loose layers and compacted with a minimum of six passes of an approved vibratory roller operated at a speed not to exceed three miles per hour.
3. Passes shall be overlapped a minimum of six inches.
4. Backfill and fill, conforming with I-10 gradation, shall be placed in 12-inch, loose layers and compacted with a minimum of six passes of an approved pneumatic-tired roller.
5. In areas where a 14-inch layer over existing material is not adequate to support the construction equipment, the maximum thickness of first fill as approved by the Engineer.
6. In areas adjacent to structures and utilities as shown on Contract Drawing, construction equipment shall be restricted and as directed by the Engineer.
7. In areas where use of a roller is impractical, place fill in maximum 8-inch, loose layers and compact with approved mechanical tampers to specified density.
8. Compact backfill as specified in sub D.6 above for fill. In pipe trenches, each layer of backfill shall be not more than eight inches in thickness before compaction. Backfill shall be placed on both sides of the pipe, simultaneously.

9. The surface of filled or backfilled areas, which are to receive pavement or on which a structure is to be placed, shall be within plus or minus 1/2 inch of the elevations shown on the Contract Drawings and shall be free of depressions or projections greater than 1/2 inch when tested with a 16-foot straight edge.
10. The surface of filled areas at other locations shall be within plus or minus one inch of elevations shown on the Contract Drawings unless a closer tolerance is necessary to meet requirements of other Sections of the Specifications or the Contract Drawings.

### 3.04 FIELD TESTS

#### A. Inspection and Testing

1. The Engineer will perform Quality Assurance testing on delivered field samples of material submitted from each source, for conformance with 2.01. Gradation and maximum density will be determined in accordance with ASTM D 422 and Procedure C of ASTM D 1557, respectively. If deemed appropriate by the Engineer, Atterberg Limits will be determined on fine grained soils in accordance with ASTM D 4318.
2. If the sample from a source is approved and if the Engineer requests, conduct the Engineer's representative to that source. Additional samples will be selected and tested.
3. The Engineer will inspect the Contractor's operation of material source within seven days after receiving samples. Approval of a source of backfill or fill material shall be subject to material continuing to meet the requirements of 2.01.
4. When performing Quality Assurance testing, the Engineer will determine the density of compacted fill or backfill by in place density tests or from undisturbed samples cut from the compacted fill or backfill as required. Notify the Engineer 24 hours prior to start of filling or backfilling to allow the Engineer time to make provisions for such testing.
5. To evaluate whether material has been compacted to specified density the Engineer will compare results of in place density tests with results of control tests on material of the same designation using Procedure C of ASTM D 1557.

6. If fill or backfill have not been sufficiently compacted as determined by in-place density tests, the compaction effort shall be continued and moisture content shall be adjusted as necessary until the specified compaction is obtained.
7. The Engineer will check conformance to elevations shown on the Contract Drawings and required tolerance for surface straightness.
8. Provide labor and equipment to take samples as directed and to assist the Engineer in other tests.

B. Testing Requirements for Fill and Backfill

1. Control Tests

Fill and backfill material field samples will be tested in the laboratory by the Engineer as part of the Quality Assurance program. These control tests consist of determining maximum density and optimum water content by Procedure C of ASTM D 1557, and gradation by ASTM D 422. When deemed appropriate by the Engineer, Atterberg Limits will be determined on fine grained soils.

2. In-Place Density Tests

Quality Control consisting of in-place density testing, as a minimum, shall be performed by the Contractor to determine densities achieved after compaction efforts. An in-place density control plan shall be submitted to the Engineer for review and approval. This plan should address, as a minimum, items such as in place test type and frequencies for different materials; equipment type, calibration and maintenance; operator identity and qualification; etc.

Quality Assurance testing will be performed by the Engineer after compaction operations, at the standard frequencies already established by Port Authority testing bulletins. Test methods may either sand cone (ASTM D 1556), rubber balloon (ASTM D 2167), or nuclear device (ASTM D 2922), with moisture content for nuclear method determined by ASTM D 3017. Tests will measure the density of the layer immediately below each compacted layer and the density of the uppermost or final layer.

C. Proofrolling in Pavement areas or under footings

1. After excavation has been performed to the elevation of pavement subgrade, proofroll the area shown on the Contract Drawings with two passes of a pneumatic-tired roller in the presence of the Engineer.
2. If, in the sole determination of the Engineer, the proofrolling produces noticeable weaving of the surface, excavation of unsuitable material may be required below pavement subgrade, within the limits and to the depth ordered by the Engineer.
3. In no case will the depth of such removal of unsuitable material exceed three feet below the pavement subgrade.
4. Remove all such unsuitable material and replace it with suitable backfill material in accordance with the requirements of 2.01 B.
5. The Contractor will be reimbursed for any ordered excavation of unsuitable material below the elevation of pavement subgrade or under footings and subsequent backfilling (but not for the proofrolling specified in 3.04 C.1) at the "Net Cost" for such Work. "Net Cost" shall be computed in the same manner as is compensation for Extra Work, including any percentage addition to cost, as set forth in the clause of the Contract providing compensation for Extra Work. Performance of such Net Cost Work shall be subject to all provisions of the Contract relating to performance of Extra Work. Compensation for said Net Cost Work shall not be charged against the total amount of compensation authorized for Extra Work.

END OF SECTION

SECTION 02221

EXCAVATION, BACKFILLING AND FILLING

APPENDIX "A"

SUBMITTALS

- A. Submit to the Manager, Materials Engineering Division, Engineering Materials Laboratory, Port Authority Technical Center, 241 Erie Street, Jersey City, N.J. 07310-1397, proposed material suppliers and sources for each designation of fill or backfill to be used under this contract. The submittal document must contain, as minimum information, the Contract location, title and number; designation of intended material use; source and supplier of material being submitted. Sample submittal paperwork must be received by the Manager of Materials at least three weeks prior to delivery of material to site. Do not deliver any material until the Engineer has checked and approved material supplier and source. Delivered material must receive on-site approval as per Section 3.04, Paragraph A, prior to use.
- B. The Contractor shall be responsible for Quality Control procedures and P.A. Material Division will be responsible for Quality Assurance Testing. Before the actual start of earth work, the Contractor must submit a Quality Control Plan for review and approval by the Engineer.
- C. Where sheet piling or shoring is required as shown on the Contract Drawings, submit detailed design drawings and design calculations of the shoring and bracing system to the Engineer for review in accordance with the requirements of "Shop Drawings, Catalog Cuts, and Samples" of Division 05 GENERAL PROVISIONS. Submit such drawings and calculations three weeks prior to commencement of such excavation. Shop drawings and calculations shall be prepared by a Professional Engineer licensed in the State in which the work will be performed, who has a minimum of five years experience in the design of soil retaining structures. The Shop Drawings shall be sealed and signed by the Professional Engineer.

END OF APPENDIX A

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SECTION 02272

SOIL EROSION AND SEDIMENT CONTROL

PART 1 - GENERAL

1.01 SUMMARY

This Section specifies requirements for the construction and maintenance of various temporary soil erosion and sediment control measures, including relocation as required for staged construction.

1.02 REFERENCES

American Society for Testing and Materials (ASTM) ASTM C 33 Specification for Concrete Aggregates

1.03 REQUIREMENTS

A. Environmental Requirements

1. Apply dust retardants other than water only when wind velocity is less than 5 mph and drift hazard is negligible.
2. Conform to "Seeding Calendar Limitations" of the Section entitled "SEEDING".
3. Use Dust Retardant or other approved method for temporary surface stabilization of short duration where establishing grass by seeding is not practical.

B. Construction Requirements

1. The Contractor shall employ soil erosion and sedimentation control measures during the duration of the contract to control erosion and minimize the sedimentation of water courses on the construction site.
2. The Contract Borrowings do not include borrow pits or storage areas that the Contractor utilizes or establishes outside of the site in order to perform the work. If the land disturbance for this Work is five thousand square feet (5,000 SF) or greater, the Contractor shall provide the Engineer with documentation that a soil erosion and sediment control plan has been approved for this work by the appropriate Soil Conservation District of the New Jersey Department of Environmental Protection.

3. The Contractor shall incorporate all permanent pollution control features into the project at the earliest practicable time. Temporary soil erosion and sediment control measures shall be coordinated with the permanent pollution control features and with the construction of pavement, drainage facilities such as pipes, culverts, headwalls, channels, ditches, etc., to the maximum extent practical to assure economical, effective and continuous erosion control throughout the duration of the Contract, as outlined in the approved progress schedule.
4. Prior to all grubbing operations, soil erosion and sediment control measures shall be installed. When unstabilized areas caused by site development, grading, or other earth disturbing activities exist beyond 14 calendar days, the areas disturbed shall be seeded and mulched. These requirements pertain to perimeter controls, berms, dams, swales, ditches and slopes. Upon completion of the grading or construction, disturbed areas shall be permanently stabilized in accordance with the Contract Drawings within 7 calendar days.
5. When excavation or embankment construction reaches the finished subgrade, those areas on which paving is to be placed are exempt from the above stabilization requirements. Roadways and haul roads actively being used for daily conveyance of equipment as well as areas between temporary berms, except median areas, are also exempt unless otherwise shown on the Contract Drawings.
6. Stream channels shall be protected from soil erosion and sediment. Stream banks being utilized shall be protected through the use of silt fences. Temporary diversion channels shall be lined with geotextile and temporary riprap.
7. The material generated from de-watering construction activities shall be contained in a de-watering basin in order to control sediment and provide filtration of water prior to it being released into adjacent streams or other watercourses.
8. Soil being stockpiled shall be placed in well-drained areas no closer than 50 feet from streams, wetlands, floodplains and other water areas, unless otherwise directed by the Engineer. The stockpiles shall be seeded and mulched in accordance with the Contract Drawings. Temporary soil erosion and sediment controls shall be provided around the stockpiles until such time as vegetation is established on the piles.

9. Temporary soil erosion and sediment control measures shall be used to correct conditions that develop during construction.
10. In the event that temporary soil erosion and sediment control measures are required due to the Contractor's failure, for any reason, to install or maintain soil erosion and sediment controls, either as part of the work or as directed by the Engineer, such Work shall be performed by the Contractor at no additional cost to the Authority.
11. If the Contractor is not in compliance with soil erosion and sediment control provisions, corrective actions shall be taken immediately. The Engineer may suspend the Work, wholly or in part, until such time as the Contractor is fully in compliance. All corrective and remedial work required to bring the Contractor into compliance shall be performed at no additional cost to the Authority.
12. Temporary soil erosion and sediment control measures shall be removed when necessary to allow for the installation of permanent control features or as permanent controls become functional. Before issuance of a Certificate of Final Completion, all items used for temporary soil erosion and sediment control shall be removed unless otherwise shown on the Contract Drawings.

#### 1.04 QUALITY ASSURANCE

##### a. Program Schedule

1. The Contractor shall prepare a program schedule for the Engineer's approval in accordance with Division 1 of the Specifications.
2. The program schedule shall clearly outline the intended maintenance of traffic, the locations where temporary and permanent soil erosion and sediment control measures shall be installed, and such other information as required. The program schedule shall give special consideration to sensitive areas such as wetlands, waterways, etc. Appropriate staging and seasonal constraints shall be used to maximize the effectiveness of the soil erosion and sediment controls. The program schedule shall also address when Work is restricted in these sensitive areas as outlined in permits issued by regulatory agencies.

## B. Soil Erosion and Sediment Control Manager

1. The Contractor shall assign to the project a supervisory-level employee to serve in the capacity of Soil Erosion and Sediment Control Manager. This employee shall be thoroughly experienced in all aspects of soil erosion and sediment control and construction. The Contractor shall submit the name and experience of this employee to the Engineer for approval at least 10 working days prior to commencing any Work on the project. Replacement of the Soil Erosion and Sediment Control Manager during the Contract shall be made only after approval of a written request for such replacement.
2. The Soil Erosion and Sediment Control Manager shall implement approved soil erosion and sediment control schedules and methods of operations. He shall coordinate his operations with the Engineer and shall oversee and supervise all aspects of soil erosion and sediment control work for the project.

He will attend all soil erosion and sediment control meetings during the Contract.

### 1.05 SUBMITTALS

See Appendix "A" for submittals requirements.

### 1.06 DELIVERY, HANDLING AND STORAGE

Protect materials against damage prior to installation.

### 1.07 SPARE MATERIALS

During construction, the Contractor shall have on hand sufficient spare materials and appurtenances as are necessary to repair damage to permanent and temporary installations.

## PART 2 - PRODUCTS

### 2.01 MATERIALS

All geotextiles shall conform to the Section entitled "Geotextiles". Unless otherwise shown on the Contract Drawings, geotextiles shall have a maximum Apparent Opening Size of 0.6 mm. and minimum permeability of  $1 \times 10^{-3}$  cm/sec.

1. Silt Fences and Inlet Filter Sediment Control shall be "Self Supported".
2. Geotextiles for other Soil Erosion and Sedimentation Control Items shall be "Erosion Control - Class A".

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- B. Wood stakes, posts and boards shall be solid, reasonably knot-free lumber conforming to the nominal size specified on the Contract Drawings.
- C. Hay bales shall consist of timothy , red top or native grasses securely bound with wire or baling twine. The twine shall be an ultra-violet light stabilized polypropylene which has a knot strength of 170 pounds and straight break strength of 300 pounds.
- D. Rip rap shall be broken stone (argillite, calcite, dolomite, gneiss, granite, quartzite, traprock). Unless otherwise shown on the Contract Drawings, riprap shall have a designated median stone (D50) size in the range of 6 to 9 inches maximum dimension, weighing not more than 150 pounds, with at least 90% weighing more than 25 pounds but not more than 40% exceeding 100 pounds, having the following characteristics:

<u>CHARACTERISTIC</u>	<u>MAX. %</u>
Weathered decomposed stone	5
Other than that classification approved	5
Absorption in cold water	1.8
Sodium sulfate soundness, loss by weight	10

- E. Coarse aggregate shall be broken stone or washed crushed gravel meeting the specification for rip rap except for size and weight requirements. Size and gradation shall be as shown on the Contract Drawings.
- F. Welded wire fabric shall conform to AASHTO M55 flat sheets or rolls.
- G. Pipe for temporary storm drains shall be minimum 8-inch diameter of type shown on the Contract Drawings.
- H. Seed and mulch shall be as specified in the section entitled "SEEDING".
- I. Topsoil Stabilization Matting.  
Topsoil stabilization matting shall be one of the following:
  - i. Excelsior mat made of wood excelsior, 40 x 4 inch in width and weighing 0.8 pounds per square yard, ± 5 percent. The excelsior material shall be covered with a coating to facilitate handling and to increase strength and shall be biodegradable.

2. Jute mat shall be cloth of a uniform plain weave of undyed and unbleached single jute yarn, 48 ± 1 inch width and weighing an average of 1.2 pounds per linear yard of cloth with a tolerance of ± 5 percent, with approximately seventy-eight warp ends per width of cloth and forty-one weft ends per linear yard of cloth. The yarn shall be of a loosely twisted construction having an average twist of not less than 1.6 turns per inch and shall not vary in thickness by more than one half its normal diameter.

J. Dust Retardant

1. "Coherex" as manufactured by Golden Bear Division of the Witco Corporation, Chandler, AZ 85244.
2. "Soil-Sement" as manufactured by Midwest Industrial Supply, Inc., Canton, OH 44711.
3. "Soil Seal Concentrate" as manufactured by Soil Seal Corporation, Los Angeles, CA 90017.
4. Or approved equal.

- K. Calcium Chloride shall be Grade 2, in the form of loose dry granules or flakes, and shall be fine enough to feed through commonly used spreaders at the specified rates.

2.02 CONSTRUCTION FEATURES

1. Silt Fence

1. Silt fence shall consist of geotextile whose width shall be at least 3 feet to provide for a 2 foot high fence after a foot of fabric is buried in the existing soil. Heavy duty silt fence shall consist of geotextile whose width shall be at least 4 feet to provide for a 3 foot high fence after a foot of fabric is buried in the existing soil. Sections of fabric shall be joined in such a manner that, when in operation, the sections work effectively as a continuous fence. Fence posts shall be installed at a slight angle toward the anticipated runoff course.
2. Heavy duty silt fence shall include a welded wire mesh backing for the geotextile. This welded steel wire mesh shall be galvanized and contain 4 inch square openings. The geotextile shall be secured to the welded wire mesh.

B. Haybale Check Dams with Temporary Stone Outlets

1. Haybales shall be embedded 4 inches into the ground and anchored in place with 2 wood stakes per bale. The temporary stone outlets, consisting of riprap stones conforming to the requirements for temporary riprap, shall be placed in the center of each flow line. Coarse aggregate, conforming to ASTM C-33 size No. 2, shall be placed immediately updrift of each stone outlet.
2. The riprap stones and coarse aggregate shall be placed on geotextile, and shall be embedded into the ground. When sections of geotextile need to be joined, the sections shall be overlapped a minimum of 18 inches in the direction of flow.

C. Temporary Stone Check Dams

1. Temporary stone check dams shall be constructed in ditches to reduce flow velocity.
2. The check dams shall consist of riprap stones conforming to the requirements for temporary riprap. Coarse aggregate, conforming to ASTM C-33 size No. 2, shall be placed immediately updrift of each check dam.
3. The riprap stones and coarse aggregate shall be placed on geotextile and shall be embedded in the ground. When sections of geotextile need to be joined, the sections shall be overlapped a minimum of 18 inches in the direction of flow.

D. Temporary Slope Drains

1. Temporary slope drains shall be installed on embankment slopes to intercept surface runoff where concentrated runoff will cause excessive erosion of the slope.
2. The drain pipe shall be staked to the slope or secured with riprap stones to prevent movement or displacement. A flared end section shall be attached at each end of the pipe and elbows shall be installed as required to conform with the existing grades in slopes.
3. A temporary earth berm and haybales shall be constructed at the top of slope or the vicinity of the slope drain to intercept runoff and channel the runoff to the slope drain. The haybales shall be embedded 4 inches into the ground and anchored in place with 2 wood stakes per bale.

4. Riprap stones, conforming to the requirements for temporary riprap, shall be placed loosely at both ends of the pipe to prevent scour. The riprap stones shall be placed on geotextile which, at the top of slope, shall be draped over the earth berm. When sections of geotextile fabric need to be joined, the sections shall be overlapped a minimum of 18 inches in the direction of flow.

E. Inlet Filters

1. For existing inlet structures, geotextile shall be placed under the grates, over the curb pieces and extend a minimum of 6 inches beyond. Coarse aggregate, size No. 8, shall be placed behind each curb piece and on the geotextile to secure the in place.
2. Openings required in new inlet walls to provide for temporary drainage shall be covered with welded wire mesh, geotextile and coarse aggregate, size No. 8.
3. Inlet filters, consisting of welded steel wire mesh and geotextile shall be installed to control sedimentation at new inlet drainage structures. Inlet filters of geotextile alone shall be installed to control sedimentation at existing inlet drainage structures.
4. For new inlet structures, welded steel wire mesh shall be molded around the inlet frames and grates, on inlet structures, and extend a minimum of 6 inches down each side of the new structures. Geotextile shall then be secure to the welded wire mesh. Coarse aggregate, size No. 8, shall be placed against the inlet structures to hold the inlet filter in place.
5. Inlet filters shall be removed before scheduled paving operations begin.

F. Inlet Protection (Haybale Barrier)

1. Inlet protection (haybale barrier) shall consist of haybales which completely encircle inlet drainage structures. The perimeter length of the haybale barrier shall be at least four times the perimeter length of the inlet structure. Haybales shall not encroach into the traveled way.

2. Haybales placed around inlet structures within earthen areas shall be embedded 4 inches into the ground and anchored in place with 2 wood stakes per bale. Haybales placed around inlet structures within pavement areas shall be placed on top of the pavement, tied together to prevent movement and shall not be anchored in place.

#### G. Inlet Sediment Traps

1. Inlet sediment traps, consisting of silt fence and temporary stone inlets, shall be constructed to control sedimentation at existing and proposed inlet drainage structures.
2. The silt fence shall consist of geotextile whose width shall be at least 3 feet to provide for a 2 foot high fence after 1 foot of geotextile is buried in the existing soil. Sections of geotextile shall be joined in such a manner that, when in operation, the sections work effectively as a continuous fence. The silt fence shall be installed around the drainage structure and into the stone inlets. Fence posts shall be installed at a slight angle toward the anticipated flow.
3. The temporary stone inlets, consisting of coarse aggregate, conforming to ASTM C-33 size No. 2, shall be placed in each flow line upgrade of the inlet structure. The coarse aggregate shall be placed on geotextile which shall be buried in the soil. When sections of geotextile need to be joined, the sections shall be overlapped a minimum of 18 inches in the direction of flow.

#### H. Floating Turbidity Barriers

1. Floating turbidity barriers, consisting of 10 mil. thick polyethylene plastic sheets suspended from floats, shall be installed in streams or other watercourses to intercept silt coming from drainage pipes or that caused by construction operations within waterways.
2. Barriers shall be located 50 feet from the point of discharge of drainage pipes or from the area of construction operations in stilling basins. The barriers shall extend across the entire waterway or radially from the stone line.

#### I. Temporary Stone Outlet Sediment Traps

1. Temporary stone outlet sediment traps, consisting of temporary basins and spillways, shall be constructed within existing, proposed and temporary drainage.

2. The spillways shall consist of riprap stones conforming to the requirements for temporary riprap. Coarse aggregate, conforming to ASTM C-33 size No. 2, shall be placed immediately upgrade of the spillways.
3. The riprap stones and coarse aggregate shall be placed on geotextile which shall be buried in the soil. When sections of geotextile need to be joined, the sections shall be overlapped a minimum of 18 inches in the direction of flow.

J. Dewatering Basin

1. Dewatering basins shall be constructed within the Site and outside any undisturbed wetland area, and areas not affected by roadway construction, as a dewatering containment measure in order to control sediment and provide filtration of water.
2. The dewatering basins shall be sized by the Contractor to entirely contain the expected discharge of water and sediment based on the flow rate of the pump to be used and the volume of water present within the area to be dewatered. The material to be used to form the basin is at the discretion of the Contractor. The outfall of the basin shall be such that the water exiting the basin does not cause erosion to, or scouring of, the area onto which the water is being discharged.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Clearing and grubbing operations shall be so scheduled and performed that grading, mulching, seeding and other permanent pollution control features can follow immediately thereafter, according to the approved progress schedule. Should seasonal limitations make such coordination unattainable, additional temporary soil erosion and sediment control measures shall be performed between successive construction stages, as directed.
- B. The amount of surface area of erodible earth material exposed at one time by clearing and grubbing, excavation, borrow or fill operations, without stabilization, shall not exceed 750,000 square feet for clearing and grubbing operations, or 750,000 square feet for grading operations without prior approval. The Engineer may increase or decrease these amounts commensurate with the Contractor's ability to keep the construction on the approved progress schedule.

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- C. Obtain the Engineer's approval before starting any operations which would require seeding for stabilization when seeding is restricted by the calendar limitations of the Section entitled "SEEDING". Approval will be based on the Contractor's alternate method for stabilizing disturbed areas when seeding is not reasonable due to seasonal constraints. The alternate method shall be approved by the Engineer before implementation and may include use of the Dust Retardant or other methods.

### 3.02 INSTALLATION

#### A. Embankment Areas

1. Side ditches shall be excavated and stabilized, and perimeter soil erosion and sediment controls installed, before beginning all earthwork. Stabilization for the ditches and swales shall consist of seed, mulch, topsoil stabilization matting or temporary riprap, as required to prevent erosion.
2. Embankment greater than 25 feet in height shall be stabilized in stages of equal increments not to exceed 15 feet. Each stage shall be either temporarily seeded and mulched, or permanently stabilized, before proceeding with the next stage. At the completion of the final stage of embankment placement, the entire slope, if not previously done, shall be permanently stabilized.
3. At the end of each work day, temporary stabilized earth berms and slope drains shall be constructed along the top edges of the embankment to intercept surface runoff.

#### B. Excavation Areas

1. Ditches to be used in a cross section, and side and outlet ditches, shall be excavated and stabilized, and perimeter soil erosion and sediment controls installed, before beginning all earthwork. Stabilization for the ditches shall consist of seed, mulch, topsoil stabilization matting or temporary riprap, as required to prevent erosion.
2. Slopes greater than 25 feet in height shall be excavated and stabilized in stages of equal increments not to exceed 15 feet. Each stage shall be permanently stabilized before proceeding with the next stage, in accordance with the time limitations specified herein.

### C. Dust Control

1. Employ construction methods and means that keep flying dust to a minimum. Provide for the laying of water or other dust control materials on the project and on roads, streets and other areas immediately adjacent to the project limits, and wherever traffic or buildings that are occupied or in use are affected by such dust caused by his hauling or other construction operations. The materials and methods used for dust control shall be as specified herein or as directed by the Engineer.
2. Apply Dust Retardant in accordance with the manufacturer's written instructions. Reapply as often as required. Calcium chloride shall not be used in any areas to be seeded or landscaped.
3. Calcium chloride may only be used on pavement subgrades subject to the approval of the Engineer. Care shall be exercised when using calcium chloride on steep slopes to prevent the calcium chloride from washing into streams or accumulating around plants or in landscape areas. Calcium chloride shall not be applied in solution. Apply calcium chloride at a rate of approximately 1.5 pounds per square yard.

### D. Dirt Control

1. The Contractor shall provide for prompt removal from existing roadways of all dirt and other materials that have been spilled, washed, tracked or otherwise deposited thereon by his hauling and other operations, whenever the accumulation is sufficient to cause the formation of mud, interfere with drainage, damage pavements or create a traffic hazard.
2. In order to minimize tracking of dirt and other materials onto existing roadways, a stabilized construction driveway shall be constructed at locations where vehicles exit a work site. The construction driveway shall consist of a layer of broken stone, which shall be a minimum 4 inches thick and 100 feet long where practical, and a collection ditch to serve the drainage purpose. The broken stone shall be 2 1/2 - inch nominal size conforming to ASTM C 33 size No. 2. The driveway shall be maintained by top dressing with additional stone, as directed, and shall be removed when no longer required.

E. Seeding

Temporary and permanent seeding shall be in accordance with the Section entitled "SEEDING".

3.03 SOIL EROSION AND SEDIMENT CONTROL MAINTENANCE

- A. Soil erosion and sediment control measures shall be maintained during the Contract even when the Work is suspended. Controls shall be inspected immediately after each rain, and any required corrective work shall immediately be performed. Riprap stones, coarse aggregate, silt fence, or haybales damaged due to washouts or siltation shall be replaced.
- B. Sediment traps and basins shall be cleaned out when they are 50 percent filled. Silt fences, stone outlet structures, dams, and haybales shall have sediment removed when the sediment reaches 50 percent of the height of the soil erosion and sediment control measure. Sediment removed shall be disposed of in accordance with the Contract Drawings.

END OF SECTION

SECTION 02272

SOIL EROSION AND SEDIMENT CONTROL

SUBMITTALS

APPENDIX "A"

- A. Submit catalog cuts for the following:
  1. Geotextiles
  2. Pipe for Slope Drains
  3. Topsoil Stabilization Matting
  4. Dust Retardant
- B. Submit certificate from geotextile manufacturers that geotextiles comply with the requirements specified in this Section.
- C. Submit design computations for sizing of Dewatering Basins prepared by a Professional Engineer, licensed in the State in which the Work will be performed.
- D. Submit to the Manager, Materials Engineering Division, Port Authority Technical Center, 241 Erie Street, Jersey City, New Jersey 07302-1397, certified test data the following:
  1. Riprap
  2. Concrete Aggregate
- E. Submit a Progress Schedule reflecting the requirements of Section 1.04 A.
- F. Submit name and applicable experience of Soil Erosion and Sediment Control Manager in accordance with Section 1.04B.
- G. Submit alternate methods for stabilizing disturbed areas when seeding and/or sod applications apply.
- H. Submit documentation of approval of soil erosion and sediment control plan for offsite land disturbance greater than 2000 square feet.

END OF APPENDIX "A"

DIVISION 2SECTION 02274GEOTEXTILESPART 1 - GENERAL

## 1.01 SUMMARY

- A. This Section specifies the requirements for geotextiles (fabrics) made of polymers for the following applications:
1. Subsurface Drainage
  2. Sediment Control
  3. Erosion Control
  4. Separation of Dissimilar Materials (including subgrade stabilization)
- B. This Section does not specify requirements for geotextiles for the following application:
1. Reinforcement within pavement structures and paving membranes
  2. Reinforcement for embankment structures
  3. Polymeric liners (geomembranes)

## 1.02 REFERENCES

The following is a list of the publications referenced in this Section:

American Association of State Highway and Transportation Officials (AASHTO)

AGGREGATE M288 Standard Specification for Geotextiles

American Society of Testing and Materials (ASTM)

ASTM D 1557 Standard Practice of Sampling of Geosynthetic for Testing

## 1.03 UNIFORM AND PERFORMANCE REQUIREMENTS

Unless otherwise shown on the Contract Drawings or Specified herein, the geotextiles shall conform to the applicable requirements of AASHTO and ASTM.

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#### 1.04 QUALITY ASSURANCE

- A. Geotextile materials will be visibly inspected by the Engineer when delivered to the construction site. Damaged materials or materials not meeting the requirements of this Section shall be removed from the construction site and replaced.
- B. Engineer's Sampling and Testing
  - 1. The Contractor shall furnish labor, equipment and materials to take samples, and to repair all areas where samples are taken.
  - 2. Quality Assurance (QA) testing of the physical requirements of the geotextile fabric will be performed by the Engineer using random samples obtained from materials delivered to the job site.
  - 3. The Engineer will perform field seam tests on random samples obtained in the field.
  - 4. Unless otherwise shown on the Contract Drawings, the Engineer will determine the lot sizes for testing based on ASTM D 4354 and the type and number (minimum three) of tests per lot.

#### 1.05 DELIVERY, HANDLING AND STORAGE

Comply with ASTM D 4354 to protect materials against moisture and ultraviolet exposure prior to installation.

#### 1.06 TESTING MATERIALS

The Contractor shall have on her hand sufficient equipment, materials and apparatus to comply with the testing methods specified in the contract documents.

#### 1.07 SUBMITTALS

- A. Submit manufacturer's certificates of compliance with all requirements of material specified in this Section.
- B. Submit fabric manufacturer's Quality Control (QC) plan for the production process. The plan shall specify the specific testing proposed to verify the physical and chemical properties required by this specification and the frequency of testing, including suggested lot sizes and number of tests per lot.

- C. When required on the Contract Drawings, submit manufacturer's representative samples of the fabric to the Engineer of Materials, Engineering Materials Laboratory, Port Authority Technical Center, 241 Erie Street, Jersey City, NJ 07310-1397. The type, quantity and purpose of such samples shall be as shown on the Contract Drawings.

## PART 2 - PRODUCTS

### 2.01 MATERIALS

#### A. General

Fibers used for the manufacture of geotextiles and the threads used in joining geotextiles by sewing shall comply with the physical and chemical requirements of AASHTO M288.

#### B. Geotextile

For the indicated application, comply with the physical requirements of AASHTO M288 Table 1 Physical Requirements and with Permeability and Apparent Opening Size as noted on the Contract Drawings.

1. Subsurface Drainage: "Class A"
2. Sediment Control: "Self Supported"
3. Erosion Control: "Class A"
4. Separation of Dissimilar Materials (including subgrade stabilization): "High Durability Level"

#### C. Temporary Silt Fences

1. Geotextile silt fence fabric shall meet the requirements of Section 2.01B, self supported, of Table M288. Fillet height shall be as shown on the Contract Drawings.
2. Posts and apertures shall be in accordance with the fabric manufacturer's written recommendations, except as otherwise shown on the Contract Drawings.
3. Pre-fabricated silt fences with the geotextiles affixed to the posts are permitted.

## PART 3 - EXECUTION

### 3.01 PREPARATION

- A. Prepare surfaces against which the geotextile will be installed by clearing and grading as required to remove surface irregularities or projections which may interfere with the installation or which may damage the geotextile.
- B. Plan the work such that the exposure of the geotextile between laydown and coverage shall be limited to a maximum of fourteen (14) days.

### 3.02 INSTALLATION

#### A. General

1. Install the geotextile as shown on the Contract Drawings and as specified herein.
2. Unroll and place the geotextile to maintain a smooth surface and in such a manner that placement of overlying materials will not excessively stretch or tear the geotextile.
3. Factory or field sewn or sealed seams shall meet the applicable requirements of AASHTO M288 Table 1.
4. Unless otherwise shown on the Contract Drawings or specified herein, overlapped seams shall have a minimum overlap of 12" in the longitudinal direction and 6" in the cross direction. The overlap shall be a minimum of 12" in the longitudinal direction.
5. Seams or joints shall be protected as directed by the Engineer. Seams shall be made with a suitable patch placed over the joint and secured with a minimum of 12" seal beyond the perimeter of the patch and shall be sealed to meet the requirements of the specification.

#### B. Subsurface Drainage Installations

1. All seams, covering the fabric in the direction of flow shall be made in the downstream direction.
2. When seams are required in the longitudinal trench direction and sit in the trench, they shall be made or have a minimum overlap equal to the trench width.

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C. Erosion Control Installations

1. Terminal ends of the geotextile shall be anchored at the crest and toe of slopes as shown on the Contract Drawings.
2. For slope protection installations, successive sheets shall be overlapped with upstream over downstream and/or upslope over downslope.
3. Placement of armor stone, rip-rap and aggregate bedding onto the geotextile shall begin at the toe and proceed upslope. For underwater applications, the first layer of such material shall be placed the same day as the geotextile is installed.
4. The height from which material shall be dropped onto the geotextile shall be limited to one (1) foot unless otherwise shown on the Contract Drawings.

D. Separation and Subgrade Stabilization Installations

1. Unroll the material in the direction of construction traffic unless otherwise directed by the Engineer. Adjacent rolls shall be overlapped in the direction of material placement and as shown on the Contract Drawings.
2. Anchor the geotextile as required using pins, staples or piles of the material to be placed on the fabric.
3. Form movement on lap pieces lapped in the direction of construction or by folding in the direction of construction.
4. Placement of material onto the geotextile shall be as specified on the Contract Drawings.

E. Sediment Control Installation

1. Install and maintain sediment controls, as shown on the Contract Drawings.
2. Removal and placement of temporary sediment controls, and restoration of the site shall be as shown on the Contract Drawings.

3.03 FIELD TESTS AND ADJUSTMENTS

- A. Proofroll and correct deficiencies as required by the Contract Drawings or as specified in other Sections of the Specifications.
- B. Unless otherwise shown on the Contract Drawings, correction of deficiencies and additional proof rolling shall be at no additional cost to the Authority.
- C. Testing of field seams shall be by the Engineer as specified elsewhere herein.

END OF SECTION

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DIVISION 2

SECTION 02832

METALLIC-COATED STEEL CHAIN LINK FENCE AND GATES

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section specifies requirements for aluminum-coated and zinc-coated steel chain link fence including the following:
  - 1. Furnishing and installing new fencing;
  - 2. Removal of existing fencing;
  - 3. Relocation of existing fencing.
- B. Definitions of terms related to chain link fencing shall be in accordance with ASTM F 552.
- C. Chain link fence components shall be zinc-coated steel except as otherwise permitted herein for fabric, barbed wire and gate framing.

1.02 REFERENCES

The following is a listing of the publications referenced in this Section:

American Concrete Institute (ACI)

ACI 318 Building Code Requirements for Reinforced Concrete

American Society for Testing and Materials (ASTM)

ASTM A 127 Zinc-Coated (Galvanized) Steel Barbed Wire

ASTM A 153 Zinc Coating (Hot Dip) on Iron and Steel Hardware

ASTM A 392 Zinc-Coated Steel Chain-Link Fence Fabric

ASTM A 491 Aluminum-Coated Steel Chain-Link Fence Fabric

ASTM A 585 Aluminum-Coated Steel Barbed Wire

ASTM A 817 Metallic-Coated Steel Wire for Chain Link Fence Fabric

ASTM A 824	Metallic Coated Steel Marcellled Tension Wire for Use with Chain Link Fence
ASTM B 117	Operating Salt Spray (Fog) Testing Apparatus
ASTM B 429	Aluminum-Alloy Extruded Structural Pipe and Tube
ASTM F 552	Definitions of Terms Relating to Chain Link Fencing
ASTM F 567	Installation of Chain-Link Fence
ASTM F 626	Fence Fittings
ASTM F 669	Strength Requirements of Metal Posts and Rails for Industrial Chain Link Fence
ASTM F 900	Industrial and Commercial Swing Gates
ASTM F 1083	Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures
ASTM F 1184	Industrial and Commercial Horizontal Slide Gates.
ASTM F 1234	Protective Coatings on Steel Framework for Fences.
ASTM F 1345	Zinc - 5% Aluminium - Mischmetal Alloy Coated Steel Chain-Link Fence Fabric

1.03 QUALITY ASSURANCE

The Engineer may inspect all fencing materials at the place of manufacture.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Fence fabric and accessories shall be delivered to the construction site in packed cartons or tightly tied rolls.

B. Each package shall be identified and shall bear the manufacturer's name.

C. Store fence fabric and accessories in a secure and dry area.

1.05 SUBMITTALS

For Submittals, see "Appendix A".

PART 2 - PRODUCTS

2.01 MANUFACTURERS

Sliding gates shall be one of the following types:

"Easy Track" by  
Boundary Fence and Railing Systems, Inc.  
Richmond Hill, NY 11418

"Internal Roller" by  
Anchor Fence, Inc.  
Baltimore, MD 21224

"Baltrac" by  
Security Fabricators, Inc.  
Kenilworth, NJ 07033

"Fortress Gate" by  
Tymetal Corporation  
Clifton Park, NY 12065

2.02 MATERIALS

A. General

1. Take field measurements prior to preparation of shop drawings and fabrication.
2. Unless otherwise specified herein or shown on the Contract Drawings, the materials, coatings, and shapes shall be of uniform type and manufacture.

B. Fence Fabric

1. Unless otherwise shown on the Contract Drawings, comply with ASTM A 619 for 0.192-inch diameter, 2-inch mesh, wire fabric with Type II, Class 2 Zinc coating or Type I Aluminum coating or Type III, Class 2 Zinc + 5% Aluminum Miscellaneous coating.
2. Type II, Class 2 Zinc-coated (Galvanized) fabric shall comply with ASTM A 392.
3. Type I Aluminum-Coated (Aluminized) fabric shall comply with ASTM A 491.
4. Type III Zinc + 5% Aluminum + Miscellaneous coated fabric shall comply with ASTM F 1305.

5. Fence fabric height shall be as shown on the Contract Drawings. For fabric height of six feet and over, top selvage shall be twisted and barbed, and bottom selvage shall be knuckled. For fabric height of less than six feet, both top and bottom selvages shall be knuckled.
6. Apply clear acrylic sealer to selvage area after weaving.

C. Barbed Wire

1. Each line of barbed wire shall consist of two strands of No. 12 1/2 gauge (0.099-inch diameter) wires twisted with 4 point No. 14 gauge barbs spaced approximately 5 inches apart. The barbed wire shall conform to ASTM A 121, Class 3 (0.8 oz/sf) zinc-coated or ASTM A 585, Type II aluminum-coated steel barbed wire with aluminum alloy barbs.
2. Extension arms shall be 45 degrees, extend inward or outward as shown on the Contract Drawings, and be slotted to support three lines (unless otherwise shown on the Contract Drawings) of barbed wire such that the outermost line is positioned approximately 12 inches horizontally from the fence line.
3. End and intermediate vertical members of gates shall be extended vertically 12 inches and be provided with the necessary clips to secure barbed wire.

D. Fence Framing

1. Steel posts and rails shall conform to ASTM F 669 for Heavy Industrial Fences.
2. External and internal protective coatings shall conform to ASTM F 1233 for the Fence Framework and Gal Creep Inhibited. Framework shall demonstrate the ability to withstand salt spray when tested in accordance with ASTM B 117 based on certified test results, as follows:
  - Exterior: 1000 hours with maximum 5% red rust.
  - Interior: 600 hours with maximum 5% red rust.
3. Zinc-coated, round, steel pipe shall conform to the applicable portion of ASTM F 1083, Standard Weight Pipe (Schedule 40) with a minimum yield strength of 25,000 psi.

4. Unless otherwise shown on the Contract Drawings, equivalent steel sections may be substituted for the sections shown on the Contract Drawings. Equivalent sections shall conform to ASTM F 669 Group IC - Steel Pipe, Group II - Roll Formed Steel Shapes or Group III - Hot-rolled Shapes and shall have bending strengths at least equal to those of the sections shown as determined by ASTM F 669.
5. Rail sleeves and connectors shall allow for expansion and contraction of the rail. Use sleeves of the same material as the rail having a minimum length of 6 inches, or provide rails swedged at one end for a minimum length of three inches for connecting into a continuous run. Suitable fittings shall be provided for securing rails to terminal posts.

E. Gates

1. General

- a. Gate types, opening widths, and directions of operation shall be as shown on the Contract Drawings.
- b. Gates shall conform to the requirements specified for metallic-coated steel chain link fence except that aluminum alloy framing conforming to ASTM B 429 may be used.
- c. Gates shall be designed for operation by one person.

2. Swing Gates

- a. Swing gates shall be factory assembled, and shall swing 180 degrees.
- b. Swing gates shall conform to ASTM F 900 except that framing shall be assembled by welding at the corners. Use of corner fittings shall not be permitted.

3. Sliding Gates

- a. Sliding gates shall be factory assembled by one of the manufacturers specified elsewhere herein. No substitutions will be permitted.
- b. For overhead and cantilever sliding gates, the materials, manufacture, and dimension and weights of frame members and posts shall, at a minimum, meet the requirements of ASTM F 1184, Class 2 (internal rollers).

- c. Rollers for overhead and cantilever sliding gates shall be equipped with bearings. Non-sealed bearings shall be provided with a grease fitting for periodic maintenance. Rollers shall be secured to post or frame without welding.

4. Cantilever Sliding Gates

- a. The gate leaf frames and tracks shall be fabricated of aluminum conforming to ASTM B 429 alloy 6063-T6 or as required to meet the performance requirements of ASTM F 1184 and specified herein.
- b. Frame members shall be minimum 2-inch square, 0.91 lb/ft aluminum tubing assembled by welding at all corners to form a rigid, one piece unit. Fabric shall be securely stretched and held in the center of the tubing. All cantilever overhang frames shall have 3/8-inch brace rods. For gate leaf sizes 23'-0" to 30'-0", an additional lateral support rail shall be welded adjacent to the top and bottom horizontal rails.
- c. The single leaf opening size shall determine the minimum overhang as follows:

<u>Opening</u>	<u>Overhang</u>
Up To 10'-0"	6'-6"
10'-1" To 14'-0"	7'-6"
14'-1" To 22'-0"	10'-0"
22'-1" To 30'-0"	12'-0"

- d. The track shall be a combined, integral track and rail. The rail shall be an aluminum extrusion having a minimum load weight of 3.72 pounds per foot and designed to withstand a reaction load of 2000 pounds. The roller track assembly shall be designed for the same reaction load as the rail and shall consist of two swivel type, zinc die cast trucks having dual, sealed-lubricant, ball bearing wheels of a minimum 2-inch diameter by 5/16-inch width. Two, side rolling, wheels to ensure alignment of track on track shall be provided for each gate leaf. Trucks shall be fastened to post brackets by minimum 7/8-inch diameter, 1/2-inch shank ball bolts.

- e. Galvanized steel guide wheel assemblies shall be provided for each supporting post. Each assembly shall consist of two rubber wheels of minimum 4-inch diameter with oil-impregnated bearings. The assembly shall be attached to the post so that the bottom horizontal member will roll between the wheels and can be adjusted to maintain plumb gate frames and proper alignment.

F. Tension Wire

Conform to ASTM A 824, Type I or Type II.

G. Accessories and Fittings

1. Furnish all necessary fittings for installation of fence as a complete unit including, but not limited to, post and line caps, rail and brace ends, rail sleeves, tie wires and clips, tension and brace bands, tension bars, truss rods, and barbed wire extension arms.
2. Fence fittings shall conform to ASTM F 626.
3. Unless otherwise specified herein, all ferrous accessories and fittings shall be zinc-coated at a minimum of 1.2 oz./sf. in accordance with ASTM A 153.
4. Furnish malleable iron, non-lift-off type hinges offset to permit 180 degree swing gate opening.
5. Furnish malleable iron, forked type latch with padlock eye suitable for operation from either side of gate.
6. Furnish two-inch, cylinder type padlock for each gate, and provide 3 keys for each padlock.
7. Furnish gate stops for double gates consisting of a mushroom type flange plate with anchors capable of being set in concrete and designed to engage center drop rod or plunger.
8. Furnish keepers to hold the gate leaf in the fully open position until manually released.
9. Wire ties shall be of the same material and coating as the fabric.

H. Concrete

Concrete for post footings shall attain a minimum compressive strength of 3000 psi in 28 days and conform to the requirements of ACI 318 for edging and planing.

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### PART 3 - EXECUTION

#### 3.01 PREPARATION

Prepare the grade and remove surface irregularities, if any, which may cause interference with the installation of chain link fence.

#### 3.02 REMOVAL OF EXISTING FENCING

- A. Where shown on the Contract Drawings, remove existing fence including fabric, gates, posts and other appurtenances. Unless otherwise shown on the Contract Drawings, post footings shall be cut flush and resulting voids grouted.
- B. Unless otherwise shown on the Contract Drawings, fencing materials and debris resulting from removal operations shall become the property of the Contractor and shall be disposed of away from Authority property.

#### 3.03 INSTALLATION

- A. Comply with applicable provisions of ASTM F 567.
- B. Install fence with all posts vertical and all components to the line and grade shown on the Contract Drawings.
- C. Connect to existing fence at an existing terminal post or by installation of an end post. Subject to the approval of the Engineer, an existing line post may be converted to a terminal post by installation of appropriate brace rails and brace rods.
- D. The clear opening from end posts to buildings, fences and other structures shall not exceed six inches unless otherwise approved in advance by the Engineer.
- E. Excavate holes for posts to the diameter and spacing shown on the Contract Drawings without disturbing the underlying materials. Holes resulting from removal of existing post footings may be utilized for installation of posts if approved by the Engineer.
- F. Center and align posts. Place concrete around posts, and vibrate or tamp for consolidation. Recheck vertical and top alignment of posts, and make necessary corrections. Extend concrete footings one inch above grade, and trowel to a crown to shed water, unless otherwise approved by the Engineer, no material shall be installed on the posts, nor shall the posts be disturbed within seven days after the individual post footing is completed.

- G. For non-FAA projects only, use of mechanical devices may be substituted for concrete in the setting of line posts, provided the Contractor can demonstrate to the satisfaction of the Engineer that such mechanical devices will develop a strength in the ground equal to or greater than that of concrete footings shown on the Contract Drawings.
- H. Chain link fabric shall be stretched taut approximately two inches (1" minimum, 4" maximum) above the ground and securely fastened to posts. Fabric shall be cut, and each span shall be attached independently to terminal posts with tension bars and tension bands spaced a maximum of 15 inches apart. Fabric shall be fastened to line posts with tie wires, bands or other method approved by the Engineer, spaced a maximum of 15 inches apart. Fasten top edge of fabric to top rail or top tension wire at intervals not exceeding 24 inches. Fasten bottom edge of fabric to bottom tension wire with wire ties at intervals not exceeding 24 inches. Join rolls of wire fabric by weaving a single strand into the end of the rolls to form a continuous mesh.
- I. Install fabric on security side of fence.
- J. Barbed wire extension arms or caps shall be firmly seated on tops of posts.
- K. Stretch barbed wire tightly to remove all sag, firmly install it in slots of extension arms, and anchor it to the terminal extension arms.
- L. Install fabric on gate frames with stretcher bars at vertical edges. Install fabric at top and bottom edges with stretcher hooks at not more than 15-inch intervals.
- M. Install gates plumb, level, and secure for full opening without interference. For double gates, install ground-set, mushroom type, flush plate in concrete, adjust hardware for smooth operation, and lubricate where necessary.
- N. Horizontal brace rails, with diagonal truss rods and turnbuckles, shall be installed at all terminal posts.

### 3.04 REMOVAL OF EXISTING FENCING

- A. Remove existing fabric where shown on the Contract Drawings, for installation on new posts. Prevent damage to the fabric. Any damaged fabric shall be repaired or replaced to the satisfaction of the Engineer at no additional cost to the authority.
- B. Remove and dispose of existing posts and accessories as specified in 3.02 B.

C. Furnish and install new posts, footings, and accessories as specified in this Section.

D. Install the removed fabric as specified in 3.03.

3.05 ELECTRICAL GROUNDS

A. Construct electrical grounds:

1. At intervals of not less than 500 feet (150m).

2. Directly beneath the point where a power line passes over the fence.

3. At other locations along the fence as shown on the Contract Drawings.

B. The ground shall be accomplished with a copper clad rod 8 feet (240 cm) long and a minimum of 5/8 inch (15 mm) in diameter driven vertically until the top is 6 inches (150 mm) below the ground surface. A No. 6 solid copper conductor shall be clamped to the rod and to the fence in such a manner that each element of the fence is grounded.

END OF SECTION

DIVISION 2

SECTION 02832

METALLIC-COATED STEEL CHAIN LINK FENCE AND GATES

"APPENDIX A"

1.00 SUBMITTALS.

- A. Submit shop drawings of chain link fence and gates in accordance with the requirements of "Shop Drawings, Catalog Cuts, and Samples" of Division 1 - GENERAL PROVISIONS.
- B. Submit manufacturer's certificates of compliance with all requirements for material types, coatings, etc. specified in this Section including but not limited to fabric, barbed wire, fence and gate framing, tension wire, fittings and accessories. Submit certification that rail and roller track assembly for sliding gates are designed for the specified reaction load.
- C. Submit representative samples of fabric to the Manager, Materials Engineering Division, Port Authority Technical Center, 241 Erie Street, Jersey City, NJ 07310-1397.
- D. Submit certified test results for:
  - 1. Salt spray testing of framework
  - 2. Concrete compressive strength
- E. Submit methods, types of equipment and other information required by the Engineer to demonstrate equivalent strength of mechanical tie post setting devices.

SEE OR "APPENDIX A"

DIVISION 2

SECTION 02920

SCREENED TOPSOIL

PART 1 - GENERAL

1.01 SUMMARY

This Section specifies requirements for subgrade preparation for and the supplying and spreading of screened topsoil.

1.02 DESIGN AND PERFORMANCE REQUIREMENTS

A. Base standards for weather conditions on reports on the weather radio band of the National Oceanic and Atmospheric Administration, Washington Science Center, Rockville, MD 20852, and on its publication entitled "Local Climatological Data With Comparative Data", published 12 times a year as a monthly and once a year as an annual.

B. Sand, silt, clay definitions, and product test methods shall be those adopted and published by the Association of Official Analytical Chemists, 1111 19th Street Suite 210, Arlington, VA 22209.

1.03 ENVIRONMENTAL REQUIREMENTS

A. Perform operations only during the following weather conditions:

1. There shall be no frost in the ground and the topsoil temperature shall be above 32 degrees F.
2. There shall be no form of precipitation falling or forecast to fall within the next two hours. Following a period of precipitation, resume operations only after the soil has drained.

1.04 QUALITY ASSURANCE

A. Qualifications

1. The laboratory performing the laboratory testing of this Section shall be a certified testing laboratory in either the State of New Jersey or New York and shall have experience in top soil testing and shall perform all tests as specified in 2.01 and as outlined on Appendix B of this Section.

2. The entity and its workers performing the Work of this Section shall be experienced in landscaping and have been engaged in work of a complexity similar to that required under this Section for a period of at least three years.

B. Test Requirements

1. Prior to delivery to the construction site, submit a representative sample of screened topsoil for analysis to a certified independent laboratory to ensure conformance to requirements specified in 2.01. No substitutions for testing parameters shall be permitted. Submit test results to the Engineer of Materials, Engineering Materials Laboratory, Port Authority Technical Center, 241 Eric Street, Jersey City, New Jersey 07310-1397, in accordance to 2.01 and Appendix B of this section.
2. Any analysis, where by the date of testing by the certified independent laboratory is in excess of one month prior to the actual date of delivery to the construction site shall not be accepted.
3. Prior to construction site delivery, advise the Engineer of Materials of the location of the source of the screened topsoil and submit a two pound sample to the Engineer of Materials.
4. Do not deliver screened topsoil to the construction site until the Engineer of Materials has approved the submittal in writing.
5. After delivery of screened topsoil to the construction site, submit a representative sample for analysis to a certified, independent laboratory to ensure conformance to requirements specified in 2.01. Submit test results to the Engineer of Materials for approval. In the event that the delivered sample is not consistent with the sample approved prior to delivery, remove the delivered screened topsoil from the construction site and replace it with material that does conform, all at the expense of the Contractor.

C. Certification

Prior to delivery of screened topsoil to the construction site, furnish the Engineer of Materials with a written statement from the topsoil supplier giving depth of stripped topsoil and certification that topsoil has never been treated with herbicides.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Do not deliver the screened topsoil to the construction site until the Engineer of Materials has approved in writing the test results for the representative sample.

1.06 SUBMITTALS

See Appendix "A" for submittal requirements.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Screened Topsoil

Fertile, friable, natural loam topsoil, free of subsoil, taken from a depth of no more than 1 foot, or less if subsoil is encountered, supplier-certified as having been obtained from an area which has never been treated with herbicide and conforming to the following:

1. Screened topsoil shall be of uniform quality, free from hard clods, stiff clay, hard pan, sods, partially disintegrated stone, lime, cement, ashes, slag, concrete, tar residues, tarred paper, boards, chips, sticks, glass or any other undesirable material.
2. Screened topsoil shall contain a minimum of 5 percent organic matter and a maximum of 7 percent organic matter as determined by loss on ignition of moisture-free sample.
3. pH range shall be 5.0 to 7.0, inclusive.
4. The range of soluble salts shall be equal to or less than 500 micromhos per centimeter.
5. Screened topsoil shall be graded as follows:

PASSING	RETAINED ON	PERCENTAGE
1" screen		100%
1" screen	2 mm (No. 10) Sieve	Not more than 5%

6. The portion of screened topsoil passing the 2 mm sieve, based on the mechanical analysis of the soil as determined by the buoyous hydrometer method, shall consist of the following, based on dry weight of sample:
  - a. Sand 30% - 50%, inclusive;
  - b. Silt 30% - 50%, inclusive;
  - c. Clay 10% - 20%, inclusive.

### PART 3 - EXECUTION

#### 3.01 PREPARATION

##### A. Areas of Changed Grades

Verify that areas of changed grades shown on the Contract Drawing have a smooth, uniform surface.

1. Loosen subgrade to a minimum four-inch depth.
2. Remove stones over two inches in any dimension, roots, rubbish and other extraneous materials. Dispose of such material away from Authority property.
3. Rake and drag to remove high areas and fill depressions.
4. Limit preparation to areas which will be planted promptly after preparation.

##### B. Unaltered Areas

Prepare subgrade areas shown on the Contract Drawings as unaltered or undisturbed by excavation, grading or stripping operations as follows:

1. Remove existing vegetation and turf. Dispose of such materials away from Authority property.
2. Till to a depth of not less than six inches to produce a homogeneous mixture of fine texture, free of clods, lumps, roots and other extraneous material. Dispose of such materials away from Authority property.
3. Rake and drag to remove high areas and fill depressions.
4. Limit preparation to areas which will be planted promptly after preparation.

3.02 APPLICATION

- A. Place and spread screened topsoil over prepared subgrade in a uniform layer of such thickness that after compaction it shall be of the thickness and shall meet grades and elevations, all as shown on the Contract Drawings.
- B. After spreading, rake and dispose of stiff clods, hard lumps, rocks, roots, litter and other extraneous materials away from Authority property.
- C. Fine grade to smooth, even surface.

END OF SECTION

SECTION 02920

SCREENED TOPSOIL

APPENDIX "A"

SUBMITTALS

Submit the following in accordance with the requirements of "Inspections and Rejections" of Division 1 - GENERAL PROVISION:

A. Qualifications

1. Submit qualifications of the entity performing the laboratory testing of this Section to the Engineer in accordance with 1.04 A. Include the name, address and telephone number of the the Testing laboratory performing the Work of this Section.
2. Submit qualifications of the entity and its workers performing the Work of this Section to the Engineer in accordance with 1.04 A. Include names of clients, telephone numbers, and contract amounts for work performed in the last three years and experience records of workers performing the Work of this Section.

B. Products

1. Submit in accordance with the requirements of "Inspections and Rejections" of Division 1 -GENERAL PROVISIONS, a complete "Product List", listing the product to be used under this Section.
2. Submit the location of the source of the screened topsoil and a two pound representative sample of screened topsoil (as many as required) to the Engineer of Materials in accordance with 1.04 B.

C. Test Reports

Submit Laboratory analyses of screened topsoil to the Engineer of Materials Engineering Materials Laboratory, Port Authority Technical Center, 741 Erie Street, Jersey City, NJ 07310-1397, in accordance to 1.04 B and Appendix B.

D. Certification

Submit to the Engineer of Materials certification required by 1.04 C.

END OF APPENDIX "A"

SECTION 02920

SCREENED TOPSOIL

APPENDIX "B"

The following is a sample testing form to be used by the Contractor:

**Material:** Screened Topsoil  
**Specification:** Section 02920 - Screened Topsoil  
**Source of Sample:**  
**Contract or P.O.#:**

<u>Quality Characteristics:</u>	<u>Spec.</u>		
<u>Visual Examanination:</u>	No hard clods, etc.		
<u>Organic Matter:</u> (Loss of Ignition)	Min. 5% Max. 7%		
<u>Soluble Salts:-</u> Micromhos/Cm - PPM	Max. 500 Max. 300		
<u>pH:</u>	5.0 - 7.0		
<u>Mechanical Analysis:</u> Passing - 1"	100%		
Passing - 3/4" Retain 2 mm (#10)	Max. 5.0%		
Passing 2mm (#10) Retain 1mm	Min. 95.0%		
<u>Engineering Methodology</u> <u>Test of Material:</u>			
Passing 2 mm (#10) Percent - Sand	70% - 80%		
Percent - Silt	20% - 30%		
Percent - Clay	10% - 20%		
<u>Potassium:</u> lbs./Acro			
<u>Phosphorus:</u> lbs./Acro			
<u>Nitrogen:</u> lbs./Acro			
<u>Moisture:</u> lbs./Acro			

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DIVISION 2

SECTION 02930

SEEDING (HYDRO-MULCH & DUST RETARDANT)

PART 1 - GENERAL

1.01 SUMMARY

This Section specifies requirements for seeding and the application of hydro-mulch and dust retardant.

1.02 DESIGN AND PERFORMANCE REQUIREMENTS

- A. Use product testing methods adopted and published by the Association of Official Analytical Chemists, 1111 19th Street Suite 210, Arlington, VA 22209.
- B. Fertilizers shall conform to current standards as established by the Association of American Plant Food Control Officials, Inc., Division of Regulatory Services, University of Kentucky, Lexington, KY 40546.
- C. Base standards for weather conditions on reports on the weather radio band of the National Oceanic and Atmospheric Administration, Washington Science Center, Rockville, MD 20852, and on its publication entitled "Local Climatological Data With Comparative Data", published 12 times a year as a monthly and once a year as an annual.
- D. Grass seed shall conform to the "Specification Chart", current edition, of the Atlantic Seaboard's Association, 289 E. McDermack Avenue, State College, PA 16801.
- E. All cultural requirements for turf grass shall be in accordance with the "Cornell Cultural Recommendations for Commercial Turfgrass Management", current edition, published by Cornell University, Ithaca, NY 14850.

1.03 ENVIRONMENTAL REQUIREMENTS

- A. Perform operations only during the following weather conditions:
  - 1. There shall be no frost in the ground and the soil temperature at each planting area shall be above 32 degrees F.

2. There shall be no form of precipitation falling or forecast to fall within the next two hours. Following a period of precipitation, resume operations only after the soil has drained.
3. Apply chemicals only when wind velocity is below 5 mph, drift hazard is negligible, the air temperature is above 40 degrees F and below 70 degrees F.
4. Do not perform any product application if precipitation has fallen within two hours prior to the planned application time or is forecast during the next 12-hour period.

B. Seeding Calendar Limitations

Seeding shall be performed as per Appendix B of this Section.

1.04 QUALITY ASSURANCE

A. Qualifications

1. The entity and its workers performing the Work of this Section shall be experienced in landscaping and have been engaged in work of a complexity similar to that required under this Section for a period of at least three years.
2. The entity performing pesticide applications shall be licensed as a commercial applicator by the state in which the Work is being performed.

B. General Requirements for Operations and Products

1. Products listed in PART 2 - PRODUCTS shall be approved in writing by the Engineer prior to delivery to the construction site.
2. After delivery to the construction site, the Engineer may, at his discretion, take for analysis representative samples of any item listed in PART 2 - PRODUCTS.
3. Pesticides
  - a. Select to act on identified pest and use the manufacturer's recommended formula, application rate and safety instructions at all times.

- b. Mix and agitate products and use equipment according to the manufacturer's directions. Mix and agitate at the work site only in a work area designated by the Engineer.
- c. Dispose of spills and surplus products away from Authority property.
- d. Keep all records which are or may be required by Federal, State or Local laws. Submit copies of these records to the Engineer within 5 days when so requested.
- e. Not less than forty-eight hours prior to a proposed spray operation, submit to the Engineer for his approval, a tabulated list indicating the target to be treated, the chemical trade name and quantity of mix being prepared.

C. Reseeding

- 1. Replace unsatisfactory seeded areas for a period of six months from the date on which the Certificate of Final Completion is issued. Reseed all areas which are dead or have weed and/or pest infestations.
- 2. Perform replacement of unsatisfactory seeded areas with products and by operations which comply with all requirements of these Specifications, and on such date(s) as ordered by the Engineer.

3.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver all products in the manufacturer's unopened containers bearing the trade name, manufacturer's name, weight and analysis.
- B. Store products away from moisture and extreme temperatures and in such a manner that their effectiveness will not be impaired.
- C. Formulation, Application, and Equipment
  - 1. Use the manufacturer's recommended formula, application rate and safety instructions at all times.
  - 2. Mix and agitate products and use equipment according to the manufacturer's directions. Mix and agitate only in an area designated by the Engineer.

3. Dispose of spilled materials and surplus products away from Authority property.

1.06 SUBMITTALS

See Appendix "A" for submittals requirements.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Nutrient Controls

1. Fertilizer

Granular - 10-6-4, 50% Organic conforming to the following:

- a. Commercial fertilizer 10-6-4, dust-free, homogenous, granular fertilizer with 50% nitrogen derived from ureaform
- b. Guaranteed analysis shall be  
10% Nitrogen, 3.0%-3.5% W.I.N.  
(water- insoluble nitrogen)

6%  $P_2O_5$

4%  $K_2O$

2. Soil pH adjustment

Granulated dolomitic limestone conforming to the following:

- a. Total carbonates not less than 86% of 48.2% calcium oxide equivalent. For purposes of calculation total carbonates shall be considered as calcium oxide. Magnesium oxide content shall be between 15-20%.
- b. A dust-free, homogenous, granular material.

B. Turf Seed

1. Turf seed shall be clean, pure and free of noxious weed seed, with mix proportions as provided in Appendix B of this Section.

2. Turf seed shall be fresh material of the latest crop, mixed in the proportions by weight, with tolerance for Pure Live Seed content (purity x germination) as tabulated by the Atlantic Seedsmen's Association, 289 E. McCormack Avenue, State College, PA 16801.

C. Dust Retardant

1. "Coherex" as manufactured by Golden Bear Division of the Witco Corporation, Chandler, AZ 85244
2. "Soil-Sement" as manufactured by Midwest Industrial Supply, Inc., Canton, OH 44711
3. "Soil Seal Concentrate" as manufactured by Soil Seal Corporation, Los Angeles, CA 90017
4. Or approved equal.

D. Mulch

1. "Silva-Fiber" as manufactured by Weyerhaeuser Company, Tacoma, WA 98477
2. "Conwed Hydro Mulch Fibers" as manufactured by Conwed Corporation, Environmental Products Division, St. Paul, MN 55164
3. "Hydro Seeding Fiber Mulch" as manufactured by Jonathan Green, Farmingdale, NJ 07727
4. Or approved equal conforming to the following:
  - a. Clean, uniform, nontoxic, and free of seeds, fungi, and other plant pathogens;
  - b. Heat processed in such a manner as to contain no growth or germination inhibiting factors.

E. Weed Control/Glyphosate

- 41% Glyphosate N - (phosphonomethyl) glycine
- 59% - inert ingredients

F. Hydrogel

1. "Viterra Holscape" as manufactured by Anchor, Inc., Agri-Products, Congers, NY 10920
2. "Soil or Soilb" as manufactured by Aquatrols Corp. of America, Inc., Cherry Hill, NJ 08003

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3. "Soil Moist" as manufactured by JRM Chemical Inc.,  
Cleveland OH 44125
4. Or an approved equal

### PART 3 - EXECUTION

#### 3.01 PREPARATION

##### A. Areas of Changed Grades

Verify that areas of changed grades which are to be seeded as shown on the Contract Drawings have a smooth, uniform surface. Loosen subgrade to a minimum six (6) inch depth, remove stones over two inches in any dimension and roots, rubbish and other extraneous materials. Dispose of such materials away from Authority property. Limit preparation to areas which will be seeded promptly after preparation.

##### B. Unaltered Areas

Where seeding is to be performed within areas that have not been altered or disturbed by excavation, grading or stripping operations, as shown on the Contract Drawings, prepare subgrade as follows:

1. Remove existing vegetation and turf. Where applicable as shown on the Contract Drawings apply glyphosate as per manufacturers instructions, at least ten days prior to seeding. Dispose of such materials away from Authority property.
2. Till to a depth of not less than six inches to produce a homogenous mixture of fine texture, free of clods, stones, roots and other extraneous materials. Dispose of such materials away from Authority property.
3. Roll and drag to remove high areas and fill depressions.
4. Limit preparation to areas which will be seeded promptly after preparation.

#### 3.02 MAINTENANCE

##### A. Seeding Operations

1. At least five days prior to fertilizer application, uniformly apply granular dolomitic limestone by machine at the rate of 50 pounds per 1000 square feet. Work lightly into the top three inches of soil.

2. Apply 10-6-4 fertilizer uniformly by machine at the rate of 1 pound of Nitrogen per 1000 square feet. Work lightly into the top three inches of soil.

3. Application of Hydrogels

Mix hydrogels into the top two (2) inches of soil at the rate of one (1) pound per 1,000 square feet. Apply seed mix, then water. If hydroseeding prepare by mixing hydrogels at the rate of 40 pounds per acre with water before adding the fertilizer, mulch, seed and other ingredients.

4. Sow grass seed at the rate provided in Appendix B of this Section and cover in such manner that a uniform stand will result.

5. Seed the area uniformly in two passes and in uniform rows that cross each other at an angle of 30 degrees. Apply seed at designated seeding rates per 1000 square feet for both passes.

B. Mulching Seeded Areas

1. Using a hydromulcher having a minimum pressure rating of 80 PSI, prepare slurry of water and natural wood fiber mulch according to the mulch manufacturer's directions.

2. Thoroughly agitate and mix slurry.

3. Apply hydromulch uniformly at a rate of 1,500 lbs. per acre.

C. Application of Dust Retardant

1. Apply dust retardant uniformly in a ratio of one part concentrate and four parts water to each acre with slope greater than 10%.

2. Apply dust retardant with an approved pressurized sprayer with a rating of 40-60 PSI.

3. Do not perform irrigation for at least 24 hours after application of dust retardant.

D. Care of Seeded Areas

As provided in Appendix B of this Section, provide "Partial" or "Full" Care conforming to the following:

1. Partial Care

Upon completion of seeding operations, water seeded area(s).

2. Full Care

Upon completion of seeding operations, water seeded area(s), and perform weeding, mowing and additional watering as required to establish a smooth lawn, free of bare or eroded areas. Continue Full Care operations until issuance of the Certificate of Final Completion.

END OF SECTION

SECTION 02930

SEEDING (HYDRO-MULCH & DUST RETARDANT)

APPENDIX "A"

SUBMITTALS

Submit the following in accordance with the requirements of 'Inspections and Rejections' of Division 1 - General Provisions.

A. Qualifications

Submit qualifications of the entity and its workers performing the Work of this Section to the Engineer in accordance with 1.04 A. Include names of clients, telephone numbers, and contract amounts for work performed in the last three years and experience records of workers performing the Work of this Section and evidence of license of pesticide applicator.

B. Products

Submit in accordance with the requirements of "Inspections and Rejections" of Division 1 -GENERAL PROVISIONS, a complete "Product List", listing all products to be used under this Section.

C. Submit to the Engineer one copy of U.S. Department of Labor Material Safety Data Sheets (MSDS) for all hazardous chemicals utilized during the Work of this Section.

END OF APPENDIX "A"

APPENDIX "B"

SECTION 02930

SEEDING (HYDRO MULCH & DUST RETARDANT)

A. SEED MIX A

Temporary Seeding for Soil Erosion and Sedimentation Control

1. Seed mix shall be "Perennial Ryegrass" as distributed by Lofts Seed Inc., Somerset, NJ 08873 or approved equal as follows:

<u>Kind of Seed</u>	<u>% Mix</u>	<u>% Min Purity</u>	<u>% Min Germ.</u>
Palmer II, Prelude II, Rebel II or Yorktown III Perennial Ryegrass	100	98	90

2. Seeding rate shall be 6 pounds per 1000 square feet.
3. Seeding shall be performed:  
April 1 - October 15
4. Provide full care upon completion of seeding. Full care shall include irrigation when weekly rainfall does not exceed one (1) inch of rainfall per week at the construction site.
5. Successful seeding shall be defined as 85% survival of the Seed Mix at the end of the six month full care period as determined solely by the Engineer.

B. SEED MIX B

Perennial Seeding for Soil Erosion and Sedimentation Control - Storm Water Channels and Detention Basins

1. Seed mix shall be "Moist/Alkaline Mixture" as distributed by Lofts Seed Inc., Somerset, NJ 08873 or approved equal as follows:

<u>Kind of Seed</u>	<u>% Mix</u>	<u>% Min Purity</u>	<u>% Min Germ.</u>
Rebel II or Prelude Tall Fescue	20	97	92
Alkali Grass	15	98	85
Palmer II Perennial Ryegrass	10	98	90
Laser Ota Polyrivialis	5	85	80

2. Seeding rate shall be 5 pounds per 1000 square feet.
3. Seeding shall be performed only during the following periods;  
     April 1 - May 31 or  
     August 16 - October 15
4. Provide full care upon completion of seeding. Full care shall include irrigation when weekly rainfall does not exceed one (1) inch of rainfall per week at the construction site and a weed-free installation at all times.
5. Successful seeding shall be defined as 85% survival of the Seed Mix at the end of the six month care period as determined solely by the Engineer.

C. SEED MIX C - PERMANENT SEEDING FOR SOIL EROSION AND SEDIMENT CONTROL - HYDRAULIC FILL (NO TOPSOIL)

1. Seed mix shall be Dry/Alkaline Mixture as distributed as Lofts Seed Inc., Somerset, NJ 08873 or an approved equal as follows:

Kind of Seed	% Mix	% Min Purity	% Min Germ
Rebel II or Tribute Tall Fescue	50	97	90
Reliant Hard Fescue	20	96	85
Tall Wheatgrass	10	94	90
Palmer II Perennial Ryegrass	10	98	90
Alkali Grass	10	98	85

2. Seeding rate shall be 5 pounds per 1000 square feet.
3. Seeding shall be performed:  
     Apr 1 - May 31 or  
     Aug 16 - Oct 15
4. Provide full care upon completion of seeding. Full care shall include irrigation when weekly rainfall does not exceed one (1) inch of rainfall per week at the construction site and a weed-free installation at all times.
5. Successful seeding shall be defined as 85% survival of the Seed Mix at the end of the six month full care period as determined solely by the Engineer.

D. SEED MIX D

Permanent Seeding for Soil Erosion and Sedimentation Control -  
Screened Topsoil

1. Seed mix shall be "Summer Stress Mixture" as distributed by  
Lofts Seed Inc., Somerset, NJ 08873 or approved equal as  
follows:

<u>Kind of Seed</u>	<u>% Mix</u>	<u>%Mix Purity</u>	<u>%Min Germ.</u>
Rebel II or Tribute Tall Fescue Baron, Nassau, Ram I or Georgetown	90	97	90
Kentucky Bluegrass	10	85	80

2. Seeding rate shall be 5 pounds per 1000 square feet.
3. Seeding shall be performed only during the following periods:  
April 1 - May 31 or  
August 16 - October 15
4. Provide full care upon completion of seeding. Full care  
shall include irrigation when weekly rainfall does not exceed  
one (1) inch of rainfall per week at the construction site  
and a weed-free installation at all times.
5. Successful seeding shall be defined as 85% survival of the  
Seed Mix at the end of the six month full care period as  
determined solely by the Engineer.

END OF APPENDIX "B"

DIVISION 2

SECTION 02934

TIDAL WETLAND SEEDING, PLANTING AND MAINTENANCE

PART 1- GENERAL

1.01 SUMMARY

This Section specifies the seeding, planting and maintenance of Tidal Wetland Plants, where shown on the Contract Drawings.

1.02 DESIGN AND PERFORMANCE REQUIREMENTS

- A. For botanical names of tidal wetland plant availability, refer to the names listed in "Hortus III: A Concise Dictionary of Plants Cultivated in the United States and Canada," published by Macmillan Publishing Co., New York, NY 10022.
- B. As a guide in determining tidal wetland plant availability, use "The Landscape Materials Information Service Perennial and Wetlands Nursery Report," current edition, published by Landscape Materials Information Service, Callicoon, NY 12723.
- C. Fertilizers shall conform to current standards as established by the Association of American Plant Food Control Officials, Inc. Division of Regulatory Services, University of Kentucky, Lexington, KY 40546.
- D. Base standards for weather conditions on reports of the weather radio band of the National Oceanic and Atmospheric Administration, Washington Science Center, Rockville, MD 20852, and on its publication entitled "Local Climatological Data With Comparative Data," published 12 times a year, as an annual.
- E. As a guide to determining high and low water predictions, use "Tidal Tables," current edition, East Coast of North and South America, Including Greenland," as published by U.S. Department of Commerce, National Oceanic and Atmospheric Administration.
- F. Use product testing methods adopted and published by the Association of official Analytical Chemists, 1111 19th Street, Suite 210, Arlington, VA 22209.
- G. Perform planting or replanting only during the appropriate growth season (see 1.03A1 and 2). Provide planting of quality, size, genus, species, variety and salinity tolerance to match original installation(s).
  - 1. Replace tidal wetland plants that are defective due to death, defoliation, disfigurement, infestation and off-color foliage.

2. Repair or replace tidal wetland plants due to erosion, bare or sparse growth or pest infestation.
- H. When the Engineer determines that the loss or damage to permanent planting and temporary waterfowl exclusion fence is the result of an "unusual phenomenon or incident" beyond the control of the Contractor, the Contractor shall replace the loss or repair the damage as directed by the Engineer. Reimbursement for such corrective Work shall be at the "Net Cost" for such Work, as specified in 4.01 in this Section.
1. "Unusual phenomena or incidents" shall mean, but not be limited to theft, vandalism, accident, petroleum product spills, hurricanes, hail, northeasters, windstorms with sustained winds in excess of 50 mph, and other such storm events as determined by the Engineer.
  2. Within 48 hours of such a loss or damage or notification of such loss or damage, the following will be submitted to the Engineer.
    - a. A written narrative statement describing the phenomenon or incident, if known.
    - b. The quantity of permanent planting and waterfowl exclusion fence lost or damaged.
    - c. A proposed schedule for re-establishment of plantings and, if necessary, waterfowl exclusion fence for approval by the Engineer.
  3. In determining the validity of the Contractor's claim, the Engineer will consider the type and intensity of the disaster as recorded by the National Oceanic and Atmospheric Administration, Port Authority Police Reports, and the condition of the plantings prior to and immediately after the claimed damage and/or loss.
- I. In case of loss or damage due to unusual phenomena or incidents, commence clean up within 48 hours of such loss or damage or notification of such loss or damage, and complete such Work within the scheduled times(s) approved under 1.02 H.2 of this Section.
- J. Replacement plants furnished by the Contractor shall be subject to warranty for the same time period as the original installations.

### 1.03 ENVIRONMENTAL REQUIREMENTS

#### A. Planting Calendar Limitations

Wetland Planting shall be performed only during the following periods:

1. Pots and Plugs May 1- July 1
2. Seeding May 1- June 1

1.04 QUALITY ASSURANCE

A. Contractor's Personnel Qualifications:

1. The entity performing the plantings under this Contract shall meet the requirements of A.2. below and shall employ a supervisor who shall directly oversee on site development of the project and who is experienced in tidal wetland habitat restoration, creation, construction and maintenance, meeting the requirements of A.3 below.
2. The entity performing the plantings shall have successfully completed a minimum of three tidal wetland habitat restoration, creation, construction and maintenance projects similar in scope and complexity to that of this Contract and performed within the New York, New Jersey, Maryland, Delaware and Connecticut region within the last three years. Submit evidence of this prior to the start of Work.
3. The Wetland Environmental Specialist on staff shall possess a minimum of an Associate Degree in Environmental Science from a recognized college and a total of five (5) years of work experience as a Wetland Environmental Specialist. This individual shall serve as the supervisor for the installation and maintenance of plantings and the establishment of final grades for plantings under this Contract.
4. Submit qualifications in writing for approval by the Engineer of the Wetland Environmental Specialist performing the Work. Include name of the specialist, a description and contract amounts for work performed in the last five years and references.

**WETLAND ENVIRONMENTAL SPECIALIST LIST**

- a. Dawson Corporations  
P.O. Box 400  
Clarksburg, NJ 08510  
  
Contact: Bob Swain  
Phone: (908) 928-0600  
Fax: (908) 928-0660
- b. Ecological Restoration & Management, Inc.  
303 Allegheny Ave.  
Towson, MD 21204  
  
Contact: Steve Hurt  
Phone: (410) 337-4899  
Fax: (410) 483-5676
- c. Environmental Resources, Inc.  
One Plaza East, Suite 319  
Salisbury, MD 21801

Contact: Dave Hardin  
Phone: (410) 548-5320  
Fax: (410) 548-3767

- d. Environmental Concern, Inc.  
P.O. Box P  
210 West Chew Ave.  
St. Michaels, MD 21663

Contact: Marc Seelinger  
Phone: (410) 745-9620  
Fax: (410) 745-3517

- e. Southern Tier Consulting, Inc.  
2677 Rte. 305  
P.O. Box 30  
West Clarksville, NY 14786

Contact: Tony Carr  
Phone: (716) 968-3120  
Fax: (716) 968-3122

- f. Or approved equal.

5. No Work shall proceed prior to receiving written approval of the qualifications of the Wetland Environmental Specialist.
6. The laboratory performing any laboratory testing required under this Section who is responsible for testing shall be a certified testing laboratory in either the State of New Jersey or New York.

B. General Requirements for Operation and Products

1. Products listed in PART 2 - PRODUCTS shall be approved in writing by the Engineer prior to delivery to the construction site.
2. After delivery to the construction site, at the discretion of the Engineer, representative samples of any item may be taken for analysis. Item(s) not conforming to requirements of the Contract shall be removed from construction site and replaced at no additional cost to the Authority.
3. All plant material shall be grown in nurseries located in one of the following states: Connecticut, Delaware, Maryland, New Jersey, Virginia or New York.

C. Specific Requirements for Operations and Products

1. Wetland Plants

- a. Coordinate all arrangements and accompany the Engineer on all inspections of plants at the nursery. Provide a minimum of two weeks prior notice to the Engineer. If plant material is being provided by collection rather than propagation (example: excavation of plug transplants), do not dig or remove any plant prior to inspection by the Engineer.
- b. All plants inspected by the Engineer at the nursery will be sealed with Authority seals, or at the discretion of the Engineer, typical representative numbers of such plants may be sealed.
- c. Deliver to the construction site preapproved plants, as described above, whose sealed numbers conform to the Engineer's nursery or collection site inspection records.
- d. Unsealed plants which, in the sole opinion of the Engineer are not equal in quality to the sealed samples will be rejected.
- e. Each shipment will be certified by Federal and State authorities to be free of insects and diseases. Inspection certificates to this effect which would be required by law, if the Authority were a private corporation, shall accompany each shipment invoice and shall be delivered to the Engineer.
- f. All plants, sealed or unsealed, shall be subject to tailgate inspection upon arrival at the construction site. All plants failing to meet the requirements of this section will be rejected by the Engineer. Such rejected plants shall be removed from construction site and replaced at no additional cost to the Authority.
- g. At the discretion of the Engineer, typical representative numbers of plants may be removed from their growing containers for inspection.

D. Replacement

1. Replace unsatisfactory furnished and installed plants and seeded areas, which in the sole opinion of the Engineer, die or otherwise become unsatisfactory.
2. Replace unsatisfactory plants and seeded areas with products and by operations which comply with all requirements of these specifications, and on such date(s) as ordered by the Engineer.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver all products in the manufacturer's unopened containers bearing the trade name, manufacturer's name, weight and analysis.
- B. Store products away from moisture and extreme temperatures, and in such a manner that their effectiveness will not be impaired.
- C. Formulation, Application, and Equipment
  - 1. Use the manufacturer's recommended formula, application rate and safety instructions at all times.
  - 2. Mix and agitate products and use equipment according to the manufacturer's directions. Mix and agitate only in an area designated by the Engineer.
  - 3. Dispose of spilled materials and surplus products away from Authority property.
- D. Specific Requirements
  - 1. Wetland Plants

Conform to requirements of 1.04 C and as follows:

    - a. Transport plants in covered trucks or trailers only. Plants transported in open trucks or trailers from the nursery will be rejected by the Engineer.
    - b. Carry plants by the pot and not by the stems.
    - c. Do not drop plants.
    - d. To prevent damage or drying out of plants, it is suggested that delivery of plant material be staged to match not more than weekly installation rates.
    - e. Protected all delivered plants from drying out by providing shade and water. Do not allow plants to become dry or wilted. Water plants held at the project site with clean fresh water only. Any plants held on the project site and watered with salt water, brackish water or contaminated water will be rejected.

1.06 SUBMITTALS

See Appendix "A" for submittals requirements.

PART 2- PRODUCTS

2.01 MATERIALS

A. Fertilizer

1. Each peat potted and plug transplant shall be fertilized at the time of planting with a 30-gram (1 oz.) subsurface application of Meister 23-6-10, granular 5- to 6-month controlled release fertilizer. Areas of wetlands established by seeding shall be fertilized with a subsurface application of the same formulation at the rate of 150 lbs. per acre at the time of seeding.
2. An approved substitute is Osmocote 22-4-9, granular 5- to 6-month controlled release fertilizer.
3. Meister 23-6-10, 5- to 6-month controlled release fertilizer is manufactured by the Helena Chemical Company, 510 Heron Drive, Bridgeport, NJ 08014.

Osmocote 22-4-9, 5- to 6-month controlled release fertilizer is manufactured by Sierra Chemical Company, Milpitas, CA 95035.

4. Any equal as approved by the Engineer may be utilized.

B. Wetland Plants

1. Furnish wetland plants in the quantity, species, size, height and pot size requirements as shown on the Contract Drawings.
2. Peat potted plants shall be acclimated in the nursery to the salinity specified on the Contract Drawings for a period no less than two weeks prior to planting. Plug transplants shall be taken from sites bordering tidal areas whose salinity matches the salinity tolerance specified on the Contract Drawings within 5 ppt.
3. All plants shall be subject to tailgate inspection upon arrival at the construction site. All plants failing to meet the following requirements will be rejected by the Engineer. Such rejected plants shall be removed from Port Authority property and replaced.
  - a. Furnish all plants to the height, number of stems, and container size as specified.
  - b. Plants shall be sound, healthy, vigorous growing specimens.
  - c. Plants shall exhibit uniform growth and a form characteristic of their species.
  - d. Plants shall have vigorous, fibrous root systems.

- e. Peat potted transplants shall be well rooted through the pot.
- f. Plant foliage shall be free of chlorosis, yellowing blemishes or damaged parts.
- g. Protect all plants from drying out.

4. Seed

- a. Seed shall be clean, pure and free of noxious weed seed, and as specified on the Contract Drawing.
- b. Seed shall be fresh material of the latest crop. Submit certification identifying date of harvest , location of harvest, percent purity and percent germination.

C. Waterfowl Exclusion Fence

Waterfowl exclusion fence is to be constructed of fence posts, fence line and surveyor ribbon unless otherwise specified by the Contract Drawings.

1. Fence posts

Fence posts shall consist of wooden lathe 4 feet in length. Minimum width of lathe is 1½ inches. Minimum thickness of lathe is 5/16 inch. Lathe shall be of thickness, grade, material composition and quality to withstand a one-year service life. A sample of wooden lathe or suitable material substitute used as posts shall be submitted to the Engineer for inspection and approval prior to installation. At a minimum, unless otherwise specified by the Contract Drawings, fence posts shall be installed 15 feet on center along the perimeter of the planting area. Fencing may also be required at intermediate locations as specified by the Contract Drawings. Fence posts shall be staked vertically into the ground to a depth of one foot.

2. Fence Line

Fence line shall consist of three rows of minimum 80 pound test, colored monofilament line. Fence line shall be tied off at each post. Three rows of line shall be taught between posts, horizontal to the ground and equidistant from each other. The three rows shall be spaced with bottom row 6 inches aboveground and the top row near the top of the post. The middle row should be equidistant between top and bottom.

3. Ribbon

Pink day-glo surveyor ribbon should be tied along the top row to improve visibility. Ribbon shall be placed between each post.

PART 3- EXECUTION

3.01 PREPARATION

A. Areas of Changed Grade

Verify that areas of changed grades which are to be seeded and/ or planted are at the precise elevations shown on the Contract Drawings. Limit preparation to areas which will be seeded or planted promptly after preparation.

Clear and grub out roots of existing vegetation and other extraneous materials and dispose of such materials away from the construction site.

Rake and drag to remove high areas and fill depressions.

3.02 INSTALLATION

A. Seeding

Seeding of Spartina alterniflora (salt marsh cordgrass) shall be accomplished as follows:

1. The bed of the seeding site shall be prepared by raking, hoeing or otherwise scarifying the soil surface so as to provide a heavily grooved surface to a depth to ½ inch.

If soil surface is sufficient to support standard seeding equipment, drilling is also permitted.

2. Seed only that portion of area which can be totally completed during tide conditions which will not inundate the site.
3. Sow seed throughout the seed bed at a rate of 10 pure live seed per square foot. Apply granular Meister 23-6-10, 5- to 6-month controlled release fertilizer or approved equivalent at the rate of 150 lbs. per acre throughout the seed bed.
4. Drag, track or otherwise grade the seed bed to establish a flat surface, compact and bury the seed within the soil surface.

B. Tidal Wetland Planting With Plugs or Peat Potted Stock

1. Spacing of plant material will be 24 inches on center within rows 24 inches apart (a 24" grid pattern) unless otherwise specified by the Contract Drawings.
2. Plants shall be installed between the contours shown on the Contract Drawings. Each transplant shall be fertilized with a 30-gram (1 oz.) subsurface application of Meister 23-6-10, 5- to 6- month controlled release fertilizer or approved equivalent at time of planting.

3. Plant each transplant in individual holes, keeping the surface of the pot or plug within ½ inch of existing grade. Each transplant shall be well packed so as to secure into the soil surface.
4. Perform planting only if approved by the Engineer, and in the presence of the Engineer.
5. Perform no planting during high tide conditions. Plant on a daily basis only that portion of the planting area which can be completed and enclosed with waterfowl exclusion fence during tide conditions which do not inundate the planting site.
6. Take care to avoid bruising or breaking the roots or top of plants. Plants damaged during the planting operation will be rejected by the Engineer.
7. After installation is completed, remaining plants will become the responsibility of the Contractor to maintain for use as replacements, as directed by the Engineer.
8. Immediately upon completion of planting operations, the Contractor shall be responsible to maintain all plantings to ensure healthy and vigorous growing specimens at all time. Any defoliated, off-color, disfigured, infested permanently damaged or dead plants shall be immediately removed from the site and replaced by the Contractor with acceptable transplants as directed by the Engineer, at no additional cost to the Authority.
9. During planting operations (May 1 - July 1), the Contractor shall replant washed out or dislodged transplants found at the Work site on a daily basis (Reinforcement). The Contractor shall replace a new transplant wherever one is missing but not found at the Work site on a daily basis (Replacement). Reinforcement and Replacement planting is at no additional cost to the Authority.
10. Unless specified otherwise by the Contract Drawings, maintain all planted areas free of litter or debris of any type at all times in accordance with the schedule outlined in Maintenance Item 3.02 D 3 of these Specifications.

C. Waterfowl Exclusion Fence

1. Waterfowl exclusion fence shall be installed as shown on the Contract Drawing.
2. Waterfowl exclusion fence shall be installed so that any planted or seeded areas are secured within the waterfowl exclusion fence at the end of each working day.

3. Routine maintenance of waterfowl exclusion fence shall be performed on a weekly basis. Maintenance shall include tightening fence line, realignment of fence posts and if necessary replacement of fence posts and fence line. A monthly inspection shall be pre-arranged with the Engineer.

Additional site visits other than weekly maintenance will be necessary to assess damage and repair fence following any major storm activity. Additional visits will at the request of the Engineer and at the expense of the Authority.

4. The Contractor shall disassemble and remove all parts of the waterfowl exclusion fence from the Work site in the last week of October. The fence shall be properly and legally disposed of.

#### D. Maintenance

1. Provide full care maintenance of all seeded and transplanted wetland plants for a period of five (5) years from the date of issuance of Certificate of Final Completion for all Work excluding Maintenance Of Tidal Wetland Planting And Maintenance Of Permanent (Landscape) Planting.
2. Requirements during the five year maintenance period.
  - a. Between September 1 and October 15, evaluate the site and submit a report to the Engineer estimating the quantity of tidal wetland plant replacement required for the upcoming planting period (May 1- Jul. 1). Provide an additional 20% contingency.
  - b. Prior to April 1, submit the quantity of replacement seed, plants, the name of the Nursery supplier, certification that transplants have acclimated to the salinity specified by the Contract Drawings, and a schedule of dates when transplanting will take place.
  - c. Prior to August 1, submit a report of the total quantity of plants and square yardage of seed replaced. The report shall identify where any heavy losses occurred (i.e. using a location plan, elevation reference, storm event, etc.).
  - d. During the five year maintenance period, the planting area shall be monitored during the growing season (July, Aug., Sept., and Oct.) and again in December and March.

3. At each Phase of wetland planting, it is the responsibility of the Contractor to maintain the wetland area and its surrounding embankments in a condition free of litter, debris or accumulated vegetative debris (rack) of sufficient size or quantity to potentially adversely affect the growth of the wetland. The degree of litter, debris and rack shall be evaluated concurrently with the schedule for the five (5) year monitoring of wetland vegetation as specified in Item 3.02 D.2.d. At a minimum the contractor shall be responsible for the general cleanup and disposal of any significant accumulation of litter, debris and rack prior to any replanting (May 1 to July 1) and at the end of each growing season (September 1 to October 15). However, the Engineer shall be notified of any significant litter, debris or rack identified by the Contractor during any site visit conducted under the monitoring program where this material is adversely impacting the growth or survival of wetland plantings. In such cases, the Engineer may authorize additional planting site cleanup by the Contractor.
4. Immediately upon issuance of a Certificate of Final Completion the Contractor shall be responsible for maintaining all planting to insure healthy and vigorous growing specimens at all times. Any improperly installed and maintained plantings causing among other things: defoliated, off-color, disfigured, infested, permanently damaged or dead plants shall be immediately removed and replaced by the Contractor with acceptable plantings as directed by the Engineer, at no additional cost to the Authority.
5. Within 48 hours notification by the Engineer of claimed "unacceptable plantings", the Contractor shall submit to the Engineer a statement in writing indicating the type of damage or loss incurred and total quantities to be replaced and a proposed schedule for re-establishing the plantings.
6. Successful maintenance shall be defined as 85% survival of tidal wetland plantings and/or 85% coverage of seeded wetland areas and seeding at the end of the five year maintenance. Survival rates less than this amount will affect the payment outlay if it is determined solely by the Engineer that the Contractor failed to adequately install and maintain the tidal wetland planting and seeding.

4.01 NET COST

- A. When the Engineer determines that loss or damage to plantings, and waterfowl exclusion fence is the result of an "unusual phenomenon or incident" beyond the control of the Contractor, the Contractor shall replace the loss or to repair the damage as directed by the Engineer. Reimbursement for such corrective Work shall be at "Net Cost" of such Work. "Unusual phenomenon or incident" shall mean theft, vandalism, accidents, petroleum product spills, hurricanes, hail, northeasters, windstorms with sustained winds in excess of 50 mph, and other such storm events as determined by the Engineer.
- B. "Net Cost" shall be computed in the same manner as is compensation for Extra Work, including any percentage addition to cost, as set forth in the clause of the Contract providing compensation for Extra Work. Performance of such Net Cost Work shall be subject to all provisions of the Contract relating to performance of Extra Work. Compensation for said Net Cost shall not be charged against the total amount of compensation authorized for Extra Work.
- C. Replacement plants and waterfowl exclusion fence furnished and installed by the Contractor under paragraph 1 above shall be maintained by the Contractor at its own expense and in accordance with the requirements of Paragraphs 3.02 A, B, C and D.

END OF SECTION

SECTION 02934

TIDAL WETLAND SEEDING, PLANTING AND MAINTENANCE

APPENDIX "A"

SUBMITTALS

Submit the following in accordance with the requirements of "Inspections and Rejections" of Division 1- GENERAL PROVISIONS.

A. Qualifications

1. Submit qualifications in writing for approval by the Engineer of Wetland Environmental Specialist who will oversee the on site development of the Work. Include the name of the wetland environmental specialist, resume, references and a description and contract amounts for similar work performed in the last five years.
2. Submit qualifications of the Entity and its workers performing the Work of this Section to the Engineer in accordance with 1.04 A 2. Include names of clients, telephone numbers, and contract amounts for work performed in the last three years and experience records of workers performing the Work of the Section.
3. Submit evidence of a minimum of three (3) successfully completed tidal wetland habitat restorations, creation and construction projects, including their supporting maintenance.

B. Products

1. Submit a complete "Product List", listing all products to be used under this Section.
  - a. Submit a one pound sample and an analysis from the source supplier for the fertilizer to the Engineer for approval.
  - b. Submit certification identifying the source of seed, date of harvest, percent germination and percent purity.
  - c. Submit a sample of wooden lathe to the engineer for inspection and approval.

2. Submit a complete "Plant List" listing all nursery sources and schedule for a plant inspection.
  - a. Submit certification by Federal and State authorities that the shipment is free of insects and diseases as required by law.
  - b. Submit certification from the Nursery Supplier that transplants have been acclimated to the salinity specified by the Contract Drawings for a period no less than two weeks.

C. Maintenance

1. Between September 1 and October 15, evaluate the project site and submit a report to the Engineer estimating the quantity of tidal wetland plant replacement required for the upcoming planting period (May 1- Jul. 1). Provide an additional 20% contingency. This report shall also include a summary of observations and photographs taken in July, August, September and October. The condition of the wetland planting and habitat shall be described qualitatively, describing health, vigor and overall height and spread of new plants and whether or not seed was set.
2. Prior to April 1, submit the quantity of replacement seed, plants, the name of the Nursery supplier, certification that transplants have been acclimated to the salinity specified on the Contract Drawings for a period no less than two weeks and a schedule of dates when transplanting will take place.
3. Prior to August 1, submit a report of the total quantity of plants and square yardage of seed replaced. The report shall identify where any heavy losses occurred (i.e. using a location plan, elevation reference, storm event, etc.).

D. Damage Reports

1. Submit to the Engineer a written narrative describing the type of damage, the cause of damage, the quantity of plants and/ or seeded area damaged and destroyed and a proposed schedule for re-establishing the plants. The report shall identify where any heavy losses occurred (<> using a location plan elevation reference, storm event, etc.)

END OF APPENDIX "A"

DIVISION 2

SECTION 02954

TREES, SHRUBS AND GROUND COVER

IN GROUND

PART 1 - GENERAL

1.01 SUMMARY

This Section specifies requirements for trees, shrubs and ground cover (hereinafter sometimes referred to as "plants") using simple topsoil mix.

1.02 DESIGN AND PERFORMANCE REQUIREMENTS

- A. For botanical names of trees, shrubs and ground cover, refer to the names listed in "Hortus III: A Concise Dictionary of Plants Cultivated in the United States and Canada" published by MacMillan Publishing Co., New York, NY 10022.
- B. To determine caliper, size, height, width and root spread of plants, use the "American Standard for Nursery Stock" ANSI Z 60.1, published by the American Association of Nurserymen, 1250 "I" Street, NW, Suite 500, Washington, D.C. 20005.
- C. As a guide in determining plant availability, use "The Landscape Materials Information Service Nursery Report", current edition, published by Landscape Materials Information Service, Callicoon, NY 12723.
- D. Fertilizers shall conform to current standards as established by the Association of American Plant Food Control Officials, Inc., Division of Regulatory Services, University of Kentucky, Lexington, KY 40546.
- E. Pruning methods shall be in accordance with the "Tree Care Operations - Tree, Shrub and Other Woody Plant Maintenance, - Standard Practices," ANSI - A 300, published by National Arborists Association, The Meeting Place Mall, Route 101, P.O. Box 1094, Amherst, NH 3031-1094.
- F. Base standards for weather conditions on reports on the weather radio band of The National Oceanic and Atmospheric Administration, Washington Science Center, Silverville, Mo 63092, and on its publication entitled "Local Climatological Data With Comparative Data", published 12 times a year as a monthly and once a year as an annual.

- G. Mulch shall conform to current standards established by National Bark Producers Association, 13542 Union Village Circle, Clifton, VA 22024.
- H. Sand, silt, clay definitions, and product test methods shall be those adopted and published by the Association of Official Analytical Chemists, 1111 19th Street, Suite 210, Arlington, VA 22209.

1.03 ENVIRONMENTAL REQUIREMENTS

- A. Perform operations only during the following weather conditions:
  - 1. There shall be no frost in the ground and the soil and backfill materials temperature at each planting area shall be above 32 degrees F.
  - 2. Perform planting and soil related operations only when no form of precipitation is falling or forecast to fall within the next 2 hours. Following a period of precipitation, resume operations only after the soil has drained.
- B. Planting Calendar Limitations

Planting shall be performed only during the following periods:

- 1. Deciduous Plants March 1 - May 1 and October 15 - December 1
- 2. Evergreen Plants April 1 - May 15 and September 1 - October 15

1.04 QUALITY ASSURANCE

a. Qualifications

- 1. The entity and its workers performing the Work of this Section shall be experienced in landscaping and have been engaged in work of a complexity similar to that required under this Section for a period of at least three years.
- 2. The entity performing pesticide applications shall be licensed as a commercial applicator by the state in which the Work is being performed.
- 3. The entity performing pruning, planting and maintenance of this Section shall be a member of the International Society of Arboriculture and State Chapter where they are residing.

4. The entity performing the work of this Section shall have a New Jersey Certified Tree Expert or a New York State Certified Arborist, depending on the state where work is being performed, who possesses a minimum of an Associate Degree in Horticulture from a recognized college and who has a total of five (5) years work experience as superintendent for all work performed under this Contract.
5. The laboratory performing the laboratory testing of this Section shall be a certified testing laboratory in either the State of New Jersey or New York and shall have experience in top soil testing and shall perform all tests as specified in 2.01 A, 2.01 B and as outlined in Appendix B and Appendix C of this Section.

B. General Requirements for Operations and Products

1. Products listed in PART 2 - PRODUCTS shall be approved in writing by the Engineer prior to delivery to the construction site.
2. After delivery to the construction site, the Engineer may, at his discretion, take for analysis representative samples of any item listed in PART 2 - PRODUCTS.
3. All plant materials shall be grown in nurseries located within the L.M.I.S. (Landscape Materials Information Service) region. The L.M.I.S. region consists of the following states: Connecticut, Delaware, Illinois, Indiana, Maine, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, and Wisconsin.
4. All plant material shall be "Nursery Grown." Nursery Grown shall mean that the plants, where the plants are to be obtained, are from active and working nurseries where the following horticultural practices have been aggressively performed:
  - a. IPM Program - Integrated Pest Management Program
  - b. Cultivation - Including weed suppression
  - c. Fertilization
  - d. Pruning
  - e. Irrigation

Any plant material from a field where the above horticultural practices have not been consistently practiced in the last twelve (12) months shall be rejected.

5. Pesticide

- a. Select to act on identified pest and use the manufacturer's recommended formula, application rate and safety instructions at all times.
- b. Mix and agitate products and use equipment according to the manufacturer's directions. Mix and agitate at the work site only in a work area designated by the Engineer.
- c. Dispose of spills and surplus products away from Authority property.
- d. Keep all records which are or may be required by Federal, State or Local laws. Submit copies of these records to the Engineer within 5 days when so requested.
- e. Not less than forty-eight hours prior to a proposed spray operation, submit to the Engineer for his approval, a tabulated list indicating the target to be treated, the chemical trade name and quantity of mix being prepared.

C. Specific Requirements for Operations and Products

1. Trees, Shrubs and Ground Cover

- a. Coordinate all arrangements and accompany the Engineer on all inspections of plants at the nursery. Provide a minimum of 48 hours prior notice to the Engineer. Do not dig or remove any plant prior to inspection by the Engineer.
- b. All plants inspected by the Engineer at the nursery will be sealed with Authority seals, or at the discretion of the Engineer, typical representative numbers of such plants may be sealed.
- c. Deliver to the construction site plants which were sealed and whose seal numbers conform to the Engineer's nursery inspection records.
- d. Unsealed plants which, in the sole opinion of the Engineer, are not equal in quality to the sealed samples will be rejected.

- e. Each shipment shall be certified by Federal and State authorities to be free of insects and diseases. Inspection certificates to this effect which would be required by law, if the Authority were a private corporation, shall accompany each shipment invoice and shall be delivered to the Engineer.
  - f. All plants, sealed or unsealed, shall be subject to tailgate inspection upon arrival at the construction site. All plants failing to meet the requirements of this Section will be rejected by the Engineer. Such rejected plants shall be removed from Authority property and replaced at no additional cost to the Authority.
  - g. At the discretion of the Engineer, typical representative numbers of plants may be removed from their growing containers for inspection.
2. Topsoil

- a. Prior to delivery to the construction site, submit a representative sample of screened topsoil for analysis to a certified independent laboratory to ensure conformance to requirements specified in 2.01 A. No substitution for testing parameters shall be permitted. Submit test results to the Engineer of Materials, Engineering Materials Laboratory, Port Authority Technical Center, 241 Eric Street, Jersey City, NJ 07310-1397, in accordance to 2.01 A and Appendix B of this Section.
- b. Any analysis, where by the date of testing by the certified independent laboratory is in excess of one month prior to the actual date of delivery to the construction site shall not be accepted.
- c. Prior to delivery to the construction site, advise the Engineer of Materials of the location of the source of the screened topsoil and submit a two part sample to the Engineer of Materials.
- d. Do not deliver screened topsoil to the construction site until the Engineer of Materials has approved the submittal in writing.

- e. After delivery of screened topsoil to the construction site, submit a representative sample for analysis to a certified, independent laboratory to ensure conformance to requirements specified in 2.10 A. Submit test results to the Engineer of Materials for approval. In the event that the delivered sample is not consistent with the sample approved prior to delivery, remove the delivered screened topsoil from the construction site and replace it with material that does conform. All at the expense of the Contractor.

### 3. Topsoil Mix

- a. Do not combine topsoil mix components until components have been approved in writing by the Engineer of Materials.
- b. After topsoil mixing operations have been completed and prior to delivery to the construction site, submit a representative sample of the topsoil mix to a certified independent laboratory to ensure conformance to requirements specified in 2.01 B. No substitutions for testing parameters shall be permitted. Submit test results to the Engineer of Materials, Engineering Materials Laboratory, Port Authority Technical Center, 241 Erie Street, Jersey City, NJ 07310-1397, in accordance to 2.01 B and Appendix C of this Section.
- c. Any analysis, where by the date of testing by the certified independent laboratory is in excess of one month prior to the actual date of delivery to the construction site shall not be accepted.
- d. Prior to delivery to the construction site, advise the Engineer of Materials of the location of the source of topsoil mix and submit a two pound sample to the Engineer of Materials.
- e. Do not deliver topsoil mix to the construction site until the Engineer of Materials has approved the submittal in writing.

- f. After delivery of topsoil mix to the construction site, submit a representative sample for analysis to a certified, independent laboratory to ensure conformance to requirements specified in 2.01 B. Submit test results to the Engineer of Materials for approval. In the event that the delivered sample is not consistent with the sample approved prior to delivery, remove the delivered topsoil mix from the construction site and replace it with material that does conform. All at the expense of the Contractor.

D. Certification

Prior to delivery of screened topsoil and/or topsoil mix to the construction site, furnish the Engineer of Materials with a written statement from the topsoil supplier giving the depth of stripped topsoil and certification that topsoil has never been treated with herbicides.

E. Replacement

1. Replace unsatisfactory furnished and installed trees, shrubs and ground cover for a period of 1 year from the date on which the Certificate of Final Completion is issued. Replace plants which, in the sole opinion of the Engineer, die or otherwise become unsatisfactory.
2. Replace unsatisfactory plants with products and by operations which comply with all requirements of these Specifications, and on such date(s) as ordered by the Engineer.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver all products in the manufacturer's unopened containers bearing the trade name, manufacturer's name, weight and analysis.
- B. Store products away from moisture and extreme temperatures and in such a manner that their effectiveness will not be impaired.
- C. Formulation, Application, and Equipment
  1. Use the manufacturer's recommended formula, application rate and safety instructions at all times.
  2. Mix and agitate products and use equipment according to the manufacturer's directions. Mix and agitate only in an area designated by the Engineer.

3. Dispose of spilled materials and surplus products away from Authority property.

D. Specific Requirements

1. Topsoil and Topsoil Mix

Conform to requirements of 1.04 C.2 and 1.04 C.3.

2. Trees, Shrubs and Ground Cover

Conform to requirements of 1.04 C.1 and as follows:

- a. Transport plants in covered trucks only. Plants transported on open trucks from the nursery will be rejected by the Engineer.
- b. Handle balled and burlapped trees on the ground using the method shown on the Contract Drawings.
- c. Carry plants by the ball or container and not by stems.
- d. Do not drop plants.
- e. Protect all delivered plants from drying out by providing shade and water. Do not allow plants to become dry or wilted.
- f. After plants have been set on the ground, apply water as needed, and cover balls with plastic sheeting.

1.06 SUBMITTALS

See Appendix "A" for submittals requirements

PART 2 - PRODUCTS

2.01 MATERIALS

A. Screened Topsoil

Fertile, friable, natural loam topsoil, free of subsoil, taken from a depth of no more than 1 foot, or less if subsoil is encountered, supplier-certified as having been obtained from an area which has never been treated with herbicide and conforming to the following:

1. Screened topsoil shall be of uniform quality, free from hard clods, stiff clay, hard pan, sods, partially disintegrated stone, lime, cement, ashes, slag, concrete, bar residues, tarred paper, boards, chips, sticks, glass or any other undesirable material.
2. Screened topsoil shall contain a minimum of 5 percent organic matter and maximum of 7 percent organic matter as determined by loss of ignition of moisture-free samples.
3. pH range shall be 5.0 to 7.0, inclusive.
4. The range of soluble salts shall be equal to or less than 500 micromhos per centimeter.
5. Screened topsoil shall be graded as follows:

PASSING	RETAINED ON	PERCENTAGE
1" screen		100%
1" screen	2mm (No.10) Sieve	Not more than 5%

6. The portion of screened topsoil passing the 2mm sieve, based on the mechanical analysis of the soil as determined by the buoyous method, shall consist of the following based on dry weight of sample:
  - a. Sand 30% - 50%, inclusive
  - b. Silt 30% - 50%, inclusive
  - c. Clay 10% - 20%, inclusive

7. Topsoil Mix:

Composed of topsoil, various soil amendments and nutrient control materials conforming to the following:

1. Topsoil mix shall contain a minimum of 7% and a maximum of 15% organic matter as determined by loss on ignition of moisture free samples, and the pH range of 5.0 to 7.0, inclusive, with 95% passing a 1" screen.
2. The range of soluble salts shall be equal to or less than 500 micromhos per centimeter.
3. Each 5 cubic yards of topsoil mix shall contain:
  - a. 3 3/4 cubic yards of Topsoil;

- b. 1 1/4 cubic yards of compost
  - c. 5 lbs. of Superphosphate 0-20-0.
  - d. 17 lbs of Hydrogel
4. Topsoil mix shall be loose, friable and not frozen or saturated at the time of mixing.

C. Compost

All Gro as manufactured by All Gro Soils, Hampton, N. H. 03842, or approved equal. Compost shall conform to the following:

- a. Weed-Free;
- b. Minimum 50% organic matter;
- c. EPA approved pathogen destruction;
- d. Consistent pH range of 5.7 to 7.7 inclusive;
- e. Minimum nutrient content as follows:
 

Nitrogen (N)	2.0%		
Phosphorus (P)	1.0%		
Potassium (K)	0.10%		
- f. Minimum micronutrient content as follows:
 

Calcium (Ca)	.70%	Magnesium (Mg)	.10%
Sulfur (S)	.80%	Boron (B)	.0007%
Copper (Cu)	.04%	Iron (Fe)	.2%
Manganese (Mn)	.05%	Molybdenum (Mo)	.0004%
Sodium (Na)	.03%	Zinc (Zn)	.09%
- g. low cadmium content
- h. Soluble salts - 300 ppm, maximum.

D. Sand

ASTM C33, free of sea salt and organic impurities harmful to plant growth.

E. Weed Control/Glyphosate

"Round Up" manufactured by Monsanto, St. Louis, MO 63167 or approved equal.

F. Hydrogel

"Viterra Gelscape" shall be as manufactured by Amereq. Inc., Congers, N.Y. 10920 or an approved equal and shall conform to the following:

99.5% Potassium Propenoate - Propenamide Copolymer

0.5% Inert Ingredients

G. Nursery Stock

1. Furnish trees, shrubs and ground cover in the quantity, species, and meeting the size, height and width requirements as shown on the Contract Drawings.
2. Furnished plants shall conform to the following:
  - a. Measure plant size as it stands in its natural position.
  - b. Conform to tree caliper, shrub sizes, heights and widths as shown on Contract Drawings.
  - c. For container grown plants, if used, conform to the dimensions for height, width, number of canes and container size as shown on the Contract Drawings.
  - d. Plants furnished shall be an average of the minimum and maximum sizes shown on the Contract Drawings.
  - e. Do not use large plants cut back to sizes specified.
  - f. Plants shall be sound, healthy, vigorous growing specimens.
  - g. Plants shall exhibit uniform growth and a form characteristic of their species.
  - h. With respect to their canes, trunks, stems, and branches, shrubs shall:
    - (1) Have normally well-developed canes and branches.
    - (2) Be free from any intestations or defects, including but not limited to decay, disfiguring knots, frost and sunscald injuries, abrasions of the bark, girdled trunk or branches, head malformation from overcrowding, damage due to machinery operation, improper pruning and blasted buds.

- i. Plants' foliage shall be free from chlorosis, yellowing, blemishes or damaged parts.
  - j. Plants shall have vigorous, fibrous root systems.
  - k. Container grown plants, if used, shall have been grown in the container long enough to develop new fibrous roots so that the root mass will retain its shape and hold together when removed from the container. Do not use recently potted or root-bound plants.
- 1. With respect to their trunks and branches, trees shall:
    - (1) Have normal, well-developed branches.
    - (2) Be free from any infestations or defects, including but not limited to decay, disfiguring, knots, frost and sunscald injuries, abrasions of the bark, girdled trunk or branches, head malformed from overcrowding, damage due to machinery operation, improper pruning and blasted buds.
    - (3) Have straight trunks with a sturdy central leader. Clump forms may have more than one straight leader. Lateral branches shall arise near right angles forming a U-shaped crotch. Trees with V-shaped crotches will be rejected by the Engineer.
    - (4) Have been properly pruned to ensure a strong, sturdy canopy.
- 3. Instructions for digging and baling plants are as follows:
    - a. Dig immediately before moving.
    - b. Dig to obtain as many fibrous roots as possible.
    - c. Do not use loose, broken or manufactured balls.
    - d. Wrap and tie balled and burlapped plants with untreated burlap and sisal or jute twine. Do not ball and tie with treated (or "no rot") material.

H. Superphosphate - 0-20-0

As distributed by J. & L. Adikes, 182-12 93rd Ave., Queens, NY 11423, or Lebanon Chemical Co., P.O. Box 180, Lebanon, PA 17042, or approved equal conforming to the following:

1. Formulated fertilizer having a guaranteed analysis as follows:

0% N  
20% P2O5  
0% K2O

I. Soil pH Adjustment

1. Iron Sulphate

Commercial iron sulphate as manufactured by Faesy & Besthuff, Inc., 143 River Road, Edgewater, NJ 07020, or approved equal.

2. Granulated Dolomitic Limestone

As manufactured by Limecrest, Sparta, NJ 07871, or approved equal conforming to the following:

- a. Total carbonates not less than 96% of 48.2% calcium oxide equivalent. For purposes of calculation, total carbonates shall be considered as calcium oxide. Magnesium oxide content shall be between 15-22%.
- b. A dust-free, homogeneous, granular material.

J. Pruning Alcohol

A commercial ethylalcohol or "Ethanol" 70-95%.

K. Guy Cables, Turnbuckles, Screw Eyebolts and Cable Clips, shall conform to the following:

1. Regular galvanized cable, sized as shown on the Contract Drawings.
2. Galvanized or dip-painted turnbuckles, drop forged, having an eye at each end, and sized as shown on the Contract Drawings.
3. Galvanized screw eyebolt for deckmen, drop forged 5/8 inch by 4 inches.

4. Cable clips, "Genuine Crosby Red-UBolt" clips manufactured by the Crosby Group, Tulsa, OK 74101, without substitution, and sized as shown on the Contract Drawings.

L. Deadmen (Pressure Treated Timbers)

Southern yellow pine grade No. 2 or better timbers, preservative treated with ACA (Ammonial Copper Arsenite, "Chemonite") or CCA (Chromateal Copper Arsenate, "Osiose-K-33") conforming to American Wood Preservers' Association (AWPA) Standard P-5, with a retention of 0.40 lbs. per cubic foot of wood.

M. Shredded Hardwood Bark Mulch

Shredded hardwood bark mulch shall be double hammermilled hardwoods, cedar, hemlock hardwood blend as supplied by American Landscape Supply, Inc., Branchburg, N.J. 08876 or approved equal.

N. Weed Control Mat:

a. Weed Control Mat shall be rot resistant, non-woven polypropylene fiber, permeable to water.

b. Weed Control Mat shall be Soil Chek as manufactured by Brighton-By-Products Company, Inc., New Brighton, PA 15066 or approved equal.

O. Reinforced Hose

New 2-ply, 1/2-inch, black, rubber garden hose.

P. Tree Stakes

1. White cedar stakes with bark attached.

2. Middle diameter of 2 to 2 3/4-inches and a butt diameter of not more than 3 inches

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify that final grades have been established prior to start of planting operations.

B. Inspect trees, shrubs and ground cover for injury, insect infestation, and improper planting. Do not plant until deficiencies are corrected, or plants are replaced.

3.02 PREPARATION

- A. All planting areas as shown on Contract Drawings.
- B. Stake out tree, shrub and ground cover locations and outline planting beds on ground.
- C. Do not begin excavation until locations are approved by the Engineer.

3.03 INSTALLATION

A. Excavation of Plant Pits

- 1. For balled and burlapped plants (B&B) and container grown plants, excavate soil from plant pits to conform to the following:

Size of Ball or Container	Diameter of Hole	Depth Below Bottom of Ball or Container
Less than 4' diameter	2 x diameter of ball or container	6 inches
4' to 5' diameter	1 3/4 x diameter of ball or container	8 inches
Over 5' diameter	1 1/2 x diameter of ball or container	8 inches

- 2. Prior to planting, excavated plant pits shall be approved by the Engineer.

B. Planting Operations

Plant only in the presence of the Engineer, and as follows:

1. Planting B & B and Container Grown Plants

- a. Handle plants so that the root ball will not be loosened. Do not handle trees by their trunks and shrubs and ground cover by their stems when transplanting or shifting plants.
- b. Lift, transport and place trees into individual tree pits using the tree lifting method shown on the Contract Drawings.
- c. Set plants plants.
- e. Set tree so that top of root ball is level with the finished grade after settlement.

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- e. For container grown plants, carefully remove the container and cut edge-roots with knife on three sides, taking care not to damage the roots.
- f. For B & B plants, after the topsoil mix has been thoroughly firmed under and around the ball, cut burlap away from the collar and from the upper half of the ball and adjust the remaining burlap to prevent the formation of air pockets. Where directed by the Engineer, remove burlap entirely.
- g. Avoid bruising or breaking roots when tamping soil.
- h. Firm topsoil mix at 6 to 8-inch intervals and thoroughly settle it with water.

C. Guying

- 1. Guy trees one inch or greater in caliper as shown on the Contract Drawings.
- 2. Place stakes prior to backfilling tree pits.
- 3. At the time of planting, thoroughly saturate the soil around each tree with water.

D. Edging of Planting Areas

- 1. Establish a neat edge where planting areas meet turf areas as shown on the Contract Drawings.
- 2. Edge with a spade or edging tool immediately after planting and seeding is completed.

E. Mulching

- 1. Cultivate and rake placed areas and leave in an orderly condition.
- 2. On level ground or slight slopes, leave a shallow basin a little larger than the diameter of the plant pit around each plant as shown on the Contract Drawings.
- 3. Place 2 inches of mulch in the plant basin.

F. Irrigation

Commence irrigation immediately after planting and maintain as required until issuance of certificate of Final Completion.

END OF SECTION

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SECTION 02954

TREES, SHRUBS AND GROUND COVER

IN GROUND

SUBMITTALS

APPENDIX "A"

Submit the following in accordance with the requirements of 'Inspections and Rejections' of Division 1 - General Provisions.

A. Qualifications

1. Submit qualifications of the entity performing the laboratory testing of this Section to the Engineer in accordance with 1.04 A. Include the name, address and telephone number of the Testing laboratory performing the work of this Section.
2. Submit evidence of the Entity's membership to the International Society of Arboriculture and State Chapter where they are residing.
3. Submit qualifications in writing for approval by the Engineer of the certified arborist performing the Work in accordance with 1.04 A.4. Include the name of the arborist, resume, and a description and contract amounts for work performed in the last two years.
4. Submit qualifications of the entity and its workers performing the Work of this Section to the Engineer in accordance with 1.04 A. Include names of clients, telephone number, and contract amounts for work performed in the last three years and experience records of workers performing the Work of this Section, and evidence of license of pesticide applicator.

B. Products

1. Submit the following in accordance with the requirements of "Inspections and Rejections" of Division 1 - GENERAL PROVISIONS:
  - a. A complete "Products List", listing all products to be used under this Section.

- b. A complete "Plant List", listing all greenhouse and nurse sources for the trees, shrubs and ground cover.
2. Submit the location of the source of the screened topsoil, topsoil mix and a two pound representative sample of screened topsoil and topsoil mix (as many as required) to the Engineer of Materials in accordance with 1.04 C.

C. Test Reports

Submit laboratory analyses of screened topsoil and topsoil mix to the Engineer of Materials, Engineering Materials Laboratory, Port Authority Technical Center, 241 Erie Street, Jersey City, NJ 07310-1397, in accordance to 1.04C 2, 1.04C 3, Appendix B and Appendix C.

D. Certifications

1. Submit plant inspection certificates, in accordance with requirements of 1.04 C.1.e.
2. Submit to the Engineer of Materials, certification required by 1.04 D.

END OF APPENDIX "A"

SECTION 02954

TREES, SHRUBS AND GROUND COVER

IN GROUND

APPENDIX "B"

Material: Screened Topsoil  
 Specification: Section 02920 - Screened Topsoil  
 Source of Sample:  
 Contract or P.O. #:

<u>Quality Characteristics:</u>	<u>Spec.</u>		
<u>Visual Examination:</u>	No hard clods, etc.		
<u>Organic Matter:</u> (Loss on Ignition)	Min. 5% Max. 7%		
<u>Soluble Salts:</u> - Micromhos/Cm - PPM -	Max. 500 Max. 300		
<u>pH:</u>	5.0 - 7.0		
<u>Mechanical Analysis:</u>			
Passing - 1"	100%		
Passing - 1" Retain 2mm (#10)	Max. 5.0%		
Passing 2mm (#10) Retain Pan Inevitable Inhomogeneity	Min. 95.0%		
Passing 2mm (#10) Percent - Sand	30% - 50%		
Percent - Silt	30% - 50%		
Percent - Clay	10% - 20%		
Phosphorus: - lbs./Acre.			
Potassium: - lbs./Acre.			
Nitrogen from NO <sub>3</sub> : - lbs./Acre			
Nitrogen from NH <sub>4</sub> : - lbs./Acre			

SECTION 02954 - APPENDIX "B"

02954 - 19

SECTION 02954

TREES, SHRUBS AND GROUND COVER

IN GROUND

APPENDIX "C"

Material: Top Soil Mix  
 Specification: Section 02950 - 02955  
 Source of Sample:  
 Contract or P.O. #:

<u>Quality Characteristic:</u>	<u>Spec.</u>		
<u>Visual Examination:</u>	No hard clods, etc.		
<u>Organic Matter:</u> (loss on Ignition)	Min. 7% Max. 15%		
<u>Soluble Salts:</u> -Micromhos/CM - PPM -	Max. 500 Max. 300		
<u>pH:</u>	5.0 - 7.0		
<u>Mechanical Analysis:</u>			
<u>Passing - 1"</u>	100%		
<u>Passing - 1"</u> <u>Retain 2mm (#10)</u>	Max. 5.0%		
<u>Passing 2mm (#10)</u>	Min. 95.0%		
<u>Boydoucos Hydrometer</u> <u>Test of M. 1001</u>			
<u>Passing 2mm (#10)</u> <u>Percent - Sand</u>	30% - 50%		
<u>Percent - Silt</u>	30% - 50%		
<u>Percent - Clay</u>	10% - 20%		
<u>Potassium - lbs./Acre.</u>			
<u>Phosphorus - lbs./Acre.</u>			
<u>Nitrogen from N03 - lbs./Acre</u> <u>Nitrogen from NH4 - lbs./Acre</u>			

DIVISION 2

SECTION 02971

MAINTENANCE OF PERMANENT PLANTING

PART 1 - GENERAL

1.01 SUMMARY

- A. This Section specifies requirements for maintenance of permanent and seasonal planting.
- B. Maintain plantings listed in Item 1 of Appendix "D" to this Section that are within the "Area of Work" shown on the Contract Drawings.
- C. Perform functions as scheduled and described in Item 2 of Appendix "D" to this Section.
- D. "Maintenance of Permanent Planting", "Maintenance of Landscaping", or "Landscaping Maintenance", or words of similar import, shall mean all the functions specified in Appendix "D" to this Section.

1.02 DESIGN AND PERFORMANCE REQUIREMENTS

- A. Perform maintenance operations using materials and methods in accordance with these Specifications and Contract Drawings.
- B. For botanical names of trees, shrubs and ground cover, refer to the names listed in "Hortus III: A Concise Dictionary of Plants Cultivated in the United States and Canada" published by MacMillan Publishing Co., New York, NY 10022.
- C. To determine caliper, size, height, width and root spread of plants, use the "American Standard for Nursery Stock" ANSI Z 60.1, published by the American Association of Nurserymen, 1250 "I" Street, NW, Suite 500, Washington, D.C. 20005.
- D. As a guide in determining plant availability, use "The Landscape Materials Information Service Nursery Report", current edition, published by Landscape Materials Information Service, Callicoon, NY 12723.

- E. Fertilizers shall conform to current standards as established by the Association of American Plant Food Control Officials, Inc., Division of Regulatory Services, University of Kentucky, Lexington, KY 40546.
- F. Pruning methods shall be in accordance with the 'Tree Care Operations - Tree, Shrub and Other Woody Plant Maintenance, - Standard Practices,' ANSI - A 300, as published by National Arborist Association, The Meeting Place Mall, Route 101, P.O. Box 1094, Amherst, NH 3031-1094.
- G. Base standards for weather conditions on reports on the weather radio band of the National Oceanic and Atmospheric Administration, Washington Science Center, Rockville, MD 20852, and on its publication entitled "Local Climatological Data With Comparative Data", published 12 times a year as a monthly and once a year as an annual.
- H. Mulch shall conform to current standards established by National Bark Producers Association, 13542 Union Village Circle, Clifton, VA 22024.
- I. Sand, silt, clay definitions, and product test methods shall be those adopted and published by the Association of Official Analytical Chemists, 1111 19th Street, Suite 210, Arlington, VA 22209.
- J. Perform replacement of items listed in Item 1 of Appendix "D" to this Section only during the appropriate growth season of the particular item. Provide planting of quality, size, genus, species and variety to match original installation(s).
  - 1. Replace trees, shrubs, ground covers, lawn areas and other plants that are defective due to death, defoliation, disfigurement, infestation and off-color foliage.
  - 2. Repair or replace lawn or ground cover areas due to erosion, bare or sparse growth, or weed or pest infestation.
- K. When the Engineer determines that loss or damage to permanent planting is the result of an unusual phenomenon or incident beyond the control of the Contractor, and the Contractor is ordered to replace the loss or to repair the damage at the direction of the Engineer, then reimbursement for the corrective Work will be at the "Net Cost" for such Work, as specified in 4.01 in this Section.
  - 1. "Unusual phenomena or incidents" shall mean, but not be limited to, hurricanes, hail, wind or thunderstorms, blizzards or unseasonable frosts, theft, vandalism or accident.

2. Within 48 hours of such loss or damage or notification of such loss or damage, the following will be submitted to the Engineer:
  - a. A written narrative statement describing the phenomenon or incident, if known.
  - b. The quantity of permanent planting lost or damaged.
  - c. A proposed schedule for re-establishment of plantings for approval by the Engineer.
3. In determining the validity of the Contractor's claim, the Engineer will consider the type and intensity of the disaster as recorded by the National Oceanic and Atmospheric Administration, Port Authority Police Reports, and the condition of the plantings prior to and immediately after the claimed damage and/or loss.
- L. In the case of loss or damage due to unusual phenomena or incidents, commence clean up within 48 hours of such loss or damage or notification of such loss or damage, and complete such Work within the scheduled time(s) approved under 1.02 C.2 of this Section.
- M. Replacement plants furnished by the Contractor shall be subject to warranty for the same time period as the original installations.
- N. Pest control for plants shall be in accordance with the "Cornell Recommendations for Pest Control for Commercial Production and Maintenance of Trees and Shrubs" and "Cornell Recommendations for Florist Crops, Part II: Pest Control - Diseases, Insects and Weeds", published by Cornell University, Ithaca, NY. These publications are available from the Distribution Center, Research Park, Cornell University, Ithaca, NY 14850. Telephone (607) 255-2080.

1.03 ENVIRONMENTAL REQUIREMENTS

- A. Perform operations only during the following weather conditions:
  1. There shall be no frost in the ground and the soil and backfill materials temperature at each planting area shall be above 32 degrees F.
  2. Perform planting and soil related operations only when no form of precipitation is falling or forecast to fall within the next 2 hours. Following a period of precipitation, resume operations only after the soil has drained.

B. Planting Calendar Limitations

Planting shall be performed only during the following periods:

1. Deciduous Plants March 1 - May 1 and October 15 - December 1
  2. Evergreen Plants April 1 - May 15 and September 1 - October 15
  3. Seasonal Plants - as shown on the Contract Drawings.
  4. Seeding - as shown on the Contract Drawings.
- C. Apply chemicals only when wind velocity does not exceed 5 mph, drift hazard is negligible, the air temperature is above 40 degrees Fahrenheit and below 70 degrees Fahrenheit, no precipitation has fallen within 2 hours prior to application, and no precipitation is forecasted for the 12 hour period after application.

1.04 QUALITY ASSURANCE

A. Contractor's Personnel Qualifications:

1. The entity performing the Work of this Section shall employ workers experienced in landscaping and landscape maintenance and shall have engaged in Work similar to the requirements of this Section for a period of at least 3 years.
2. The entity performing pesticide applications shall be licensed as a commercial applicator by the state in which the Work is being performed.
3. The entity performing pruning, planting and maintenance of this Section shall be a member of the International Society of Arboriculture and State Chapter where they are residing.
4. The entity performing the Work of this Section shall have a New Jersey Certified Tree Expert or a New York State Certified Arborist, depending on the State where work is being performed who possesses a minimum of an Associate Degree in Horticulture from a recognized college and who has a total of five (5) years work experience, as superintendent for all work performed under this Contract.

5. The laboratory performing the laboratory testing of this Section shall be a certified testing laboratory in either the State of New Jersey or New York and shall have experience in top soil testing and shall perform all tests as specified in 2.01 A, 2.01 B and as outlined in Appendix B and Appendix C of this Section.

B. General Requirements for Operations and Products

1. Products listed in PART 2 - PRODUCTS shall be approved in writing by the Engineer prior to delivery to the construction site.
2. After delivery to the construction site, at the discretion of the Engineer, representative samples of any item may be taken for analysis. Item(s) not conforming to requirements of the Contract shall be removed from Authority property and replaced with conforming item(s).
3. All plant materials shall be grown in nurseries located within the L.M.I.S. (Landscape Materials Information Service) region. The L.M.I.S. region consists of the following states: Connecticut, Delaware, Illinois, Indiana, Kentucky, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia and West Virginia.
4. All plant material shall be 'Nursery Grown.' Nursery Grown shall mean that the fields, where the plants are to be obtained, are from active and working nurseries where the following horticultural practices have been aggressively performed:
  - a. IPM Program - Integrated Pest Management Program
  - b. Cultivation - Including weed suppression
  - c. Fertilization
  - d. Pruning
  - e. Irrigation

Any plant material from a field where the above horticultural practices have not been consistently practiced in the last twelve (12) months shall be rejected.

5. Soil Nutrients

- a. Submit within the first three months of each year a minimum of five (5) soil samples taken six (6) inches below the soil surface from five (5) different locations within planted area(s) for analysis by a certified independent laboratory. Testing for each sample shall include NH<sub>4</sub>, NO<sub>3</sub>, P<sub>2</sub>O<sub>5</sub>, K<sub>2</sub>O, Fe, soluble salts, pH and organic matter.
- b. Submit test results to the Engineer.
- c. The Engineer may take soil and leaf samples for analysis. In the event that the test results indicate that the Contractor has failed to or improperly applied any nutrient control product, the Contractor shall make all corrections including replacement in kind at no cost to the Authority, immediately upon notification by the Engineer.

6. Pesticide

- a. Select to act on identified pest and use the manufacturer's recommended formula, application rate and safety instructions at all times.
- b. Mix and agitate products and use equipment according to the manufacturer's directions. Mix and agitate at the construction site only in a work area designated by the Engineer.
- c. Dispose of spills and surplus products away from Authority property.
- d. Keep all records which are or may be required by Federal, State or Local laws. Submit copies of these records to the Engineer within 5 days when so requested.
- e. Not less than forty-eight hours prior to a proposed spray operation, submit to the Engineer for his approval, a tabulated list indicating the target to be treated, the chemical trade name and quantity of mix being prepared.

C. Specific Requirements for Operations and Products

1. Trees, Shrubs and Ground Cover

- a. Coordinate all arrangements and accompany the Engineer on all inspections of plants at the nursery. Provide a minimum of 48 hours prior notice to the Engineer. Do not dig or remove any plant prior to inspection by the Engineer.
- b. All plants inspected by the Engineer at the nursery will be sealed with Authority seals, or at the discretion of the Engineer, typical representative numbers of such plants may be sealed.
- c. Deliver to the construction site plants which were sealed and whose seal numbers conform to the Engineer's nursery inspection records.
- d. Unsealed plants which, in the sole opinion of the Engineer, are not equal in quality to the sealed samples will be rejected.
- e. Each shipment shall be certified by Federal and State authorities to be free of insects and diseases. Inspection certificates to this effect which would be required by law, if the Authority were a private corporation, shall accompany each shipment invoice and shall be delivered to the Engineer.
- f. All plants, sealed or unsealed, shall be subject to tailgate inspection upon arrival at the construction site. All plants failing to meet the requirements of this Section will be rejected by the Engineer. Such rejected plants shall be removed from Authority property and replaced at no additional cost to the Authority.
- g. At the discretion of the Engineer, typical representative numbers of plants may be removed from their growing containers for inspection.

2. Topsoil

- a. Prior to delivery to the construction site, submit a representative sample of screened topsoil for analysis to a certified independent laboratory to ensure conformance to requirements specified in 2.01 A. No substitution for testing parameters shall be permitted. Submit test results to the Engineer of Materials, Engineering Materials Laboratory, Port Authority Technical Center, 241 Erie Street, Jersey City, NJ 07310-1397, in accordance to 2.01 A and Appendix B of this Section.

- b. Any analysis, where by the date of testing by the certified independent laboratory is in excess of one month prior to the actual date of delivery to the construction site shall not be accepted.
- c. Prior to delivery to the construction site, advise the Engineer of Materials of the location of the source of the screened topsoil and submit a two pound sample to the Engineer of Materials.
- d. Do not deliver screened topsoil to the construction site until the Engineer of Materials has approved the submittal in writing.
- e. After delivery of screened topsoil to the construction site, submit a representative sample for analysis to a certified, independent laboratory to ensure conformance to requirements specified in 2.01 A. Submit test results to the Engineer of Materials for approval. In the event that the delivered sample is not consistent with the sample approved prior to delivery, remove the delivered screened topsoil from the construction site and replace it with material that does conform. All at the expense of the Contractor.

### 3. Topsoil Mix

- a. Do not combine topsoil mix components until components have been approved in writing by the Engineer of Materials.
- b. After topsoil mixing operations have been completed and prior to delivery to the construction site, submit a representative sample of the topsoil mix to a certified independent laboratory to ensure conformance to requirements specified in 2.01 B. No substitutions for testing parameters shall be permitted. Submit test results to the Engineer of Materials, Engineering Materials Laboratory, Port Authority Technical Center, 241 Erie Street, Jersey City, NJ 07310-1397, in accordance to 2.01 B and Appendix C of this Section.
- c. Any analysis, where by the date of testing by the certified independent laboratory is in excess of one month prior to the actual date of delivery to the construction site shall not be accepted.
- d. Prior to delivery to the construction site, advise the Engineer of Materials of the location of the source of topsoil mix and submit a two pound sample to the Engineer of Materials.

- e. Do not deliver topsoil mix to the construction site until the Engineer of Materials has approved the submittal in writing.
- f. After delivery of topsoil mix to the construction site, submit a representative sample for analysis to a certified, independent laboratory to ensure conformance to requirements specified in 2.01 B. Submit test results to the Engineer of Materials for approval. In the event that the delivered sample is not consistent with the sample approved prior to delivery, remove the delivered topsoil mix from the construction site and replace it with material that does conform. All at the expense of the Contractor.

D. Certification

Prior to delivery of screened topsoil and/or topsoil mix to the construction site, furnish the Engineer of Materials with a written statement from the topsoil supplier giving the depth of stripped topsoil and certification that topsoil has never been treated with herbicides.

E. Replacement

- 1. Replace unsatisfactory furnished and installed trees, shrubs, ground cover and seasonal displays which, in the sole opinion of the Engineer, die or otherwise become unsatisfactory.
- 2. Replace unsatisfactory plants with products and by operations which comply with all requirements of these Specifications, and on such date(s) as ordered by the Engineer.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Deliver all products in the manufacturer's unopened containers bearing the trade name, manufacturer's name, weight and analysis.
- B. Store products away from moisture and extreme temperatures and in such a manner that their effectiveness will not be impaired.
- C. Formulation, Application, and Equipment
  - 1. Use the manufacturer's recommended formula, application rate and safety instructions at all times.
  - 2. Mix and agitate products and use equipment according to the manufacturer's directions. Mix and agitate only in an area designated by the Engineer.

3. Dispose of spilled materials and surplus products away from Authority property.

D. Specific Requirements

1. Topsoil and Topsoil Mix

Conform to requirements of 1.04 C.2 and 1.04 C.3.

2. Trees, Shrubs, Ground Cover and Seasonal Displays

Conform to requirements of 1.04 C.1 and as follows:

- a. Transport plants in covered trucks only. Plants transported on open trucks from the nursery will be rejected by the Engineer.
- b. Handle balled and burlapped trees on the ground using the method shown on the Contract Drawings.
- c. Carry plants by the ball or container and not by stems.
- d. Do not drop plants.
- e. Protect all delivered plants from drying out by providing shade and water. Do not allow plants to become dry or wilted.
- f. After plants have been set on the ground, apply water as needed, and cover balls with plastic sheeting.

1.06 SUBMITTALS

See Appendix "A" for submittals requirements.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Screened Topsoil

Fertile, friable, natural loam topsoil, free of subsoil, taken from a depth of no more than 1 foot, or less if subsoil is encountered, supplier-certified as having been obtained from an area which has never been treated with herbicide and conforming to the following:

1. Screened topsoil shall be of uniform quality, free from hard clods, stiff clay, hard pan, sods, partially disintegrated stone, lime, cement, ashes, slag, concrete, tar residues, tarred paper, boards, chips, sticks, glass or any other undesirable material.

2. Screened topsoil shall contain a minimum of 5 percent organic matter and maximum of 7 percent organic matter as determined by loss of ignition of moisture-free samples.
3. pH range shall be 5.0 to 7.0, inclusive.
4. The range of soluble salts shall be equal to or less than 500 micromhos per centimeter.
5. Screened topsoil shall be graded as follows:

PASSING	RETAINED ON	PERCENTAGE
1" screen		100%
1" screen	2mm (No.10) Sieve	Not more than 5%

6. The portion of screened topsoil passing the 2mm sieve, based on the mechanical analysis of the soil as determined by the buoyous method, shall consist of the following based on dry weight of sample:
  - a. Sand 30%-50%, inclusive
  - b. Silt 30%-50%, inclusive
  - c. Clay 20%, maximum

B. Topsoil Mixes

Composed of topsoil, various soil amendments and nutrient control materials conforming to the following:

1. Topsoil mix shall contain a minimum of 7% and a maximum of 15% organic matter as determined by loss on ignition of moisture free samples, and the pH range of 5.0 to 7.0, inclusive, with 95% passing a 1" screen.
2. The range of soluble salts shall be equal to or less than 500 micromhos per centimeter.
3. Each 5 cubic yards of topsoil mix shall contain:
  - a. 3 3/4 cubic yards of topsoil;
  - b. 1 1/4 cubic yard of compost
  - c. 5 lbs. of Superphosphate 0-20-0.
  - d. 17 lbs of Hydrogel

4. Topsoil mix shall be loose, friable and not frozen or saturated at the time of mixing.

C. Compost

All Gro as manufactured by All Gro Soils, Hampton, N. H. 03842, or approved equal. Compost shall conform to the following:

- a. Weed-Free;
- b. Minimum 50% organic matter;
- c. EPA approved pathogen destruction;
- d. Consistent pH range of 5.7 to 7.7 inclusive;
- e. Minimum nutrient content as follows:

Nitrogen (N)	2.0%
Phosphorus (P)	1.0%
Potassium (K)	0.10%

- f. Minimum micronutrient content as follows:

Calcium (Ca)	.70%	Magnesium (Mg)	.10%
Sulfur (S)	.80%	Boron (B)	.0007%
Copper (Cu)	.04%	Iron (Fe)	.2%
Manganese (Mn)	.06%	Molybdenum (Mo)	.0004%
Sodium (Na)	.03%	Zinc (Zn)	.09%

- g. Low cadmium content.
- h. Soluble salts - 300 ppm, maximum.

D. Weed Control/Glyphosate

"Round Up" manufactured by Monsanto, St. Louis, MO 63167 or approved equal.

E. Hydrogel

"Viterra Gelscape" shall be as manufactured by Amereq. Inc., Congers, N.Y. 10920 or an approved equal and shall conform to the following:

99.5%	Potassium Propenoate - Propenamide Copolymer
0.5%	Inert Ingredients

F. Nursery Stock

- 1. Furnish trees, shrubs and ground cover in the quantity, species, and meeting the size, height and width requirements as shown on the Contract Drawings.

2. Furnished plants shall conform to the following:
  - a. Measure plant size as it stands in its natural position.
  - b. Conform to tree caliper, shrub sizes, heights and widths as shown on Contract Drawings.
  - c. For container grown plants, if used, conform to the dimensions for height, width, number of canes and container size as shown on the Contract Drawings.
  - d. Plants furnished shall be an average of the minimum and maximum sizes shown on the Contract Drawings.
  - e. Do not use large plants cut back to sizes specified.
  - f. Plants shall be sound, healthy, vigorous growing specimens.
  - g. Plants shall exhibit uniform growth and a form characteristic of their species.
  - h. With respect to their canes, trunks, stems, and branches, shrubs shall:
    - (1) Have normal, well-developed canes and branches.
    - (2) Be free from any infestations or defects, including but not limited to decay, disfiguring, knots, frost and sunscald injuries, abrasions of the bark, girdled trunk or branches, head malformed from overcrowding, damage due to machinery operation, improper pruning and blasted buds.
  - i. Plants' foliage shall be free from chlorosis, yellowing, blemishes or damaged parts.
  - j. Plants shall have vigorous, fibrous root systems.
  - k. Container grown plants, if used, shall have been grown in the container long enough to develop new fibrous roots so that the root mass will retain its shape and hold together when removed from the container. Do not use recently potted or root-bound plants.
    1. With respect to their trunks and branches, trees shall:
      - (1) Have normal, well-developed branches.

(2) Be free from any infestations or defects, including but not limited to decay, disfiguring, knots, frost and sunscald injuries, abrasions of the bark, girdled trunk or branches, head malformed from overcrowding, damage due to machinery operation, improper pruning and blasted buds.

(3) Have straight trunks with a sturdy central leader. Clump forms may have more than one straight leader. Lateral branches shall arise near right angles forming a U-shaped crotch. Trees with V-shaped crotches will be rejected by the Engineer.

(4) Have been properly pruned to ensure a strong, sturdy canopy.

3. Instructions for digging and balling plants are as follows:

- a. Dig immediately before moving.
- b. Dig to retain as many fibrous roots as possible.
- c. Do not use loose, broken or manufactured balls.
- d. Wrap and tie balled and burlapped plants with untreated burlap and sisal or jute twine. Do not ball and tie with treated (or "no rot") material.

G. Superphosphate - 0-20-0

As distributed by J. & L. Adikes, 182-12 93rd Ave., Queens, NY 11423, or Lebanon Chemical Co., P.O. Box 180, Lebanon, PA 17042, or approved equal conforming to the following:

1. Formulated fertilizer having a guaranteed analysis as follows:

0% N  
20% P<sub>2</sub>O<sub>5</sub>  
0% K<sub>2</sub>O

H. Soil pH Adjustment

1. Iron Sulphate

Commercial iron sulphate as manufactured by Faesy & Besthuff, Inc., 143 River Road, Edgewater, NJ 07020, or approved equal.

2. Granulated Dolomitic Limestone

As manufactured by Limecrest, Sparta, NJ 07871, or approved equal conforming to the following:

- a. Total carbonates not less than 86% of 48.2% calcium oxide equivalent. For purposes of calculation, total carbonates shall be considered as calcium oxide. Magnesium oxide content shall be between 15-22%.
- b. A dust-free, homogenous, granular material.

I. Pruning Alcohol

A commercial ethylalcohol or "Ethanol" 70-95%.

J. Guy Cables, Turnbuckles, Screw Eyebolts and Cable Clips, shall conform to the following:

1. Regular galvanized cable, sized as shown on the Contract Drawings.
2. Galvanized or dip-painted turnbuckles, drop forged, having an eye at each end, and sized as shown on the Contract Drawings.
3. Galvanized screw eyebolt for deadmen, drop forged 5/8 inch by 4 inches.
4. Cable clips, "Genuine Crosby Red-UBolt" clips manufactured by the Crosby Group, Tulsa, OK 74101, without substitution, and sized as shown on the Contract Drawings.

K. Deadmen (Pressure Treated Timbers)

Southern yellow pine grade No. 2 or better timbers, preservative treated with ACA (Ammonial Copper Arsenite, "Chemonite") or CCA (Chromateal Copper Arsenate, "Osmostone-K-33") conforming to American Wood Preservers' Association (AWPA) Standard P-5, with a retention of 0.40 lbs. per cubic foot of wood.

L. Shredded Hardwood Bark Mulch

Shredded hardwood bark mulch shall be double hammermilled hardwoods, cedar, hemlock hardwood blend as supplied by American Landscape Supply, Inc., Branchburg, N.J. 08876 or approved equal.

M. Weed Control Mat:

- a. Weed Control Mat shall be rot resistant, non-woven polypropylene fiber, permeable to water.

b. Weed Control Mat shall be Soil Chek as manufactured by Brighton-By-Products Company, Inc., New Brighton, PA 15066 or approved equal.

N. Reinforced Hose

New 2-ply, 1/2-inch, black, rubber garden hose.

O. Tree Stakes

1. White cedar stakes with bark attached.

2. Middle diameter of 2 to 2 3/4-inches and a butt diameter of not more than 3 inches.

P. Dramm

Dramm shall be a Dramm number 400 Water Beaker as distributed by Good-Prod Sales, Inc., Kenilworth, New Jersey. No substitutions will be permitted.

Q. Anti-desiccant

"Wilt-Pruf NCF" as manufactured by Wilt-Pruf Products, Inc., Greenwich, CT 06830-0280; "Cloud Cover" as manufactured by Easy Gardener, Waco, TX 76702-1025, "Transfilm" as manufactured by PC1-Gordon Corp., Kansas City, MO 64101.

PART 3 - EXECUTION

3.01 PREPARATION

A. Maintenance of Traffic and Work Area Protection

1. No heavy equipment, including trucks, may be used on paved pedestrian or sidewalk areas during maintenance operations unless approved by the Engineer.

2. Demarcate Work area(s) with roping and traffic cones. Cones shall be reflectorized orange rubber with approximate height, width and wall thickness respectively of 28 inches, 15 inches, 1/8 inch, as manufactured by Western Marketing Service, Union City, NJ, or approved equal. Cones shall bear the Contractor's identification, burned or painted on.

B. For pesticide preparation, conform to 1.04 B.6 and 3.03 E of this Section.

C. For pruning, conform to 3.03 F of this Section.

D. For tree removal, conform to 3.03 H of this Section.

### 3.02 FIELD TESTS

#### A. Nutrient Control

Identify nutrient, soluble salt and pH levels in accordance with 1.04 C.4 of this Section, and perform practices in accordance with Appendix "D" and as follows:

1. Perform nutrient applications 48 hours after irrigation to ensure proper soil moisture levels.
2. In the event that the accumulation of soluble salts is above 500 microhmos per centimeter, leach affected planter twice by applying 1 gallon of water per square foot of planter area, wait 1 hour before repeating procedure. Continue procedure until affected planter reaches an acceptable level of soluble salts.
3. In the event that the soil pH is below 5.5 for non-ericaceous plants and 4.5 for ericaceous plants, broadcast granulated dolomitic limestone at the rate recommended by the manufacturer. Repeat application as required.
4. In the event that the pH is above 8.0 for non-ericaceous plants and 6.5 for ericaceous plants, broadcast iron sulphate at the rate recommended by the manufacturer.
5. In the event that the soil test results indicate a deficiency of iron, broadcast Chelated Iron at the rate recommended by the manufacturer. Repeat applications as required.
6. In the event that soil test results indicate a deficiency of nutrients, nitrogen, potassium and phosphorous, apply nutrients at the rate recommended by the manufacturer. Repeat applications as required.

### 3.03 ADJUSTMENTS

A. Perform maintenance operations in accordance with Item 2 of Appendix "D" to this Section.

#### B. Irrigation

Frequency will vary depending on environmental factors. The total amount of water, from natural or applied irrigation shall be not less than one inch per week.

#### C. Mowing of Lawn Areas

1. Maintain a maximum height of 2 1/2 inches.
2. Trim edges.

3. Remove clippings after mowing and trimming.
4. Broom clean clippings from adjacent paved areas.

D. Sanitation

1. Weeding

- a. Manually remove before growth and maintain all permanent and seasonal planting areas "weed-free" at all times.
- b. Identify weeds and apply selective pre-emergent and post-emergent herbicides according to Part 3.03 E of this Section.

2. Litter Removal

Maintain planting and paved areas located within the "area of work" shown on the Contract Drawings free of litter or debris of any type.

E. Pest Control

Shall include but not be limited to managing insect, weeds and disease pests using the Integrated Pest Management (IPM) concept, the identification of pests, monitoring pest activity and population, the submittal of a pest control program and the proper application of pesticides, avoiding injury to non-target organisms and the environment, and as follows:

1. Notify the Engineer of infested plants.
2. Apply specific pesticides in accordance with Appendix "D".
3. Identify plant pests in their early stage of development and within 48 hours of identifying a pest on any plant, proceed as follows:
  - a. Specify the number of plants or planted areas requiring treatment, and their locations.
  - b. Submit written pesticide program in accordance with 1.05 F of this Section.
  - c. Failure to notify the Engineer prior to severe infestation shall mean the Contractor accepts full responsibility for the health of permanent planting including replacement In-Kind with a pest-free and disease-free plant.

4. During Pesticide Application Operations the following shall apply:
  - a. Applicators shall be properly licensed in accordance with 1.04 A.2 of this Section and attired with protective clothing, gloves and other required equipment.
  - b. Equipment shall be clean, safe, leak-free and in good working order. Remove malfunctioning equipment from the work site.
  - c. Secure the area from pedestrian traffic by roping off the area and place signs as directed by the Engineer.
  - d. Provide workers to supervise the operation and to keep pedestrians from approaching within 50 feet of area.
  - e. Protect all areas from spills and immediately report spills to the Engineer.

F. Pruning

1. Prune all plants in order to maintain healthy compact growth.
2. Prune in accordance with the National Arborist Association's ANSI A300 "Tree Care Operations - Tree, Shrub and Other Woody Plant Maintenance - Standard Practices" and in accordance with Appendix "D" and as follows:
  - a. Provide and maintain a traffic cone and rope barricade around all work areas during pruning operations.
  - b. Provide a worker on the ground to redirect pedestrian traffic during tree pruning operations.
  - c. Perform pruning with sharp tools. Disinfect tools by dipping in alcohol at the commencement of the day's operation and again after finishing each plant known to be diseased. Use fresh alcohol each day for this operation.
  - d. Prune to remove dead, weak, interfering, suckered, damaged or unsightly twigs or branches.
3. Prune to maintain the species' characteristic shape. Pollard, top or shape the plant as directed by the Engineer.

4. In addition, prune shrubs and ground covers and dead-head flowers to control and renew growth in accordance with Appendix "D".
5. No tree climbing permitted. For trees less than 15 feet in height, use free standing ladders and do not touch the tree trunk.
6. Do not disturb utility lines during pruning operations.
7. Do not use anvil-type pruning tools.
8. Make pruning cuts at the branch collar. Crushed, jagged cuts or cuts leaving too much stub and existing improper cuts are to be properly re-cut.
9. Carefully clean and shape large wounds.

G. Winter Protection

Protect plantings in accordance with Appendix "D" and as follows:

1. Apply anti-desiccant with a power sprayer to provide adequate protective film over trunks, branches, twigs and/or foliage.
2. Apply one inch deep mulch on planting beds and planters.
3. Apply burlap and/or snow fencing as shown on the Contract Drawings and as directed by the Engineer.

H. Tree Removals

Prior to commencing removal operation, obtain the Engineer's approval of proposed removal methods and equipment.

1. Rope all areas surrounding the trees being worked on and provide a ground person to direct pedestrian traffic.
2. Remove the tree stump and rootball completely.
3. Manually remove all shrubs and ground cover.
4. Remove and dispose of all debris away from Authority property.

I. Guy Wire Maintenance

1. Maintain all tree stakes, wire and hose.

2. In accordance with Appendix "D" or as directed by the Engineer, loosen guy wires around each tree trunk. Re-attach guy wires to allow room for the tree's seasonal growth and tighten turnbuckles.
3. In accordance with Appendix "D" or as directed by the Engineer, remove and dispose of guying material away from Authority property.

J. Mulching

Maintain shredded hardwood bark mulch to a minimum depth of two (2) inches at all times. Adjust mulch layer in accordance with Appendix "D", the Contract Drawings, and as directed by the Engineer.

K. Seasonal Displays, Herbaceous Plants, and Bulbs

1. Furnish, install, maintain and remove seasonal displays in accordance with the Contract Drawings.
2. Conduct operations in a neat and orderly manner.
3. Planting Operation
  - a. Excavation of Plant Holes
    - (1) Hand trowel plant hole excavations.
    - (2) Plant each plant in individual holes.
    - (3) Dig plant holes two inches wider than the container in which the plant was delivered.
    - (4) Dig bulb holes twice the diameter of the bulb. Set daffodil bulbs three times as deep as their diameter, measuring not to the tip of the bulb, but where the tip swells to form a shoulder. Set tulip bulbs so they are covered with six inches of soil. Bulbs to be planted in masses shall have the complete area excavated to the specified depth.
  - b. Planting
    - (1) Perform planting only if approved by the Engineer, and in the presence of the Engineer.
    - (2) Remove only those plants from storage which are to be immediately installed. Do not leave any unplanted plants unattended at the construction site.

- (3) Perform planting only during periods of dry weather and when the ambient soil temperature at six inch depth is above 0 degrees C (32 degrees F).
- (4) Remove plants from pots, butterfly roots, and place in holes. Remove and dispose of all pots away from Authority property.
- (5) In general, plants shall stand, after settlement, at the same level in relation to the finished grade as the level at which they have grown.
- (6) Set plants plumb.
- (7) Take care to avoid bruising or breaking the roots or tops of plants. Plants damaged during the planting operation will be rejected by the Engineer.
- (8) At the time of planting, thoroughly saturate the topsoil mix around each plant with water.
- (9) After installation is completed, remaining plants will become the responsibility of the Contractor to maintain for use as replacements, as directed by the Engineer.
- (10) After individual bulb holes are excavated or a mass planting area is excavated to the specified depth, evenly apply Superphosphate 0-20-0 at the rate of five lbs. per 100 square feet and scratch into the bottom of the bed. Backfill with Topsoil Mix for Planters and water thoroughly.

#### 4. Irrigation

- a. The Contractor shall be required to irrigate all seasonal displays when the top three (3) inches of the soil sampler is dry and friable to the touch and when it does not hold together when squeezed to form a clump.
- b. The approved irrigation process is to provide water by means of a Dramm water breaker gently to the soil surface (unless an operating automatic irrigation system is available).
- c. During periods of irrigation, add a minimum of 1/2 of an inch of water during any one irrigation period.

- d. Spray plant foliage, using a Dramm water breaker attached to the hose, so foliage is thoroughly wetted and water drips from the foliage, during each period of irrigation.
  - e. In the event, that the Engineer, in his sole opinion determines that the Contractor has failed to water the plantings according to these Specifications, he will notify the Contractor who, at his own expense, shall immediately make corrections as directed. Upon the second of such notifications, the Engineer shall withhold a portion of the Contractor's monthly payment as he deems necessary to cover the cost of replacement plants in the event that the plants die due to lack of water.
5. Cultivation shall include but not be limited to weeding and cultivating.
- a. Weeding shall be performed in accordance with Appendix "D" and as follows:
    - (1) A weed is defined as any plant which is not part of the planting.
    - (2) No weed shall be allowed to gain a height (or spread) of more than one (1) inch before its removal.
    - (3) A neat clean weed-free display shall be provided at all times.
  - b. Cultivation shall be in accordance with Appendix "D" and as follows:
    - (1) Hand-cultivators shall be used.
    - (2) Cultivation shall maintain the surface of the soil mix in an open, porous condition conducive to healthy plant growth at all times.
    - (3) Cultivation shall not damage plant roots.

6. Maintenance of Plants

- a. Within 24 hours of notification by the Engineer, replace, at the Contractor's expense, all plants which stop flowering or fail to flower, as directed by the Engineer. However, if it can be proven to the Engineer, that the lack of flowers was not due to neglect or abuse caused by the Contractor, the Contractor will not be responsible for cost of such replacements.
- b. Pinch, shape and remove vegetative buds as necessary to maintain a compact, vigorous plant and encourage flower bud production on flowering varieties.
- c. Staking includes providing approved plant support stakes and tying material to provide structural support as directed by the Engineer. Adjust stakes to provide straight and secure plants.

7. Removal of Seasonal Display

- a. Remove all plantings in accordance with the approved schedule.
- b. Protect plants which are to remain.
- c. Dispose of previous displays away from Authority property.

PART 4 - PAYMENT

4.01 NET COST WORK

The Contractor will be reimbursed for the Work specified in 1.02 K. of this Section at the "Net Cost" for such Work. "Net Cost" shall be computed in the same manner as is compensation for Extra Work, including any percentage addition to cost, as set forth in the clause of the Contract providing compensation for Extra Work. Performance of such Net Cost Work shall be subject to all provisions of the Contract relating to performance of Extra Work. Compensation for said Net Cost Work shall not be charged against the total amount of compensation authorized for Extra Work.

END OF SECTION

SECTION 02971

MAINTENANCE OF PERMANENT PLANTING

APPENDIX "A"

SUBMITTALS

Submit the following in accordance with the requirements of "Inspections and Rejections" of Division 1 - General Provisions.

A. Qualifications

1. Submit qualifications of the entity performing the laboratory testing of this Section to the Engineer in accordance with 1.04 A. Include the name, address and telephone number of the Testing laboratory performing the work of this Section.
2. Submit evidence of the Entity's membership to the International Society of Arboriculture and State Chapter where they are residing.
3. Submit qualifications in writing for approval by the Engineer of the certified arborist performing the Work in accordance with 1.04 A.4. Include the name of the arborist, resume, and a description and contract amounts for work performed in the last two years.
2. Submit qualifications of the Entity and its workers performing the Work of this Section to the Engineer in accordance with 1.04 A. Include names of clients, telephone numbers, and contract amounts for work performed in the last three years and experience records of workers performing the Work of this Section, and evidence of license of pesticide applicator.

B. Products

1. Submit the following in accordance with the requirements of "Inspections and Rejections" of Division 1 - GENERAL PROVISIONS:
  - a. A complete "Product List", listing all products to be used under this Section;
  - b. A complete "Plant List", listing all greenhouse and nursery sources for the trees, shrubs and ground cover.
2. Submit the location of the source of the screened topsoil, topsoil mix and a two pound representative sample of screened topsoil and topsoil mix (as many as required) to the Engineer of Materials in accordance with 1.04 C.
3. Submit a minimum of five (5) soil analyses within the first three months of each year of maintenance in

accordance with 1.04 B.5.a.

C. Test Reports

Submit laboratory analyses of screened topsoil and topsoil mix to the Engineer of Materials, Engineering Materials Laboratory, Port Authority Technical Center, 241 Erie Street, Jersey City, NJ 07310-1397, in accordance to 1.04C 2, 1.04C 3, Appendix B and Appendix C.

D. Certifications

1. Submit plant inspection certificates, in accordance with requirements of 1.04 C.1.e.
2. Submit to the Engineer of Materials, certification required by 1.04 D.

E. Notification

1. Prior to commencement of work and after the completion of each day's work, the Contractor shall enter in a log book a location directed by the Engineer the following information:
  - a. Time started
  - b. Time finished
  - c. Date
  - d. Number of workers
  - e. Type of equipment and material used
  - f. Schedule of work
  - g. Work completed
  - h. Signature
2. Pesticide application information, in accordance with 3.03 E of this Section.
3. Damage Notification

Submit to the Engineer, in accordance with 1.02 K.2 of this Section, notification of loss or damage due to unusual phenomena or incidents.

END OF APPENDIX "A"

SECTION 02971

MAINTENANCE OF PERMANENT PLANTING

APPENDIX "B"

Material: Screened Topsoil  
Specification: Section 02920 - Screened Topsoil  
Source of Sample:  
Contract or P.O. #:

<u>Quality Characteristics:</u>	Spec.		
<u>Visual Examination:</u>	No hard clods, etc.		
<u>Organic Matter:</u> (Loss on Ignition)	Min. 5% Max. 7%		
<u>Soluble Salts:</u> - Micromhos/Cm - PPM -	Max. 500 Max. 300		
<u>pH:</u>	5.0 - 7.0		
<u>Mechanical Analysis:</u> Passing - 1"	100%		
Passing - 1" Retain 2mm (#10)	Max. 5.0%		
Passing 2mm (#10) Retain Pan <u>Buoyoucouc Hydrometer</u> <u>Test of Material:</u>	Min. 95.0%		
Passing 2mm (#10) Percent - Sand	30% - 50%		
Percent - Silt	30% - 50%		
Percent - Clay	10% - 20%		
<u>Potassium:</u> - lbs./Acre.			
<u>Phosphorus:</u> - lbs./Acre.			
<u>Nitrogen From NO3:</u> - lbs./Acre <u>Nitrogen From NH4:</u> - lbs./Acre			

END OF APPENDIX "B"

SECTION 02971

MAINTENANCE OF PERMANENT PLANTING

APPENDIX "C"

Material: Topsoil Mix  
Specification: Section 02950 - 02955 - Topsoil Mix  
Source of Sample:  
Contract or P.O. #:

<u>Quality Characteristics:</u>	<u>Spec.</u>		
<u>Visual Examination:</u>	No hard clods, etc.		
<u>Organic Matter:</u> (Loss on Ignition)	Min. 7% Max. 15%		
<u>Soluble Salts:</u> - Micromhos/Cm - PPM -	Max. 500 Max. 300		
<u>pH:</u>	5.0 - 7.0		
<u>Mechanical Analysis:</u> Passing - 1"	100%		
Passing - 1" Retain 2mm (#10)	Max. 5.0%		
Passing 2mm (#10) Retain Pan <u>Buoyoucouc Hydrometer</u> <u>Test of Material:</u>	Min. 95.0%		
Passing 2mm (#10) Percent - Sand	30% - 50%		
Percent - Silt	30% - 50%		
Percent - Clay	10% - 20%		
<u>Potassium:</u> - lbs./Acre.			
<u>Phosphorus:</u> - lbs./Acre.			
<u>Nitrogen From NO3:</u> - lbs./Acre <u>Nitrogen From NH4:</u> - lbs./Acre			

END OF APPENDIX "C"

SECTION 02971

MAINTENANCE OF PERMANENT PLANTING

APPENDIX "D"

1. PLANTING TO BE MAINTAINED

Trees  
Shrubs  
Ground Cover  
Grass Lawn

2. MAINTENANCE TO BE PERFORMED

<u>Function</u>	<u>Schedule</u>	<u>Description</u>
Irrigation	Apr., May, Oct. & Nov. June, July, Aug. & Sept.	Water once a week. Water twice a week.
Mowing	May, June, July, Aug. & Sept. Apr., Oct. & Nov.	Once a week. Once every 2 weeks.
Weed Removal	Apr. through Nov.	Identify & remove once a week.
Litter Removal	Jan. through Dec.	Once a week.
Fallen Leaf Removal	End of growing season.	Rake and remove from work site.
Dead Plants/ Parts Removal	May through Nov.	Once a week. Remove dead plants, branches and flowers.
Nutrient Control - Lawns	Apr. 15 through May 15 & Sept. 15 through Oct. 15	One application granular 10-6-4.
Nutrient Control - Trees	Apr. 1 through Apr. 15  Oct. 15 through Oct. 31	One application of water soluble fertilizer.  One application of granular 0-20-0.

Nutrient Control - Shrubs	Apr. 1 through Apr. 15	One application granular 10-6-4 and one application granular micronutrients.
	Oct. 15 through Oct. 31	One application granular 0-20-0.
Nutrient Control - Perennials	Mar. 15 through Mar. 31	One light application granular 14-14-14.
Pruning - Deciduous Trees	Nov. 15 through Mar. 1	Prune dead, weak, interfering, suckered, damaged or unsightly twigs and branches. Remove street tree branches which penetrate the area 8 feet above finished grade of pedestrian surfaces. Pruning shall not diminish the natural character of the tree
Pruning - Deciduous Shrubs	June 1 through August 1	Remove 1/3 of the old wood. Remove stems which overhang sidewalks and/or Remove suckers
Trimming - Perennials	Immediately after flowering.	Remove all dead flowers and flower stalks
	End of growing season	Remove all dead leaves
Anti-desiccant Winter Protection	Dec. through Feb.	Two separate applications to all plants.

Rodent Control	Nov. 1 through Dec. 15	Two separate applications to all plants.
Mulching	Jan. through Dec.	Check once a month. Maintain mulch layer as shown on the Contract Drawings
Tree Guying	Weekly from time of installation	Check and adjust
	One year from time of installation	Remove completely

3. TIME OF PERFORMANCE

Maintenance of the permanent plantings shall be performed for a period of 12 months from the date of issuance of a Certificate of Final Completion for all Work excluding Maintenance Of Tidal Wetland Planting And Maintenance Of Permanent (Landscape) Planting for the permanent plantings required under this Contract.

END OF APPENDIX "D"

ATTACHMENT A

**LGA-124.039  
ALLEY POND PARK  
WETLANDS MITIGATION**

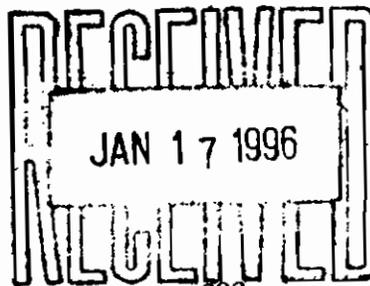
**SOIL DATA**

- Soil Sample Locations and Elevations with Plan of Sample Locations (sample nos. A1 through A27)
- “Atterberg Limits of Soil” (sample nos. A3, A17, & A23)
- “Organic Content Determination” (sample nos. A3, A17 & A23)
- “Visual Classification of Soils” (sample nos. A1 through A27)

ALLEY POND PARK SITE #2  
SOIL SAMPLE LOCATIONS & ELEVATIONS

<u>SOUTH</u>	<u>EAST</u>	<u>ELEVATION</u>	<u>SAMPLE #</u>
12987.425236	57096.356507	6.50'	A1
12966.359057	57250.482077	6.70'	A2
12147.233593	57413.439564	6.05'	A3
12055.455842	57008.783831	6.20'	A4
12100.797459	57100.499167	6.05'	A5
12387.315742	57282.448757	6.14'	A6
12276.296496	57459.990517	5.98'	A7
12130.227199	56932.555512	6.40'	A8
12277.760324	57235.289626	6.08'	A9
12362.235052	57410.417724	5.97'	A10
12235.403716	56918.484677	6.25'	A11
12324.970749	57096.959597	6.24'	A12
12371.827161	57190.983432	6.15'	A13
12321.701335	57499.166604	5.85'	A14
12268.302320	56756.041790	5.90'	A15
12440.776994	57108.709325	5.95'	A16
12319.936857	57270.927141	5.99'	A17
12362.890724	57560.752716	5.56'	A18
12398.842241	56800.144207	5.87'	A19
12499.825738	57003.558821	6.00'	A20
12385.916360	57179.720599	6.02'	A21
12387.185158	57386.912020	5.87'	A22
12448.781064	56873.913123	5.78'	A23
12383.913433	57153.176433	5.80'	A24
12350.166209	57482.485876	5.53'	A25
12349.985444	56858.508791	5.00'	A26
12423.095462	57212.943290	5.50'	A27

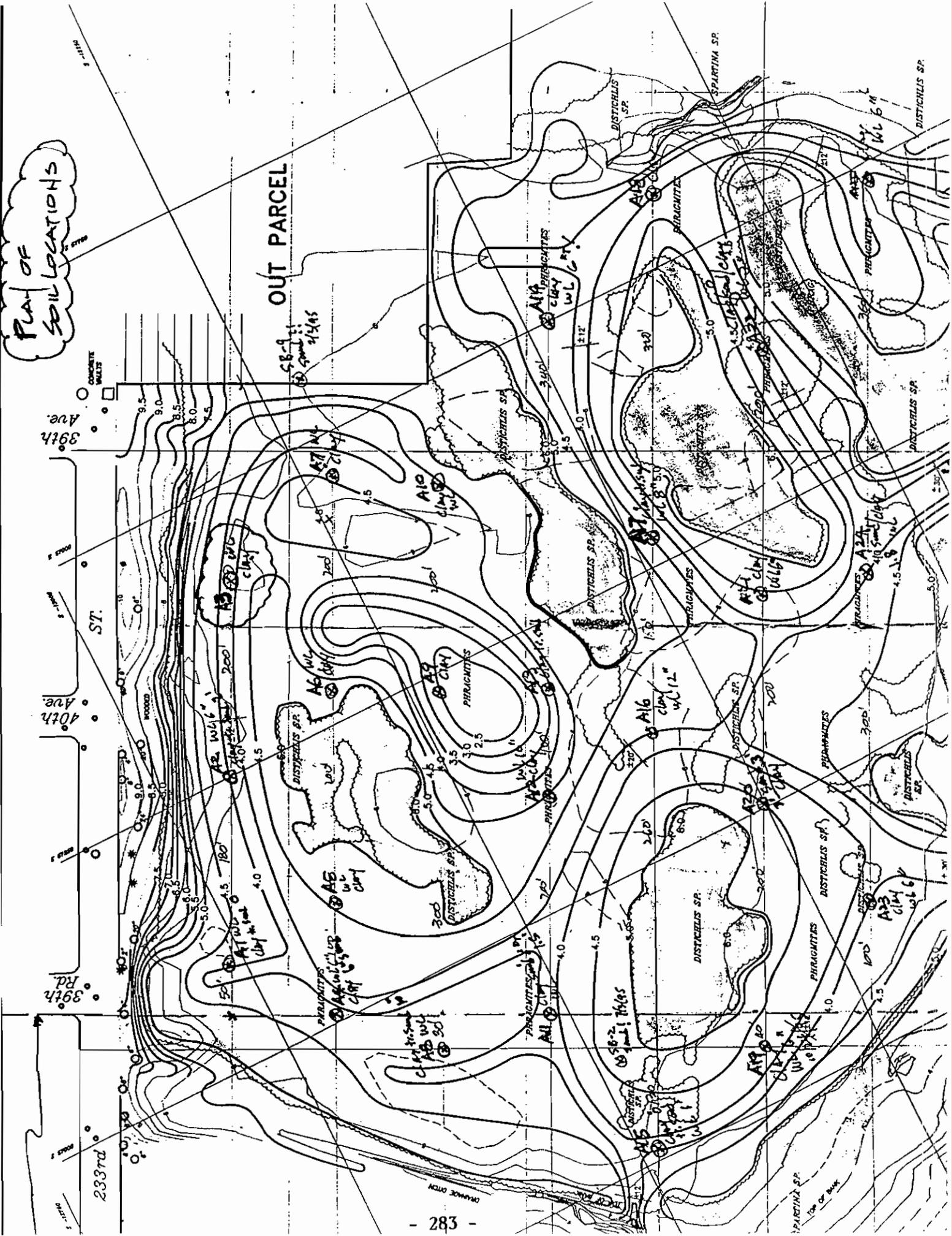
NOTE: ALL COORDINATES IN QUEENS DATUM



TOTAL P.002

PLAN OF  
SPILL LOCATIONS

OUT PARCEL



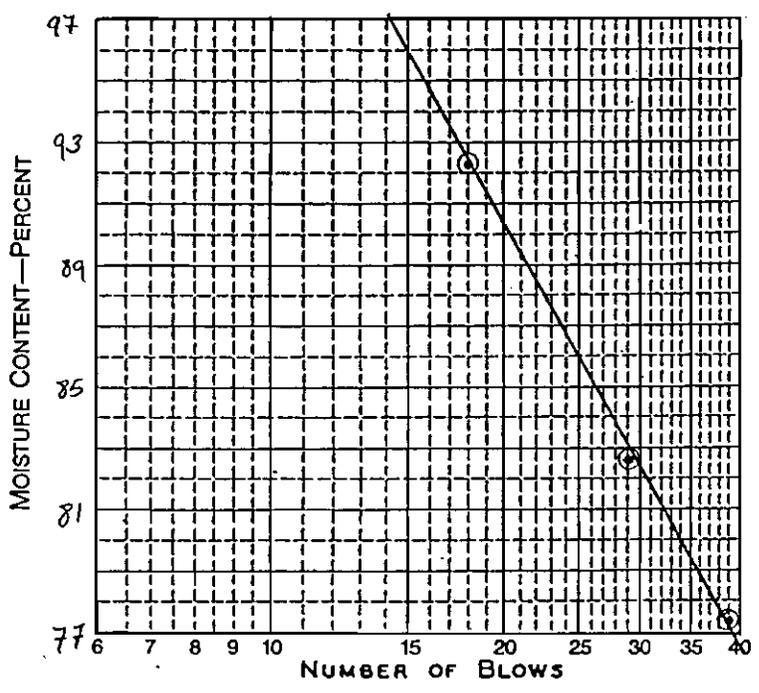
# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT / CONSTRUCTION DIVISION  
MATERIALS ENGINEERING SECTION

## ATTERBERG LIMITS OF SOIL

PROJECT: LGA. ALLEY POND PARK

LAB FILE NO.: 555      BORING NO.: A3      SAMPLE NO.: 2      DEPTH: 3.0' / 5.0'



LIQUID LIMIT: 86.0

PLASTIC LIMIT: 44.8

PLASTICITY INDEX: 41.2

### LIQUID LIMIT

	1	2	3	4
DISH NUMBER				
NUMBER OF BLOWS	10	18	29	39
WT. OF WET SOIL & DISH	14.79	14.26	15.42	16.79
WT. OF DRY SOIL & DISH	8.04	8.21	9.17	10.19
WT. OF WATER	6.75	6.05	6.25	6.60
WT. OF DISH	1.65	1.65	1.62	1.66
WT. OF DRY SOIL	6.39	6.56	7.55	8.53
WATER CONTENT-%	105.6	92.2	82.8	77.4

### PLASTIC LIMIT

	13	14	15	16
DISH NUMBER				
NUMBER OF BLOWS	-	-	-	-
WT. OF WET SOIL & DISH	13.21	12.33	12.78	12.39
WT. OF DRY SOIL & DISH	9.78	9.10	9.32	9.00
WT. OF WATER	3.43	3.23	3.46	3.39
WT. OF DISH	1.62	1.64	1.64	1.63
WT. OF DRY SOIL	8.16	7.46	7.68	7.37
WATER CONTENT-%	42.0	43.3	45.1	46.0

SAMPLE DESCRIPTION: gray organic CLAY

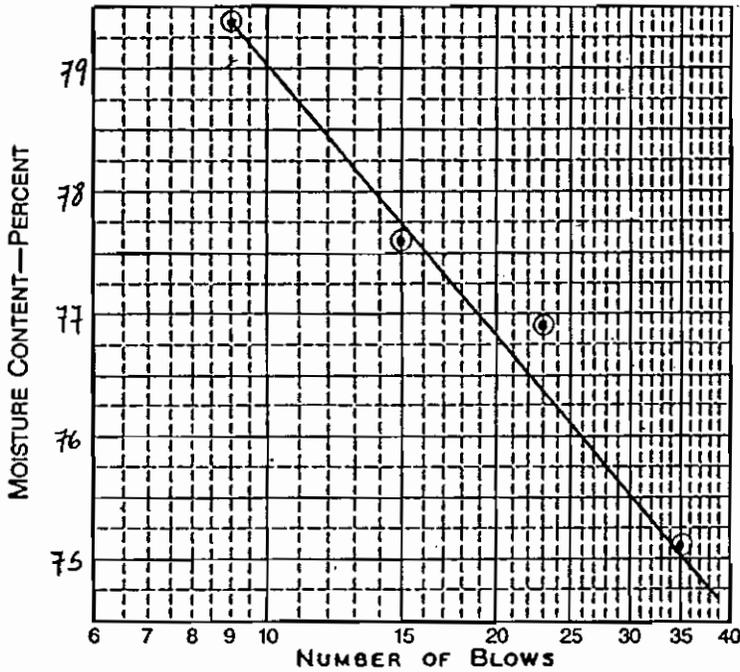
REMARKS: DISH #13 IN PLASTIC LIMIT WAS NOT INCLUDED IN AVERAGE.

# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT / CONSTRUCTION DIVISION  
MATERIALS ENGINEERING SECTION

## ATTERBERG LIMITS OF SOIL

PROJECT: LGA. ALLEY POND PARK  
 LAB FILE NO.: 555      BORING NO.: A17      SAMPLE NO.: 1      DEPTH: 1.2'  
3.0'



LIQUID LIMIT: 76.1  
 PLASTIC LIMIT: 41.0  
 PLASTICITY INDEX: 35.1

### LIQUID LIMIT

	5	6	7	8
DISH NUMBER				
NUMBER OF BLOWS	35	23	15	9
WT. OF WET SOIL & DISH	17.44	14.61	15.51	15.56
WT. OF DRY SOIL & DISH	10.65	8.97	9.45	9.40
WT. OF WATER	6.79	5.64	6.06	6.16
WT. OF DISH	1.61	1.64	1.64	1.64
WT. OF DRY SOIL	9.04	7.33	7.81	7.76
WATER CONTENT-%	75.1	76.9	77.6	79.4

### PLASTIC LIMIT

	17	18	19	20
DISH NUMBER				
NUMBER OF BLOWS	—	—	—	—
WT. OF WET SOIL & DISH	14.20	12.22	12.73	12.88
WT. OF DRY SOIL & DISH	10.52	9.13	9.52	9.63
WT. OF WATER	3.68	3.09	3.21	3.25
WT. OF DISH	1.63	1.65	1.64	1.65
WT. OF DRY SOIL	8.89	7.48	7.88	7.98
WATER CONTENT-%	41.4	41.3	40.7	40.7

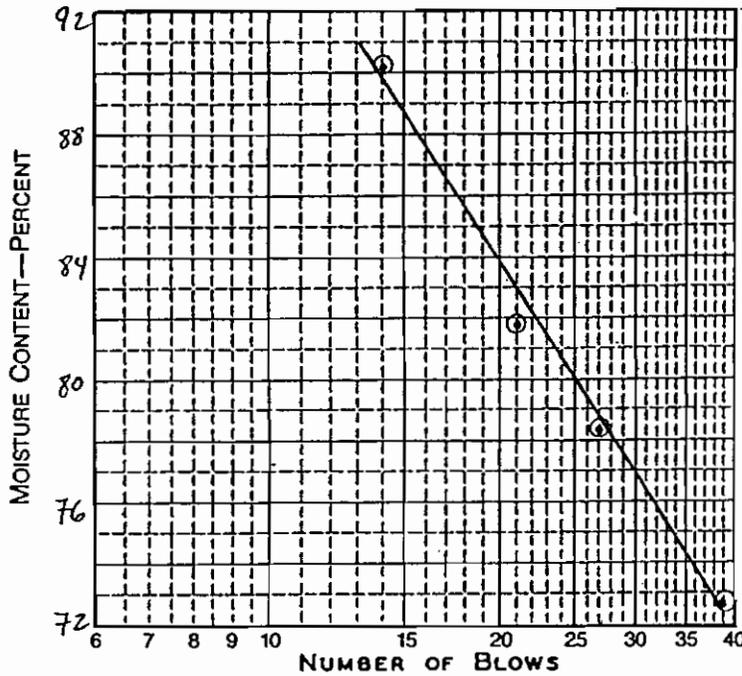
SAMPLE DESCRIPTION: gray organic CLAY

REMARKS: \_\_\_\_\_

**THE PORT AUTHORITY OF NY & NJ**  
ENGINEERING DEPARTMENT / CONSTRUCTION DIVISION  
MATERIALS ENGINEERING SECTION

ATTERBERG LIMITS OF SOIL

PROJECT: LGA. ALLEY POND PARK  
 LAB FILE NO.: 555 BORING NO.: A23 SAMPLE NO.: 2 DEPTH: 3.0'  
5.0'



LIQUID LIMIT: 80.0  
 PLASTIC LIMIT: 42.6  
 PLASTICITY INDEX: 37.4

LIQUID LIMIT

	9	10	11	12
DISH NUMBER				
NUMBER OF BLOWS	14	21	27	39
WT. OF WET SOIL & DISH	15.48	15.87	17.00	16.76
WT. OF DRY SOIL & DISH	8.92	9.47	10.26	10.38
WT. OF WATER	6.56	6.40	6.74	6.38
WT. OF DISH	1.64	1.65	1.64	1.62
WT. OF DRY SOIL	7.28	7.82	8.62	8.76
WATER CONTENT-%	90.1	81.8	78.2	72.8

PLASTIC LIMIT

	21	22	23	24
DISH NUMBER				
NUMBER OF BLOWS	-	-	-	-
WT. OF WET SOIL & DISH	12.76	11.14	11.61	12.49
WT. OF DRY SOIL & DISH	9.48	8.32	8.60	9.23
WT. OF WATER	3.28	2.82	3.01	3.26
WT. OF DISH	1.66	1.65	1.65	1.64
WT. OF DRY SOIL	7.82	6.67	6.95	7.59
WATER CONTENT-%	41.9	42.3	43.3	43.0

SAMPLE DESCRIPTION: gray organic CLAY

REMARKS:

**THE PORT AUTHORITY OF N.Y. & N.J.**  
**ENGINEERING DEPARTMENT**  
**MATERIALS ENGINEERING DIVISION**  
**ORGANIC CONTENT DETERMINATION**

Sheet 1 of 1

PROJECT : LGA - Alley Pond Park Wetlands Mitigation LAB FILE No. 555

BORING No. A3 SAMPLE No. 2

DISH NO.	2
WEIGHT OF OVEN DRIED SOIL BEFORE IGNITION & CRUCIBLE	27.33
WEIGHT OF DRIED SOIL AFTER IGNITION & CRUCIBLE	26.88
WEIGHT OF ORGANIC MATTER	0.45
WEIGHT OF CRUCIBLE	18.79
WEIGHT OF ASH	8.09
ORGANIC CONTENT %	5.56

BORING No. A17 SAMPLE No. 1

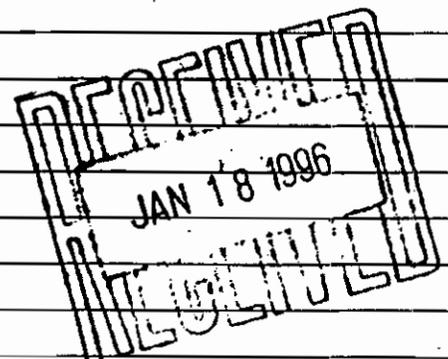
DISH NO.	1
WEIGHT OF OVEN DRIED SOIL BEFORE IGNITION & CRUCIBLE	27.48
WEIGHT OF DRIED SOIL AFTER IGNITION & CRUCIBLE	27.12
WEIGHT OF ORGANIC MATTER	0.36
WEIGHT OF CRUCIBLE	19.72
WEIGHT OF ASH	7.40
ORGANIC CONTENT %	4.86

BORING No. A23 SAMPLE No. 2

DISH NO.	3
WEIGHT OF OVEN DRIED SOIL BEFORE IGNITION & CRUCIBLE	29.19
WEIGHT OF DRIED SOIL AFTER IGNITION & CRUCIBLE	28.74
WEIGHT OF ORGANIC MATTER	0.45
WEIGHT OF CRUCIBLE	19.94
WEIGHT OF ASH	8.90
ORGANIC CONTENT %	5.11

BORING No. \_\_\_\_\_ SAMPLE No. \_\_\_\_\_

DISH NO.	
WEIGHT OF OVEN DRIED SOIL BEFORE IGNITION & CRUCIBLE	
WEIGHT OF DRIED SOIL AFTER IGNITION & CRUCIBLE	
WEIGHT OF ORGANIC MATTER	
WEIGHT OF CRUCIBLE	
WEIGHT OF ASH	
ORGANIC CONTENT %	





**THE PORT AUTHORITY OF NY & NJ**  
ENGINEERING DEPARTMENT / CONSTRUCTION DIVISION  
MATERIALS ENGINEERING SECTION  
VISUAL CLASSIFICATION OF SOILS

PROJECT <u>LGA. ALLEY POND PARK</u>		sheet <u>1</u> of <u>1</u>	
lab. file no. <u>555</u>		BORING No. <u>A2</u>	
DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.0'	-	DISCOMPOSED VEGETATION AND ROOTS	
0.5'	1	GRAVEL, little c-f sand, trace silt	+ roots.
2.0'	2A	brown c-f SAND, and Gravel, trace silt	
2.5'	2B	gray organic CLAY, trace c-f sand, trace gravel	sand and gravel were mixed in
	3	gray organic CLAY, trace Gravel	
5.0'		bottom of BORING	
		STRATA:	
		0.0' - 0.5'	
		0.5' - 2.0'	
		2.0' - 2.6'	
		2.5' - 5.0'	

**APPROVED**  
JAN 11 1996  
**NEGATIVE**

**WATER CONTENT DETERMINATION**

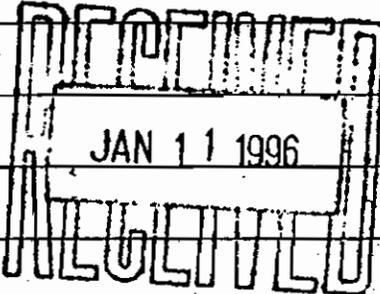
SAMPLE No.	1	2A	2B	3		
DISH No.	3	4	5	6		
WEIGHT OF WET SOIL & DISH	92.69	76.28	60.07	70.25		
WEIGHT OF DRY SOIL & DISH	78.06	65.57	39.01	41.79		
WEIGHT OF WATER	14.63	10.71	21.06	28.46		
WEIGHT OF DISH	1.65	1.66	1.65	1.61		
WEIGHT OF DRY SOIL	76.41	63.91	37.36	40.18		
WATER CONTENT (%)	19.1	11.8	28956.4	70.8		

# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT / CONSTRUCTION DIVISION

MATERIALS ENGINEERING SECTION

## VISUAL CLASSIFICATION OF SOILS

PROJECT <u>LGA. ALLEY POND PARK</u>		sheet <u>1</u> of <u>1</u>	
lab. file no. <u>555</u>		BORING No. <u>A3</u>	
DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.0'	-	DECOMPOSED VEGETATION AND ROOTS	(SEE BORING REPORT)
1.0'	1	gray organic CLAY	+ ROOTS
	2	SAME	
5.0'	bottom of boring		
STRATA: 0.0' - 1.0' 1.0' - 5.0'			
			

### WATER CONTENT DETERMINATION

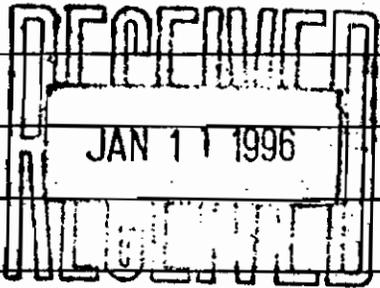
SAMPLE No.	1	2		
DISH No.	7	8		
WEIGHT OF WET SOIL & DISH	47.01	53.96		
WEIGHT OF DRY SOIL & DISH	26.05	26.82		
WEIGHT OF WATER	20.96	27.14		
WEIGHT OF DISH	1.65	1.64		
WEIGHT OF DRY SOIL	24.40	25.18		
WATER CONTENT (%)	85.90	107.8	- 290 -	

# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT / CONSTRUCTION DIVISION

MATERIALS ENGINEERING SECTION

## VISUAL CLASSIFICATION OF SOILS

PROJECT <u>LEA ALLEY POND PARK</u>			sheet <u>1</u> of <u>1</u>
lab. file no. <u>555</u>		BORING No. <u>A4</u>	
DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.0'	-	DECOMPOSED VEGETATION AND ROOTS	(SEE BORING REPORT)
0.5'	1A	brown c-f SAND, trace silt, some gravel	+ roots
1.0'	1B	gray organic CLAY	+ shells
	2	SAME	+ shells
	3	SAME	+ shells
5.0'	bottom of boring		
STRATA:			
0.0' - 0.5'			
0.5' - 1.0'			
1.0' - 5.0'			
			

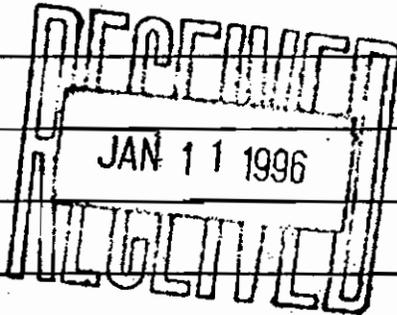
### WATER CONTENT DETERMINATION

SAMPLE No.	1A	1B	2	3
DISH No.	53	54	55	56
WEIGHT OF WET SOIL & DISH	91.34	72.87	50.89	48.14
WEIGHT OF DRY SOIL & DISH	77.55	45.67	29.40	30.08
WEIGHT OF WATER	13.79	27.20	21.49	18.06
WEIGHT OF DISH	1.62	1.64	1.63	1.63
WEIGHT OF DRY SOIL	75.93	44.03	27.77	28.45
WATER CONTENT (%)	18.2	61.8	291.77.4	63.5

**THE PORT AUTHORITY OF NY & NJ**  
**ENGINEERING DEPARTMENT/CONSTRUCTION DIVISION**  
**MATERIALS ENGINEERING SECTION**  
**VISUAL CLASSIFICATION OF SOILS**

sheet 1 of 1

PROJECT L&A ALLEY POND PARK  
 lab. file no. 566 BORING No. AS

DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.0'	-	DECOMPOSED VEGETATION AND ROOTS	
1.0'	1	gray organic CLAY	± roots.
	2	SAME	
5.0'	bottom of boring		
STRATA:			
0.0' - 1.0'			
1.0' - 5.0'			
			

**WATER CONTENT DETERMINATION**

SAMPLE No.	1	2		
DISH No.	30	31		
WEIGHT OF WET SOIL & DISH	53.86	60.73		
WEIGHT OF DRY SOIL & DISH	31.13	32.69		
WEIGHT OF WATER	22.73	28.04		
WEIGHT OF DISH	1.63	1.65		
WEIGHT OF DRY SOIL	29.50	31.04		
	17.1	40.3		

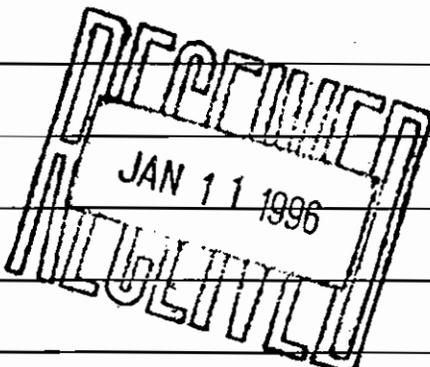
# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT / CONSTRUCTION DIVISION

MATERIALS ENGINEERING SECTION

## VISUAL CLASSIFICATION OF SOILS

PROJECT <u>LEA. ALLEY POND PARK</u>		sheet <u>1</u> of <u>1</u>	
lab. file no. <u>555</u>		BORING No. <u>A6</u>	
DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.0'	-	DECOMPOSED VEGETATION AND ROOTS	
1.0'	1	gray organic CLAY	+ roots
	2	SAME	+ roots
5.0'	bottom of boring		
STRATA:			
0.0' - 1.0'			
1.0' - 5.0'			



### WATER CONTENT DETERMINATION

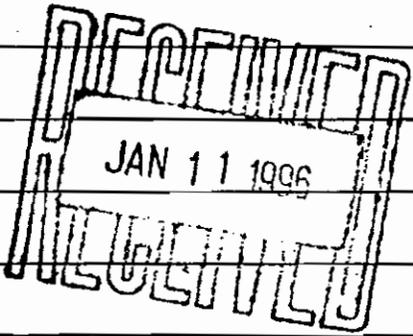
SAMPLE No.	1	2			
DISH No.	9	10			
WEIGHT OF WET SOIL & DISH	56.77	51.38			
WEIGHT OF DRY SOIL & DISH	30.88	26.29			
WEIGHT OF WATER	25.89	25.09			
WEIGHT OF DISH	1.65	1.66			
WEIGHT OF DRY SOIL	29.23	24.63			
WATER CONTENT (%)	88.6	101.9			

# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT/CONSTRUCTION DIVISION

MATERIALS ENGINEERING SECTION

## VISUAL CLASSIFICATION OF SOILS

PROJECT <u>LGA. ALLEY POND PARK</u>			sheet <u>1</u> of <u>1</u>
lab. file no. <u>555</u>		BORING No. <u>A7</u>	
DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.0'	-	DECOMPOSED VEGETATION AND ROOTS	(SEE BORING REPORT)
1.0'	1	gray organic CLAY	+ roots
	2	SAME	
5.0'	bottom of boring		
STRATA: 0.0' - 1.0' 1.0' - 5.0'			
			

### WATER CONTENT DETERMINATION

SAMPLE No.	1	2		
DISH No.	11	12		
WEIGHT OF WET SOIL & DISH	52.73	51.26		
WEIGHT OF DRY SOIL & DISH	30.26	28.00		
WEIGHT OF WATER	22.47	23.26		
WEIGHT OF DISH	1.63	1.65		
WEIGHT OF DRY SOIL	28.63	26.35		
WATER CONTENT (%)	78.5	88.3	- 294 -	

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MATERIALS ENGINEERING SECTION

## VISUAL CLASSIFICATION OF SOILS

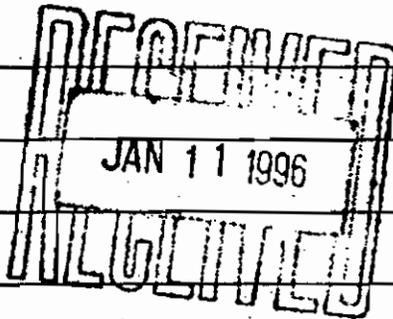
sheet 1 of 1

PROJECT LGA. ALLEY POND PARK

lab. file no. \_\_\_\_\_

BORING No. A8

DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.01	-	VEGETATION AND ROOTS	(SEE BORING REPORT)
0.61	1A	brown c-f SAND, trace silt, some gravel	+ roots.
1.5'	1B	gray organic CLAY	+ m-f sand
	2	SAME, trace m-f sand	
	3	gray organic CLAY	
5.0'		bottom of boring	
		STRATA:	
		0.01 - 0.6'	
		0.6' - 1.5'	
		1.5' - 5.0'	



### WATER CONTENT DETERMINATION

SAMPLE No.	1A	1B	2	3	
DISH No.	57	58	59	60	
WEIGHT OF WET SOIL & DISH	95.51	70.59	84.09	61.25	
WEIGHT OF DRY SOIL & DISH	81.53	42.01	53.60	34.96	
WEIGHT OF WATER	13.98	28.58	30.49	26.29	
WEIGHT OF DISH	1.64	1.63	1.63	1.63	
WEIGHT OF DRY SOIL	79.89	40.38	51.97	33.33	
	17.5	70.8	295.8.7	78.9	

# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT/CONSTRUCTION DIVISION

MATERIALS ENGINEERING SECTION

## VISUAL CLASSIFICATION OF SOILS

PROJECT <u>LEA. ALLEY POND PARK</u>		sheet <u>1</u> of <u>1</u>	
lab. file no. <u>555</u>		BORING No. <u>A9</u>	
DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0-0'	-	DECOMPOSED VEGETATION AND ROOTS	(see boring report)
0-8	1	gray organic CLAY.	+ shells
	2	SAME	
5-0'		bottom of boring	
		STRATA:	
		0.0' - 0.8'	
		0.8' - 5.0'	

### WATER CONTENT DETERMINATION

SAMPLE No.	1	2		
DISH No.	13	14		
WEIGHT OF WET SOIL & DISH	66.34	51.16		
WEIGHT OF DRY SOIL & DISH	36.19	27.82		
WEIGHT OF WATER	30.15	23.34		
WEIGHT OF DISH	1.62	1.63		
WEIGHT OF DRY SOIL	34.57	26.19		
WATER CONTENT (%)	87.2	89.1		

# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT / CONSTRUCTION DIVISION

MATERIALS ENGINEERING SECTION

## VISUAL CLASSIFICATION OF SOILS

PROJECT <u>LOA ALLEY POND PARK</u>		sheet <u>1</u> of <u>1</u>	
lab. file no. <u>555</u>		BORING No. <u>A10</u>	
DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.01	-	DECOMPOSED VEGETATION AND ROOTS	
1.01	1	gray argonic CLAY	
	2	SAME, trace roots fibers	
5.0'	bottom of boring		
		STRATA:	
		0.0' - 1.0'	
		1.0' - 5.0'	

### WATER CONTENT DETERMINATION

SAMPLE No.	1	2		
DISH No.	20	21		
WEIGHT OF WET SOIL & DISH	43.28	53.05		
WEIGHT OF DRY SOIL & DISH	25.91	26.45		
WEIGHT OF WATER	17.37	26.60		
WEIGHT OF DISH	1.65	1.65		
WEIGHT OF DRY SOIL	24.26	24.80		
WATER CONTENT (%)	71.6	107.3	- 297	

# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT / CONSTRUCTION DIVISION

MATERIALS ENGINEERING SECTION

## VISUAL CLASSIFICATION OF SOILS

PROJECT <u>LEA ALLEY POND PARK</u>			sheet <u>1</u> of <u>1</u>
lab. file no. <u>555</u>		BORING No. <u>A11</u>	
DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.0'	—	VEGETATION AND ROOTS	(SEE BORING REPORT)
1.0'	1A	gray-brown m-f SAND, trace silt, trace Gravel	+ roots.
2.5'	1B	gray organic CLAY, trace m-f Sand	+ shells.
	2	SAME	+ shells
5.0'	bottom of boring		
STRATA:			
0.0' - 1.0'			
1.0' - 2.5'			
2.5' - 5.0'			

### WATER CONTENT DETERMINATION

SAMPLE No.	1A	1B	2
DISH No.	61	62	63
WEIGHT OF WET SOIL & DISH	90.18	61.20	60.51
WEIGHT OF DRY SOIL & DISH	74.76	33.24	33.44
WEIGHT OF WATER	15.42	27.96	27.07
WEIGHT OF DISH	1.62	1.62	1.62
WEIGHT OF DRY SOIL	73.14	31.62	31.82
WATER CONTENT (%)	21.1	88.4	298.5.1



# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT/CONSTRUCTION DIVISION

MATERIALS ENGINEERING SECTION

## VISUAL CLASSIFICATION OF SOILS

PROJECT <u>LOA. ALLEY POND PARK</u>		sheet <u>1</u> of <u>1</u>	
lab. file no. <u>555</u>		BORING No. <u>A13</u>	
DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.0'	-	DECOMPOSED VEGETATION AND ROOTS	(SEE BORING REPORT)
1.5'	1	gray organic CLAY	+ roots
	2	SAME	
5.0'	bottom of boring		
STRATA:			
0.0' - 1.5'			
1.5' - 5.0'			

## WATER CONTENT DETERMINATION

SAMPLE No.	1	2		
DISH No.	24	25		
WEIGHT OF WET SOIL & DISH	49.83	54.98		
WEIGHT OF DRY SOIL & DISH	29.28	30.84		
WEIGHT OF WATER	20.55	24.14		
WEIGHT OF DISH	1.63	1.63		
WEIGHT OF DRY SOIL	27.65	29.21		
WATER CONTENT (%)	74.3	82.6	- 300 -	

# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT/CONSTRUCTION DIVISION

MATERIALS ENGINEERING SECTION

## VISUAL CLASSIFICATION OF SOILS

PROJECT <u>LEA. ALLEY POND PARK</u>		sheet <u>1</u> of <u>1</u>	
lab. file no. <u>555</u>		BORING No. <u>A14</u>	
DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.0'	-	DECOMPOSED VEGETATION AND ROOTS	(SEE BORING REPORT)
1.0'	1	gray organic CLAY	+ shells, roots.
	2	SAME	
5.0'	bottom of boring		
		STRATA:	
		0.0' - 1.0'	
		1.0' - 5.0'	

### WATER CONTENT DETERMINATION

SAMPLE No.	1	2			
DISH No.	42	43			
WEIGHT OF WET SOIL & DISH	53.35	50.51			
WEIGHT OF DRY SOIL & DISH	30.52	26.32			
WEIGHT OF WATER	22.83	24.19			
WEIGHT OF DISH	1.63	1.64			
WEIGHT OF DRY SOIL	28.89	24.68			
	19.0	48.0			



# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT/CONSTRUCTION DIVISION

MATERIALS ENGINEERING SECTION

## VISUAL CLASSIFICATION OF SOILS

PROJECT <u>LGA. ALLEY POND PARK</u>			sheet <u>1</u> of <u>1</u>
lab. file no. <u>555</u>		BORING No. <u>A16</u>	
DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.0'	-	DECOMPOSED VEGETATION AND ROOTS	(SEE BORING REPORT)
1.01	1	gray organic CLAY	+ shells
	2	SAME	+ shells
5.0'	bottom of boring		
STRATA:			
0.0' - 1.0'			
1.0' - 5.0'			

## WATER CONTENT DETERMINATION

SAMPLE No.	1	2		
DISH No.	32	33		
WEIGHT OF WET SOIL & DISH	63.79	60.29		
WEIGHT OF DRY SOIL & DISH	34.22	33.67		
WEIGHT OF WATER	19.57	26.62		
WEIGHT OF DISH	1.64	1.64		
WEIGHT OF DRY SOIL	32.58	32.03		
	101	92.1		



# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT/CONSTRUCTION DIVISION

MATERIALS ENGINEERING SECTION

## VISUAL CLASSIFICATION OF SOILS

PROJECT <u>LGA. ALLEY POND PARK</u>			sheet <u>1</u> of <u>1</u>
lab. file no. <u>555</u>		BORING No. <u>A18</u>	
DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.0'	-	DECOMPOSED VEGETATION AND ROOTS	(SEE BORING REPORT)
1.5'	1	gray organic CLAY.	+ fine sand, roots
	2	SAME	+ shells
5.0'	← bottom of boring		
		STRATA:	
		0.0' - 1.5'	
		1.5' - 5.0'	

## WATER CONTENT DETERMINATION

SAMPLE No.	1	2		
DISH No.	44	45		
WEIGHT OF WET SOIL & DISH	45.63	60.71		
WEIGHT OF DRY SOIL & DISH	26.65	32.46		
WEIGHT OF WATER	18.98	28.25		
WEIGHT OF DISH	1.65	1.62		
WEIGHT OF DRY SOIL	25.00	30.84		
WATER CONTENT (%)	75.9	91.60	- 305 -	



# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT/CONSTRUCTION DIVISION

MATERIALS ENGINEERING SECTION

## VISUAL CLASSIFICATION OF SOILS

PROJECT <u>LEA. ALLEY POND PARK</u>			sheet <u>1</u> of <u>1</u>
lab. file no. <u>555</u>		BORING No. <u>A20</u>	
DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.0'	-	DECOMPOSED VEGETATION AND ROOTS	(SEE BORING REPORT)
1.0'	1	brown-grey c-f SAND, trace silt, little gravel	+ roots.
	2A	gray-brown c-f SAND, little silt, trace gravel	+ clng of silt balls.
4.0'	2B	gray argonic CLAY	+ shells
5.0'	bottom of boring		
STRATA:			
0.0' - 1.0'			
1.0' - 4.0'			
4.0' - 5.0'			

### WATER CONTENT DETERMINATION

SAMPLE No.	1	2A	2B		
DISH No.	17	18	19		
WEIGHT OF WET SOIL & DISH	78.70	96.29	57.46		
WEIGHT OF DRY SOIL & DISH	66.98	78.57	32.83		
WEIGHT OF WATER	11.72	17.72	24.63		
WEIGHT OF DISH	1.64	1.64	1.64		
WEIGHT OF DRY SOIL	65.34	76.93	31.19		
WATER CONTENT (%)	17.9	23.0	30779.0		



# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT/CONSTRUCTION DIVISION

MATERIALS ENGINEERING SECTION

## VISUAL CLASSIFICATION OF SOILS

PROJECT <u>LGA. ALLEY POND PARK</u>		sheet <u>1</u> of <u>1</u>	
lab. file no. <u>565</u>		BORING No. <u>A22</u>	
DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.0'	-	DECOMPOSED VEGETATION AND ROOTS	(SEE BORING REPORT)
1.5'	1	gray organic CLAY	+ shells
	2A	SAME, little m-f sand	very poor recovery + roots
	2B	SAME, trace m-f sand	+ shells
5.0'	bottom of boring		
STRATA:			
0.0' - 1.5'			
1.5' - 5.0'			

### WATER CONTENT DETERMINATION

SAMPLE No.	1	2A	2B
DISH No.	48	49	50
WEIGHT OF WET SOIL & DISH	61.02	43.23	69.23
WEIGHT OF DRY SOIL & DISH	34.75	29.47	39.90
WEIGHT OF WATER	26.27	13.76	29.33
WEIGHT OF DISH	1.64	1.64	1.64
WEIGHT OF DRY SOIL	33.11	27.83	38.26
WATER CONTENT (%)	79.3	49.4	76.7

# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT/CONSTRUCTION DIVISION

MATERIALS ENGINEERING SECTION

## VISUAL CLASSIFICATION OF SOILS

PROJECT <u>LEA ALLEY POND PARK</u>		sheet <u>1</u> of <u>1</u>	
lab. file no. <u>565</u>		BORING No. <u>A23</u>	
DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.0'	-	DECOMPOSED VEGETATION AND ROOTS	(SEE BORING REPORT)
1.5'	1	gray organic CLAY.	
	2	SAME	
5.0'	bottom of boring		
		STRATA:	
		0.0' - 1.5'	
		1.5' - 5.0'	

## WATER CONTENT DETERMINATION

SAMPLE No.	1	2		
DISH No.	28	29		
WEIGHT OF WET SOIL & DISH	49.55	57.41		
WEIGHT OF DRY SOIL & DISH	27.37	30.44		
WEIGHT OF WATER	22.18	26.97		
WEIGHT OF DISH	1.63	1.64		
WEIGHT OF DRY SOIL	25.74	28.80		
WATER CONTENT (%)	86.2	93.6	- 310 -	



# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT/CONSTRUCTION DIVISION

MATERIALS ENGINEERING SECTION

## VISUAL CLASSIFICATION OF SOILS

PROJECT <u>LEA. ALLEY POND PARK</u>		sheet <u>1</u> of <u>1</u>	
lab. file no. <u>555</u>		BORING No. <u>A25</u>	
DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.0'	-	DECOMPOSED VEGETATION AND ROOTS	(SEE BORING REPORT)
1.5'	1	gray organic CLAY, trace roots fibers	
	2	SAME, trace roots fibers	
5.0'	bottom of BORING		
STRATA:			
0.0' - 1.5'			
1.5' - 5.0'			

## WATER CONTENT DETERMINATION

SAMPLE No.	1	2			
DISH No.	36	87			
WEIGHT OF WET SOIL & DISH	54.89	57.33			
WEIGHT OF DRY SOIL & DISH	25.75	27.01			
WEIGHT OF WATER	29.14	30.32			
WEIGHT OF DISH	1.60	1.65			
WEIGHT OF DRY SOIL	24.15	25.36			
WATER CONTENT (%)	120.7	119.6			



# THE PORT AUTHORITY OF NY & NJ

ENGINEERING DEPARTMENT/CONSTRUCTION DIVISION

MATERIALS ENGINEERING SECTION

## VISUAL CLASSIFICATION OF SOILS

PROJECT <u>LGA ALLEY POND PARK</u>			sheet <u>1</u> of <u>1</u>
lab. file no. <u>555</u>		BORING No. <u>A27</u>	
DEPTH	SAMPLE #	DESCRIPTION	REMARKS
0.01	-	DECOMPOSED VEGETATION AND ROOTS	(SEE BORING REPORT)
1.51	1	gray organic CLAY, little fine sand	
	2	SAME, trace fine sand	
5.0'	bottom of boring		
STRATA:			
0.0' - 1.5'			
1.5' - 5.0'			

### WATER CONTENT DETERMINATION

SAMPLE No.	1	2			
DISH No.	40	41			
WEIGHT OF WET SOIL & DISH	57.68	64.15			
WEIGHT OF DRY SOIL & DISH	33.99	37.06			
WEIGHT OF WATER	23.69	27.09			
WEIGHT OF DISH	1.60	1.64			
WEIGHT OF DRY SOIL	32.39	35.42			
WATER CONTENT (%)	73.1	76.5			

ATTACHMENT B



City of New York  
Parks & Recreation

The Overlook  
Forest Park  
Kew Gardens, New York 11415

Henry J. Stern  
Commissioner

October 4, 1996

Raymond J. Kordish  
Permits and Governmental Approvals  
The Port Authority of NY & NJ  
One World Trade Center  
New York, NY 10048

Dear Mr. Kordish:

The "Right of Entry" is approved at 11 Avenue and 233 Street for the express purpose of Mitigation Planting Design at Alley Pond Park--NYSDEC Permit # 2-6301-00126/1-0, special condition 7.c with the following provisions:

- 1 - No Truck traffic before 8:30am and between 2:30 - 3:30pm.  
Extreme caution due to near by elementary school.
- 2 - No work on Weekends.
- 3 - Restore entry site to original condition or better.
- 4 - Contact Community Board 11 and Park Managers office at least 2 weeks before the start date.

If you have any further question, feel free to contact Park Manager Mr. Nemahik Voon at (718)479-7726. Looking forward to the completion of this project.

Sincerely,

Richard Murphy  
Acting Borough Commissioner

The Queens Borough Headquarters of the Department of Parks & Recreation of the City of New York is located on a hilltop at the east end of Forest Park, on Park Lane southeast of Union Turnpike

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DEC PERMIT NUMBER: 2-8301-00126/00001-0
FACILITY/PROGRAM NUMBER(S):

EFFECTIVE DATE: 17 June 1994
EXPIRATION DATE(S): 31 December 2002

**PERMIT**  
Under the Environmental Conservation  
Law (ECL)

TYPE OF PERMIT  New  Renewal  Modification  Permit to Construct  Permit to Operate

- |                                                                               |                                                                             |                                                                                      |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Article 15, Title 5: Protection of Waters | <input checked="" type="checkbox"/> 6NYCRR 605: Water Quality Certification | <input type="checkbox"/> Article 27, Title 7: 6NYCRR 360: Solid Waste Management     |
| <input type="checkbox"/> Article 15, Title 15: Water Supply                   | <input type="checkbox"/> Article 17, Titles 7, 8: SPDES                     | <input type="checkbox"/> Article 27, Title 8: 6NYCRR 373: Hazardous Waste Management |
| <input type="checkbox"/> Article 16, Title 15: Water Transport                | <input type="checkbox"/> Article 19: Air Pollution Control                  | <input type="checkbox"/> Article 34: Coastal Erosion Management                      |
| <input type="checkbox"/> Article 15, Title 15: Long Island Wells              | <input type="checkbox"/> Article 24: Freshwater Wetlands                    | <input type="checkbox"/> Article 26: Floodplain Management                           |
|                                                                               | <input checked="" type="checkbox"/> Article 25: Tidal Wetlands              |                                                                                      |

PERMIT ISSUED TO: The Port Authority of New York and New Jersey		TELEPHONE NUMBER: (212) 437-7448
ADDRESS OF PERMITTEE: One World Trade Center, New York, NY 10048		
CONTACT PERSON FOR PERMITTED WORK: Bernice Mellons, Manager Permits and Governmental Approvals, Port Authority of New York and New Jersey		TELEPHONE NUMBER: (718) 435-7288
NAME AND ADDRESS OF PROJECT/FACILITY: LaGuardia Airport Runway 13-31 Overrun, Flushing Bay, Queens, NY.		
LOCATION OF PROJECT/FACILITY: Same as above		
COUNTY: Queens	TOWN: New York City	WATER BODY: Flushing Bay
		NYTM COORDINATES: 595.2 East; 4514.8 North

**DESCRIPTION OF AUTHORIZED ACTIVITY:** Construction of a rectangular runway overrun about 690 feet long by 1,200 feet wide, covering about 20 acres at the southeastern end of Runway 13-31 at LaGuardia Airport in Flushing Bay. The overrun peninsula shall be built of about 440,000 cubic yards of fill, including about 350,000 cubic yards of clean dredged sand and about 90,000 cubic yards of rock and soil from the earthen berm breakwater located just south of the runway overrun site. The outer 2,200-foot length of the breakwater shall be removed to an elevation of 3.2 feet above mean low water. Natural stone from the breakwater shall be used as part of the outer rip-rap cladding of the overrun peninsula; the remainder of the material from the breakwater shall be placed in the fill core and surrounded with clean sand. As mitigation for the loss of about 4 acres of intertidal and high marsh, 9 acres of coastal shoals and mudflats and 8 acres of littoral zone and open water, permittee shall create 9 acres of coastal shoals and mudflats by removal of the breakwater, and 12 acres of intertidal marsh, including 7 acres to be planted around the airport perimeter and a minimum of 5 acres to be created by excavating and planting filled former salt marsh in Alley Park.

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified (see page 2) and any Special Conditions included as part of this permit.

ACTING REGIONAL PERMIT ADMINISTRATOR: John F. Cryan	ADDRESS: NYS DEC Region 2 Office, 47-40 21st Street Long Island City, NY 11101 PHONE: (718) 482-4997
AUTHORIZED SIGNATURE: <i>John F. Cryan</i>	DATE: 17 June 1994

Page 1 of 5

**GENERAL CONDITIONS**

**Instructions**

- 1. The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the Permittee is complying with the instant permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3). A copy of the instant permit, including all documents referenced herein, must be available for inspection by the Department at all times at the project site. Failure to produce a copy of such permit or such referenced documents upon request by a Department representative is a violation of this permit.

**Permit Changes and Renewals**

- 2. The Department reserves the right to modify, suspend, or revoke this permit when--
  - a) the scope of the permitted activity is exceeded or a violation of any condition of the permit or provisions of the ECL and pertinent regulations is found;
  - b) the permit was obtained by misrepresentation or failure to disclose relevant facts;
  - c) new material information is discovered; or
  - d) environmental conditions, relevant technology, or applicable law or regulation have materially changed since the permit was issued.
- 3. All work authorized herein shall comply with the most current information submitted by the Permitted pursuant to its application for the instant permit. If such information conflicts with any provision of the instant permit, such provision shall obtain. The Permittee must submit a separate written application to the Department for renewal, modification, or transfer of this permit. Such application must include any forms, fees, or supplemental information the Department requires. Any renewal, modification, or transfer granted by the Department must be in writing.
- 4. The permittee must submit a renewal application at least--
  - a) 180 days before expiration of permits for State Pollutant Discharge Elimination System (SPDES), Hazardous Waste Management Facilities (HWMF), major Air Pollution Control (APC), and Solid Waste Management Facilities (SWMF); and
  - b) 30 days before expiration of all other permit types.
- 5. Unless expressly provided for by the Department, issuance of this permit does not modify, supersede, or rescind any order or determination previously issued by the Department or any of the terms, conditions, or requirements contained in such order or determination.

**Other Legal Obligations of Permittee**

- 6. The Permittee has accepted expressly, by the execution of its application for the instant permit, the full legal responsibility for all damages, direct or indirect, of whatever nature and by whomsoever suffered, arising out of the project described in this permit and has agreed to indemnify and save harmless the State from suits, actions, damages, and costs of every name and description resulting from this project.
- 7. This permit does not convey to the Permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.
- 8. The Permittee is responsible for obtaining any other permits, approvals, lands, easements, and rights-of-way that may be required for this project.

**ADDITIONAL GENERAL CONDITIONS FOR ARTICLES 15 (TITLE 6), 24, 25, 24, 26 AND 6NYCRR PART 608**

9. That if future operations by the State of New York require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Department of Environmental Conservation it shall cause unreasonable obstruction to the free navigation of said waters or flood flows or endanger the health, safety or welfare of the people of the State, or cause loss or destruction of the natural resources of the State, the owner may be ordered by the Department to remove or alter the structural work, obstructions, or hazards caused thereby without expense to the State, and if, upon the expiration or revocation of this permit, the structure, fill, excavation, or other modification of the watercourse hereby authorized shall not be completed; the owners shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore to its former condition the navigable and flood capacity of the waterspurs. No claim shall be made against the State of New York on account of any such removal or alteration.
10. That the State of New York shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the State for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.
11. Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent or approval from the U.S. Army Corps of Engineers, U.S. Coast Guard, New York State Office of General Services, or local government which may be required.
12. All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, pellets, concrete, leachate or any other environmentally deleterious materials associated with the project.
13. Any material dredged in the prosecution of the work herein permitted shall be removed evenly, without leaving large refuse piles, ridges across the bed of a waterway or floodplain or deep holes that may have a tendency to cause damage to navigable channels or to the banks of a waterway.
14. There shall be no unreasonable interference with navigation by the work herein authorized.
15. If upon the expiration or revocation of this permit, the project hereby authorized has not been completed, the applicant shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore the site to its former condition. No claim shall be made against the State of New York on account of any such removal or alteration.
16. If granted under Article 35, this permit does not signify in any way that the project will be free from flooding.
17. If granted under 6NYCRR Part 608, the NYS Department of Environmental Conservation hereby certifies that the subject project will not contravene effluent limitations or other limitations or standards under Sections 301, 302, 303, 306 and 307 of the Clean Water Act of 1977 (PL 95-217) provided that all of the conditions listed herein are met.
18. All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or his agent as part of the permit application.

Such approved plans were prepared by Jean Soedel  
 Condition No. 1 on Page 4) on \_\_\_\_\_

**SPECIAL CONDITIONS**

Please see the numbered Special Conditions on the following page.

+ Pursuant to 6 NYCRR Section 601.17, permittee shall not oppose amendment of the DEC Tidal Wetland Map to reflect the new tidal wetlands created as mitigation for the work permitted herein.

**SPECIAL NOTE:** In accordance with Title 19, Part 600.4 (c) of the New York Code of Rules and Regulations, the New York State Department of Environmental Conservation hereby certifies that the action described and approved in this permit is consistent to the maximum extent practicable with the policies and purposes of the New York City Waterfront Revitalization Program.

Continued on next page...

DEC PERMIT NUMBER: <b>2-8301-00126/00001-0</b>		
PERMITTEE: <b>Port Authority of NY &amp; NJ</b>	FACILITY: <b>LaGuardia Runway Overrun</b>	<b>Page 3 of 6</b>

**SPECIAL CONDITIONS**

1. All construction work, including but not limited to, geotextile placement, sand fill placement, removal of the breakwater, and armoring of side slopes shall be done according to the following documents:

- a. The permit application, including an attached 3-page Project Description as revised on 8 March 1994, and an attached 7-sheet set of 8-1/2 by 11-inch format plans prepared by the Port Authority and dated 23 October 1992.
- b. Specifications submitted to DEC on 8 March 1994 by Raymond Kordish of the Port Authority, entitled, "Division 2, Section 02230, Hydraulic Fill", dated 18 August 1993.

2. Prior to the beginning of work on this project, permittee shall submit the name, location on site, and telephone number on site of the resident engineer. The resident engineer shall contact DEC regarding all proposed modifications to this project, and shall obtain DEC approval in writing for such modifications prior to making such modifications.

3. The resident engineer shall inspect the project site daily for conformance to conditions of this permit. If any day's work does not meet the permit conditions, the resident engineer shall immediately inform DEC in writing of any failures to meet permit conditions and proposed remedial actions, if any, to be undertaken.

4. The silt fencing or curtain shall remain in place at least 24 hours after the completion of construction work on the overrun peninsula.

5. The earthen berm breakwater shall be reduced in elevation to no less than 3.2 feet above mean low water. The remaining substrate shall be silt or stone. All wood, brick, broken concrete, asphalt, metal, plastic, and other materials shall be completely removed from the newly established land surface.

6. The breakwater shall be removed from the most seaward (eastern) extent to the most landward. Any machinery used in removal operations shall not be driven or go on areas located at elevations lower than 3.2 feet above mean low water.

7. The mitigation work shall be done no later than the dates given below for each phase of the work:

- a. At LaGuardia Airport, northeastern shore, test planting shall be completed by 31 May 1995; full-scale planting design submitted to DEC for approval by 1 September 1995; and full-scale planting finished by 1 June 1996.

- b. At the LaGuardia Airport runway overrun, full-scale planting design shall be submitted to DEC for approval by 1 September 1995, and full-scale planting finished by 1 June 1996.

- c. At the Alley Park restoration site, a general agreement by NYC Parks to allow wetland creation work at Alley Park, along with a survey of proposed sites and a draft general proposed scope of wetland creation work, shall be submitted to DEC for approval by 1 September 1994; a detailed agreement by NYC Parks allowing permittee to perform the specific work chosen by permittee and approved by DEC at Alley Park, final site selection and site surveys, and a full scope of work and draft design drawings for fill removal and vegetated wetland creation covering no less than 5 acres shall be submitted to DEC for approval by 1 December 1994; final design drawings shall be submitted to DEC for approval by 1 June 1995; construction work shall commence on-site by 1 May 1996; and final grading and planting shall be done by 1 June 1997.

8. All plantings shall be maintained by permittee at a minimum survival proportion of 85% of individuals planted for a period of not less than five (5) years. Plants shall be replaced on an annual basis after each growing season to maintain the minimum 85% survivorship. Beginning in 1997, each September 30th, permittee shall submit to DEC an annual report on the progress of the mitigation wetland plantings, including survivorship during the past year, replacements made (numbers of individuals and locations of each species), planting and propagation techniques used, winter damage to plantings, unusual failures or successes with plantings and their causes, and photographic documentation of each planting site at the beginning, middle, and end of each growing season.

DEC PERMIT NUMBER: 2-6301-00126/00001-0		
PERMITTEE: The Port Authority of NY & NJ	Page 4 of 5	Facility: LaGuardia Overrun

### SPECIAL CONDITIONS

9. To protect the World's Fair Marina from the potential for increased wave action caused by removal of the earthen breakwater, the involved parties, including permittee, shall enter into an agreement that will provide for the construction of a wave attenuation system (floating breakwater) by the owner or operator of the marina.

DEC PERMIT NUMBER: 2-6301-00126/00001-0

PERMITTEE: The Port Authority of NY & NJ

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Facility: Laguardia Overrun.

APPENDIX A (NY)

FEDERAL AVIATION ADMINISTRATION  
AIRPORT IMPROVEMENT PROGRAM  
NOTICES TO CONTRACTORS  
REQUIRED SUBMISSIONS TO FAA  
CERTIFICATION OF NONSEGREGATED FACILITIES  
SCHEDULES OF MINIMUM WAGE RATES

I. Notice to Contractors:

- A. The successful bidder on this Contract (if the Contract price is \$50,000 or more and the successful bidder has 50 or more employees) and each subcontractor (if the subcontract price is 50,000 or more and the subcontractor has 50 or more employees) shall, within 120 days from Contract commencement, develop and maintain a written affirmative action compliance program for each of its establishments.
- B. The successful bidder shall submit to the Authority a Certification of Nonsegregated Facilities prior to award of the Contract (if the Contract price exceeds \$10,000 and the Contract is not exempt from the provisions of the equal opportunity clause) and shall notify prospective subcontractors for supplies and construction Contracts of the requirement for such a certification (if the subcontract price exceeds \$10,000 and the subcontract is not exempt from the provisions of the Equal Protection Clause). Samples of the certification and the notice to subcontractors are contained in this Appendix A.

II. Required Submissions to FAA.

- A. Compliance Reports. Within 30 days after award of this Contract, the Contractor (if the Contract price is \$50,000 or more and it has 50 or more employees) shall file a compliance report on Standard Form 100, Employee Information Report, EEO-1 (SF 100) with the Joint Reporting committee if:
  - (1) The Contractor has not submitted a complete compliance report within 12 months preceding the date of award, and
  - (2) The Contractor is within the definition of "employer" in paragraph 2e(3) of the instructions included in SF 100.

- B. The Contractor shall require the subcontractor on any first tier subcontracts, irrespective of dollar amount, to file SF 100 within 30 days after award of the subcontract if the above two conditions apply. SF 100 is normally furnished contractors annually, based on a mailing list currently maintained by the Joint Reporting Committee. In the event a contractor has not received the form, he may obtain it by writing to the following address:

Joint Reporting Committee  
P.O. Box 2236  
Norfolk, Virginia 20501

- C. The Contractor shall after commencement of Contract work submit the monthly Utilization Report (CC 257) to the OFCCP regional office, at the appropriate address listed below, on or before the fifth working day of each month, reporting activity of the previous month. If no Work was accomplished, the form should be submitted stating that fact. A form is to be submitted for the last month of activity stating the Work has been completed.

For downstate New York and New Jersey:

Mr. Harold M. Busch  
District Director, OFCCP/ESA  
U.S. Department of Labor  
26 Federal Plaza, Rm. 36-116  
New York, N.Y. 10278

For Upstate New York:

Mr. Garland Sweeney  
District Director, OFCCP/ESA  
U.S. Department of Labor  
Jackson Building, Rm. 609  
220 Delaware Avenue  
Buffalo, N.Y. 14202

III. Notice to Prospective Subcontractors of Requirement for Certification on Nonsegregated Facilities.

- A. A Certification of Nonsegregated Facilities must be submitted prior to the award of a subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity Clause.
- B. Contractors receiving subcontract awards exceeding \$10,000 which are not exempt from the provisions of the equal opportunity clause will be required to provide for the forwarding of this notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity Clause. NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C 1001.

IV. Certification of Nonsegregated Facilities.

All bidders will be required to submit with their bids a Certification of Nonsegregated Employee Facilities, including an agreement to get a similar certification from proposed subcontractors. These certifications will be required prior to award of Contract.

The Contractor certifies that it does not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The Contractor certifies further that it will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it will not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The Contractor agrees that a breach of this Certification is a violation of the equal opportunity clause in this Contract. As used in this Certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or any other reason. The Contractor agrees that (except where it has obtained identical Certifications from proposed subcontractors for specific time periods) he will obtain identical Certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause, and that it will retain such Certifications in its files.

Certification - The information above is true and complete to the best of my knowledge and belief. FOR: CDM ASSOCIATES, INC.

BENJAMIN SCHUTZMAN

PRESIDENT

\_\_\_\_\_  
Name and Title of Signer (Please Print)

Benjamin Schutzman

\_\_\_\_\_  
Signature

October 21, 1996

\_\_\_\_\_  
Date

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

V. Schedules of Minimum Wage Rates

The following are the minimum wage rates required by the Secretary of Labor. The classification may be supplemented and the rates for each classification may be changed from time to time in accordance with the revised rates and classifications issued by the Secretary of Labor.

IV. Certification of Nonsegregated Facilities.

All bidders will be required to submit with their bids a Certification of Nonsegregated Employee Facilities, including an agreement to get a similar certification from proposed subcontractors. These certifications will be required prior to award of Contract.

The Contractor certifies that it does not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The Contractor certifies further that it will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it will not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The Contractor agrees that a breach of this Certification is a violation of the equal opportunity clause in this Contract. As used in this Certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or any other reason. The Contractor agrees that (except where it has obtained identical Certifications from proposed subcontractors for specific time periods) he will obtain identical Certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause, and that it will retain such Certifications in its files.

Certification - The information above is true and complete to the best of my knowledge and belief. FOR: FELIX EQUITIES, INC.  
WILLIAM J. VESCIO VICE PRES.

\_\_\_\_\_  
Name and Title of Signer (Please Print)

William J. Vescio Vice Pres.

\_\_\_\_\_  
Signature

October 22, 1996

\_\_\_\_\_  
Date

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

V. Schedules of Minimum Wage Rates

The following are the minimum wage rates required by the Secretary of Labor. The classification may be supplemented and the rates for each classification may be changed from time to time in accordance with the revised rates and classifications issued by the Secretary of Labor.

General Decision Number NY950003

Superseded General Decision No. NY940003

State: New York

Construction Type:

BUILDING

HEAVY

HIGHWAY

RESIDENTIAL

County(ies):

BRONX

NEW YORK

RICHMOND

KINGS

QUEENS

BUILDING & RESIDENTIAL CONSTRUCTION PROJECTS (includes single family homes and apartments up to and including 4 stories), HEAVY AND HIGHWAY CONSTRUCTION PROJECTS

* Modification Number	Publication Date
0	02/10/1995
1	02/10/1995
2	03/17/1995
3	04/07/1995
4	04/21/1995
5	06/02/1995
6	07/07/1995
7	07/21/1995
8	08/11/1995
9	08/25/1995
10	11/17/1995
11	12/01/1995
12	12/15/1995

COUNTY(ies):

BRONX  
KINGS

NEW YORK  
QUEENS

RICHMOND

ASBE0012A 07/01/1995

	Rates	Fringes
ASBESTOS/INSULATOR WORKERS: SCOPE OF WORK: includes application of all insulating materials, protective coverings, coatings and finishing to all types of mechanical systems.	29.27	14.55

HAZARDOUS MATERIAL HANDLER:

SCOPE OF WORK: duties limited to:  
preparation, wetting, stripping,  
removal, scrapping, vacumming,  
bagging and disposing of all  
insulation materials, whether  
they contain asbestos or not,  
from mechanical systems.

21.66	4.70
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BOIL0005A 09/02/1995

	Rates	Fringes
BOILERMAKER	\$31.35	3.40+47%+a

FOOTNOTE:

a. PAID HOLIDAYS: New Years Day, Thanksgiving Day, Memorial Day, Independence Day, Labor Day and Good Friday, Friday after Thanksgiving, Christmas Eve Day and New Years Eve

BRNY0001A 07/01/1995

	Rates	Fringes
BRICKLAYERS	\$33.10	12.23

BRNY0003A 07/01/1995

	Rates	Fringes
TERRAZZO WORKERS	27.88	12.40
TERRAZZO FINISHERS	26.57	12.40

BRNY0004A 06/30/1994

	Rates	Fringes
MARBLE SETTERS	28.64	13.55

BRNY0020A 06/30/1994

	Rates	Fringes
MARBLE FINISHERS	26.02	13.62

12/15/1995

BRNY0024A	07/01/1995		
MARBLE POLISHERS		Rates 29.41	Fringes 11.89
BRNY0052A	11/01/1995		
TILE LAYERS		Rates 28.01	Fringes 12.11
BRNY0066A	07/01/1995		
CAULKER, CLEANER AND POINTER		Rates 23.18	Fringes 11.30
BRNY0088A	06/01/1995		
TILE FINISHERS		Rates 24.89	Fringes 9.33
CARP0001Y	07/01/1995		
CARPENTERS: Building, Heavy & Highway: Carpenters & Soft floor layers		Rates 27.98	Fringes 16.96
CARP0740A	07/01/1995		
MILLWRIGHTS		Rates 27.71	Fringes 18.79
CARP1456E	07/01/1995		
DOCKBUILDERS & PILEDRIVERMEN:		Rates 27.98	Fringes 16.96
CARP1456F	07/01/1995		
DIVERS		Rates 34.05	Fringes 16.96
DIVER TENDERS		25.56	16.96
ELEC0003A	06/08/1995		
ELECTRICIANS		Rates 32.00	Fringes 18.439
Jobbing, and maintenance and repair work		18.00	6.179+7.65%+a

PAID HOLIDAYS:

a. New Years Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Election Day, Thanksgiving Day, the day after Thanksgiving Day, and Christmas Day

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ELEC0003H 07/01/1995

	Rates	Fringes
SERVICE TECHNICIAN	20.77	3.38
ASSEMBLER/WIREMAN	17.78	3.38

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ELEV0001B 07/01/1995

	Rates	Fringes
ELEVATOR MECHANICS (New Construction)	31.31	9.51+a
ELEVATOR MECHANICS (Modernization and Repair)	27.33	9.37+a

FOOTNOTE:

- a. PAID HOLIDAYS: New Year's Day, Lincoln's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas Day.  
PAID VACATION: Employer contributes 8% of regular basic hourly rate as vacation pay for employees with more than 5 years of service, and 6% for employees with less than 5 years of service
- 

ENGI0014B 07/01/1995

	Rates	Fringes
POWER EQUIPMENT OPERATORS (HEAVY & HIGHWAY):		
GROUP 1	39.72	14.50+a
GROUP 2	32.63	14.50+a
GROUP 3	32.38	14.50+a
GROUP 4	31.61	14.50+a
GROUP 5	30.95	14.50+a
GROUP 6	30.24	14.50+a
GROUP 7	30.23	14.50+a
GROUP 8	29.33	14.50+a
GROUP 9	28.67	14.50+a
GROUP 10	28.52	14.50+a
GROUP 11	26.57	14.50+a
GROUP 12	27.18	14.50+a
GROUP 13	26.84	14.50+a
GROUP 14	19.90	14.50+a
GROUP 15	18.74	14.50+a

12/15/1995

## POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Tower crane

GROUP 2: Backhoes, power shovel, Hydraulic clam shells, moles and machines of a similar type

GROUP 3: Mine hoists and crane, etc. used as mine hoists

GROUP 4: Gradalls, keystones, cranes (with digging buckets), bridge cranes, trenching machines, vermeer cutter and machines of a similar nature

GROUP 5: Piledrivers, derrick boats, tunnel shovels

GROUP 6: Raise bore drill, and machines of a similar nature

GROUP 7: Back filling machines, cranes, mucking machines, dual drum pavers

GROUP 8: Mixers (concrete w/loading attachments), concrete pavers, cableways, land derricks, power house (low pressure units), concrete pumps

GROUP 9: Concrete plants, well drilling machines, stone crushers double drum hoist, power house (other than above)

GROUP 10: Concrete mixers

GROUP 11: Elevators

GROUP 12: Concrete breaking machine, Hoists (single drum), load masters, locomotive and dinkies over 10 tons,

GROUP 13: Vibratory console

GROUP 14: Compressors (portable 3 or more in battery), tigger machine (caissons) well point pumps, chum\_drill

GROUP 15: Boilers, (high pressure, compressors (portable, single, or 2 in-battery, not over 100' apart), pumps (river cofferdam and welding machines (except where arc is operated by members of local 15) push button machines, all engines irrespective of power (power pac) used to drive auxilliary equipment, air, hydraulic etc.

PREMIUMS ON CRANES (Crawler or Truck):

100' to 149' boom - add	.50
150' to 249' boom - add	.75
250' to 349' boom - add	1.00
350' to 450' boom - add	1.50

UTILITY CONSTRUCTION:

12/15/1995

Utility compressors	18.63	14.50+a
Off shift compressors	23.73	14.50+a
Horizontal boring rig	28.38	14.50+a

PAVING CONSTRUCTION:

Asphalt spreader	29.33	14.50+a
Asphalt roller	28.52	14.50+a
Asphalt plants	25.00	14.50+a

ASBESTOS ABATEMENT	25.00	14.50+a
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STEEL ERECTION:

Three drum derricks	35.61	14.50+a
Cranes, Hydraulic Cranes, 2 drum derricks, Forklifts, Boom Trucks	34.17	14.50+a
Compressors, Welding Machines	24.80	14.50+a

Premiums for Cranes on Steel Erection:

100' to 149' boom - add	1.00
150' to 249' boom - add	1.25
250' to 349' boom - add	1.50
350' to 450' boom - add	2.00
Tower crane - add	1.25

FOOTNOTE:

a. Paid Holidays: New Year's Day; Lincoln's Birthday;  
Washington's Birthday; Memorial Day; Independence Day;  
Labor Day; Veterans Day; Columbus Day; Election Day;  
Thanksgiving Day; and Christmas Day; provided the employee  
works one day the payroll week in which the holiday occurs.

ENGI0014C 07/01/1995

	Rates	Fringes
POWER EQUIPMENT OPERATORS (BUILDING):		
GROUP 1	32.40	14.50+a
GROUP 2	31.84	14.50+a
GROUP 3	30.71	14.50+a
GROUP 4	24.78	14.50+a

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Double drum

GROUP 2: Stone derrick, cranes, hydraulic cranes, boom trucks

GROUP 3: Hoists, fork lift, house cars, plaster (platform machine), plaster bucket, concrete pump and all other equipment used for hoisting material

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GROUP 4: Compressors, welding machines (cutting concrete work), paint spraying, sand blasting, pumps (with the exclusion of concrete pumps), house car (settlement basis only), all engines irrespective of power (power pac) used to drive auxiliary equipment, air, hydraulic, etc., boilers

Premiums for Cranes:

100'-149' boom - add .75  
 150'-249' boom - add 1.00  
 250'-349' boom - add 1.25  
 350'-450' boom - add 1.75  
 Tower cranes add 1.00

FOOTNOTE:

- a. PAID HOLIDAYS: New Year's Day, Lincoln's Birthday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Columbus Day, Election Day, Thanksgiving Day, and Christmas Day, provided the employee works one day in the payroll week in which the holiday occurs

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 IRON0040P 07/01/1995  
 BRONX, NEW YORK, RICHMOND  
 IRONWORKERS (STRUCTURAL)  
 Rates 25.50 Fringes 28.78  
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IRON0046C 07/01/1995  
 IRONWORKERS (METALLIC LATHERS)  
 Rates 26.57 Fringes 17.64  
 -----

IRON0197A 07/01/1995  
 IRONWORKERS (STONE DERRICKMAN)  
 Rates 28.59 Fringes 20.12  
 -----

IRON0361P 07/01/1995  
 KINGS, QUEENS  
 IRONWORKERS (STRUCTURAL)  
 Rates 25.50 Fringes 28.78  
 -----

IRON0580A 07/01/1995  
 IRONWORKERS (ORNAMENTAL)  
 Rates 26.15 Fringes 20.90  
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LABO0006A 07/01/1995  
 BUILDING CONSTRUCTION  
 Rates Fringes

12/15/1995

LABORERS:

CEMENT AND CONCRETE WORKERS \$25.00 9.515

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LABO0029A 07/01/1995

	Rates	Fringes
LABORERS: (Heavy)		
Blasters	30.13	11.90
Blasters (hydraulic trac drill)	30.65	11.90
Hydraulic Trac Drill	27.22	11.90
Wagon; Airtrac; Quarry Bar		
Drill Runners	26.73	11.90
Jackhammers, Chippers, Spaders, Concrete Breakers, All Other Pneumatic Tools, Walk Behind Self-Propelled Hydraulic Asphalt and Concrete Breaker	26.07	11.90
Powder Carriers	23.58	11.90

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LABO0099A 06/01/1995

	Rates	Fringes
LABORERS: (Building):		
Asbestos Removal	20.95	9.89
Mason Tenders	24.00	10.19
Demolition laborers	24.00	10.19

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LABO0731A 01/01/1995

	Rates	Fringes
LABORERS: (Building/Heavy):		
UNSKILLED	21.67	12.57
UTILITY LABORER	21.52	12.57

Paid Holidays:

Labor Day and Thanksgiving Day

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LABO1010A 07/01/1995

	Rates	Fringes
LABORERS HIGHWAY CONSTRUCTION:		
FORMSETTERS	\$27.34	11.80+a
LABORERS	24.24	11.80+a

FOOTNOTES:

a. PAID HOLIDAYS: Memorial Day, Fourth of July, Labor Day, Columbus Day, Election Day and Thanksgiving Day, provided the employee has worked one (1) day in the calendar week in which the

12/15/1995

said holiday occurs.

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LABO1018A 07/01/1995

	Rates	Fringes
LABORERS:		
Asphalt Rakers	\$27.21	11.80+A
Asphalt Tampers	24.77	11.80+A
Asphalt Laborers	24.66	11.80+A
Screedman	27.58	11.80+A

FOOT NOTE:

A. Paid Holidays: Memorial Day, Independence Day, Labor Day, Columbus Day, Election Day, Veterans Day, and Thanksgiving Day

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PAIN0009B 06/01/1995

	Rates	Fringes
PAINTERS		
Brush and Roller	24.00	10.32
Spray and Scaffold	29.14	12.52
Fire escape	27.43	11.79

PAIN0806A 10/01/1995

	Rates	Fringes
PAINTERS:		
Structural steel and Bridge	33.00	14.87

PAIN1087A 01/01/1995

	Rates	Fringes
GLAZIERS:		
Glaziers	25.00	14.17

PAIN1486P 04/01/1995

	Rates	Fringes
PAINTERS:		
Painters & drywall finishers	23.88	11.40
Spraying, scaffold or rolling scaffold over 18 feet	26.35	11.40
Sandblasting; structural steel	31.46	11.40
Repaint of hospitals, schools and apartment houses	12.89	10.39

PLAS0060A 07/05/1995

	Rates	Fringes
BRONX, NEW YORK, RICHMOND AND THE NORTH EAST PORTION OF QUEENS		

12/15/1995

PLASTERERS	24.05	13.99
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PLAS0202B 07/05/1995		
	Rates	Fringes
ALL OF KINGS AND SOUTH OF THE LONG ISLAND EXPRESSWAY IN QUEENS		
PLASTERERS	23.50	14.57

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PLAS0530A 02/01/1995		
	Rates	Fringes
DRYWALL GLAZIERS	24.31	8.80

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PLAS0780A 07/01/1995		
	Rates	Fringes
CEMENT MASONS	29.35	13.47

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PLUM0001K 07/01/1995		
	Rates	Fringes
PLUMBERS:		
KING AND QUEENS COUNTIES	31.01	16.83

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PLUM0002K 07/05/1995		
	Rates	Fringes
PLUMBERS:		
BRONX AND NEW YORK COUNTIES	33.41	25.59
Jobbing - repair and or replacement of the present plumbing system that does not change the existing roughing	21.28	14.01

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PLUM0371A 07/01/1995		
	Rates	Fringes
RICHMOND COUNTY		
PLUMBERS	32.26	10.28
JOBGING and ALTERATIONS Any repair and or replacement of the present plumbing system that does not change the existing roughing	19.49	8.50

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PLUM0638A	07/01/1995		
SPRINKLER FITTERS/STEAMFITTERS		Rates 30.05	Fringes 17.84
-----			
ROOF0008C	06/30/1995		
ROOFERS		Rates 24.58	Fringes 13.85
-----			
SHEE0028B	08/03/1995		
SHEET METAL WORKERS		Rates 29.76	Fringes 14.93
-----			
TEAM0282B	07/01/1995		
TRUCK DRIVERS:		Rates	Fringes
Asphalt		23.53	16.31+a+b
High Rise		24.90	16.34+a+b
Euclids & Turnapulls		24.335	17.5125+a+b

FOOTNOTES:

PAID HOLIDAYS: A-New Year's Day; B-Memorial Day; C-Independence Day; D-Labor Day; E-Thanksgiving Day; F-Christmas Day.

a. Paid Holidays: A thru F, Lincoln's Birthday, Washington's Birthday, Election Day, Veterans's Day, provided the employee works 2 days in the calendar week in which the holiday falls and shape each remaining work day during such calendar week.

b. For each 15 days worked within the contract year an employee will receive one day's vacation with pay with a maximum vacation of 3 weeks per year.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(v)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

END OF GENERAL DECISION

12/15/1995

APPENDIX B (NY)  
 NOTICE TO CONTRACTORS  
 AFFIRMATIVE ACTION REQUIREMENTS  
 EQUAL EMPLOYMENT OPPORTUNITY

I. Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246, as amended).

The following is to be made a part of all solicitations for bids on all federally assisted construction contracts or subcontracts in excess of \$10,000.00.

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce on all construction work in the covered area, are as follows:

Trade

Electricians	9.0% - 10.2%
Carpenters	27.6% - 32.0%
Steamfitters	12.25% - 13.5%
Metal Lathers	24.6% - 25.6%
Painters	22.8% - 26.0%
Operating Engineers	25.6% - 26.0%
Plumbers	12.0% - 14.5%
Iron Workers (Structural)	25.9% - 32.0%
Elevator Constructors	5.5% - 6.5%
Bricklayers	13.4% - 15.5%
Asbestos Workers	22.8% - 28.0%
Roofers	6.3% - 7.5%
Iron Workers (Ornamental)	22.4% - 23.0%
Cement Masons	23.0% - 27.0%
Glaziers	16.0% - 20.0%
Plasterers	15.8% - 18.0%
Teamsters	22.0% - 22.5%
Boilermakers	13.0% - 15.5%
All other	16.4% - 17.5%*

Women

6.9%\*

\* In the event that during the performance of this Contract the Office of Federal Contract Compliance establishes different goals for New York City, the Contractor shall be deemed bound to such different goals and this Appendix shall be deemed amended to substitute such goals for the goals set forth above.

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or Federally-assisted) performed in the covered area. If the Contractor performs construction Work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals established for the geographical area where this Contract is to be performed.

The hours of minority and female employment and training must be substantially uniform throughout the length of the Contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the Contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director OFCCP, within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under this Contract. The notification shall list: the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and, the geographical area in which the subcontract is to be performed.
4. As used in this notice, and in this Contract, the "covered area" means the Counties of New York State which comprise the five Boroughs of New York City - specifically, Bronx, Kings, New York, Queens and Richmond Counties.
5. The Department of Labor has eliminated all imposed EEO plans and the Philadelphia Plan as a means of complying with Executive Order 11246. Hometown Plans can still be used; however, signatories are required to submit goals and timetables for the utilization of women to the Director, Office of Federal Contract Compliance Programs, Department of Labor, Washington, D.C.

## II. Standard Federal Equal Employment Opportunity Construction Contract Specifications (executive Order 11246, as amended)

The following specifications are made a part of all federally assisted construction contracts or subcontracts over \$10,000.00 and included in all invitations for bids:

A. As used in these specifications:

- (1) "Covered area" means the Counties of New York State which comprise the five Boroughs of New York City - specifically, Bronx, Kings, New York, Queens and Richmond Counties.
- (2) "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), United States Department of Labor, or any person to whom the Director delegates authority;
- (3) "Employer identification number" means the Federal Social Security Number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
- (4) "Minority" includes:
  - (a) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
  - (b) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South America, or other Spanish culture or origin regardless of race);
  - (c) Asian or Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast, Asia, the Indian Subcontinent, or the Pacific Islands); and
  - (d) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

B. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the Work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the notice above which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this Contract resulted.

- C. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the plan area (including goals and timetables) shall be in accordance with that plan for those trades which have unions participating in the plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO Clause and to make a good faith effort to achieve each goal under the plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the plan goals and timetables.
- D. The Contractor shall implement the specific affirmative action standards provided in paragraphs G.(1) through (16) of these Specifications. The goals set forth in this Contract are expressed as percentages of the total hours of employment and training of minority and femaleutilizations; the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction Work in a geographical area where they do not have a Federal or federally assisted construction contract shall apply to the minority and female goals established for the geographical area where the Work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any OFCCP office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
- E. Neither the provisions of any collective bargaining agreement nor the failure by a union with whom the Contractor has a collective bargaining agreement to refer either minorities or women shall excuse the Contractor's obligations under these Specifications, Executive Order 11246, as amended, or the regulations promulgated pursuant thereto.
- F. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

G. The Contractor shall take specific affirmative actions to ensure Equal Employment Opportunity (EEO). The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:

- (1) Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
- (2) Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
- (3) Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason, therefor, along with whatever additional actions the Contractor may have taken.
- (4) Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

- (5) Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under G.(2) above.
- (6) Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- (7) Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with onsite supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job sites. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- (8) Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and subcontractors with whom the Contractor does or anticipates doing business.

- (9) Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students; and to minority and female. recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations, such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- (10) Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of the Contractor's workforce.
- (11) Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- (12) Conduct, at least annually, an inventory and evaluation, at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- (13) Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- (14) Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- (15) Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- (16) Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

- H. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (G.(1) through (16)). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar groups of which the Contractor is a member and participant, may be asserted as fulfilling any one of more of its obligations under G.(1) through (16) of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
- I. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide EEO and to take affirmative action for all minority groups, both male and female, and all women, both minority and nonminority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate number (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
- J. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
- K. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246, as amended.
- L. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the OFCCP. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

- M. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph G of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
- N. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep records. Records shall at least include for each employee, the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, Contractors shall not be required to maintain separate records.
- O. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

THE PORT AUTHORITY OF NY & NJ

SCHEDULE A  
DISADVANTAGED BUSINESS ENTERPRISE

MINORITY AND WOMEN'S BUSINESS CERTIFICATION

1. Name of Firm \_\_\_\_\_

Address \_\_\_\_\_

No Street

City

State

Zip Code

Phone Number ( ) \_\_\_\_\_

(Area Code) and Number

County

1a. If a P.O. Box is used for mailing purposes provide the exact address for the business address below:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2. Name of Company President/CEO

\_\_\_\_\_  
First Name Middle Name Last Name Title

3a. This Company is applying for certified status as: \_\_\_\_\_ Minority Owned Business \_\_\_\_\_ Woman Owned Business

3b. Does this firm have current S.B.A. 8 (a) status? \_\_\_\_\_ Yes \_\_\_\_\_ No

4a. Ethnicity and Gender of Principal Owners (\*Submit Proof)

\_\_\_\_\_ Black \_\_\_\_\_ Native American (\*) \_\_\_\_\_ Female  
\_\_\_\_\_ Hispanic (\*) \_\_\_\_\_ White (Non-Hispanic) \_\_\_\_\_ Male  
\_\_\_\_\_ Asian (\*) \_\_\_\_\_ Other (specify)

4b. U.S. Citizen \_\_\_\_\_ Yes \_\_\_\_\_ No

Permanent Resident Alien \_\_\_\_\_ Yes \_\_\_\_\_ No

5. Federal Employer Identification Number \_\_\_\_\_

6. Type of Ownership

A \_\_\_\_\_ Sole Proprietorship  
\_\_\_\_\_ Partnership  
\_\_\_\_\_ Corporation

B The above type of ownership since

\_\_\_\_\_  
Date

C. Date Business Est. \_\_\_\_\_

Month / Year

7. Method of Acquisition (check all applicable)

\_\_\_\_\_ Bought Existing Business  
\_\_\_\_\_ Started New Business  
\_\_\_\_\_ Secured Franchise  
\_\_\_\_\_ Secured Concession  
\_\_\_\_\_ Merger or Consolidation

Other \_\_\_\_\_

Date of Acquisition \_\_\_\_\_

Month / Year

**8a. For Corporations and Partnerships. Complete for all Shareholders, Partners, Directors or Officers.**

Name and Position (If no position is held state "none")	Circle	No. of Shares Owned	% of Voting Shares Owned	Common or Preferred	Date of Ownership or Employment	Home Address and Telephone #
	Min/Fem					
	Min/Fem					
	Min/Fem					
	Min/Fem					
	Min/Fem					

**8b.** The present configuration of ownership has existed since \_\_\_\_\_ Date \_\_\_\_\_

	Issued	Outstanding
<b>8c.</b> Total number of shares issued and outstanding	Common _____	_____
	Preferred _____	_____
	Other _____	_____

<b>9.</b> Number of Employees (Average over year)	Full-Time _____
	Part-Time _____

**10.** Gross Income  
 \$ \_\_\_\_\_  
 Current Year (198\_\_ )  
 \$ \_\_\_\_\_  
 Last Year (198\_\_ )  
 \$ \_\_\_\_\_  
 Previous Year (198\_\_ )

**11.** List your three largest clients or customers

Company Name & Contact Person	Address & Telephone No	Annual Sales/Contracts
_____	_____	_____
_____	_____	_____
_____	_____	_____

**12.** Have you ever been a Prime Contractor? \_\_\_\_\_ Yes \_\_\_\_\_ No

13. List the three largest contracts that your company has entered into during the last year.

Client Name	Contract Dollar Amount	Location of Contract Performance	Contract Duration	Prime, Sub, or Joint Venture

14. Check one which best describes your major operation. You may check an additional box if your operations consist of two or more fairly equal areas. When two or more items are grouped together, please circle the one most appropriate for you.

- |                                                          |                                                |
|----------------------------------------------------------|------------------------------------------------|
| <input type="checkbox"/> Agriculture, Forestry, Fishing  | <input type="checkbox"/> Wholesale Trade       |
| <input type="checkbox"/> Mining                          | <input type="checkbox"/> Retail Trade          |
| <input type="checkbox"/> Construction                    | <input type="checkbox"/> Finance, Insurance    |
| <input type="checkbox"/> Manufacturing                   | <input type="checkbox"/> Real Estate           |
| <input type="checkbox"/> Transportation                  | <input type="checkbox"/> General Services      |
| <input type="checkbox"/> Electric, Gas, Sanitary Service | <input type="checkbox"/> Professional Services |
| <input type="checkbox"/> Repair Shop                     | <input type="checkbox"/> Public Administration |
| <input type="checkbox"/> Research & Development          | <input type="checkbox"/> Other (explain)       |
| <input type="checkbox"/> Communications                  |                                                |

15. Describe principal products sold or services offered (please explain)

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16a. Do any principals and/or officers of this company maintain a business relationship or have an ownership interest in any other company?  Yes  No  
If Yes, provide the following information.

A. Name of Principal	B. Name, Address, and Telephone Number of Affiliated Firm	C. Position With Firm

16b. List any principals and/or officers of this company who are not fulltime employees of the company.

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16c. Does this firm share the following with any other firm: (For each yes response, indicate the name and address of the business.)

	<u>Yes</u>	<u>No</u>	<u>Name / Address</u>
1) Office Space?	---	---	_____
2) Yard Space?	---	---	_____
3) Equipment (Including Rentals)?	---	---	_____
4) Office or Field Staff?	---	---	_____
5) Secretary?	---	---	_____
6) Estimator?	---	---	_____
7) Controller?	---	---	_____
8) Attorney/C.P.A.?	---	---	_____

17a. List all major creditors and types of investments in the applicant company by principals or others. Examples include Cash, Machinery, Equipment, Real Estate, Other (Identify).

<u>Name of Source</u>	<u>Type of Investment or Credit</u>	<u>Dollar Value of Investment or Credit</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

17b. If your company is owned in full or in part by another firm, identify the firm and percent of ownership interest. Include MESBICs, venture capitalists and other similar investors.

<u>A. Firm Name</u>	<u>B. Address</u>	<u>C. Percent of Ownership</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

18. If this company was established within the last five years as the result of acquiring an existing business, identify the former Board of Directors and/or Company principals.

A. Name and Title	B. Circle Min/Fem/Non-Min.	C. Home Address And Telephone #
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

19. Identify those individuals responsible for managerial operations.

	Name and Title	Circle
a	Financial decisions	Min/Fem / Non-Min.
b	Estimating	Min/Fem / Non-Min.
c	Preparing Bids	Min/Fem / Non-Min.
d	Negotiating Contracts	Min/Fem / Non-Min.
e	Negotiating & Signing for Surety and/or Performance Bonding	Min/Fem / Non-Min.
f	Negotiating & Signing For Insurance	Min/Fem / Non-Min.
g	Marketing & Sales	Min/Fem / Non-Min.
h	Hiring and Firing of Personnel	Min/Fem / Non-Min.
i	Supervisor of Field Operations	Min/Fem / Non-Min.
j	Purchase of Major Equipment or Supplies	Min/Fem / Non-Min.
k	Managing and Signing Payroll, Employee Benefits	Min/Fem / Non-Min.
l	Company checking account(s) How many signatures are required? _____ They are _____	Min/Fem / Non-Min.

20. Has your firm ever been Bonded?  Yes  No If Yes, Specify:

Type of Bonding \_\_\_\_\_

Current Bonding Capacity \_\_\_\_\_

Bonding Company \_\_\_\_\_

NAME

MAILING ADDRESS

TELEPHONE #

21. Identify Bank(s) and Sources of Letter of Credit.

	A. Name	B. Mailing Address	C. Telephone #
a. Bank(s)			
b. Letters of Credit(s) (list sources)			

22. If Licensing or accreditation is required to conduct your business, identify

Type of License Accreditation	Issued By	Date Issued	Expiration Date	Holder/Registrant of License, etc.

23. List major equipment and machinery which is owned/leased by the firm.

Type of Equipment/ Machinery	Owned/ Leased	Quantity	Purchase Date	Purchase Price

24. List rented or leased warehouse, plant and office facilities

Facility Type	Lessor/ Rental Agent	Rented/Leased (Specify and Expiration Date)	Present Value or Amount of Yearly Lease/Rent Payment	Floor Space # of sq ft



27. CHECK OF SUPPORTING DOCUMENTS

Submit copies of the following Required Documents according to your Type of Business Ownership. Regardless of business type, check and attach copies of all items that apply in Section D.

<p><b>A. FOR A CORPORATION – REQUIRED</b> Attach copies of the following:</p> <ol style="list-style-type: none"><li>1. Articles of incorporation, including date approved by State</li><li>2. Corporation By-Laws</li><li>3. Minutes of first corporate organization meeting and amendments.</li><li>4. Specimen copy of stock certificate(s) issued</li><li>5. Stock transfer ledger</li><li>6. Resumes of the principals of this company showing education, training and employment with dates</li><li>7. List of current Board of Directors including ethnicity, gender and effective dates</li><li>8. Prior three years' federal and state income tax returns including all schedules</li><li>9. Current financial statements</li><li>10. Corporate bank signature cards</li><li>11. Proof of sources of capitalization or investments</li><li>12. Copies of all issued stock certificates, front and back, as well as next un-issued certificate</li></ol>	<p><b>B. FOR A PARTNERSHIP – REQUIRED</b> Attach copies of the following:</p> <ol style="list-style-type: none"><li>1. Partnership agreement</li><li>2. Current financial statements</li><li>3. Prior three years' federal tax returns including all schedules, if applicable</li><li>4. Resumes of all partners showing education, training and employment with dates</li><li>5. Proof of sources of capitalization/investments</li><li>6. Copy of bank signature cards</li></ol> <p><b>C. FOR A SOLE PROPRIETOR – REQUIRED</b> Attach copies of the following:</p> <ol style="list-style-type: none"><li>1. Copy of Business Certification of DBA filed with County Clerk (if doing business under an assumed name)</li><li>2. Current financial statement</li><li>3. Prior three years' federal tax returns including all schedules, if applicable</li><li>4. Resumes of owners, superintendents, field and/or office supervisors. Show education, training and employment with dates.</li><li>5. Copy of bank signature cards</li><li>6. Proof of sources of capitalization</li></ol>
<p><b>D. FOR ALL APPLICANTS OTHER DOCUMENTS REQUIRED</b></p> <ol style="list-style-type: none"><li>1. Copy of all third party agreements (e.g., equipment rental, purchase agreements, management service agreements, etc.)</li><li>2. Proof of Small Business Administration 8 (a) Certification (copy of all approval letters)</li><li>3. Copy of vehicle(s) registration(s)</li><li>4. Copy of lease agreements</li><li>5. Furnish copies of agreements relating to<ol style="list-style-type: none"><li>a. Stock options</li><li>b. Ownership agreements</li><li>c. Stockholder agreements</li><li>d. Stockholder voting rights</li><li>e. Restriction on the disposal of stock loan agreements</li><li>f. Facts pertaining to the value of shares</li></ol></li><li>6. Copy of buy-out rights agreements</li><li>7. Copy of profit sharing agreements</li><li>8. Copy of any certification, decertification or denial of certification documentation</li><li>9. Copy of proof of permanent resident alien status</li><li><del>10. Written request for exemption from disclosure regarding trade secrets or proprietary information</del></li><li>11. You may be required to submit other financial and other data such as cancelled checks and personal income tax returns.</li></ol>	

## 28. Acknowledgements and Verification

FIRST, this Application form, the supporting documents, and any other information provided in support of the Application are considered part of the Application. The making of any false statements or misrepresentations in the Application may result in the Applicant's disqualification from certification as an MBE or WBE by The Port Authority of New York and New Jersey.

SECOND, The information contained herein is subject to the Port Authority's Freedom of Information Policy as reflected in the resolution adopted by the Committee on Operations of the Port Authority on September 28, 1977.

THIRD, the Port Authority of New York and New Jersey may require proof of minority or woman status in addition to the information disclosed in this Application and a business wishing to be certified as an MBE/WBE by the Agency shall cooperate with the Port Authority in supplying the additional information. By making this Application, the Applicant agrees to submit additional proof if it is requested and acknowledges that the Port Authority may decide not to certify the Applicant as a Minority, or Women-owned Business if the additional proof is not submitted within 60 days after it is requested by the said agency.

FOURTH, by making this Application, the Applicant consents to examinations of its books and records and interviews of its principals and employees by the Port Authority for the purpose of determining whether the Applicant is, or continues to be, an eligible Minority, or Women-owned Business. The Applicant acknowledges that its certification may be immediately denied or revoked if such examinations or interviews are refused or if the Port Authority determines, as a result of the examinations or interviews, that the Applicant does not qualify as a Minority, or Women-owned Business Enterprise.

FIFTH, by filing this Application, the Applicant consents to inquiries being directed by the Port Authority to the Applicant's bonding companies, banking institutions, credit agencies, contractors and clients for the purpose of ascertaining the Applicant's eligibility for certification. If the Applicant fails to permit such inquiries to be made, such failure shall be grounds for denying or revoking the Applicant's certification.

SIXTH, the Applicant agrees to provide information regarding any change in the ownership or operational and managerial control of Applicant's business after the initial certification application has been filed, within 30 days of such change.

SEVENTH, certification is normally granted for a period of two (2) years. However, the Port Authority may require the submission of a new Application, additional information, examinations of the Applicant's principals and employees at any time before the expiration of the two year certification period. The Applicant's failure to submit such material or to consent to such examinations and interviews will be grounds for immediate revocation of certification.

EIGHTH, the filing of this application, its acceptance by the Port Authority, and any subsequent certification of the Applicant by the Port Authority, is not intended to and does not create any procedural or substantive rights enforceable at law by the Applicant against the Port Authority, its Commissioners, Officers, or employees and any such certification is only intended to facilitate the identification of qualified and bona fide Minority, Women, and Disadvantaged Business Enterprises.

\_\_\_\_\_  
Applicant's Signature

VERIFICATION

(A) STATE OF )  
 ) SS:  
COUNTY OF )

(B) , being duly sworn, states he or she is the owner of (or a partner in) the enterprise making the foregoing Application and that the statements and representations made in the Application are true to his or her own knowledge.

(C) , being duly sworn, states that he or she is the of the enterprise making the foregoing Application, that he or she has read the Application and knows its contents, that the statements and representations made in the Application are true to his or her own knowledge, and that the Application is made at the direction of the Board of Directors of the Corporation.

\_\_\_\_\_  
Corporate Seal  
(If Applicable)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Sworn to before me this

day of , 19

\_\_\_\_\_  
Notary Public

NOTE: Applicant must also sign page 9

SCHEDULE B

NOTE: THIS FORM IS FOR THE USE OF THE PORT AUTHORITY AND COMPLETION OF SAME HAS NO CONNECTION WITH POSSIBLE OR PROBABLE SUBCONTRACTING AWARDS BY ANY GENERAL CONTRACTORS.

INFORMATION FOR DETERMINING JOINT VENTURE ELIGIBILITY

(THIS FORM NEED NOT BE FILLED IN IF ALL JOINT VENTURE FIRMS ARE MINORITY OWNED).

1. NAME OF JOINT VENTURE \_\_\_\_\_
2. ADDRESS OF JOINT VENTURE \_\_\_\_\_
3. PHONE NUMBER OF JOINT VENTURE \_\_\_\_\_
4. IDENTIFY THE FIRMS WHICH COMPRISE THE JOINT VENTURE. (THE MBE PARTNER MUST COMPLETE SCHEDULE A) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(A) DESCRIBE THE ROLE OF THE MBE FIRM IN THE JOINT VENTURE. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. NATURE OF THE JOINT VENTURE'S BUSINESS \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. PROVIDE A COPY OF THE JOINT VENTURE AGREEMENT.

7. WHAT IS THE CLAIMED PERCENTAGE OF MBE OWNERSHIP? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. OWNERSHIP OF JOINT VENTURE: (THIS NEED NOT BE FILLED IN IF DESCRIBED IN THE JOINT VENTURE AGREEMENT, PROVIDE BY QUESTION 6).

- (A) PROFIT AND LOSS SHARING.
- (B) CAPITAL CONTRIBUTIONS, INCLUDING EQUIPMENT.
- (C) OTHER APPLICABLE OWNERSHIP INTERESTS.

9. CONTROL OF AND PARTICIPATION IN THIS CONTRACT. IDENTIFY BY NAME, RACE, SEX, AND "FIRM" THOSE INDIVIDUALS (AND THEIR TITLES) WHO ARE RESPONSIBLE FOR DAY-TO-DAY MANAGEMENT AND POLICY DECISION-MAKING, BUT NOT LIMITED TO, THOSE WITH PRIME RESPONSIBILITY FOR:

(A) FINANCIAL DECISIONS \_\_\_\_\_

(B) MANAGEMENT DECISIONS, SUCH AS:

(1) ESTIMATING \_\_\_\_\_

(2) MARKETING AND SALES \_\_\_\_\_

(3) HIRING AND FIRING OF MANAGEMENT PERSONNEL \_\_\_\_\_  
\_\_\_\_\_

(4) PURCHASING OF MAJOR ITEMS OR SUPPLIES \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(C) SUPERVISION OF FIELD OPERATIONS \_\_\_\_\_  
\_\_\_\_\_

AFFIDAVIT

"The undersigned swear that the foregoing statements are correct and include all material information necessary to identify and explain the terms and operation of our joint venture and the intended participation by each joint venturer in the undertaking. Further, the undersigned covenant and agree to provide to the grantee current, complete and accurate information regarding actual joint venture work and the payment therefor and any proposed changes in any of the joint venture arrangements and to permit the audit and examination of the books, records and files of the joint venture, or those of each joint venturer relevant to the joint venture, by authorized representatives of the grantee or the Federal funding agency. Any material misrepresentation will be grounds for terminating any contract which may be awarded and for initiating action under Federal or State laws concerning false statements."

\_\_\_\_\_  
NAME OF FIRM

\_\_\_\_\_  
NAME OF FIRM

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
NAME

\_\_\_\_\_  
NAME

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
DATE

\_\_\_\_\_  
DATE

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

ON THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 19\_\_\_\_, BEFORE ME APPEARED

(name) \_\_\_\_\_  
to me personally known, who, being duly sworn, did execute the foregoing  
affidavit, and did state that he or she was properly authorized by  
(name of firm) \_\_\_\_\_ to  
execute the affidavit and did so as his or her free act and deed.

\_\_\_\_\_  
Notary Public  
My Commission Expires:

SEAL

HBE APPROVAL REQUEST

PART ONE: (to be completed by Bidder)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone No. \_\_\_\_\_

Facility: \_\_\_\_\_

Contract \_\_\_\_\_

Contract Title: \_\_\_\_\_

Request Approval of: \_\_\_\_\_

Amount of Sub-Contract

Address: \_\_\_\_\_

Materials \_\_\_\_\_

Phone No. \_\_\_\_\_

Labor \_\_\_\_\_

Type of work: \_\_\_\_\_

TOTAL \_\_\_\_\_

Has this Company done work under a Port Authority

Est. Start Date / /

Contract?

YES

NO

Actual Start Date / /

If the answer to question above is "YES", give P.A. Contract Number: if "NO", give three references, contract nos., type and approx. estimate work performed by contractor, name and telephone number of the person in charge for the owner.

Remarks

(for PA use only)

Date \_\_\_ / \_\_\_ / \_\_\_

For the Bidder

PART TWO: (to be completed by Port Authority)

| | Subject to the provisions of subject contract, the company submitted for approval on this application is hereby disapproved.

| | Subject to the provisions of subject contract, the company submitted for approval on this application is hereby approved. Any materials to be furnished by this subcontractor shall be subject to inspection and approval as required by the Specifications

Date \_\_\_ / \_\_\_ / \_\_\_

Signature

Title





49 Code of Federal Regulations Part 23 annexed hereto forms a part of the Contract. Please note that Sections 23.45(e), 23.45(f)(3), 23.45(g)(4), 23.47(e) and (f), 23.61(a), 23.61(b), 23.62 and 23.63 were amended effective October 21, 1987. Sections 23.61 (a), 23.61(b), 23.62, 23.63, 23.64(b)(2), 23.64(c), 23.64(e)(2), 23.65, 23.68(e)(2) and Appendix "A", thereto, were amended effective May 23, 1988. The amendatory language follows page 159 of the October 1, 1986 edition of 49 Code of Federal Regulations Subtitle A which is reproduced in its entirety beginning with the next page of this document.

quality of vehicles assigned to routes, quality of stations serving different routes, location of routes may not be determined on the basis of race, color, or national origin.

(c) The location of projects requiring land acquisition and the displacement of persons from their residences and businesses may not be determined on the basis of race, color, or national origin.

(b) *Obligations of the airport operator—*

(1) *Tenants, contractors, and concessionaires.* Each airport operator shall require each tenant, contractor, and concessionaire who provides any activity, service, or facility at the airport under lease, contract with, or franchise from the airport, to covenant in a form specified by the Administrator, Federal Aviation Administration, that he will comply with the nondiscrimination requirements of this part.

(2) *Notification of beneficiaries.* The airport operator shall (i) make a copy of this part available at the office for inspection during normal working hours by any person asking for it, and (ii) conspicuously display a sign, or signs, furnished by the FAA, in the main public areas of the airport, stating that discrimination based on race, color, or national origin is prohibited on the airport.

(3) *Reports.* Each airport owner subject to this part shall within 15 days after he receives it, forward to the Area Manager of the FAA Area in which the airport is located a copy of each written complaint charging discrimination because of race, color, or national origin by any person subject to this part, together with a statement describing all actions taken to resolve the matter, and the results thereof. Each airport operator shall submit to the area manager of the FAA Area in which the airport is located a report for the preceding year on the date and in a form prescribed by the Federal Aviation Administrator.

38 FR 10080, June 18, 1970, as amended by Cmdt. 21-1, 38 FR 5875, Mar. 5, 1973; Amendment 1-3, 40 FR 14318, Mar. 31, 1975]

## PART 23—PARTICIPATION BY MINORITY BUSINESS ENTERPRISE IN DEPARTMENT OF TRANSPORTATION PROGRAMS

### Subpart A—General

- Sec.
- 23.1 Purpose.
- 23.3 Applicability.
- 23.5 Definitions.
- 23.7 Discrimination prohibited.

Sec.

### Subpart B—[Reserved]

### Subpart C—Department of Transportation Financial Assistance Programs

- 23.41 General.
- 23.43 General requirements for recipients.
- 23.45 Required MBE program components.
- 23.47 Counting MBE participation toward meeting MBE goals.
- 23.49 Maintenance of records and reports.
- 23.51 Certification of the eligibility of minority business enterprises.
- 23.53 Eligibility standards.
- 23.55 Appeals of denials of certification as an MBE.

### Subpart D—Implementation of Section 105(f) of the Surface Transportation Assistance Act of 1982

- 23.61 Purpose.
- 23.62 Definitions.
- 23.63 Applicability.
- 23.64 Submission of overall goals.
- 23.65 Content of justification.
- 23.66 Approval and disapproval of overall goals.
- 23.67 Special provision for transit vehicle manufacturers.
- 23.68 Compliance.
- 23.69 Challenge procedure.

### APPENDIX A—SECTION-BY-SECTION ANALYSIS APPENDIX B—DETERMINATIONS OF BUSINESS SIZE

### APPENDIX C—GUIDANCE FOR MAKING DETERMINATIONS OF SOCIAL AND ECONOMIC DISADVANTAGE

### APPENDIX D—JUSTIFICATIONS FOR REQUESTS FOR APPROVAL OF OVERALL GOALS OF LESS THAN TEN PERCENT

### Subpart E—Compliance and enforcement

- 23.73 Complaints.
- 23.75 Compliance reviews.
- 23.81 Conciliation procedures for financial assistance programs.
- 23.83 Enforcement proceedings for financial assistance programs.
- 23.85 Emergency enforcement procedure.
- 23.87 Suspension and debarment; referral to the Department of Justice.

### SCHEDULE A—INFORMATION FOR DETERMINING MINORITY BUSINESS ENTERPRISE ELIGIBILITY

### SCHEDULE B—INFORMATION FOR DETERMINING JOINT VENTURE ELIGIBILITY

AUTHORITY: Sec. 905 of the Railroad Revitalization and Regulatory Reform Act of 1978 (45 U.S.C. 803); sec. 30 of the Airport and Airway Development Act of 1970, as amended (49 U.S.C. 1730); sec. 19 of the Urban Mass Transportation Act 1964, as amended (Pub. L. 95-599); Title 23 of the

U.S. Code (relating to highways and highway safety); Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d *et seq.*); The Federal Property and Administrative Services Act of 1949 (49 U.S.C. 471 *et seq.*); Executive Order 11625; Executive Order 12138, unless otherwise noted.

SOURCE: 45 FR 21184, Mar. 31, 1980, unless otherwise noted.

### Subpart A—General

#### § 23.1 Purpose.

(a) The purpose of this part is to carry out the Department of Transportation's policy of supporting the fullest possible participation of firms owned and controlled by minorities and women, (MBEs) in Department of Transportation programs. This includes assisting MBEs throughout the life of contracts in which they participate.

(b) This part implements in part section 905 of the Railroad Revitalization and Regulatory Reform Act of 1978 (45 U.S.C. 803); section 30 of the Airport and Airway Development Act of 1970, as amended (49 U.S.C. 1730); section 19 of the Urban Mass Transportation Act of 1964, as amended (Pub. L. 95-599); Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d *et seq.*); the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 471 *et seq.*); and Title 23 of the U.S. Code (relating to highways and highway safety). This regulation supersedes all DOT regulations issued previously under these authorities, insofar as such regulations affect minority business enterprise matters in DOT financial assistance programs.

#### § 23.2 Applicability.

This part applies to any DOT program through which funds are made available to members of the public for accomplishing DOT's purposes. Contracts and subcontracts which are to be performed entirely outside the United States, its possessions, Puerto Rico, and the North Mariana Islands, are exempted from this part.

#### § 23.5 Definitions.

"Affirmative action" means taking specific steps to eliminate discrimination and its effects, to ensure nondis-

crimatory results and practices in the future, and to involve minority business enterprises fully in contracts and programs funded by the Department.

"Applicant" means one who submits an application, request, or plan to be approved by a Departmental official or by a primary recipient as a condition to eligibility for DOT financial assistance; and "application" means such an application, request, or plan.

"Compliance" means the condition existing when a recipient or contractor has met and implemented the requirements of this part.

"Contract" means a mutually binding legal relationship or any modification thereof obligating the seller to furnish supplies or services, including construction, and the buyer to pay for them. For purposes of this part, a lease is a contract.

"Contractor" means one who participates, through a contract or subcontract, in any program covered by this part, and includes lessees.

"Department" or "DOT" means the Department of Transportation, including its operating elements.

"DOT-assisted contract" means any contract or modification of a contract between a recipient and a contractor which is paid for in whole or in part with DOT financial assistance or any contract or modification of a contract between a recipient and a lessee.

"DOT financial assistance" means financial aid provided by the Department or the United States Railroad Association to a recipient, but does not include a direct contract. The financial aid may be provided directly in the form of actual money, or indirectly in the form of guarantees authorized by statute as financial assistance services of Federal personnel, title or other interest in real or personal property transferred for less than fair market value, or any other arrangement through which the recipient benefits financially, including licenses for the construction or operation of a Deep Water Port.

"Departmental element" means the following parts of DOT:

(a) The Office of the Secretary (OST);

(b) The Federal Aviation Administration (FAA);

(c) The United States Coast Guard (USCG);

(d) The Federal Highway Administration (FHWA);

(e) The Federal Railroad Administration (FRA);

(f) The National Highway Traffic Safety Administration (NHTSA);

(g) The Urban Mass Transportation Administration (UMTA);

(h) The St. Lawrence Seaway Development Corporation (SLSDC); and

(i) The Research and Special Programs Administration (RSPA).

"Joint venture" means an association of two or more businesses to carry out a single business enterprise for profit for which purpose they combine their property, capital, efforts, skills, and knowledge.

"Lessee" means a business or person that leases, or is negotiating to lease, property from a recipient or the Department on the recipient's or Department's facility for the purpose of operating a transportation-related activity or for the provision of goods or services to the facility or to the public on the facility.

"Minority" means a person who is a citizen or lawful permanent resident of the United States and who is:

(a) Black (a person having origins in any of the black racial groups of Africa);

(b) Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);

(c) Portuguese (a person of Portuguese, Brazilian, or other Portuguese culture or origin, regardless of race);

(d) Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or

(e) American Indian and Alaskan Native (a person having origins in any of the original peoples of North America.)

(f) Members of other groups, or other individuals, found to be economically and socially disadvantaged by the Small Business Administration under section 8(a) of the Small Business Act, as amended (15 U.S.C. 637(a)).

"Minority business enterprise" or "MBE" means a small business concern, as defined pursuant to section 3 of the Small Business Act and implementing regulations, which is owned and controlled by one or more minorities or women. This definition applies only to financial assistance programs. For the purposes of this part, owned and controlled means a business:

(a) Which is at least 51 per centum owned by one or more minorities or women or, in the case of a publicly owned business, at least 51 per centum of the stock of which is owned by one or more minorities or women; and

(b) Whose management and daily business operations are controlled by one or more such individuals.

"MBE coordinator" means the official designated by the head of the Department element to have overall responsibility for promotion of minority business enterprise in his/her Departmental element.

"Noncompliance" means the condition existing when a recipient or contractor has failed to implement the requirements of this part.

"Primary recipient" is a recipient who receives DOT financial assistance and passes some or all of this assistance on to another recipient.

"Program" means any undertaking by a recipient to use DOT financial assistance, and includes the entire activity any part of which receives DOT financial assistance.

"Recipient" means any entity, public or private, to whom DOT financial assistance is extended, directly or through another recipient for any program.

"Secretary" means the Secretary of transportation or any person whom he/she has designated to act for him/her.

"Set-aside" means a technique which limits consideration of bids or proposals to those submitted by MBEs.

[45 FR 21184, Mar. 31, 1980, as amended at 46 FR 60459, Dec. 10, 1981]

### § 23.7 Discrimination prohibited.

No person shall be excluded from participation in, denied the benefits

of, or otherwise discriminated against in connection with the award and performance of any contract covered by this part, on the grounds of race, color, national origin, or sex.

**Subpart B—[Reserved]**

**Subpart C—Department of Transportation Financial Assistance Programs**

**§ 23.41 General.**

(a) *Responsibilities of applicants and recipients.* (1) All applicants and recipients shall follow the requirements of section 23.43.

(2) Applicants and recipients in the following categories who will let DOT-assisted contracts shall implement an MBE program containing the elements set forth in § 23.45(e) through (i). This program shall be submitted for approval to the DOT element concerned with the application for financial assistance or project approval.

(i) Applicants for funds in excess of \$250,000, exclusive of transit vehicle purchases, under sections 3, 5, 9, 9A, 17 and 18 of the Urban Mass Transportation Act of 1964, as amended, and Federal-aid urban systems.

(ii) Applicants for planning funds in excess of \$100,000 under section 6, 8, 9 or 9A of the Urban Mass Transportation Act of 1964, as amended.

(iii) Applicants for Section 402 program funds of the National Highway Traffic Safety Administration;

(iv) Applicants for funds in excess of \$250,000 awarded by the Federal Aviation Administration to general aviation airports;

(v) Applicants for funds in excess of \$400,000 awarded by the Federal Aviation Administration to non-hub airports; and

(vi) Applicants for planning funds in excess of \$75,000 awarded by the Federal Aviation Administration.

(vii) Licensees or applicants for a license under the Deepwater Port Act of 1974 (33 U.S.C. 1501 *et seq.*).

(3) All applicants and recipients in the following categories who will let DOT-assisted contracts shall implement an MBE program containing all the elements set forth in § 23.45. The

program shall be submitted for approval to the DOT element concerned with the application for assistance or project approval.

(i) Applicants for Federal-aid highway program funds;

(ii) Applicants for funds in excess of \$500,000, exclusive of transit vehicle purchases, under sections 3, 5, 9, 9A, 17 and 18 of the Urban Mass Transportation Act of 1964, as amended, and Federal-aid urban systems;

(iii) Applicants for planning funds in excess of \$200,000 under section 6, 8, 9 and 9A of the Urban Mass Transportation Act of 1964, as amended.

(iv) Applicants for funds in excess of \$500,000 awarded by the Federal Aviation Administration to large, medium and small hub airports; and

(v) Applicants for financial assistance programs, including loan guarantees, by the Federal Railroad Administration and the United States Railway Association.

(b) *Approval requirement.* Applications and funding agreements are signed and authorizations to proceed are approved only after the applicant's MBE program has been approved by the Departmental element. This requirement applies to applications, authorizations to proceed requested by Federal-aid highway program recipients, and requests for draw downs from the U.S. Railway Association submitted 90 days or more following the effective date of this part.

(c) *Effect of agreement.* The MBE program prepared by the applicant and the commitment made by the applicant to carry out the MBE program is incorporated into and becomes part of this agreement and subsequent financial assistance agreements. The agreement between the Department and the recipient shall contractually bind the recipient to the commitments made in the MBE program, as approved by the Department. Failure to keep these commitments shall be deemed noncompliance with this part. Once submitted and approved, an MBE program is applicable to all DOT-assisted contracts solicited and let by the applicant after the approval date of the MBE program regardless of the approval date of the grant or

project under which the contracts are let.

(d) *Other MBE programs.* (1) Applicants meeting the criteria set forth in paragraphs (a)(2) and (3) of this section who have formulated MBE programs under previous requirements of DOT or other agencies shall revise these programs to conform to the requirements of this part prior to the approval of their next application.

(2) An MBE program approved by one Departmental element is acceptable to all Departmental elements. Applicants having an approved MBE program are not required to resubmit the program or to produce a new program for future applications, as long as all requirements for approval continue to be met and implementation of the program is achieving compliance. The Departmental element reassesses its approval of the MBE program of continuing recipients at least annually.

(e) *Transit vehicle manufacturers.* Transit vehicle manufacturers who wish to bid on UMTA-assisted transit vehicle procurement contracts shall have a UMTA-approved MBE program. Each UMTA recipient shall require these manufacturers to certify that they have such a program as a condition for bidding on UMTA-assisted contracts.

(f) *Exemptions.* The head of the Departmental element may, under appropriate circumstances, and with the concurrence of the Secretary, grant deviations or exemptions from this subpart. A request for deviation or exemption from this subpart shall be in writing and shall include a showing as to how the particular situation is exceptional and how the modified program complies substantially with this part. If the applicant asserts that State or local law prohibits it from including a particular provision in its program, the applicant shall provide copies of all legal citations supporting the claim.

[45 FR 21184, Mar. 31, 1980, as amended at 48 FR 33444, July 21, 1983]

§ 23.43 General requirements for recipients.

(a) Each recipient shall agree to abide by the statements in paragraphs (a)(1) and (2) of this section. These

statements shall be included in the recipient's DOT financial assistance agreement and in all subsequent agreements between the recipient and any subrecipient and in all subsequent DOT-assisted contracts between recipients or subrecipients and any contractor.

(1) *"Policy.* It is the policy of the Department of Transportation that minority business enterprises as defined in 49 CFR Part 23 shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with Federal funds under this agreement. Consequently the MBE requirements of 49 CFR Part 23 apply to this agreement."

(2) *"MBE Obligation.* (1) The recipient or its contractor agrees to ensure that minority business enterprises as defined in 49 CFR Part 23 have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this agreement. In this regard all recipients or contractors shall take all necessary and reasonable steps in accordance with 49 CFR Part 23 to ensure that minority business enterprises have the maximum opportunity to compete for and perform contracts. Recipients and their contractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of DOT-assisted contracts."

(b) Each DOT financial assistance agreement shall include the following: "If as a condition of assistance the recipient has submitted and the Department has approved a minority business enterprise affirmative action program which the recipient agrees to carry out, this program is incorporated into this financial assistance agreement by reference. This program shall be treated as a legal obligation and failure to carry out its terms shall be treated as a violation of this financial assistance agreement. Upon notification to the recipient of its failure to carry out the approved program the Department shall impose such sanctions as noted in 49 CFR Part 23, Subpart E, which sanctions may include termination of the agreement or other measures that may affect the ability

of the recipient to obtain future DOT financial assistance."

(c) The recipient shall advise each subrecipient, contractor, or subcontractor that failure to carry out the requirements set forth in § 23.43(a) shall constitute a breach of contract and, after the notification of the Department, may result in termination of the agreement or contract by the recipient or such remedy as the recipient deems appropriate.

(d) Recipients shall take action concerning lessees as follows:

(1) Recipients shall not exclude MBEs from participation in business opportunities by entering into long-term, exclusive agreements with non-MBEs for the operation of major transportation-related activities or major activities for the provision of goods and services to the facility or to the public on the facility.

(2) Recipients required to submit affirmative action programs under § 23.41 (a)(2) or (a)(3) that have business opportunities for lessees shall submit to the Department for approval with their programs overall goals for the participation as lessees of firms owned and controlled by minorities and firms owned and controlled by women. These goals shall be for a specified period of time and shall be based on the factors listed in § 23.45(g)(5). Recipients shall review these goals at least annually, and whenever the goals expire. The review shall analyze projected versus actual MBE participation during the period covered by the review and any changes in factual circumstances affecting the selection of goals. Following each review, the recipient shall submit new overall goals to the Department for approval. Recipients that fail to meet their goals for MBE lessees shall demonstrate to the Department in writing that they made reasonable efforts to meet the goals.

(3) Except as provided in this section, recipients are not required to include lessees in their affirmative action programs. Lessees themselves are not subject to the requirements of this part, except for the obligation of § 23.7 to avoid discrimination against MBEs.

§ 23.45 Required MBE program components.

(a) *A policy statement, expressing a commitment to use MBEs in all aspects of contracting to the maximum extent feasible.* (1) The applicant's policymaking body (Board, Council, etc.) shall issue a policy statement, signed by the chairperson, which expresses its commitment to the program, outlines the various levels of responsibility and states the objectives of the program. The policy statement shall be circulated throughout the applicant's organization and to minority, female, and nonminority community and business organizations.

(b) *The designation of liaison officer, as well as such support staff as may be necessary and proper to administer the program, and a description of the authority, responsibility, and duties of the liaison officer and support staff.* (1) The Chief Executive Officer of the recipient shall designate an MBE liaison officer and adequate staff to administer the MBE program. The MBE liaison officer shall report directly to the Chief Executive Officer.

(2) The MBE liaison officer shall be responsible for developing, managing, and implementing the MBE program on a day-to-day basis; for carrying out technical assistance activities for MBEs; and for disseminating information on available business opportunities so that MBEs are provided an equitable opportunity to bid on the applicant's contracts.

(c) *Procedures to ensure that MBEs have an equitable opportunity to compete for contracts and subcontracts.* The recipient shall develop and use affirmative action techniques to facilitate MBE participation in contracting activities. These techniques include:

(1) Arranging solicitations, time for the presentation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation MBEs.

(2) Providing assistance to MBEs in overcoming barriers such as the inability to obtain bonding, financing, or technical assistance.

(3) Carrying out information and communications programs on con-

tracting procedures and specific contracting opportunities in a timely manner, with such programs being bilingual where appropriate.

(d) *Opportunities for the use of banks owned and controlled by minorities or women.* (1) The recipient shall thoroughly investigate the full extent of services offered by banks owned and controlled by minorities or women in its community and make the greatest feasible use of these banks.

(2) Recipients shall also encourage prime contractors to use the services of banks owned and controlled by minorities or women.

(e) *MBE directory.* (1) The recipient shall have available a directory or source list to facilitate identifying MBEs with capabilities relevant to general contracting requirements and to particular solicitations. The recipient shall make the directory available to bidders and proposers in their efforts to meet the MBE requirements. It shall specify which firms the Department, recipient, or the Small Business Administration has determined to be eligible MBEs in accordance with procedures set forth in this subpart.

(f) *Procedures to ascertain the eligibility of MBEs and joint ventures involving MBEs.* (1) To ensure that its MBE program benefits only firms owned and controlled by minorities or women, the recipient shall certify the eligibility of MBEs and joint ventures involving MBEs that are named by the competitors in accordance with this subpart. Recipients may, at their own discretion, accept certifications made by other DOT recipients.

(2) Recipients shall require their prime contractors to make good faith efforts to replace an MBE subcontractor that is unable to perform successfully with another MBE. The recipient shall approve all substitutions of subcontractors before bid opening and during contract performance, in order to ensure that the substitute firms are eligible MBEs.

(g) *Percentage goals for the dollar value of work to be awarded to MBEs.* (1) Once the recipient has reviewed proposed contracting to identify those contracting activities which have the greatest potential for MBE participation, the recipient shall set goals that

are practical and related to the potential availability of MBEs in desired areas of expertise.

(2) The applicant/recipient shall establish two types of MBE goals:

(i) Overall goals for its entire MBE program, for a specified period of time (e.g. one year), or for a specific project, (e.g. the construction of a facility); and

(ii) Contract goals on each specific prime contract with subcontracting possibilities, which the bidder or proposer must meet or exceed or demonstrate that it could not meet despite its best efforts.

(3)(i) Recipients shall submit their overall goals and a description of the methodology used in establishing them with their MBE program. When the overall goals expire, new overall goals shall be set and submitted to the Department for approval. Contract goals need not be submitted in the applicant's MBE program, but the program shall contain a description of the methodology to be used in establishing them. Contract goals may require approval by the Department prior to contract solicitation.

(ii) At the time the recipient submits its overall goals to the Department for approval, the recipient shall publish a notice announcing these goals, informing the public that the goals and a description of how they were selected are available for inspection during normal business hours at the principal office of the recipient for 30 days following the date of the notice, and informing the public that the Department and the recipient will accept comments on the goals for 45 days from the date of the notice. The notice shall include addresses to which comments may be sent, and shall be published in general circulation media and available minority-focus media and trade association publications, and shall state that the comments are for informational purposes only.

(4) Recipients shall set separate overall and contract goals for firms owned and controlled by minorities and firms owned and controlled by women.

(5) The applicant shall consider the following factors in setting overall goals:

(i) Overall goals shall be based on projection of the number and types of contracts to be awarded by the applicant and a projection of the number and types of MBEs likely to be available to compete for contracts from the recipient over the period during which the goals will be in effect.

(ii) Overall goals shall also be based on past results of the applicant's/recipient's efforts to contract with MBEs and the reasons for the high or low level of those results.

(6) The applicant/recipient shall review the overall goals at least annually. The review process shall analyze projected versus actual MBE participation during the previous year. The necessary revisions shall be made based on the analysis and submitted to the Department for approval.

(7) Goals shall be set for specific contracts based on the known availability of qualified MBEs.

(8) Recipients and contractors shall, at a minimum, seek MBEs in the same geographic area in which they seek contractors or subcontractors generally for a given solicitation. If the recipient or contractor cannot meet the goals using MBEs from this geographic area, the recipient or contractor, as part of its efforts to meet the goal, shall expand its search to a reasonable wider geographic area.

(h) *A means to ensure that competitors make good faith efforts to meet MBE contract goals:*

(1) For all contracts for which contract goals have been established, the recipient shall, in the solicitation, inform competitors that the apparent successful competitor will be required to submit MBE participation information to the recipient and that the award of the contract will be conditioned upon satisfaction of the requirements established by the recipient pursuant to this subsection.

(i) The apparent successful competitor's submission shall include the following information:

(A) The names and addresses of MBE firms that will participate in the contract;

(B) A description of the work each named MBE firm will perform;

(C) The dollar amount of participation by each named MBE firm.

(ii) The recipient may select the time at which it requires MBE information to be submitted. *Provided*, that the time of submission shall be before the recipient commits itself to the performance of the contract by the apparent successful competitor.

(2) If the MBE participation submitted in response to paragraph (h)(1) of this section does not meet the MBE contract goals, the apparent successful competitor shall satisfy the recipient that the competitor has made good faith efforts to meet the goals.

(i) The recipient may prescribe other requirements of equal or greater effectiveness in lieu of good faith efforts. Any recipient choosing alternative requirements shall inform the DOT office concerned by letter of the content of the requirements it has prescribed within 30 days of the effective date of this subsection. The recipient may put these alternative requirements into effect immediately and prior DOT approval of alternative requirements is not necessary.

(ii) If the Department determines that the alternative requirements are not as or more effective than the good faith efforts provisions of this subsection, the Department may require the recipient to use the good faith efforts requirements of this subsection instead of the requirements it has prescribed.

(3) Meeting MBE contract goals, making good faith efforts as provided in paragraph (h)(2) of this section, or meeting requirements established by recipients in lieu of good faith efforts, is a condition of receiving a DOT-assisted contract for which contract goals have been established.

(i) [Reserved]

(j) *A description of the methods by which the recipient will require subcontractors, contractors, and subcontractors to comply with applicable MBE requirements.* (1) The recipient shall include in its MBE program a description and the specific language of any preconditions to subgrants or contracts pertaining to the use of MBEs, including subcontracting programs, it awards with DOT funds in addition to those required by this section. It shall specify on what size and/or type of contracts and subgrants it includes

such preconditions. The description shall contain a summary of the ways the recipient provides help to its subrecipients, contractors, and subcontractors in drafting and implementing their programs for using MBEs. The description shall also include the means by which the recipient enforces the requirements placed on subrecipients, contractors and subcontractors.

(2) Any MBE subcontracting programs required by the recipient in addition to those required by this section shall be submitted to the recipient by the apparent successful bidder/proposer. The bidders/proposers shall be advised in the solicitation that failure to submit the additional MBE subcontracting program shall make the bidder/proposer ineligible for award.

(k) *Procedures by which the applicant/recipient will implement MBE set-asides.* Where not prohibited by state or local law and determined by the recipient to be necessary to meet MBE goals, procedures to implement MBE set-asides shall be established. MBE set-asides shall be used only in cases where at least three MBEs with capabilities consistent with contract requirements exist so as to permit competition.

#### APPENDIX A—GUIDANCE CONCERNING GOOD FAITH EFFORTS

To determine whether a competitor that has failed to meet MBE contract goals may receive the contract, the recipient must decide whether the efforts the competitor made to obtain MBE participation were "good faith efforts" to meet the goals. Efforts that are merely *pro forma* are not good faith efforts to meet the goals. Efforts to obtain MBE participation are not good faith efforts to meet the goals, even if they are sincerely motivated, if, given all relevant circumstances, they could not reasonably be expected to produce a level of MBE participation sufficient to meet the goals. In order to award a contract to a competitor that has failed to meet MBE contract goals, the recipient must determine that the competitor's efforts were those that, given all relevant circumstances, a competitor actively and aggressively seeking to meet the goals would make.

To assist recipients in making the required judgment, the Department has prepared a list of the kinds of efforts that contractors may make in obtaining MBE participation. It is not intended to be a manda-

tory checklist; the Department does not require recipients to insist that a contractor do any one, or any particular combination, of the things on the list. Nor is the list intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases. In determining whether a contractor has made good faith efforts, it will usually be important for a recipient to look not only at the different kinds of efforts that the contractor has made, but also the quantity and intensity of these efforts.

The Department offers the following list of kinds of efforts that recipients may consider:

(1) Whether the contractor attended any pre-solicitation or pre-bid meetings that were scheduled by the recipient to inform MBEs of contracting and subcontracting opportunities;

(2) Whether the contractor advertised in general circulation, trade association, and minority-focus media concerning the subcontracting opportunities;

(3) Whether the contractor provided written notice to a reasonable number of specific MBEs that their interest in the contract was being solicited, in sufficient time to allow the MBEs to participate effectively;

(4) Whether the contractor followed up initial solicitations of interest by contacting MBEs to determine with certainty whether the MBEs were interested;

(5) Whether the contractor selected portions of the work to be performed by MBEs in order to increase the likelihood of meeting the MBE goals (including, where appropriate, breaking down contracts into economically feasible units to facilitate MBE participation);

(6) Whether the contractor provided interested MBEs with adequate information about the plans, specifications and requirements of the contract;

(7) Whether the contractor negotiated in good faith with interested MBEs, not rejecting MBEs as unqualified without sound reasons based on a thorough investigation of their capabilities;

(8) Whether the contractor made efforts to assist interested MBEs in obtaining bonding, lines of credit, or insurance required by the recipient or contractor; and

(9) Whether the contractor effectively used the services of available minority community organizations; minority contractors' groups; local, state and Federal minority business assistance offices; and other organizations that provide assistance in the recruitment and placement of MBEs.

(Title VI of the Civil Rights Act of 1964; sec. 30 of the Airport and Airway Development Act of 1970, as amended; sec. 905 of the Railroad Revitalization and Regulatory Reform Act of 1976; sec. 19 of the Urban Mass Transportation Act of 1964, as amend-

ed; 23 U.S.C. 324; Executive Order 11625; Executive Order 12138)

(45 FR 21184, Mar. 31, 1980, as amended at 46 FR 23461, Apr. 27, 1981)

§ 23.47 Counting MBE participation toward meeting MBE goals.

MBE participation shall be counted toward meeting MBE goals set in accordance with this subpart as follows:

(a) Once a firm is determined to be an eligible MBE in accordance with this subpart, the total dollar value of the contract awarded to the MBE is counted toward the applicable MBE goals.

(b) The total dollar value of a contract to an MBE owned and controlled by both minority males and non-minority females is counted toward the goals for minorities and women, respectively, in proportion to the percentage of ownership and control of each group in the business. The total dollar value of a contract with an MBE owned and controlled by minority women is counted toward either the minority goal or the goal for women, but not to both. The contractor or recipient employing the firm may choose the goal to which the contract value is applied.

(c) A recipient or contractor may count toward its MBE goals a portion of the total dollar value of a contract with a joint venture eligible under the standards of this subpart equal to the percentage of the ownership and controls of the MBE partner in the joint venture.

(d)(1) A recipient or contractor may count toward its MBE goals only expenditures to MBEs that perform a commercially useful function in the work of a contract. An MBE is considered to perform a commercially useful function when it is responsible for execution of a distinct element of the work of a contract and carrying out its responsibilities by actually performing, managing, and supervising the work involved. To determine whether an MBE is performing a commercially useful function, the recipient or contractor shall evaluate the amount of work subcontracted, industry practices, and other relevant factors.

(2) Consistent with normal industry practices, an MBE may enter into sub-

contracts. If an MBE contractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of normal industry practices, the MBE shall be presumed not to be performing a commercially useful function. The MBE may present evidence to rebut this presumption to the recipient. The recipient's decision on the rebuttal of this presumption is subject to review by the Department.

(e) A recipient or contractor may count toward its MBE goals expenditures for materials and supplies obtained from MBE suppliers and manufacturers, provided that the MBEs assume the actual and contractual responsibility for the provision of the materials and supplies.

(1) The recipient or contractor may count its entire expenditure to an MBE manufacturer (i.e., a supplier that produces goods from raw materials or substantially alters them before resale).

(2) The recipient may count 20 percent of its expenditures to MBE suppliers that are not manufacturers, provided that the MBE supplier performs a commercially useful function in the supply process.

§ 23.49 Maintenance of records and reports.

(a) In order to monitor the progress of its MBE program the applicant/recipient shall develop a recordkeeping system which will identify and assess MBE contract awards, prime contractors' progress in achieving MBE subcontract goals, and other MBE affirmative action efforts.

(b) Specifically, the applicant/recipient shall maintain records showing:

(1) Procedures which have been adopted to comply with the requirements of this part.

(2) Awards to MBEs. These awards shall be measured against projected MBE awards and/or MBE goals. To assist in this effort, the applicant shall obtain regular reports from prime contractors on their progress in meeting contractual MBE obligations.

(3) Specific efforts to identify and award contracts to MBEs.

(c) Records shall be available upon the request of an authorized officer or employee of the government.

(d)(1) The recipient shall submit reports conforming in frequency and format to existing contract reporting requirements of the applicable Departmental element. Where no such contract reporting requirements exist, MBE reports shall be submitted quarterly.

(2) These reports shall include as a minimum:

(i) The number of contracts awarded to MBEs;

(ii) A description of the general categories of contracts awarded to MBEs;

(iii) The dollar value of contracts awarded to MBEs;

(iv) The percentage of the dollar value of all contracts awarded during this period which were awarded to MBEs; and

(v) An indication of whether and the extent of which the percentage met or exceeded the goal specified in the application.

(3) The records and reports required by this section shall provide information relating to firms owned and controlled by minorities separately from information relating to firms owned and controlled by women. If the records and reports include any section 8(a) contractors that are not minorities or women, information concerning these contractors shall also be recorded and reported separately.

#### § 23.51 Certification of the eligibility of minority business enterprises.

(a) To ensure that this part benefits only MBEs which are owned and controlled in both form and substance by one or more minorities or women, DOT recipients shall use Schedules A and B (reproduced at the end of this Part) to certify firms who wish to participate as MBEs in DOT under this part.

(b) Except as provided in paragraph (c) of this section, each business, including the MBE partner in a joint venture, wishing to participate as a MBE under this part in a DOT-assisted contract shall complete and submit Schedule A. Each entity wishing to participate as a joint venture MBE under this part in DOT-assisted con-

tracts shall in addition complete and submit Schedule B. The schedule(s) shall be signed and notarized by the authorized representative of the business entity. A business seeking certification as an MBE shall submit the required schedules with its bid or proposal for transmission to the contracting agency involved.

(c) Under the following circumstances, a business seeking to participate as an MBE under this subpart need not submit schedule A or B:

(1) If a DOT recipient has established a different certification process that DOT has determined to be as or more effective than the process provided for by this section. Where such a process exists, potential MBE contractors shall submit the information required by the recipient's process.

(2) If the potential MBE contractor states in writing that it has submitted the same information to or has been certified by the DOT recipient involved, any DOT element, or another Federal agency that uses essentially the same definition and ownership and control criteria as DOT. The potential MBE contractor shall obtain the information and certification (if any) from the other agency and submit it to the recipient or cause the other agency to submit it. The recipient may rely upon such a certification. Where another agency has collected information but not made a determination concerning eligibility, the DOT recipient shall make its own determination based on the information it has obtained from the other agency.

(3) If the potential MBE contractor has been determined by the Small Business Administration to be owned and controlled by socially and economically disadvantaged individuals under section 8(a) of the Small Business Act, as amended.

#### § 23.53 Eligibility standards.

(a) The following standards shall be used by recipients in determining whether a firm is owned and controlled by one or more minorities or women is and shall therefore be eligible to be certified as an MBE. Businesses aggrieved by the determination

may appeal in accordance with procedures set forth in § 23.55.

(1) Bona fide minority group membership shall be established on the basis of the individual's claim that he or she is a member of a minority group and is so regarded by that particular minority community. However, the recipient is not required to accept this claim if it determines the claim to be invalid.

(2) An eligible minority business enterprise under this part shall be an independent business. The ownership and control by minorities or women shall be real, substantial, and continuing and shall go beyond the *pro forma* ownership of the firm as reflected in its ownership documents. The minority or women owners shall enjoy the customary incidents of ownership and shall share in the risks and profits commensurate with their ownership interests, as demonstrated by a examination of the substance rather than form of arrangements. Recognition of the business as a separate entity for tax or corporate purposes is not necessarily sufficient for recognition as an MBE. In determining whether a potential MBE is an independent business, DOT recipients shall consider all relevant factors, including the date the business was established, the adequacy of its resources for the work of the contract, and the degree to which financial, equipment leasing, and other relationships with nonminority firms vary from industry practice.

(3) The minority or women owners shall also possess the power to direct or cause the direction of the management and policies of the firm and to make the day-to-day as well as major decisions on matters of management, policy, and operations. The firm shall not be subject to any formal or informal restrictions which limit the customary discretion of the minority or women owners. There shall be no restrictions through, for example, bylaw provisions, partnership agreements, or charter requirements for cumulative voting rights or otherwise that prevent the minority or women owners, without the cooperation or vote of any owner who is not a minority or woman, from making a business decision of the firm.

(4) If the owners of the firm who are not minorities or women are disproportionately responsible for the operation of the firm, then the firm is not controlled by minorities or women and shall not be considered an MBE within the meaning of this part. Where the actual management of the firm is contracted out to individuals other than the owner, those persons who have the ultimate power to hire and fire the managers can, for the purposes of this part, be considered as controlling the business.

(5) All securities which constitute ownership and/or control of a corporation for purposes of establishing it as an MBE under this part shall be held directly by minorities or women. No securities held in trust, or by any guardian for a minor, shall be considered as held by minority or women in determining the ownership or control of a corporation.

(6) The contributions of capital or expertise by the minority or women owners to acquire their interests in the firm shall be real and substantial. Examples of insufficient contributions include a promise to contribute capital, a note payable to the firm or its owners who are not socially and economically disadvantaged, or the mere participation as an employee, rather than as a manager.

(b) In addition to the above standards, DOT recipients shall give special consideration to the following circumstances in determining eligibility under this part.

(1) Newly formed firms and firms whose ownership and/or control has changed since the date of the advertisement of the contract are closely scrutinized to determine the reasons for the timing of the formation of or change in the firm.

(2) A previous and/or continuing employer-employee relationship between or among present owners is carefully reviewed to ensure that the employee-owner has management responsibilities and capabilities discussed in this section.

(3) Any relationship between an MBE and a business which is not an MBE which has an interest in the MBE is carefully reviewed to determine if the interest of the non-MBE

conflicts with the ownership and control requirements of this section.

(c) A joint venture is eligible under this part if the MBE partner of the joint venture meets the standards for an eligible MBE set forth above and the MBE partner is responsible for a clearly defined portion of the work to be performed and shares in the ownership, control, management responsibilities, risks, and profits of the joint venture.

(d) A joint venture is eligible to compete in an MBE set-aside under this part if the MBE partner of the joint venture meets the standards of an eligible MBE set forth above, and the MBE partner's share in the ownership, control, and management responsibilities, risks, and profits of the joint venture is at least 51 percent and the MBE partner is responsible for a clearly defined portion of the work to be performed.

(e) A business wishing to be certified as an MBE or joint venture MBE by a DOT recipient shall cooperate with the recipient in supplying additional information which may be requested in order to make a determination.

(f) Once certified, an MBE shall update its submission annually by submitting a new Schedule A or certifying that the Schedule A on file is still accurate. At any time there is a change in ownership or control of the firm, the MBE shall submit a new schedule A.

(g) Except as provided in § 23.55, the denial of a certification by the Department or a recipient shall be final, for that contract and other contracts being let by the recipient at the time of the denial of certification. MBEs and joint ventures denied certification may correct deficiencies in their ownership and control and apply for certification only for future contracts.

(h) Recipients shall safeguard from disclosure to unauthorized persons information that reasonably may be regarded as confidential business information, consistent with Federal, state and local law.

#### § 23.55 Appeals of denials of certification as an MBE.

(a) *Filing.* Any firm which believes that it has been wrongly denied certi-

fication as an MBE or joint venture under §§ 23.51 and 23.53 by the Department or a recipient of DOT financial assistance may file an appeal in writing, signed and dated, with the Department. The appeal shall be filed no later than 180 days after the date of denial of certification. The Secretary may extend the time for filing or waive the time limit in the interest of justice, specifying in writing the reasons for so doing. Third parties who have reason to believe that another firm has been wrongly denied or granted certification as an MBE or joint venture may advise the Secretary. This information is not considered an appeal pursuant to this section.

(b) *Decision to investigate.* The Secretary ensures that a prompt investigation is made pursuant to prescribed DOT Title VI investigation procedures.

(c) *Status of certification during the investigation.* The Secretary may at his/her discretion, deny the MBE or joint venture in question eligibility to participate as an MBE DOT-assisted contracts let during the pendency of the investigation, after providing the MBE or joint venture in question an opportunity to show cause by written statement to the Secretary why this should not occur.

(d) *Cooperation in investigation.* All parties shall cooperate fully with the investigation. Failure or refusal to furnish requested information or other failure to cooperate is a violation of this part.

(e) *Determinations.* The Secretary makes one of the following determinations and informs the MBE or joint venture in writing of the reasons for the determination:

(1) The MBE or joint venture is certified; or

(2) The MBE or joint venture is not eligible to be certified and is denied eligibility to participate as an MBE in any direct or DOT-assisted contract until a new application for certification is approved by the recipient.

**Subpart D—Implementation of Section 105(f) of the Surface Transportation Assistance Act of 1982**

**AUTHORITY:** Sec. 105(f) of the Surface Transportation Assistance Act of 1982 (Pub. L. 97-424).

**SOURCE:** 48 FR 33442, July 21, 1983, unless otherwise noted.

**§ 23.61 Purpose.**

(a) The purpose of this subpart is to implement section 105(f) of the Surface Transportation Assistance Act of 1982 (Pub. L. 97-424) so that, except to the extent the Secretary determines otherwise, not less than ten percent of the funds authorized by the Act for the programs listed in § 23.63 of this subpart is expended with small business concerns owned and controlled by socially and economically disadvantaged individuals.

(b) The ten percent level of participation for disadvantaged businesses established by section 105(f) will be achieved if recipients under the programs covered by this subpart set and meet overall disadvantaged business goals of at least ten percent.

**§ 23.62 Definitions.**

The following definitions apply to this subpart. Where these definitions are inconsistent with the definitions of § 23.5 of this part, these definitions control for all other purposes under this part.

"Act" means the Surface Transportation Assistance Act of 1982 (Pub. L. 97-424).

"Disadvantaged business" means a small business concern: (a) Which is at least 51 percent owned by one or more socially and economically disadvantaged individuals, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more socially and economically disadvantaged individuals; and (b) whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

"Small business concern" means a small business as defined pursuant to section 3 of the Small Business Act

and relevant regulations promulgated pursuant thereto.

"Socially and economically disadvantaged individuals" means those individuals who are citizens of the United States (or lawfully admitted permanent residents) and who are Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, or Asian-Indian Americans and any other minorities or individuals found to be disadvantaged by the Small Business Administration pursuant to section 8(a) of the Small Business Act. Recipients shall make a rebuttable presumption that individuals in the following groups are socially and economically disadvantaged. Recipients also may determine, on a case-by-case basis, that individuals who are not a member of one of the following groups are socially and economically disadvantaged.

(a) "Black Americans," which includes persons having origins in any of the Black racial groups of Africa;

(b) "Hispanic Americans," which includes persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race;

(c) "Native Americans," which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians;

(d) "Asian-Pacific Americans," which includes persons whose origins are from Japan, China, Taiwan, Korea, Vietnam, Laos, Cambodia, the Philippines, Samoa, Guam, the U.S. Trust Territories of the Pacific, and the Northern Marianas; and

(e) "Asian-Indian Americans," which includes persons whose origins are from India, Pakistan, and Bangladesh.

**§ 23.63 Applicability.**

This subpart applies to all DOT financial assistance in the following categories that recipients expend in DOT-assisted contracts:

(a) Federal-aid highway funds authorized by Title I and section 202 of Title II of the Act; and

(b) Urban mass transportation funds authorized by Title I or III of the Act or the Urban Mass Transportation Act of 1964, as amended.

## § 23.64 Submission of overall goals.

(a) Each recipient of funds to which this subpart applies that is required to have an MBE program under § 23.41 of this part shall establish an overall goal for the use of disadvantaged businesses.

(b) Each recipient required to establish an overall goal shall calculate it in terms of a percentage of one of the following bases, as applicable:

(1) For recipients of Federal-aid highway funds, all such funds that the recipient will expend in DOT-assisted contracts in the forthcoming fiscal year; or

(2) For recipients of urban mass transportation funds, all such funds (exclusive of funds to be expended for purchases of transit vehicles) that the recipient will expend in DOT-assisted contracts in the forthcoming fiscal year. In appropriate cases, the UMTA Administrator may permit recipients to express overall goals as a percentage of funds for a particular grant, project, or group of grants and/or projects.

(c) Each recipient of Federal-aid highway funds or urban mass transportation funds shall submit its overall goal to FHWA or UMTA, as appropriate, for approval 60 days before the beginning of the Federal fiscal year to which the goal applies. An UMTA recipient calculating its overall goal as a percentage of funds for a particular grant, project, or group of grants or projects shall submit its overall goal to UMTA at a time determined by the UMTA Administrator.

(d) Recipients submitting a goal of ten percent or more shall submit the goal under the procedures set forth in § 23.45(g) of this part.

(e) If an FHWA or UMTA recipient requests approval of an overall goal of less than ten percent, the recipient shall take the following steps in addition to those set forth in § 23.45(g) of this part:

(1) Submit with its request a justification including the elements set forth in § 23.65;

(2) Ensure that the request is signed, or concurred in, by the Governor of the state (in the case of a state transportation agency) or the Mayor or other elected official(s) responsible for

the operation of a mass transit agency; and

(3) Consult with minority and general contractors' associations, community organizations, and other officials or organizations which could be expected to have information concerning the availability of disadvantaged businesses and the adequacy of the recipient's efforts to increase the participation of such businesses. If it appears to the Administrator that the recipient has failed to consult with a relevant person or organization, the Administrator may direct the recipient to consult with that person or organization.

## § 23.65 Content of justification.

An FHWA or UMTA recipient requesting approval of an overall goal of less than ten percent shall include information on the following points in its justification. Guidance concerning this information is found in Appendix D.

(a) The recipient's efforts to locate disadvantaged businesses;

(b) The recipient's efforts to make disadvantaged businesses aware of contracting opportunities;

(c) The recipient's initiatives to encourage and develop disadvantaged businesses;

(d) Legal or other barriers impeding the participation of disadvantaged businesses at at least a ten percent level in the recipient's DOT-assisted contracts, and the recipient's efforts to overcome or mitigate the effects of these barriers;

(e) The availability of disadvantaged businesses to work on the recipient's DOT-assisted contracts;

(f) The size and other characteristics of the minority population of the recipient's jurisdiction, and the relevance of these factors to the availability or potential availability of disadvantaged businesses to work on the recipient's DOT-assisted contracts; and

(g) A summary of the views and information concerning the availability of disadvantaged businesses and the adequacy of the recipient's efforts to increase the participation of such businesses provided by the persons and or-

**§ 23.66**

ganizations consulted by the recipient under § 23.64(f)(3).

**§ 23.66 Approval and disapproval of overall goals.**

(a) The Administrator reviews and approves any overall goal of ten percent or more submitted by a recipient as provided in § 23.45(g) of this part.

(b) The Administrator of the concerned Departmental element approves a requested goal of less than ten percent if he or she determines, on the basis of the recipient's justification and any other information available to the Administrator, that

(1) The recipient is making all appropriate efforts to increase disadvantaged business participation in its DOT-assisted contracts to a ten percent level; and

(2) Despite the recipient's efforts, the recipient's requested goal represents a reasonable expectation for the participation of disadvantaged businesses in its DOT-assisted contracts, given the availability of disadvantaged businesses to work on these contracts.

(c) Before approving or disapproving a requested goal of less than ten percent, the Administrator provides the Director of the DOT Office of Small and Disadvantaged Business Utilization with an opportunity to review and comment on the request.

(d) If the Administrator does not approve the goal the recipient has requested, the Administrator, after consulting with the recipient, establishes an adjusted overall goal. The adjusted overall goal represents the Administrator's determination of a reasonable expectation for the participation of disadvantaged businesses in the recipient's DOT-assisted contracts, and is based on the information provided by the recipient and/or other information available to the Administrator.

(e) The Administrator may condition the approval or establishment of any overall goal on any reasonable future action by the recipient.

**§ 23.67 Special provision for transit vehicle manufacturers.**

(a) Each UMTA recipient shall require that each transit vehicle manufacturer, as a condition of being authorized to bid on transit vehicle pro-

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curements in which UMTA funds participate, certify that it has complied with the requirements of this section. This requirement shall go into effect on October 1, 1983.

(b) Each manufacturer shall establish and submit for the UMTA Administrator's approval an annual percentage overall goal. The base from which the goal is calculated shall be the amount of UMTA financial assistance participating in transit vehicle contracts to be performed by the manufacturer during the fiscal year in question. Funds attributable to work performed outside the United States and its territories, possessions, and commonwealths shall be excluded from this base. The requirements and procedures of § 23.64 (d) and (e)(1) and §§ 23.65-23.66 of this subpart shall apply to transit vehicle manufacturers as they apply to recipients.

(c) The manufacturer may make the certification called for in paragraph (a) if it has submitted the goal required by paragraph (b) and the UMTA Administrator has either approved it or not disapproved it.

**§ 23.68 Compliance.**

(a) Compliance with the requirements of this subpart is enforced through the provisions of this section, not through the provisions of Subpart E of this part.

(b) Failure of a recipient to have an approved MBE program, including an approved overall goal, as required by § 23.64 of this subpart, is noncompliance with this subpart.

(c) If a recipient fails to meet an approved overall goal, it shall have the opportunity to explain to the Administrator of the concerned Department element why the goal could not be achieved and why meeting the goal was beyond the recipient's control.

(d)(1) If the recipient does not make such an explanation, or if the Administrator determines that the recipient's explanation does not justify the failure to meet the approved overall goal, the Administrator may direct the recipient to take appropriate remedial action. Failure to take remedial action directed by the Administrator is noncompliance with this subpart.

(2) Before the Administrator determines whether a recipient's explanation of justifies its failure to meet the approved overall goal, the Administrator gives the Director, Office of Small and Disadvantaged Business Utilization, an opportunity to review and comment on the recipient's explanation.

(e)(1) In the event of noncompliance with this subpart by a recipient of Federal-aid highway funds, the FHWA Administrator may take any action provided for in 23 CFR 1.36.

(2) In the event of noncompliance with this subpart by a recipient of funds administered by UMTA, the UMTA Administrator may take appropriate enforcement action. Such action may include the suspension or termination of Federal funds or the refusal to approve projects, grants, or contracts until deficiencies are remedied.

[48 FR 33442, July 21, 1983; 48 FR 41163, Sept. 14, 1983]

#### § 23.69 Challenge procedure.

(a) Each recipient required to establish an overall goal under § 23.64 shall establish a challenge procedure consistent with this section to determine whether an individual presumed to be socially and economically disadvantaged as provided in § 23.62 is in fact socially and economically disadvantaged.

(b) The recipient's challenge procedure shall provide as follows:

(1) Any third party may challenge the socially and economically disadvantaged status of any individual (except an individual who has a current 8(a) certification from the Small Business Administration) presumed to be socially and economically disadvantaged if that individual is an owner of a firm certified by or seeking certification from the recipient as a disadvantaged business. The challenge shall be made in writing to the recipient.

(2) With its letter, the challenging party shall include all information available to it relevant to a determination of whether the challenged party is in fact socially and economically disadvantaged.

(3) The recipient shall determine, on the basis of the information provided by the challenging party, whether

there is reason to believe that the challenged party is in fact not socially and disadvantaged.

(i) If the recipient determines that there is not reason to believe that the challenged party is not socially and economically disadvantaged, the recipient shall so inform the challenging party in writing. This terminates the proceeding.

(ii) If the recipient determines that there is reason to believe that the challenged party is not socially and economically disadvantaged, the recipient shall begin a proceeding as provided in paragraphs (b) (4), (5), and (6) of this paragraph.

(4) The recipient shall notify the challenged party in writing that his or her status as a socially and economically disadvantaged individual has been challenged. The notice shall identify the challenging party and summarize the grounds for the challenge. The notice shall also require the challenged party to provide to the recipient, within a reasonable time, information sufficient to permit the recipient to evaluate his or her status as a socially and economically disadvantaged individual.

(5) The recipient shall evaluate the information available to it and make a proposed determination of the social and economic disadvantage of the challenged party. The recipient shall notify both parties of this proposed determination in writing, setting forth the reasons for its proposal. The recipient shall provide an opportunity to the parties for an informal hearing, at which they can respond to this proposed determination in writing and in person.

(6) Following the informal hearing, the recipient shall make a final determination. The recipient shall inform the parties in writing of the final determination, setting forth the reasons for its decision.

(7) In making the determinations called for in paragraphs (b) (3), (5), and (6) of this paragraph, the recipient shall use the standards set forth in Appendix C to this subpart.

(8) During the pendency of a challenge under this section, the presumption that the challenged party is a so-

cially and economically disadvantaged individual shall remain in effect.

(c) The final determination of the recipient under subparagraphs (b)(3)(i) and (b)(6) may be appealed to the Department by the adversely affected party to the proceeding under the procedures of § 23.55 of this part.

#### APPENDIX A—SECTION-BY-SECTION ANALYSIS

This section-by-section analysis describes the provisions of the final rule. This material is normally published in the preamble to the final rule. However, the Department believes that it may be useful to recipients, contractors, and the public to publish this information in an appendix to the final regulation. As a result, this information will be available to users of the Code of Federal Regulations as well as to persons who have access to the FEDERAL REGISTER print of the regulation.

##### *Section 23.61 Purpose.*

This section states that the purpose of Subpart D is to implement section 105(f) of the Surface Transportation Assistance Act of 1982. The rest of the section restates the text of the statute and states that the ten percent level of disadvantaged business participation established by the statute will be achieved if recipients set and meet goals of at least ten percent. The Department of Transportation is committed to carrying out section 105(f) and achieving its objectives, and intends to enforce the obligations of the recipients and contractors under section 105(f) and 49 CFR Part 23.

##### *Section 23.62 Definitions.*

As used in Subpart D, the word "Act" means the Surface Transportation Assistance Act of 1982. The definition of the term "disadvantaged business" in Subpart D is very similar to the definition of the term "minority business enterprise" used for other purposes in 49 CFR Part 23. A different term is employed in recognition of the fact that a slightly different set of individuals is eligible to own and control a disadvantaged business than is eligible to own and control a minority business enterprise. In either case, at least 51 percent of the business must be owned by one or more of the eligible individuals, and the firm's management and daily business operations must be controlled by one or more of the eligible individuals who own it. It is important to note that the business owners themselves must control the operations of the business. Absentee ownership, or titular ownership by an individual who does not take an active

role in controlling the business, is not consistent with eligibility as a disadvantaged business under this regulation. In order to be an eligible disadvantaged business, a firm must meet the criteria of § 23.53 of this regulation and must be certified as 49 CFR Part 23 provides.

"Small business concern" is defined as a small business meeting the standards of section 3 of the Small Business Act and relevant regulations that implement it. These regulations are summarized in Appendix B to the subpart. It should be emphasized that any business which fails to qualify under the standards as a small concern, including a firm certified by SBA under the 8(a) program, cannot be certified as a disadvantaged business, even though it is owned and controlled by socially and economically disadvantaged individuals. Since the small business status of a firm can change over the years, we recommend that recipients make a point of reviewing periodically the small business status of firms with existing certifications periodically to make sure that they still qualify.

"Socially and economically disadvantaged individuals" is the term that defines the persons eligible to own and control a disadvantaged business. The term includes the following people: First, anyone found to be socially and economically disadvantaged by SBA under the 8(a) program is regarded as socially and economically disadvantaged for the purpose of DOT-assisted programs. Second, any individual who is a member of one of the designated groups (Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, and Asian Indian-Americans) is rebuttably presumed to be socially and economically disadvantaged. By "rebuttably presumed," we mean that the socially and economically disadvantaged status of any individual who is a member of one of the groups is normally assumed by the recipient. With the exception of persons whose origins are from Burma, Thailand, and Portugal, the members of these presumed groups are exactly the same persons who are considered to be minorities for purposes of the § 23.5 definition of "minority."

Individuals whose origins are from Burma, Thailand, and Portugal are not presumed to be socially and economically disadvantaged individuals for purposes of Subpart D. This means that firms owned and controlled by such individuals are eligible to be considered as MBEs for purposes of FRA, FAA, NHTSA and other DOT financial assistance programs but not as disadvantaged businesses for purposes of FHWA and UMTA programs (unless their owners are determined to be socially and economically disadvantaged on an individual basis). If SBA determines any additional groups to be presump

tively socially and economically disadvantaged, these groups will become eligible for consideration as owners of disadvantaged businesses on the same basis as Black Americans, Hispanic Americans, and members of the other presumptive groups.

A recipient may, through its certification program, determine that individuals who are not members of any of the presumptive groups are socially and economically disadvantaged. On this basis, for example, non-minority women, disabled Vietnam veterans, Appalachian white males, Hasidic Jews, or any other individuals who are able to demonstrate to the recipient that they are socially and economically disadvantaged may be treated as eligible to own and control a disadvantaged business, on the same basis as a member of one of the presumptive groups. It must be emphasized that these individuals are not determined to be socially and economically disadvantaged on the basis of their group membership. Rather, the social and economic disadvantage of each must be determined on an individual, case-by-case basis. Guidance for making these determinations is found in Appendix C.

#### *Section 23.63 Applicability.*

This section provides that Subpart D applies to all DOT financial assistance in two categories that recipients expend "in DOT-assisted contracts." This last phrase is very important. The base from which goals are calculated is not the total amount of money which each recipient receives from FHWA or UMTA. It is the amount of money that the recipient expends in DOT-assisted contracts. Funds that the recipient does not expend in contracts (i.e., funds spent by an FHWA recipient to acquire right-of-way or pay its own employees to supervise construction; funds used by an UMTA recipient to pay salaries of bus drivers) not part of the base from which the overall goal is calculated. Only those funds to be expended by the recipient in contracts are available to create contracting opportunities for disadvantaged businesses, so only these funds comprise the base from which goals for the use of disadvantaged businesses are calculated.

The first category of program funds to which Subpart D applies is Federal-aid highway funds authorized by Title I of the Act and highway safety program funds authorized by section 202 of Title II of the Act. The second category is Urban Mass Transportation funds authorized by Title I or Title III of the Act or the Urban Mass Transportation Act of 1964, as amended. Non-STAA funds authorized by the Urban Mass Transportation Act of 1964, as amended, should be counted as part of the base for calculating UMTA goals on the same basis as funds authorized by the STAA. The

Urban Mass Transportation Administration is including these funds in the base in order to minimize administrative inconvenience resulting from the joint use of funds authorized by different statutes. Otherwise, two different procedures would have to be used, often with respect to the same grant or project. UMTA takes this action under the authority of section 19 of the Urban Mass Transportation Act 1964, as amended.

#### *Section 23.64 Submission of Overall Goals.*

This section concerns the procedures for submission of overall goals to be used by recipients of funds covered by this subpart. Paragraph (a) is intended to avoid the imposition of new administrative burdens on recipients of relatively low amounts of DOT financial assistance. This paragraph provides that only those recipients who are required to have MBE programs under 49 CFR Part 23 must comply with the goal setting requirements of Subpart D. This includes all state transportation agencies who receive FHWA funds and UMTA recipients who receive at least \$250,000 in UMTA capital and operating funds, exclusive of funds for transit vehicle purchases, or \$100,000 in UMTA planning funds. UMTA recipients who are not required to have an MBE program by § 23.41 need not comply with the goal setting provisions of Subpart D.

Paragraph (b) describes how recipients calculate their overall goals. Recipients of FHWA funds use as the base for calculating their percentage goal all Federal-aid funds that the recipient will expend in DOT-assisted contracts in the forthcoming fiscal year. Funds authorized by section 202 of the STAA are considered to be Federal-aid highway funds for this purpose. For UMTA funds, the base is all Federal funds (exclusive of funds to be expended for transit vehicle purchases) that the recipient will expend in DOT-assisted contracts in the forthcoming fiscal year. The UMTA Administrator may, however, allow recipients to base their goals on Federal funds received for a particular grant, project, or group of grants or projects.

The Department is aware that recipients may not be aware of the exact amount of Federal funds to be received or to be used in Federally-assisted contracts in the forthcoming fiscal year. However, it is reasonable to expect that recipients will have a close enough projection so that they can determine a reasonable expectation for disadvantaged business participation expressed in percentage terms.

Paragraph (c) provides that, with the exception of UMTA recipients calculating their goals on a grant or project basis, each UMTA and FHWA recipient which must submit an overall goal is required to do so by the August 1 preceding the beginning of

the fiscal year to which the goals apply. For example, goal submissions pertaining to fiscal year 1985 are due August 1, 1984. In the case of Fiscal Year 1984, DOT expects recipients to submit their overall goals for approval as close to August 1 as possible.

Paragraph (d) provides that, if the recipient is submitting a goal of ten percent or more, the recipient simply submits the goal under the procedures of § 23.45(g) of this part, exactly in the manner that goals have been required to be submitted under the existing regulation.

Paragraph (e) concerns the situation in which a recipient is requesting approval of an overall goal of less than ten percent. Such a recipient is required to comply with the steps set forth in § 23.45(g). However, it is required to take three additional steps. First, it must submit a justification for its request containing the information listed in § 23.65.

Second, it must ensure that the request is signed or concurred in by the Governor of the state (in the case of a state transportation agency) or the Mayor or other elected official responsible for the operation of a mass transit agency. If the official responsible for the operation of a mass transit agency is not a Mayor, another appropriate elected official or officials should provide the signature or concurrence (e.g., a County Executive, the Chairman of a Board of Directors for a transit authority consisting of elected officials, etc.). The reason for this requirement is to ensure that a request for a goal of less than ten percent has the backing of the responsible elected official. This should help to prevent frivolous requests or requests based solely on the views of the non-elected staff of a state or local agency. It is also intended to protect the Department from becoming involved in a disagreement between, for example, a state transportation agency and a governor over disadvantaged business policy. It will also signal to the Department that a request for a lower goal has the backing of the highest responsible elected official involved with the jurisdiction.

The third requirement is that, before making a request for a goal of less than ten percent, the recipient must consult with minority and general contracting associations, community organizations (particularly minority community organizations) and other officials or organizations which can be expected to have information concerning the availability of disadvantaged businesses and the adequacy of recipients' efforts to increase the participation of such businesses. This consultation need not involve a formal public comment period. However, it should involve contact between responsible official(s) of the recipient and representatives of the organizations consulted, which

should also have the opportunity to provide written information.

The provision is based on the belief that the organizations consulted are likely to be in a position to give the recipient useful information concerning the availability of disadvantaged businesses and the effectiveness of and problems with the recipient's efforts to increase disadvantaged business participation. The information sought in the consultation is intended to include the views of the consulted parties on the points listed in paragraph (a)—(f) of § 23.65. Such information is important to the recipient in formulating a request for a goal of less than ten percent, the Department in evaluating such a request, and to both the recipient and the Department in attempting to determine what additional steps would be appropriate to increase disadvantaged business participation in the future.

There may be some circumstances in which a recipient will have failed to consult with a party whose information could be very useful to the formulation and evaluation of a request for a goal less than ten percent. If the Administrator becomes aware of such a case, the Administrator has the discretion to tell the recipient to go back and consult with that party. Pending this further consultation, the Administrator would not approve the request for a goal of less than ten percent.

#### *Section 23.65 Content of Justification*

Section 23.65 lists the types of information that a recipient seeking a goal of less than ten percent must provide to the Administrator. The purpose of this information is to enable the Department to make an informed determination of what the reasonable expectation for the recipient's disadvantaged business participation level is for the forthcoming fiscal year. These items of information are discussed in greater detail in Appendix D. In the absence of a justification, the FHWA and UMTA Administrators will not be able to consider a request for a goal of less than ten percent.

#### *Section 23.66 Approval and Disapproval of Overall Goals*

Paragraph (a) of this section concerns the situation in which a recipient submits for approval an overall goal of ten percent or more. In response to such a request, the Administrator follows the review and approval procedure provided in § 23.45(g) of the existing rule. The FHWA and UMTA Administrators will review and approve goals submitted under this paragraph in the same manner and in accordance with the same policies as they have reviewed and approved overall goals under the existing 49 CFR Part 23.

Paragraph (b) concerns a situation in which a recipient has requested approval of a goal of less than ten percent. In order to approve the goal the recipient has requested, the Administrator must make two determinations. First, the Administrator must determine that the recipient is making all appropriate efforts to increase disadvantaged participation on its DOT-assisted contracts to at least a ten percent level. Second, the Administrator must determine that, despite the recipient's efforts, the goal requested by the recipient is the reasonable expectation, short of ten percent, for the participation of disadvantaged businesses in its DOT-assisted contracts, given the availability of disadvantaged businesses to work on these contracts.

Both of these determinations are very important. The concept of a goal as the reasonable expectation for the recipient's performance recognizes the possibility that there may be limits, related to the availability of disadvantaged businesses, that prevent the attainment of a ten percent goal. Before granting a request for a goal below ten percent, the Administrator must determine that such a limit does in fact exist. However, the idea of a reasonable expectation also assumes that the recipient is doing everything it can to increase disadvantaged business participation, both by seeking to increase the availability of disadvantaged businesses and seeking to increase the ability of available disadvantaged businesses to work on its contracts. If the recipient is not taking all appropriate steps to increase disadvantaged business participation, then the goal it has requested is not its reasonable expectation for disadvantaged business participation.

If the Administrator does not approve the goal the recipient has requested, the Administrator, after consulting with the recipient, establishes an adjusted overall goal, which represents his or her determination of the reasonable expectation for recipient's disadvantaged business participation. This adjusted overall goal is on information provided by the recipient or any other information available to the Administrator from other sources, including input from interested groups and the past performance of the recipient or other recipients whose situation is analogous to that of the recipient in question. In approving either the goal requested by the recipient or in establishing an adjusted overall goal, the Administrator may always condition the approval or establishment of an overall goal on any reasonable future action by the recipient.

*Section 23.67 Special Provision for Transit Vehicle Manufacturers.*

This section addresses the special situation of the purchase of transit vehicles by

UMTA recipients. The intent of this section is to provide a simplified method by which transit vehicle manufacturers and UMTA recipients can meet disadvantaged business obligations. The Department does not directly regulate transit vehicle manufacturers, since they are not the recipients of Federal financial assistance from UMTA. Rather, they are contractors to UMTA recipients. Consequently, paragraph (a) imposes the basic obligation of this section on UMTA recipients themselves.

Paragraph (a) is a requirement that UMTA recipients condition the authority of manufacturers to bid on UMTA-assisted transit vehicle procurements on a certification by the manufacturer that it has complied with the other provisions of this section. In order to permit manufacturers reasonable start-up time, and to avoid disruption of the whole procurement process, this requirement does not go into effect until October 1, 1983.

Paragraph (b) requires that, in order to make this certification, manufacturers have UMTA-approved overall goal. The base for calculating these goals is the amount of UMTA financial assistance participating in transit vehicle contracts to be performed by the manufacturer during the fiscal year in question. The Department is aware that UMTA recipients order some vehicles from foreign manufacturers and that the vehicles produced by domestic manufacturers use foreign components in some cases. The Department's regulation does not, of course, have extraterritorial application. Consequently, the manufacturer may exclude from the base from which the goal is calculated the value of the work performed abroad. For example, suppose an UMTA recipient buys a bus from a Canadian manufacturer for \$100,000. Fifty percent of the work on the bus is performed in Canada. In this case, the amount of funds contributing toward the base from which the manufacturer's goal is calculated is \$40,000 (i.e., eighty percent of the \$50,000 of the value of the bus attributable to work performed in the United States).

In submitting an overall goal for the UMTA Administrator's approval, the manufacturer is required to follow the same procedures as recipients with respect to timing, justification of goals, etc. The Administrator follows the same criteria and has the same authority with respect to approval and conditioning of recipient's overall goals as he or she does with respect to recipient's goals. The UMTA Administrator may issue additional guidance with respect to procedures for the submission of overall goals and the content or justification of overall goals that take into account special circumstances of transit vehicle manufacturers, if this appears appropriate.

Paragraph (c) provides that the manufacturer may make the certification to recipients required by paragraph (a) if it has submitted the goals provided for by this section and the UMTA Administrator has either approved them or not disapproved them. This provision is intended to prevent delays in transit vehicle procurements.

#### Section 23.68 Compliance.

Paragraph (a) points out that compliance with Subpart D, as distinguished from compliance with other portions of the regulation, is enforced through § 23.68 rather than through Subpart E of the regulation. For example, a recipient's failure to have an approved overall goal as required by Subpart D would be treated under § 23.68. A complaint of discrimination against a recipient by a particular disadvantaged business would be handled under the procedures of Subpart E. Paragraphs (b) and (d)(1) list the three circumstances in which a recipient may find itself in noncompliance with Subpart D. These are the only three circumstances in which a recipient may be found in noncompliance with Subpart D. While a recipient may be in noncompliance with 49 CFR Part 23 for other reasons, these other types of noncompliance are handled through the procedures of Subpart E.

Paragraph (b) names the first two situations in which a recipient may be found in noncompliance with Subpart D. First, the recipient can be in noncompliance by failing to have an approved overall goal as required by § 23.64. This includes not only the situation in which the recipient does not submit a goal to the Department for approval, but also situations in which a recipient does not accept an adjusted overall goal established by the Administrator or fails or refuses to carry out conditions established by the Administrator under § 23.66(e).

Second, a recipient may be in noncompliance if it does not have an approved disadvantaged business program. Subpart D does not, in itself, require the creation of such a program. However, such a program, as prescribed by other provisions of 49 CFR Part 23, is essential if a recipient is to comply with the disadvantaged business participation requirements of Subpart D. Consequently, the failure to have a program, or failure to have a program which fully meets the requirements of 49 CFR Part 23, is noncompliance with Subpart D.

For example, 49 CFR Part 23 requires that, before a recipient awards a contract, it ensure that the apparent successful bidder has met the contract goal or has demonstrated good faith efforts to do so. If a recipient's program does not provide for making this determination before the award of contract, but instead provides for checking the disadvantaged business participation efforts of the contractor only after the award of

the contract, the recipient has a program that does not conform to 49 CFR Part 23. The recipient may therefore be found in noncompliance with Subpart D.

Paragraphs (c) and (d)(1) concern the procedure that recipients and the Department must follow when a recipient is falling or has fallen short of its approved overall goal. The goal-setting process is intended to determine, in advance, the reasonable expectation for the recipient's disadvantaged business participation. These paragraphs are intended to provide for the situation in which the recipient's performance does not meet this expectation. At any time the Administrator requests it, or at the recipient's own initiative, the recipient would make an explanation to the Administrator concerning why the goal could not be achieved. This explanation, if it is to be satisfactory to the Administrator, must demonstrate that recipient's failure to meet the goal is for reasons beyond the recipient's control.

For example, if the recipient expected substantial disadvantaged business participation in a major project, and the project was postponed by litigation or a natural disaster, the recipient could make a case that its failure to meet the goal was attributable to factors beyond its control. A situation that might arise more frequently concerns the failure of contractors to meet contract goals. Under the Department's regulation, recipients may award contracts to contractors who do not meet contract goals if these contractors demonstrate to the recipient that they have made good faith efforts to do so. It is conceivable that a recipient would have set contract goals commensurate with its overall goal, would have given appropriate scrutiny to the claims of contractors that they made unsuccessful but good faith efforts to meet these contract goals, and awarded contracts to contractors who did not meet contract goals in a number of instances. Collectively, these contract awards would cause the recipient to fall below its overall goal.

The Administrator may take circumstances of this kind into account in determining whether a recipient's failure to meet its overall goal was because of factors beyond the recipient's control. In doing so, however, the Administrator also would consider the degree of scrutiny by the recipients of contractors' claims of unsuccessful good faith efforts and the efforts the recipient made in order to make up for shortfalls in particular contracts and prevent such shortfalls in other contracts.

If the recipient's explanation that factors beyond its control prevented achievement of the overall goal is determined by the Administrator to justify the failure to reach the goal, the matter is closed. If the recipient does not provide an explanation or if

the Administrator determines that the recipient's explanation is not adequate, the Administrator may take the additional step of directing the recipient to take appropriate remedial action. Remedial action includes prospective steps to improve disadvantaged business participation, such as additional outreach, assistance to disadvantaged businesses or, where not inconsistent with state or local law, the use of set-asides. In order to take the remedial steps which the Administrator prescribes, the recipient may have to devote additional resources to the task.

Failure or refusal by the recipient to take these remedial steps is the third form of noncompliance with Subpart D. The Department wants to make it very clear that failure to meet an overall goal, as such, does not constitute noncompliance with Subpart D. However, if the recipient fails to meet the goal, does not satisfactorily explain its failure to meet the goal as being beyond its control, and then fails or refuses to take remedial steps prescribed by the Administrator, it would be in noncompliance.

Paragraph (e) sets forth the sources of sanctions for recipient noncompliance under Subpart D. These sanctions are the same measures that are available to the UMTA or FHWA Administrator with respect to the failure of a recipient to carry out any condition of receiving Federal financial assistance.

#### *Section 23.69 Challenge Procedure.*

The proposal in the NPRM to make the presumption of social and economic disadvantage rebuttable caused some confusion among recipients who commented. They asked whether this meant that they had to investigate the social and economic status of each business owner that sought certification for programs covered by Subpart D. They also asked by what criteria, and through what procedure, the rebuttable presumption would be applied.

This section is intended to answer these questions. First, the basic meaning of a presumption of social and economic disadvantage is that the recipient assumes that a member of the designated groups is socially and economically disadvantaged. In making certification decisions, the recipient relies on this presumption, and does not investigate the social and economic status of individuals who fall into one of the presumptive groups.

However, saying that the presumption is rebuttable means that a third party may challenge the actual social and/or economic disadvantage of a business owner who has received or is seeking certification for his firm from the recipient. The procedures for making such a challenge are spelled out in this section. They are set forth in detail in § 23.69 and are basically self-explanatory.

Two points deserve emphasis. First, the procedures are intended to be informal. Recipients are not required to establish elaborate court-like tribunals, use strict rules of evidence, etc. Second, while a challenge is in progress, the presumption of social and economic disadvantage remains in effect. Therefore, if a firm has been certified, and the social and economic disadvantage of its owner is under challenge, the firm continues to be certified and eligible to be considered a disadvantaged business for purposes of the recipient's DOT-assisted contracting activities.

#### *Amendments to § 23.41(a)*

The NPRM proposed to make technical amendments to § 23.41(a)(2)(i) and § 23.41(a)(3)(ii). These amendments added additional UMTA funding sources (e.g. Section 9A) to the list of sources from which funds would contribute toward the threshold amounts for determining whether UMTA recipients had to have MBE programs. There were no comments on these proposed changes. These amendments are adopted unchanged from the NPRM. The final rule makes similar amendments to § 23.41 (a)(2)(ii) and (a)(3)(iii).

#### *Relationship Between Subpart D and the Remainder of 49 CFR Part 23*

In order to prevent uncertainty, the Department wishes to restate the relationship between Subpart D and the remainder of 49 CFR Part 23. Under 49 CFR Part 23, certain recipients are required to have MBE programs. It is only these recipients who are required to follow the provisions of Subpart D. Recipients who must implement Subpart D do so only with respect to their FHWA and UMTA programs cited in Subpart D. For example, a state department of transportation receiving funds from FHWA, UMTA, NHTSA, FRA, and FAA would be required to follow the Subpart D goal procedures with respect only to its FHWA and UMTA funds. It would not be required to do so for its FAA, NHTSA, and FRA funds. The recipient would continue to follow all applicable procedures of 49 CFR Part 23 with respect to the FAA, FRA, and the NHTSA funds.

With respect to its FHWA and UMTA-assisted programs, the recipient continues to set two separate goals, both at the overall goal and contract goal level: one is for disadvantaged businesses (this replaces the existing rule's goal for MBEs) and the other is for women-owned businesses. In the event that a business owned and controlled by a nonminority woman is found to be disadvantaged on an individual basis, the amount of contracts to that firm could not be double-counted, any more than a contract to a firm

owned by a minority woman could be double-counted under the other provisions of 49 CFR Part 23.

The contract award procedures of 49 CFR Part 23 apply to contracts under Subpart D just as they do to contracts under other provisions of 49 CFR Part 23. Recipients may award contracts to those successful bidders who meet contract goals or demonstrate that they made good faith efforts to do so.

Recipients must certify the eligibility of firms to participate under Subpart D programs just as they do with respect to programs covered by other provisions of 49 CFR Part 23. For businesses owned and controlled by members of the presumptive groups listed in the definition of socially and economically disadvantaged individuals in Subpart D, the certification process is, with one exception, exactly the same as the certification process that has existed all along under 49 CFR Part 23. The exception is that individuals with origins in Burma, Thailand, and Portugal are presumed to be socially and economically disadvantaged. They can be eligible under Subpart D only if they successfully demonstrate to the recipient that they are socially and economically disadvantaged as individuals.

However, businesses owned and controlled by individuals with origins in these countries continue to be eligible minority businesses under other provisions of 49 CFR Part 23. The result is that these firms may be certified for participation in FAA, FRA, NHTSA, or other DOT-assisted programs as before, but must make an individual showing of social and economic disadvantage in order to be regarded as eligible to participate in FHWA and UMTA programs as disadvantaged businesses. The same requirement for an individual determination of social and economic disadvantage applies to any individual who is not a member of one of the presumptive groups, such as a non-minority woman, a handicapped person, etc.

#### *Decertification Procedures*

Substantial concern has been expressed about the infiltration of DOT-assisted programs by "fronts"—businesses that claim to be owned and controlled by minorities, women, or other disadvantaged individuals, but which, in fact are ineligible for participation in DOT-assisted programs as MBEs, WBEs or disadvantaged businesses.

The Department wants to take this opportunity to reemphasize the importance of scrutiny of all firms seeking to participate in DOT-assisted programs. We believe strongly that recipients should take prompt action to ensure that only firms meeting the eligibility criteria of 49 CFR Part 23 participate as MBEs, WBEs, or disadvantaged businesses in DOT-assisted programs. This means not only that recipients should carefully check the eligibility of firms applying

for certification for the first time, but also that they should review the eligibility of firms with existing certifications in order to ensure that they are still eligible. A firm's circumstances, organization, ownership or control can change over time, resulting in a once-eligible firm becoming ineligible. A second look at a firm previously found to be eligible may reveal factors leading, on renewed consideration, to a determination that it is ineligible.

49 CFR Part 23 does not, as presently drafted, prescribe any particular procedures for actions by recipients to remove the eligibility of firms that they have previously treated as eligible. When a recipient comes to believe that a firm with a current certification is not eligible, the Department recommends that the recipients take certain steps before removing the firm's eligibility. The recipient should inform the firm in writing of its concerns about the firm's eligibility, give the firm an opportunity to respond to these concerns in person and in writing, and provide the firm a written explanation of the reasons for the recipient's final decision. This process may be brief and informal. For example, the firm's opportunity to respond to the recipient's concerns need not involve a formal court-type hearing. However, in the interest of ensuring that eligibility removal decisions are made fairly, these steps should take place before a firm's eligibility is removed. The Department believes that such a procedure in so-called "decertification" cases will make the procedure fairer and better administratively, as well as help prevent unnecessary procedural litigation. Procedures of this kind are not a regulatory requirement, but the Department believes that, as a matter of policy, that they are advisable for recipients to use.

Once a recipient has made a final decision on certification, that determination goes into effect immediately with respect to the recipient's DOT-assisted contracts (see § 23.53(g)). If a firm that has been denied certification or has been decertified appeals the recipient's action to the Department under § 23.55, or if a third party challenges the recipient's decision to certify the firm under § 23.55, the recipient's action remains in effect until and unless the Department makes a determination under § 23.55 reversing the recipient's action. The recipient's action is not stayed during the pendency of a § 23.55 appeal.

For example, if a recipient has decertified a firm and the firm appeals the decertification to DOT, the firm remains ineligible for consideration as a disadvantaged business with respect to the recipient's DOT-assisted programs until and unless the Department finds that the firm is eligible. Likewise, if the recipient has certified the firm as eligi-

ble, the firm remains eligible while the Department's consideration of a third party's challenge to its eligibility is pending. The Department has followed this policy and interpretation of its regulations consistently under the existing rule, and we will continue to do so with respect to Subpart D.

There is only one exception to this rule. Section 23.55(c) provides that, in appropriate cases, the Secretary may deny the firm in question eligibility to participate as an MBE (or disadvantaged business) on DOT-assisted contracts let during the pendency of the investigation, after providing the firm an opportunity to show cause by written statement to the Secretary why this should not occur. This paragraph is intended, and has been consistently interpreted and applied by the Department, to cover only a situation in which the recipient has decided that a firm is eligible and a third party has challenged the correctness of the recipient's determination. As a matter of policy, the Department believes that the award of contracts to ineligible firms is a very serious blow to the integrity of the Department's program. Consequently, if it appears to the Department that a challenged firm's eligibility is in serious doubt, the Department, under § 23.55(c), can administratively "enjoin" the firm's participation pending a final determination on the merits of the challenge to its certification. This provision does not, however, authorize the Department to maintain a firm's certification in effect pending the outcome of the § 23.55 Appeal, when the recipient has refused to certify or has decertified the firm.

#### APPENDIX B—DETERMINATIONS OF BUSINESS SIZE

In determining the eligibility of businesses for purposes of 49 CFR Part 23, recipients must determine whether or not a business is a small business concern as defined by section 3 of the Small Business Act. If a business is not a small business concern according to these standards, then it is not eligible to participate as an MBE, WBE, or disadvantaged business under 49 CFR Part 23. This is true even though the business may be owned and controlled by minorities, women, or socially and economically disadvantaged individuals and is eligible in all other respects. Even a firm certified by the SBA under the 8(a) program is not eligible under this regulation if it is not a small business.

In determining whether a business is a small business concern, recipients should apply the standards established by the Small Business Administration in 13 CFR Part 121. In particular, recipients should refer to § 121.3-8 (Definition of Small Business for Government Procurement) and

§ 121.3-12 (Definition of Small Business for Government Subcontractors). This appendix lists the most frequent applications of these sections to the kinds of contracting done by FHWA and UMTA recipients. For information on types of businesses not listed in this appendix (e.g., manufacturers), recipients should consult § 121.3-8 and the Appendices to 13 CFR Part 121.

Recipients should apply the following size standards:

1. *Subcontracts of \$10,000 or less:* A business is small if, including its affiliates, it does not have more than 500 employees.

2. *Subcontracts over \$10,000 and prime contracts:*

A business is regarded as small if it meets the following criteria:

(a) *Construction.*

(1) *General Construction* (in which less than 75 percent of the work falls into one of the categories in paragraph (2)): The firm's average annual receipts for the three preceding fiscal years do not exceed \$12 million.

(2) *Special trade contractors:*

Type of firm	Maximum average annual receipts in preceding 3 fiscal years
Plumbing, heating (except electric) and air-conditioning.	\$5 million for all types of contractors on this list.
Painting, paperhanging, and decorating	
Masonry, stone setting, and other stonework.	
Plastering, drywall, acoustical and insulating work.	
Terrazzo, tile, marble, and mosaic work	
Carpentering and flooring	
Floor laying and other floorwork	
Roofing and sheet metal work	
Concrete work	
Water well drilling	
Structural steel erection	
Glass and glazing work	
Excavating and foundation work	
Wrecking and demolition work	
Installation or erection of buildings equipment.	
Special trade contractors, not elsewhere classified.	

(b) *Suppliers of manufactured goods:* The firm, including its affiliates, must not have more than 500 employees.

(c) *Service contractors:*

Type of firm	Maximum average annual receipts in preceding 3 fiscal years (in millions of dollars)
Engineering.....	\$7.5
Janitorial and custodial.....	4.5
Computer programming or data processing.....	4
Computer Maintenance.....	7
Protective Services.....	4.5
Others not mentioned in 13 CFR 121.3-8(e).....	2

#### APPENDIX C--GUIDANCE FOR MAKING DETERMINATIONS OF SOCIAL AND ECONOMIC DISADVANTAGE

Before making any determination of social and economic disadvantage, the recipient should always determine whether a firm is a small business concern. If it is not, then the firm is not eligible to be considered a disadvantaged business, and no further determinations need be made.

Under the definition of "socially and economically disadvantaged individual" used in Subpart D of this part, members of the named groups (Black Americans, Hispanic Americans, Native Americans, Asian Pacific Americans, and Asian-Indian Americans) and persons certified as socially and economically disadvantaged by the Small Business Administration (SBA) under the SBA's section 8(a) program are presumed to be both socially and economically disadvantaged. This presumption is rebuttable. This means that, as part of a challenge to the eligibility of a firm a recipient has certified under § 23.69 of this regulation, a third party may present evidence that the firm's owners are not truly socially and/or economically disadvantaged, even though they are members of one of the presumptive groups. Recipients must follow the challenge procedure in § 23.69 when a challenge is made, using this appendix for guidance in making determinations under that procedure.

Under the regulation, anyone who has been certified by SBA under its 8(a) program as socially and economically disadvantaged is automatically considered to be a socially and economically disadvantaged individual for purposes of this regulation. However, the absence of an 8(a) certification does not mean that an individual or firm is ineligible under this regulation.

Recipients should continue the existing practice of making their own judgments

about whether an individual is in fact a member of one of the presumptive groups. If an individual has not maintained identification with the group to the extent that he or she is commonly recognized as a group member, it is unlikely that he or she will in fact have suffered the social disadvantage which members of the group are presumed to have experienced. If an individual has not held himself or herself out to be a member of one of the groups, has not acted as a member of a community of disadvantaged persons, and would not be identified by persons in the population at large as belonging to the disadvantaged group, the individual should be required to demonstrate social disadvantage on an individual basis.

For example, an individual could demonstrate that he had a Chinese ancestor. However, this hypothetical person has never lived in a Chinese-American community, has held himself out to be white for driver's license or other official records purposes, has not previously claimed to be a Chinese-American, and would not be perceived by others in either the Chinese-American community or non-minority community to be a Chinese-American (or any other sort of Asian-Pacific American) by virtue of his appearance, culture, language or associations. The recipient should not regard this individual as an Asian-Pacific American.

Individuals who are not presumed to be socially and economically disadvantaged by virtue of membership in one of these groups may, nevertheless, be found to be socially and economically disadvantaged on a case-by-case basis. If an individual requests that his or her business be certified as an eligible disadvantaged business under Subpart D, the recipient, as part of its certification process, is responsible for making a determination of social and economic disadvantage.

In making determinations of social and economic disadvantage, recipients should be guided by the following standards, which have been adopted from materials prepared by the SBA.

##### A. SOCIAL DISADVANTAGE

(1) *Elements of Social Disadvantage.* In order to determine that an individual is socially disadvantaged, the recipient must conclude that the individual meets the following standards:

(i) The individual's social disadvantage must stem from his or her color; national origin; gender; physical handicap; long-term residence in an environment isolated from the mainstream of American society; or other similar cause beyond the individual's control. The individual cannot establish social disadvantage on the basis of factors which are common to small business persons who are not socially disadvantaged. For example, because of their marginal financial

status, many small businesses have difficulty obtaining credit through normal banking channels. An individual predicated a social disadvantage claim on denial of bank credit to his or her firm would have to establish that the denial was based on one or more of the listed causes, or similar causes—not simply on the individual's or the firm's marginal financial status.

(ii) The individual must demonstrate that he or she has personally suffered social disadvantage, not merely claim membership in a non-designated group which could be considered socially disadvantaged. This can be achieved, for example, by describing specific instances of discrimination which the individual has experienced, or by recounting in some detail how his or her development in the business world has been thwarted by one or more of the listed causes or similar causes. As a general rule, the more specific an explanation of how one has personally suffered social disadvantage, the more persuasive it will be. In assessing such facts, the recipient should place substantial weight on prior administrative or judicial findings of discrimination experienced by the individual. Such findings, however, are not necessarily conclusive evidence of an individual's social disadvantage; nor are they a prerequisite for establishing social disadvantage.

(iii) The individual's social disadvantage must be rooted in treatment which he or she has experienced in American society, not in other countries.

(iv) The individual's social disadvantage must be chronic, longstanding, and substantial, not fleeting or insignificant. Typically, a number of incidents illustrating a person's social disadvantage, occurring over a substantial period of time, would be necessary to make a successful claim. Usually, only by demonstrating a series of obstacles which have impeded one's progress in the business world can an individual demonstrate chronic, longstanding, and substantial social disadvantage.

(v) The individual's social disadvantage must have negatively affected his or her entry into, and/or advancement in, the business world.

The closer the individual can link social disadvantage to impairment of business opportunities, the stronger the case. For example, the recipient should place little weight on annoying incidents experienced by an individual which have had little or no impact on the person's career or business development. On the other hand, the recipient should place greater weight on concrete occurrences which have tangibly disadvantaged an individual in the business world.

(2) *Evidence of Social Disadvantage.* The recipient should entertain any relevant evidence in support of an individual's claim of social disadvantage. In addition to a personal statement from the individual claiming to

be socially disadvantaged, such evidence may include, but is not limited to: third party statements; copies of administrative or judicial findings of discrimination; and other documentation in support of matters discussed in the personal statement. The recipient should particularly consider and place emphasis on the following experiences of the individual, where relevant: education, employment, and business history. However, the individual may present evidence relating to other matters as well. Moreover, the attainment of a quality education or job should not absolutely disqualify the individual from being found socially disadvantaged if sufficient other evidence of social disadvantage is presented to the recipient.

(i) *Education.* The recipient should consider, as evidence of an individual's social disadvantage, denial of equal access to business or professional schools; denial of equal access to curricula; exclusion from social and professional association with students and teachers; denial of educational honors; social patterns or pressures which have discouraged the individual from pursuing a professional or business education; and other similar factors.

(ii) *Employment.* The recipient should consider, as evidence of an individual's social disadvantage: discrimination in hiring; discrimination in promotions and other aspects of professional advancement; discrimination in pay and fringe benefits; discrimination in other terms and conditions of employment; retaliatory behavior by an employer; social patterns or pressures which have channelled the individual into non-professional or non-business fields; and other similar factors.

(iii) *Business History.* The recipient should consider, as evidence of an individual's social disadvantage, unequal access to credit or capital; acquisition of credit under unfavorable circumstances; discrimination in receipt (award and/or bid) of government contracts; discrimination by potential clients; exclusion from business or professional organizations; and other similar factors which have retarded the individual's business development.

#### B. ECONOMIC DISADVANTAGE

Recipients should always make a determination of social disadvantage before proceeding to make a determination of economic disadvantage. If the recipient determines that the individual is not socially disadvantaged, it is not necessary to make the economic disadvantage determination.

As a general rule, economically disadvantaged individuals are socially disadvantaged individuals whose ability to compete in the free enterprise system has been impaired due to diminished capital and credit opportunities, as compared to others in the same

or similar line of business and competitive market area who are not socially disadvantaged. In determining the degree of diminished credit and capital opportunities of a socially disadvantaged individual, consideration will be given to both the disadvantaged individual and the applicant concern with which he or she is affiliated.

In considering the economic disadvantage of firms and owners, it is important for recipients to understand that they are making a comparative judgment about relative disadvantage. Obviously, someone who is destitute is not likely to be in any position to own a business. The test is not absolute deprivation, but rather disadvantage compared to business owners who are not socially disadvantaged individuals and firms owned by such individuals.

It is the responsibility of applicant firms and their owners to provide information to the recipient about their economic situation when they seek eligibility as disadvantaged businesses. Recipients are encouraged to become as knowledgeable as they can about the types of businesses with which they deal, so that they can make a reasonably informed comparison between an applicant firm and other firms in the same line of business. Recipients are not required to make a detailed, point-by-point, accountant-like comparison of the businesses involved. Recipients are expected to make a basic judgment about whether the applicant firm and its socially disadvantaged owner(s) are in a more difficult economic situation than most firms (including established firms) and owners who are not socially disadvantaged.

#### OTHER ELIGIBILITY CONSIDERATIONS

It is very important for recipients to realize that making a determination of social and economic disadvantage, standing alone, does not mean that a firm is eligible. The recipient must also determine that the firm is 51 percent owned by socially and economically disadvantaged individuals and that these individuals control the firm. In making these latter determinations, recipients should continue to follow §§ 23.51-23.53 of Subpart C of 49 CFR Part 23.

If a firm or other party believes that any recipient's social and economic disadvantage determination is in error, the firm or party may make an administrative certification appeal to the Department as provided in 49 CFR 23.55.

#### APPENDIX D—JUSTIFICATION FOR REQUESTS FOR APPROVAL OF OVERALL GOALS OF LESS THAN TEN PERCENT

The purpose of a justification for a request for approval of an overall goal of less than ten percent is to explain why the goal requested by the recipient is the reasonable

expectation for the participation of disadvantaged businesses in the recipient's DOT-assisted contracts. The justification has two basic elements. First, the recipient should show that it is doing as much as it can to increase disadvantaged business participation to at least a ten percent level. Second, the recipient should show that, given the availability of disadvantaged businesses, the requested goal is the reasonable expectation for the level of disadvantaged business participation that these efforts are likely to obtain.

With respect to the specific elements of the justification listed in § 23.66, the Department offers the following guidance, usually in the form of questions the answers to which will help the Department make an informed decision. It should be emphasized that this material is guidance, and is not intended to create a regulatory requirement or a mandatory list of the contents for recipient's submissions. However, it will help the Department to make expeditious and well-informed decisions if recipients provide reasonably complete and detailed information. Doing so will also facilitate suggestions by the Department on additional ways recipients can increase disadvantaged business participation.

(a) *Efforts to locate disadvantaged businesses.* What contacts has the recipient made with sources of information about disadvantaged businesses (such as minority contractors, associations, the Commerce Department's Minority Business Development Administration, DOT Office of Small and Disadvantaged Utilization (and its Program Management Centers), and other recipients' directories of disadvantaged businesses)? In what geographic areas has it sought to locate additional disadvantaged businesses? Have these or other information sources produced additional names of disadvantaged businesses potentially available to work on the recipient's DOT-assisted contract? What follow-up was done with respect to these firms?

(b) *Efforts to make disadvantaged businesses aware of contracting opportunities.* What steps does the recipient take through publications, advertising, pre-bid conferences, direct contact, putting disadvantaged businesses in touch with firms that may bid on prime contracts, and other means to let disadvantaged businesses know about specific contracting and subcontracting opportunities as they arise? (Activity of this kind by the recipient is important because, in many cases, disadvantaged businesses may not be in a position to learn of contracting opportunities through informal communications networks available to non-disadvantaged firms.)

(c) *Initiatives to encourage and develop disadvantaged businesses.* What is the re-

recipient doing to assist the formation and growth of disadvantaged firms, by means such as training, technical assistance, financial assistance and involvement of other sources of support (such as the FHWA Supportive Services Program and other Federal, state, or local agencies and associations)? What has the recipient done to facilitate the ability of disadvantaged businesses to perform contracts (e.g., splitting a large contract or project into smaller segments that disadvantaged businesses can more readily perform)?

(d) *Legal or other barriers to disadvantaged business participation.* What specific barriers to disadvantaged business participation has the recipient identified? (Common barriers include bonding, prequalification and licensing requirements; difficulty in obtaining financing; any state or local residency requirement or preference, or any other formal or informal limitations on the area from which disadvantaged businesses are sought; and the reluctance of some members of the non-disadvantaged contracting community to use firms owned and controlled by socially and economically disadvantaged persons.) What is the recipient doing about the barriers it has identified? (Examples of efforts to overcome or mitigate the effect of these barriers include changes to or exceptions from state or local requirements as they affect disadvantaged businesses, technical or financial assistance to disadvantaged businesses to help them meet existing requirements, or cooperative efforts with financial institutions and non-minority contractors' associations.)

(e) *The availability of disadvantaged businesses.* How many disadvantaged businesses are available to perform work for the recipient on DOT-assisted contracts? The starting point for the recipient's information should be its directory or list of certified disadvantaged businesses. The number of firms in this directory may not give a complete picture, however. Disadvantaged firms in other jurisdictions, not currently certified by the recipient, may be willing and able to work on the recipient's contracts. On the other hand, firms in the directory may have limited availability (e.g., lack of interest in the recipient's work, other commitments, limitations of the amount of work they can handle). In some cases (e.g., where a state spends a large portion of its funds on a single large project requiring very specialized contractors), the availability of work that disadvantaged firms can perform could be a limitation. The recipient, as appropriate, should discuss these factors as they affect a determination of the reasonable expectation for disadvantaged business participation in its DOT-assisted contracts.

The recipient should not only advise the Department how many disadvantaged firms exist, but also analyze the dollar volume of

the recipient's work the available firms are likely to be able to perform in the fiscal year (or other period) in question.

(f) *Size and other characteristics of the recipient's jurisdiction's minority population.* What is the size of the minority population of the recipient's jurisdiction? (In some cases, not only the size but also the composition or residence pattern of the minority population may be relevant). Where relevant, what is the size of the minority population of nearby jurisdictions?

Minority population is usually not an exact index of the availability of disadvantaged businesses. In some cases, disadvantaged business participation levels for various recipients have ranged well above or below the minority population of the jurisdictions involved. In any event, recipients should tie any assertions they make on the basis of minority population to the effect they believe it has on disadvantaged business availability.

(g) *Views and information from the consultation process.* With whom has the recipient consulted and what did the consulted parties say with respect to anything in paragraph (a)-(f)? In particular, what were the views of and information provided by the disadvantaged business community concerning the availability of such firms, barriers to their participation and what is needed to overcome them, the efficacy of the recipient's efforts to increase disadvantaged business participation and what could be done to improve these efforts?

### Subpart E—Compliance and Enforcement

#### § 23.73 Complaints.

(a) *Filing.* Any person who believes himself or herself, another person, or any specific class of individuals to be subjected to a violation of this part may file a complaint in writing, signed and dated, with the Department. The complaint shall be filed no later than 180 days after the date of an alleged violation or the dates on which a continuing course of conduct in violation of this part was disclosed. The Secretary may extend the time for filing or waive the time limit in the interest of justice, specifying in writing the reason for so doing.

(b) *Investigations.* The Secretary ensures that a prompt investigation is made pursuant to prescribed DOT Title VI investigation procedures.

(c) *Cooperation in investigation.* The respondent to the complaint shall

cooperate fully with the investigation. Failure or refusal by the respondent to furnish requested information or other failure to cooperate is a violation of this part.

(d) *Determinations.* Upon completion of the investigation, the Secretary informs the recipient or contractor and complainant of the results of the investigation in writing. If the investigation indicates a failure to comply with this part, the conciliation procedures of § 23.81 and, if necessary, the enforcement procedures of § 23.83 are followed.

(e) *Intimidation or retaliation acts prohibited.* No recipient, contractor, or other person shall intimidate, threaten, coerce, or discriminate against any individual for the purpose of interfering with any right or privilege secured by this part, or because he or she made a complaint, testified, assisted, or participated in any manner in an investigation, proceeding, or hearing under this part. The identity of complainants shall be kept confidential at their election during the conduct of any investigation, proceeding, or hearing under this part. But when such confidentiality is likely to hinder the investigation the complainant shall be advised for the purpose of waiving the privilege.

#### § 23.75 Compliance reviews of recipients.

(a) *Desk audit.* All compliance reviews conducted after financial assistance has been approved or contracts have been awarded begin with a desk audit. The desk audit is a review of all material and information concerning the recipient's MBE performance.

(b) *On-site review.* An on-site review includes interviews, visits to project or facility sites receiving DOT funds, and inspection of any statistical or documentary materials relevant to the recipient's performance which were not available for review during the desk audit.

(c) *Cooperation.* The recipient shall cooperate fully with these reviews. Failure or refusal to furnish requested information or failure to cooperate is a violation of this part.

(d) *Determination.* As a result of its review of the recipient, the Departmental element civil rights staff

makes one of the following determinations:

(1) The recipient is in compliance with its MBE obligations; or

(2) There is reasonable cause to believe that the recipient is not in compliance with its MBE obligations in certain specified respects. Proceedings shall be begun in accordance with § 23.81 and, if necessary, § 23.83.

#### § 23.81 Conciliation procedures for financial assistance programs.

(a) *Reasonable cause notice.* Whenever the responsible office of civil rights makes a determination of reasonable cause to believe that a recipient is in noncompliance, a notice is sent promptly and in writing by registered mail, return receipt requested, describing the areas of noncompliance requiring the applicant or recipient to show cause within 30 days why enforcement proceedings or other appropriate action to ensure compliance should not be instituted and offering the recipient an opportunity to conciliate. The responsible office of civil rights shall pursue conciliation efforts for at least 30 days from the date of the reasonable cause notice.

(1) *Successful conciliation.* If a conciliation agreement is signed by the Departmental element's office of civil rights and recipient, it is approved or disapproved by the head of the Departmental element within 20 days of receiving it. If the head of the Departmental element disapproves the agreement, the reasons therefor are stated in writing. The head of the Departmental element may propose amendments to the agreement which are forwarded to the recipient, requesting the recipient's acceptance or rejection of the amended agreement within 20 days of receipt.

(2) *Unsuccessful conciliation.* If no agreement is signed within 120 days of the notice of reasonable cause enforcement proceedings set forth in § 23.83 begin. The head of the responsible office of civil rights, upon a written determination that an additional 30 days are needed to complete conciliation, may extend the conciliation period for 30 days. Subsequent extensions may be made upon such written

determinations. The determinations shall include reasons for the extension and shall be provided to the complainant and respondent.

(b) *Effect of conciliation agreement.* If a conciliation agreement is approved, the existence of the determination of noncompliance does not act as a bar to the provision of financial assistance as long as the terms of the agreement are fulfilled. A compliance review is conducted by the Department element within nine months of the approval of an agreement.

**§ 23.83 Enforcement proceedings for financial assistance programs.**

(a) Whenever conciliation efforts pursuant to § 23.81 are unsuccessful, enforcement proceedings begin. These proceedings are conducted in accordance with the Department's procedures for enforcing Title VI (49 CFR Part 21).

(b) A finding of noncompliance and the imposition of any sanction pursuant to these proceedings is binding on all other Departmental elements. Sanctions are limited to the recipient with respect to whom the noncompliance finding has been made and to the particular program or activity, or part thereof, in which noncompliance has been found.

**§ 23.85 Emergency enforcement procedure.**

(a) *General.* Whenever the Secretary determines that the conciliation and enforcement proceedings set forth in §§ 23.81 and 23.83 will not result in the timely and adequate enforcement of the provisions of this part, he/she initiates special enforcement procedures to obtain compliance.

(b) *Emergency reasonable cause notice.* A notice is sent, registered mail, return receipt requested, describing the areas of alleged noncompliance, setting forth the reasons why the normal course of conciliation and enforcement pursuant to §§ 23.81 and 23.83 will not result in timely and adequate enforcement, and requiring the recipient to show cause, within a specified period of time, generally not to exceed 15 days, why appropriate action, described in the notice, to ensure compliance should not be

taken. The notice states that the recipient must respond in writing or orally on the record before an official appointed by the Secretary or the proposed action will be taken.

(c) *Decision.* If the Secretary, after reviewing the recipient's oral or written response, determines that such action is necessary, he/she orders that all or any part of the contracting activities of the recipient affected by the recipient's alleged noncompliance be halted until the matter is resolved under §§ 23.81 or 23.83. The Secretary's action under this paragraph may not affect any contract already awarded. When the Secretary makes an order under this paragraph, resolution of the matter shall proceed on an expedited basis.

**§ 23.87 Suspension and debarment; referral to the Department of Justice.**

(a) If, at any time, any person has reason to believe that any person or firm has willfully and knowingly provided incorrect information or made false statements, or otherwise acted in a manner subjecting that person or firm to suspension or debarment action under 49 CFR Part 29, he or she may contact the appropriate DOT element concerning the existence of a cause for suspension or debarment, as provided in 49 CFR 29.17.

(b) Upon the receipt of information indicating a violation of 18 U.S.C. 1001, or any other Federal criminal statute, the Department may refer the matter to the Department of Justice for appropriate legal action.

(50 FR 18494, May 1, 1985)

**SCHEDULE A—INFORMATION FOR DETERMINING MINORITY BUSINESS ENTERPRISE ELIGIBILITY**

1. Name of firm \_\_\_\_\_
2. Address of firm \_\_\_\_\_
3. Phone Number of firm \_\_\_\_\_
4. Indicate whether firm is sole proprietorship, partnership, joint venture, corporation or other business entity (please specify) \_\_\_\_\_
5. Nature of firm's business \_\_\_\_\_
6. Years firm has been in business \_\_\_\_\_
7. Ownership of firm: Identify those who own 5 percent or more of the firm's ownership. Columns e and f need be filled out

only if the firm is less than 100 percent minority owned.

a— Name	b— Race	c— Sex	d— Years of ownership	e— Ownership percentage	f— Voting percentage

With firms less than 100 percent minority owned, list the contributions of money, equipment, real estate, or expertise of each of the owners.

8. Control of firm: (a) Identify by name, race, sex, and title in the firm those individuals (including owners and non-owners) who are responsible for day-to-day management and policy decisionmaking, including, but not limited to, those with prime responsibility for:

- (1) Financial decisions \_\_\_\_\_
- (2) Management decisions, such as—
  - a. Estimating \_\_\_\_\_
  - b. Marketing and sales \_\_\_\_\_
  - c. Hiring and firing of management personnel \_\_\_\_\_
  - d. Purchases of major items or supplies \_\_\_\_\_
- (3) Supervision of field operations \_\_\_\_\_

9. For each of those listed in question 8, provide a brief summary of the person's experience and number of years with the firm, indicating the person's qualifications for the responsibilities given him or her.

10. Describe or attach a copy of any stock options or other ownership options that are outstanding, and any agreements between owners or between owners and third parties which restrict ownership or control of minority owners.

11. Identify any owner (see item 7) or management official (see item 8) of the named firm who is or has been an employee of another firm that has an ownership interest in or a present business relationship with the named firm. Present business relationships include shared space, equipment, financing, or employees as well as both firms having some of the same owners.

12. What are the gross receipts of the firm for each of the last two years?

Year ending \_\_\_\_\_  
\$ \_\_\_\_\_

Year ending \_\_\_\_\_  
\$ \_\_\_\_\_

13. Name of bonding company, if any: \_\_\_\_\_

Bonding limit \_\_\_\_\_  
Source of letters of credit, if any \_\_\_\_\_

14. Are you authorized to do business in the state as well as locally, including all necessary business licenses?

15. Indicate if this firm or other firms with any of the same officers have previously

received or been denied certification or participation as an MBE and describe the circumstances. Indicate the name of the certifying authority and the date of such certification or denial.

**AFFIDAVIT**

"The undersigned swears that the foregoing statements are true and correct and include all material information necessary to identify and explain the operations of \_\_\_\_\_ (name of firm) as well as the ownership thereof. Further, the undersigned agrees to provide through the prime contractor or, if no prime, directly to the grantee current, complete and accurate information regarding actual work performed on the project, the payment therefor and any proposed changes, if any, of the foregoing arrangements and to permit the audit and examination of books, records and files of the named firm. Any material misrepresentation will be grounds for terminating any contract which may be awarded and for initiating action under Federal or State laws concerning false statements."

NOTE: If, after filing this Schedule A and before the work of this firm is completed on the contract covered by this regulation, there is any significant change in the information submitted, you must inform the grantee of the change through the prime contractor or, if no prime contractor, inform the grantee directly.

Signature \_\_\_\_\_  
Name \_\_\_\_\_  
Title \_\_\_\_\_  
Date \_\_\_\_\_

Corporate Seal (where appropriate).  
Date \_\_\_\_\_  
State of \_\_\_\_\_  
County of \_\_\_\_\_

On this — day of —, 19—, before me appeared (Name) \_\_\_\_\_, to me personally known, who, being duly sworn, did execute the foregoing affidavit, and did state that he or she was properly authorized by (Name of firm) \_\_\_\_\_ to execute the affidavit and did so as his or her free act and deed.

(Seal)  
Notary Public \_\_\_\_\_  
Commission expires \_\_\_\_\_

**SCHEDULE B—INFORMATION FOR DETERMINING JOINT VENTURE ELIGIBILITY**

(This form need not be filled in if all joint venture firms are minority owned.)

- 1. Name of joint venture \_\_\_\_\_
- 2. Address of joint venture \_\_\_\_\_
- 3. Phone number of joint venture \_\_\_\_\_
- 4. Identify the firms which comprise the joint venture. (The MBE partner must complete Schedule A.) \_\_\_\_\_

(a) Describe the role of the MBE firm in the joint venture.

(b) Describe very briefly the experience and business qualifications of each non-MBE joint venturer.

5. Nature of the joint venture's business —

6. Provide a copy of the joint venture agreement.

7. What is the claimed percentage of MBE ownership?

8. Ownership of joint venture: (This need not be filled in if described in the joint venture agreement, provided by question 6.)

(a) Profit and loss sharing.

(b) Capital contributions, including equipment.

(c) Other applicable ownership interests.

9. Control of and participation in this contract. Identify by name, race, sex, and "firm" those individuals (and their titles) who are responsible for day-to-day management and policy decisionmaking, including, but not limited to, those with prime responsibility for:

(a) Financial decisions

(b) Management decisions, such as:

(1) Estimating

(2) Marketing and sales

(3) Hiring and firing of management personnel

(4) Purchasing of major items or supplies

(c) Supervision of field operations

NOTE: If, after filing this Schedule B and before the completion of the joint venture's work on the contract covered by this regulation, there is any significant change in the information submitted, the joint venture must inform the grantee, either directly or through the prime contractor if the joint venture is a subcontractor.

AFFIDAVIT

"The undersigned swear that the foregoing statements are correct and include all material information necessary to identify and explain the terms and operation of our joint venture and the intended participation by each joint venturer in the undertaking. Further, the undersigned covenant and agree to provide to the grantee current, complete and accurate information regarding actual joint venture work and the payment therefor and any proposed changes in any of the joint venture arrangements and to permit the audit and examination of the books, records and files of the joint venture, or those of each joint venturer relevant to the joint venture, by authorized representa-

tives of the grantee or the Federal funding agency. Any material misrepresentation will be grounds for terminating any contract which may be awarded and for initiating action under Federal or State laws concerning false statements."

Table with 2 columns: Name of Firm, Signature, Name, Title, Date. Two columns for each category.

Date State of County of

On this - day of -, 19-, before me appeared (Name) -, to me personally known, who, being duly sworn, did execute the foregoing affidavit, and did state that he or she was properly authorized by (Name of firm) - to execute the affidavit and did so as his or her free act and deed.

Notary Public Commission expires (Seal)

Date State of County of

On this - day of -, 19-, before me appeared (Name) -, to me personally known, who, being duly sworn, did execute the foregoing affidavit, and did state that he or she was properly authorized by (Name of firm) - to execute the affidavit and did so as his or her free act and deed.

Notary Public Commission expires (Seal)

25-UNIFORM REGULATION ON ASSURANCE AND REAL PROPERTY ACQUISITION FOR FEDERAL AND FEDERAL ASSISTED PROGRAMS

Subpart General

- Sec. 25.1 Purpose 25.2 Definitions 25.3 Non-application of payments. 25.4 Assurances, monitoring and correction. 25.5 Manner of notices.

entire business. It is not intended to cover a situation in which the firm simply provides drivers for trucks owned or leased by another party (e.g., a prime contractor) or leases such a party's trucks on an ad hoc basis for a specific job.

If the commercially useful function being performed is not that of a regular dealer, but rather that of delivery of products, obtaining bonding or insurance, procurement of personnel, acting as a broker or manufacturer's representative in the procurement of supplies, facilities, or materials, etc., the counting rules of § 23.47(f) would apply.

Under paragraph (f), for example, a business that simply transfers title of product from manufacturer to ultimate purchaser (e.g., a sales representative who reinvoices a steel product from the steel company to the recipient or contractor) or a firm that puts a product into a container for delivery would not be considered a regular dealer. The recipient or contractor would not receive credit based on a percentage of the cost of the product for working with such firms.

Subparagraph (f)(1) concerns the use of services that help the recipient or contractor obtain needed supplies, personnel, materials or equipment to perform a contract or program function. Only the fee received by the service provider could be counted toward goals. For example, use of a minority sales representative or distributor for a steel company, if performing a commercially useful function at all, would entitle the recipient or contractor receiving the steel to count only the fee paid to the representative or distributor toward its goal. No portion of the price of the steel would count toward the goal. This provision would also govern fees for professional and other services obtained expressly and solely to perform work relating to a specific contract or program function.

Subparagraph (f)(2) concerns transportation or delivery services. If an MBE, DBE or WBE trucking company picks up a product from a manufacturer or regular dealer and delivers the product to the recipient or contractor, the commercially useful function it is performing is not that of a supplier, but simply that of a transporter of goods. Unless the trucking company is itself the manufacturer or a regular dealer in the product, credit cannot be given based on a percentage of the cost of the product. Rather, credit would be allowed for the cost of the transportation service.

Subparagraph (f)(3) applies the same principle to bonding and insurance matters. Contractors often are required

to obtain bonding and insurance concerning their work in DOT-assisted contracts. When they obtain a bond or an insurance policy from an MBE, DBE, or WBE agent, the amount allowable toward goals is not any portion of the face value of the policy or bond or the total premium, but rather the fee received by the agent for selling the bond or insurance policy.

The Department is aware that the rule's language does not explicitly mention every kind of business that works in DOT financial assistance programs. In administering this rule, the Department's operating administrations would, on a case-by-case basis, determine the appropriate regulatory provision to apply in a particular situation.

These provisions would apply to prime contracts and purchases by recipients, as well as to subcontracts let by prime contractors. The rule provides that only services required by a DOT-assisted contract are eligible for credit. A DOT-assisted contract, for this purpose, can mean direct purchase of goods or services by a transit authority as well as by a prime contractor or contractor under a highway contract. The amendments to § 23.47 apply to all financial assistance programs in the Department (e.g., the airport and intercity rail programs as well as the highway and urban mass transportation programs).

**Regulatory Process Matters**

The Department has determined that this rule does not constitute a major rule under the criteria of Executive Order 12291. It is a significant rule under the Department's Regulatory Policies and Procedures. Since the regulation simply makes administrative adjustments to an existing program, its economic impacts are expected to be small, and the Department has consequently not prepared a regulatory evaluation.

Since proposed rules have not been issued with respect to the portions of this rule implementing section 106(c) of the STURAA and concerning the definition of Hispanic, the Regulatory Flexibility Act does not apply to these provisions. With respect to the supplier credit and commercially useful function portions of the rule, the Act does apply.

As noted in the NPRM, the Department considered whether the proposal for these amendments would have a significant economic impact on a substantial number of small entities. The entities in question are small businesses who act as suppliers to DOT recipients and contractors. The changes in counting procedures will benefit regular dealers by increasing the credit that

may be counted toward DBE/WBE goals for the purchase of supplies. For businesses that do not perform such services, the proposal will clarify an existing policy that only credits for their service may be counted toward goals. The overall effect of the proposal will be to increase opportunities for participation in DOT financial assistance programs.

Comments to the rule did not suggest that even these benefits would be of major magnitude, however, and none of the comments suggested that the proposal would have any adverse consequences for small entities. Consequently, the Department certifies that the rule will not have a significant economic effect on a substantial number of small entities.

The portions of the rule which have not previously been the subject of an NPRM concern matters under Federal grants, and hence are exempt from the notice and comment requirements of the Administrative Procedure Act (5 U.S.C. § 553(a)(2)). In addition, the portions of the rule implementing section 106(c) of the STURAA must be implemented rapidly, in order to ensure that the provisions apply to funds authorized by the Act, as Congress intended. It is reasonable to promulgate the amendment to the definition of Hispanic at the same time as other changes are made to the definition of "socially and economically disadvantaged individuals," in order to avoid confusion by recipients administering the program. For these reasons, the Department has determined that there is good cause to promulgate these portions of the rule without prior notice and comment (see 5 U.S.C. § 553(b)(3)) and to make the rule effective immediately, rather than after a 30-day period (see 5 U.S.C. § 553(c)(3)).

**List of Subjects in PART 23**

Minority businesses, Highways, Mass transportation.

Issued in Washington, DC on October 8, 1987.

Jan Burnley,  
Acting Secretary of Transportation

In consideration of the foregoing, the Department of Transportation certifies that

**PART 23—(AMENDED)**

1. The authority citation for Part 23 is revised to read as follows and the authority citation for Subpart D is removed:

Authority: Sec. 306 of the Railroad Revitalization and Regulatory Reform Act of 1976 (45 U.S.C. 803); sec. 30 of the Airport and Airway Development Act of 1970, as

amended (49 U.S.C. 1730; sec. 19 of the Urban Mass Transportation Act 1964, as amended (Pub. L. 86-409); Title 23 of the U.S. Code (relating to highways and highway safety); Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.); The Federal Property and Administrative Services Act of 1949 (49 U.S.C. 471 et seq.); sec. 106(c) of the Surface Transportation and Uniform Relocation Assistance Act of 1967 (Pub. L. 100-17); Executive Order 11823; Executive Order 12136.

2. Section 23.45(e) is amended by adding the following sentence at the end of the paragraph:

§ 23.45 (Amended)

(e) \* \* \* Recipients subject to the disadvantaged business enterprise program requirements of Subpart D of this Part shall compile and update their directories annually. The directories shall include the addresses of listed firms.

3. Section 23.45(f)(3) is added to read as follows:

(f) \* \* \*

(3) Recipients covered by the disadvantaged business program requirements of Subpart D of this Part shall, in determining whether a firm is an eligible disadvantaged business enterprise, take at least the following steps:

(i) Perform an on-site visit to the offices of the firm and to any job sites on which the firm is working at the time of the eligibility investigation;

(ii) Obtain the resumes or work histories of the principal owners of the firm and personally interview these individuals;

(iii) Analyze the ownership of stock in the firm, if it is a corporation;

(iv) Analyze the bonding and financial capacity of the firm;

(v) Determine the work history of the firm, including contracts it has received and work it has completed;

(vi) Obtain or compile a list of equipment owned or available to the firm and the licenses of the firm and its key personnel to perform the work it seeks to do as part of the DBE program; and

(vii) Obtain a statement from the firm of the type of work it prefers to perform as part of the DBE program.

4. Section 23.45(g)(4) is revised to read as follows:

§ 23.45 (Amended)

(g) \* \* \*

(4) Recipients covered by the disadvantaged business enterprise program requirements of Subpart D of this Part shall establish an overall goal and contract goal for firms owned and controlled by socially and economically disadvantaged individuals. Other recipients shall establish separate overall and contract goals for firms owned and controlled by minorities and firms owned and controlled by women, respectively.

5. Section 23.47 is amended by revising paragraph (e) and by adding a new paragraph (f), to read as follows:

§ 23.47. (Amended)

(e) (1) A recipient or contractor may count toward its MBE, DBE or WBE goals 60 percent of its expenditures for materials and supplies required under a contract and obtained from an MBE, DBE or WBE regular dealer, and 100 percent of such expenditures to an MBE, WBE, or DBE manufacturer.

(2) For purposes of this section, a manufacturer is a firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the recipient or contractor.

(3) For purposes of this section, a regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public in the usual course of business. To be a regular dealer, the firm must engage in, as its principal business, and in its own name, the purchase and sale of the products in question. A regular dealer in such bulk items as steel, cement, gravel, stone, and petroleum products need not keep such products in stock, if it owns or operates distribution equipment. Brokers and packagers shall not be regarded as manufacturers or regular dealers within the meaning of this section.

(f) A recipient or contractor may count toward its MBE, DBE, or WBE goals the following expenditures to MBE, DBE, or WBE firms that are not manufacturers or regular dealers:

(1) The fees or commissions charged for providing a bona fide service, such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials or supplies required for performance of the contract, provided that the fee or commission is determined by the recipient to be reasonable and not

excessive as compared with fees customarily allowed for similar services. (2) The fees charged for delivery of materials and supplies required on a job site (but not the cost of the materials and supplies themselves) when the hauler, trucker, or delivery service is not also the manufacturer of or a regular dealer in the materials and supplies, provided that the fee is determined by the recipient to be reasonable and not excessive as compared with fees customarily allowed for similar services.

(3) The fees or commissions charged for providing any bonds or insurance specifically required for the performance of the contract, provided that the fee or commission is determined by the recipient to be reasonable and not excessive as compared with fees customarily allowed for similar services.

6. Section 23.61(a) is amended by revising the first sentence up to the first comma to read as follows:

§ 23.61 (Amended)

(a) The purpose of this subpart is to implement section 106(c) of the Surface Transportation and Uniform Relocation Assistance Act of 1967 (Pub. L. 100-17) so that, \* \* \*

7. Section 23.61(b) is amended by removing the words "section 105(f)" and substituting the words "section 106(c)".

8. Section 23.62 is amended by revising the definition of "Act" to read as follows:

§ 23.62 (Amended)

"Act" means the Surface Transportation and Uniform Relocation Assistance Act of 1967 (Pub. L. 100-17).

9. Section 23.62 is amended by removing the period(.) at the end of the definition of "Small business concern" and adding the following words:

"Small business concern" \* \* \* excludes that a small business concern shall not include any concern or group of concerns controlled by the same social and economically disadvantaged individual or individuals which has annual average gross receipts in excess of \$14 million over the previous three fiscal years. The Secretary shall adjust this figure from time to time for inflation.

10. Section 23.62 is amended by adding, in the definition of "Socially economically disadvantaged individuals," immediately following the words "(or lawfully admitted permanent residents) and who are" the word

definition entitled "(b) Hispanic Americans," immediately after the words "or other Spanish" the words "or Portuguese."

11. Section 23.63 is revised to read as follows:

**§ 23.63 Applicability.**

This subpart applies to all DOT financial assistance in the following categories that recipients expend in DOT-assisted contracts:

- (a) Federal-aid highway funds authorized by Title I of the Act;
- (b) Urban mass transportation funds authorized by Title I or III of the Act or the Urban Mass Transportation Act of 1964, as amended; and
- (c) Funds authorized by Title I, II (except section 203) or III of the Surface Transportation Assistance Act of 1962 (Pub. L. 87-424) and obligated on or after April 2, 1967.

**Appendix A—[Amended]**

12. The portion of Appendix A, following Subpart D, entitled "Section 23.61 Purpose," is amended in its first sentence, by removing the words "105(f) of the Surface Transportation Assistance Act of 1962," and substituting the words "105(c) of the Surface Transportation and Uniform Relocation Assistance Act of 1967."; and, in the third sentence, by removing the word "105(f)" in both places where it occurs and substituting the word "105(c)".

13. The portion of Appendix A, following Subpart D, entitled "Section 23.62 Definitions" is amended by removing the words "Surface Transportation Assistance Act of 1962," in the first sentence and substituting the words "Surface Transportation and Uniform Relocation Assistance Act of 1967."

14. The portion of Appendix A, following Subpart D, entitled "Section 23.62 Definitions" is amended by adding the following new paragraphs following the end of the paragraph entitled "small business concerns":

that the DBE program meets its objective of helping small minority businesses become self-sufficient and able to compete in the market with non-disadvantaged firms, that DBE firms should "graduate" from the program once their average annual receipts reached \$14 million.

In implementing this provision, recipients should note that a firm is not "graduated" from the program, and hence no longer an eligible DBE, until its average annual gross receipts over the previous three-year period exceed \$14 million. The fact that a firm exceeds \$14 million in gross receipts in a single year does not necessarily result in "graduation." For example, suppose a firm has the following history:

1985—\$11 million  
1986—\$13 million  
1987—\$14 million  
1988—\$14 million  
1989—\$13 million

The firm makes \$14 million in 1987. However, the firm's average annual gross receipts for 1985-87 are \$12.67 million, so the firm remains eligible in 1988 as well, since its average annual gross receipts for 1986-88 would be \$13.67 million. However, the firm's average annual gross receipts for 1987-89 would be \$14.3 million. As a result, the firm would not be an eligible DBE in 1990.

It should also be pointed out the \$14 million ceiling, like small business size limits under section 3 of the Small Business Act, includes revenues of "affiliate" of the firm as well as the firm itself. This is the import of the "any concern or group of concerns" language. In addition, firms still are subject to applicable lower limits on business size established by the Small Business Administration in 13 CFR Part 121. For example, if SBA regulations say that \$7.5 million average gross annual revenues is the size limit for a certain type of business, that size limit, rather than the overall \$14 million ceiling, determines whether the firm qualifies in terms of its size to be a DBE.

15. The portion of Appendix A, following Subpart D, entitled "Section 23.62 Definitions" is amended by adding, at the end of the list of designated groups in the fourth sentence of the paragraph entitled "Socially and economically disadvantaged individuals", following the words

"or women.

16. The portion of Appendix A, following Subpart D, entitled "Section 23.62 Definitions" is amended by removing the words "Burma, Thailand and Portugal" from the last sentence of the paragraph entitled "Socially and economically disadvantaged individuals" and from the first sentence of the paragraph immediately following the paragraph entitled "Socially and economically disadvantaged individuals" and substituting, in each case, the words "Burma and Thailand."

17. The portion of Appendix A, following Subpart D, entitled "Section 23.62 Definitions" is amended by removing the words "non-minority women," from the second sentence of the last paragraph.

18. The portion of Appendix A, following Subpart D, entitled "Section 23.63 Applicability," is amended by revising the second paragraph to read as follows:

The first category of program funds to which Subpart D applies is Federal-aid highway funds authorized by Title I of the Act. The second category is urban mass transportation funds authorized by Title I (i.e., interstate transfer and substitution funds) or Title III of the Act. The third category is funds authorized by Title I (except section 203), or Title III of the Surface Transportation Assistance Act of 1962 (Pub. L. 87-424) and obligated on or after April 2, 1967 (enactment date of the STURAA).

19. The portion of Appendix A, following Subpart D, entitled "Relationship Between Subpart D and the Remainder of 49 CFR Part 23" is amended by revising the second paragraph to read as follows:

With respect to FHWA and UMT/assisted programs, recipients will be only one DBE goal, at both the overall contract goal level. There are no local separate DBE and WBE goals. Each single DBE goal applies to all DBEs they are owned and controlled by or by women.

[FR Doc. 87-24233 Filed 10-16-87; 1 BILLING CODE 49-10-00-01]

adopted April 7, 1988, and released May 10, 1988. The full text of this Commission decision is available for inspection and copying during normal business hours in the FCC Dockets Branch (Room 230), 1919 M Street NW., Washington, DC. The complete text of this decision may also be purchased from the Commission's copy contractor, International Transcription Service, (202) 857-3800, 2100 M Street NW., Suite 140, Washington, DC 20037.

#### List of Subjects in 47 CFR Part 73

Radio broadcasting.

#### PART 73—[AMENDED]

1. The authority citation for Part 73 continues to read as follows:

Authority: 47 U.S.C. 154, 303.

#### § 73.202 [Amended]

2. Section 73.202(b), the FM Table of Allotments for Iowa is amended by revising the entry for Ida Grove to delete Channel 224A and add Channel 225C2.

Federal Communications Commission.  
Steve Kaminer,  
Deputy Chief, Policy and Rules Division,  
Mass Media Bureau.  
[FR Doc. 88-11518 Filed 5-20-88; 8:45 am]  
BILLING CODE 4712-01-M

#### 47 CFR Part 73

[MM Docket No. 87-393; RM-5966; RM-6170]

Radio Broadcasting Services; Roland and Heavener, OK

AGENCY: Federal Communications Commission.

ACTION: Final rule.

**SUMMARY:** The Commission, at the request of Family Broadcasting Company, allocates Channel 222A to Roland, Oklahoma, as the community's first local FM service. Channel 222A can be allocated to Roland in compliance with the Commission's minimum distance separation requirements with a site restriction of 5.5 kilometers (3.4 miles) north to avoid a short-spacing to the pending application for Channel 223A at Heavener, Oklahoma. (ARN-871124NZ). The Commission also denies the counterproposal of Double Eagle Broadcasting Corp. to substitute Channel 223C2 for Channel 222A at Heavener, Oklahoma. With this action, this proceeding is terminated.

**DATES:** Effective June 24, 1988. The window period for filing applications will open on June 27, 1988, and close on July 27, 1988.

**FOR FURTHER INFORMATION CONTACT:** Leslie K. Shapiro, Mass Media Bureau, (202) 634-6530.

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission's Report and Order, MM Docket No. 87-393, adopted April 5, 1988, and released May 10, 1988. The full text of this Commission decision is available for inspection and copying during normal business hours in the FCC Dockets Branch (Room 230), 1919 M Street NW., Washington, DC. The complete text of this decision may also be purchased from the Commission's copy contractor, International Transcription Service, (202) 857-3800, 2100 M Street NW., Suite 140, Washington, DC 20037.

#### List of Subjects in 47 CFR Part 73

Radio broadcasting.

#### PART 73—[AMENDED]

1. The authority citation for Part 73 continues to read as follows:

Authority: 47 U.S.C. 154, 303.

#### § 73.202 [Amended]

2. Section 73.202(b), the FM Table of Allotments for Oklahoma is amended by adding the following entry, Roland, Channel 222A.

Federal Communications Commission.  
Steve Kaminer,  
Deputy Chief, Policy and Rules Division,  
Mass Media Bureau.  
[FR Doc. 88-11519 Filed 5-20-88; 8:45 am]  
BILLING CODE 4712-01-M

#### DEPARTMENT OF TRANSPORTATION

Office of the Secretary

49 CFR Part 23

(Docket No. 64h)

Participation by Minority Business Enterprise in Department of Transportation Programs

AGENCY: Office of the Secretary, DOT.  
ACTION: Final rule.

**SUMMARY:** Congress recently enacted section 105(f) of the Airport and Airway Safety and Capacity Expansion Act of 1987. This section requires the application to the Federal Aviation Administration's airport financial assistance program of the provisions of the Department's disadvantaged business enterprise (DBE) rule previously applicable only to the Federal Highway Administration's and Urban Mass Transportation Administration's programs. This rule makes this change.

**DATES:** This rule is effective on May 23, 1988.

**FOR FURTHER INFORMATION CONTACT:** Robert C. Ashby, Deputy Assistant General Counsel for Regulation and Enforcement, Department of Transportation, 400 7th Street SW., Washington, DC 20560, (202) 366-9306.

**SUPPLEMENTARY INFORMATION:** Congress recently passed, and the President signed, section 105(f) of the Airport and Airway Safety and Capacity Expansion Act of 1987. This provision establishes a statutory disadvantaged business enterprise (DBE) program in Federal Aviation Administration (FAA) financial assistance programs for airports. The content of the provision is taken virtually verbatim from section 105(c) of the Surface Transportation and Uniform Relocation Assistance Act of 1987.

Because the Department had already made changes to its DBE program regulation in response to section 105(c) (52 FR 39225; October 21, 1987), it is not necessary to make further substantive changes in the regulations as a result of the new FAA statutory provision. However, it is necessary to make technical and conforming amendments to the regulation in order to specify that Subpart D of the rule (which previously has applied only to the Department's highway and mass transit financial assistance programs) now applies to FAA recipients as well as to UMTA and FHWA recipients. This final rule makes those needed amendments.

The October 21 amendments to Part 23 have not yet appeared in the printed volumes of the Code of Federal Regulations, and many persons interested in the airport program probably were not aware of Part 23 amendments many of which, when made, pertained only to highways and mass transit. Therefore, we are providing the following summary of the October 21 amendments, which now will apply to the airport program as well:

Section 23.45 (e) and (f) were amended to require that addresses of DBE firms be listed in recipients' directories and that recipients take a number of procedural steps when certifying DBEs (on-site visits, obtaining work histories of the firm and its principal owners, interviewing the principal owners, analysis of stock ownership, analysis of bonding and financial capacity of the firm, list of equipment and licenses held by the firm and its key personnel, and a statement of the type of work the firm prefers to do).

Section 23.45(g) was amended to require a single overall and a single contract goal for DBEs (as opposed to separate goals for WBEs and DBEs).

Section 23.47(e) was amended to provide that 60 percent of the value of supplies

purchased from a DBE "regular dealer" could be counted toward DBE goals (formerly, only 20 percent could be counted). The amendment also included a definition of "regular dealer" and clarification of the "commercially useful function" concept. Section 23.62 was amended to exclude from the definition of "small business concern" firms whose average gross annual receipts over three years exceed \$14 million and to include women in the definition of "socially and economically disadvantaged individuals".

Technical amendments and conforming changes to the explanatory material in Appendix A to Subpart D of the regulation were also made.

The Department's action is required by statute. Since the Department has no discretion in the matter, and because it is important to conform to a Congressional enactment as soon as possible, the Department is issuing this rule as a final rule, effective upon publication.

While the rule will cause recipients to make certain administrative changes in their programs (e.g., have a single DBE goal instead of separate minority and women's business enterprise goals, as in the past, and establishing a third-party challenge procedure), we do not believe that these administrative changes are likely to be unduly disruptive. For example, the same recipients who have had MBE programs will now have DBE programs. The FAA will shortly issue guidance to its grantees concerning the transition to administering their programs under Subpart D.

Another provision of the Airport and Airway Safety and Capacity Expansion Act concerns participation by DBE firms in the airport concessions business. This rule does not attempt to implement this statutory provision, which will require the development of new substantive regulations. The Department hopes to propose these new regulations for public comment along with other revisions to Part 23 which are now being reviewed within the Department.

#### Regulatory Process Matters

The Department has determined that this rule does not constitute a major rule under the criteria of Executive Order 12291. It is a non-significant rule under the Department's Regulatory Policies and Procedures. Since the regulation simply makes administrative adjustments to an existing program expressly required by statute, its economic impacts are expected to be small, and the Department has consequently not prepared a regulatory evaluation. For this reason, the Department certifies that the rule does not have a significant economic impact on a significant number of small entities.

Also, the Department certifies, in accordance with Executive Order 12612, that the rule does not have significant Federalism implications to warrant the preparation of a Federalism assessment.

The rule concerns matters under Federal grants, and hence is exempt from the notice and comment requirements of the Administrative Procedure Act (5 U.S.C. 553(a)(2)). In addition, the rule must be implemented rapidly, in order to ensure that the provisions apply to funds authorized by the Act, as Congress intended. For these reasons, the Department has determined that there is good cause to promulgate these portions of the rule without prior notice and comment (see 5 U.S.C. 553(b)(3)) and to make the rule effective immediately, rather than after a 30-day period (see U.S.C. 553(c)(3)).

#### List of Subjects in 49 CFR Part 23

Minority businesses, Highways, Mass. Transportation.

Issued in Washington, DC, on May 17, 1988.  
Jim Burnley,  
Secretary of Transportation.

In consideration of the foregoing, the Department of Transportation amends 49 CFR Part 23 as follows:

#### PART 23—[AMENDED]

1. The authority citation for Part 23 is revised to read as follows:

Authority: Sec. 905 of the Regulatory Revitalization and Regulatory Reform Act of 1978 (45 U.S.C. 803); sec. 30 of the Airport and Airway Development Act of 1970, as amended; sec. 520 of the Airport and Airway Improvement Act of 1982, as amended by the Airport and Airway Safety and Capacity Expansion Act of 1987; sec. 19 of the Urban Mass Transportation Act of 1964, as amended (49 U.S.C. 1615); sec. 108(c) of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Pub. L. 100-17); sec. 105(f) of the Airport and Airway Safety and Capacity Expansion Act of 1987 (Pub. L. 100-223); Title 23 of the U.S. Code (relating to highways and traffic safety, particularly sec. 324 thereof); Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d et seq.); Executive Order 12265; Executive Order 12138.

2. Section 23.61(a) is amended by revising the first sentence up to the first comma to read as follows:

#### § 23.61 [Amended]

(a) The purpose of this subpart is to implement section 108(c) of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Pub. L. 100-17) and section 105(f) of the Airport and Airway Safety and Capacity Expansion Act of 1987 (Pub. L. 100-223) so that

3. Section 23.61(b) is amended by adding the words "and section 105(f)" after the words "section 108(c)".

4. Section 23.62 is amended by revising the definition of "Act" to read as follows:

#### § 23.62 [Amended]

"Act" means the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Pub. L. 100-17), with respect to financial assistance programs of the FHWA and UMTA, and the Airport and Airway Safety and Capacity Expansion Act of 1987 (Pub. L. 100-223), with respect to FAA programs.

5. Section 23.63 is amended by adding a new paragraph (d), to read as follows:

#### § 23.63 [Amended]

(d) Funds authorized under section Title I of the Airport and Airway Safety and Capacity Expansion Act of 1987 (Pub. L. 100-223).

#### § 23.64 [Amended]

6. Section 23.64 is amended, in paragraph (b)(2) thereof, by adding the words "or airport" after the words "urban mass transportation" and by adding the words "or FAA" after the word "UMTA".

7. Section 23.64 is amended, in paragraph (c) thereof, by substituting the words "Federal-aid highway funds, urban mass transportation funds, or airport funds" for the words "Federal-aid highway funds or urban mass transportation funds"; and, in paragraphs (c) and (e) thereof, by adding the words "or FAA" after the word "UMTA" in each instance in which the word "UMTA" occurs.

8. Section 23.64 is amended, in paragraph (e)(2), by deleting the word "or" following the words "( . . . state transportation agency)", by inserting a comma (,) at that point, and by adding, after the semicolon, the words "or, with respect to an airport sponsor, the elected official, head of the board, or other official responsible for the operation of the sponsor,".

#### § 23.65 [Amended]

9. Section 23.65 is amended, in its first line, by adding the words "or FAA" following the word "UMTA".

#### § 23.68 [Amended]

10. Section 23.68 is amended, in paragraph (e)(2), by adding the words "or FAA" after the word "UMTA", both times the word "UMTA" occurs.

11. The portion of Appendix A, following Subpart D, entitled "Section 23.61 Purpose" is amended by adding, before the period (.) at the end of the first sentence, the words "and section 105(f) of the Airport and Airway Safety and Capacity Expansion Act of 1987" and by adding the words "and section 105(f)" after the words "section 105(c)" in both places in the last sentence of the paragraph in which the words "section 105(c)" appear.

12. The portion of Appendix A, following Subpart D, entitled "Section 23.62 Definitions" is amended by adding before the period in the first sentence, the words "Airport and Airway Safety and Capacity Expansion Act of 1987".

13. The portion of Appendix A, following Subpart D, entitled "Section 23.62 Definitions" is amended by removing from the second sentence of the second paragraph under the title "Socially and economically disadvantaged individuals" the word "FAA" following the word "FRA" and, in the same sentence, by substituting the words "FHWA, UMTA and FAA" for the words "FHWA and UMTA".

14. The portion of Appendix A, following Subpart D, entitled "Section 23.63 Applicability," is amended, in the first paragraph, in the first sentence thereof, by substituting the words "a number of" for the word "two"; in the third and fifth sentences thereof, by adding the words "or FAA" after the word "FWHA" in both instances in which the word "FHWA" occurs; and in the fifth sentence thereof, by adding the words "or otherwise to acquire land" after the words "to acquire right-of-way".

15. The portion of Appendix A, following Subpart D, entitled "Section 23.63 Applicability," is amended by adding the following sentence to the second paragraph thereof.

The provisions of Subpart D also apply to the FAA-administered airport funds authorized by the Airport and Airway Safety and Capacity Expansion Act of 1987.

16. The portion of Appendix A, following Subpart D, entitled "Section 23.64 Submission of Overall Goals," is amended by adding the words "or FAA" after the word "UMTA" in the last

sentence of the first paragraph thereof and by adding a new sentence before the present last sentence of the first paragraph, to read as follows:

Recipients of FAA airport program funds who receive planning funds in excess of \$75,000 or more than \$250,000 (general aviation airports), \$400,000 (non-hub airports), or \$500,000 (hub airports) in FAA assistance also must submit overall goals.

17. The portion of Appendix A, following Subpart D, entitled "Section 23.64 Submission of Overall Goals," is amended by adding, in the second paragraph, the words "or FAA" after the word "UMTA", in both instances in which the word "UMTA" appears.

18. The portion of Appendix A, following Subpart D, entitled "Section 23.64 Submission of Overall Goals," is amended, in the fourth paragraph, in the first sentence, the words "or FAA" after the word "UMTA" in the first instance in which the word "UMTA" appears and by substituting for the subsequent words "UMTA and FHWA" the words "UMTA, FHWA, or FAA".

19. The portion of Appendix A, following Subpart D, entitled "Section 23.64 Submission of Overall Goals," is amended by adding, in the seventh paragraph, the second sentence thereof, the words "or airport sponsor" after the words "mass transit agency".

20. The portion of Appendix A, following Subpart D, entitled "Section 23.65 Content of Justification," is amended, in the last sentence thereof, by substituting the words "FHWA, UMTA, or FAA" for the words "FHWA and UMTA".

21. The portion of Appendix A, following Subpart D, entitled "Section 23.68 Approval and Disapproval of Overall Goals," is amended by substituting, in the third sentence thereof, the words "FHWA, UMTA or FAA" for the words "FHWA and UMTA".

22. The portion of Appendix A, following Subpart D, entitled "Section 23.68 Compliance," is amended by substituting, in the final sentence of the last paragraph thereof, the words "FHWA, UMTA or FAA" for the words "UMTA or FHWA".

[FR Doc. 88-11537 Filed 5-20-88; 8:45 am]

BILLING CODE 4810-02-M

## Fish and Wildlife Service

## 50 CFR Part 14

## Humane and Healthful Transport of Wild Animals and Birds to the United States; Enforcement Policy

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Notice of enforcement policy.

**SUMMARY:** The U.S. Fish and Wildlife Service announces the policy for the enforcement of Humane and Healthful Transport regulations. This policy aids affected members of the public in better understanding the regulations.

**EFFECTIVE DATE:** February 8, 1988.

**FOR FURTHER INFORMATION CONTACT:** Mary E. Monaghan, Division of Law Enforcement, U.S. Fish and Wildlife Service, P.O. Box 28008, Washington, DC 20038-8008, telephone (202) 343-9242.

**SUPPLEMENTARY INFORMATION:** The Service published a final rule on November 10, 1987, (52 FR 43274) that set the standards for the humane and healthful transport of wild mammals and birds into the United States. After publication of the rule, the Service received additional comments from affected members of the public maintaining some of its provisions were not clear, were unreasonable, or could actually result in inhumane shipping conditions.

Pursuant to court order these regulations were made effective retroactively to February 8, 1988. The Service is reviewing the regulations for the purpose of making improvements and clarifications (See 53 FR 15041). During this period of review, and any subsequent proposal to amend the rule, the Service intends to enforce the provisions of the regulations in a reasonable and prudent manner.

Responsible parties are expected to comply with these regulations and insure that any wildlife is transported under humane and healthful conditions. The Service recognizes that there may be special circumstances where strict compliance with these regulations

**CONFORMED COPY**

**THE PORT AUTHORITY OF NY & NJ**



FRANCIS J. LOMBARDI, P.E.  
CHIEF ENGINEER

ONE WORLD TRADE CENTER  
NEW YORK, NY 10048

December 2, 1996

(212) 435-7449  
(201) 961-6600 x7449

VIA FEDERAL EXPRESS

C.D.M. Associates, Inc./  
Felix Equities, Inc., A Joint Venture  
53-44 97th Place  
Corona, N.Y. 11368

SUBJECT: LA GUARDIA AIRPORT - ALLEY POND PARK - WETLAND MITIGATION -  
CONTRACT LGA-124.039

Gentlemen:

The Port Authority of New York and New Jersey hereby accepts your proposal on the above Contract.

The Port Authority elects to require you to furnish a performance and payment bond in accordance with the terms of the contract. A copy of the required bond form is enclosed, which should be executed by you and your surety and returned to Phyllis Esnes of the Port Authority, Room 72S at the above address.

Please note that under the contract clause entitled "Performance and Payment Bond", you are required to return the executed bond within seven days.

Your attention is directed to the clause of the Contract entitled "Time for Completion and Damages for Delay" and to the fact that before you may commence performance of the work you must furnish whichever of the documents mentioned in that clause are applicable.

Subject to the provisions of the Form of Contract, including those of the clause entitled "Extra Work Orders", the Chief Engineer shall have authority to order any item of Extra Work if the cost thereof to the Authority, together with the cost of all other Extra Work previously ordered, will not be in the aggregate in excess of \$100,000.

Forwarded herewith for your use and compliance are "General Instructions Relating to the Direction and Processing of Correspondence and of Those Other Items Specified to be Submitted to the Port Authority Under the Terms of the Contract".

Very truly yours,

Approved as to form:

THE PORT AUTHORITY OF NEW YORK  
AND NEW JERSEY

Jeffrey S. Green  
General Counsel

PAP. BY [Signature]  
11/22 Chief Engineer

BY [Signature]  
Attorney  
DATE 11/25/96

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**FEDEX DELIVERED ON: December 3, 1996**

GEORGE J. MARLIN, EXECUTIVE DIRECTOR  
JOHN J. HALLY, JR., DEPUTY EXECUTIVE DIRECTOR

CHRISTINE TODD WHITMAN, GOVERNOR STATE OF NEW JERSEY GEORGE E. PATAKI, GOVERNOR STATE OF NEW YORK

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY  
ONE WORLD TRADE CENTER  
NEW YORK, NEW YORK 10048

ADDENDUM NO. 2                      October 18, 1996

TO PROSPECTIVE BIDDERS ON CONTRACT LGA-124.039 - LA GUARDIA AIRPORT -  
ALLEY POND PARK - WETLAND MITIGATION.

The following changes are hereby made in the contract documents  
for the subject Contract.

This communication should be physically annexed to back cover of  
the book and initialled by each bidder before submitting his bid.

In case any bidder fails to conform to these instructions, his  
Proposal will nevertheless be construed as though this communication had  
been so physically annexed and initialled.

CHANGES IN THE CONTRACT BOOKLET

Page 1 - In the third line of the first paragraph on the page, change  
the day and date for receipt of Proposals to "Wednesday,  
October 23, 1996".

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

Francis J. Lombardi, P.E.  
Chief Engineer

INITIALLED BY THE BIDDER:

---

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY  
ANALYSIS OF BID

PROJECT: ALLEY POND PARK - WETLAND MITIGATION

DATE \_\_\_\_\_

THIS IS NOT PART OF THE CONTRACT SHEET NO. 1 OF 2

(Additional Items of Materials or Work May Be Listed)

CONTRACTOR \_\_\_\_\_ CONTRACT NO. LGA-124.039

UNIT NO.	DESCRIPTION (1)	QUANTITY	UNIT (2)	UNIT PRICE	AMOUNT
1	Reproducibles of As-Built Shop Drawings		LS		
2	Excavation		CU. YD		
3	Removal (Trucking)		CU. YD		
4	Chain Link Fence & Screening Fabric		LF		
5	Chain Link Fence Gate		EA		
6	Lay Down Area & Removal		LS		
7	Temporary Haul Route & Removal		LS		
8	Timber Mat Road & Removal		LS		
9	Silt Fence		LF		
					\$

- 1) Separate and list all items or operations of work included in your estimate in accordance with Specifications. When listing subcontracts, the prime Contractor will have each subcontractor complete an analysis of bid form.
- 2) Unit of measure, i.e., Sq. Ft., Cu. Yds., BBLs, PCS, Ea., etc.
- 3) Include all charges, such as moving on site, removal, rental, etc.
- 4) In case of conflict between information hereon (whether supplied by the Authority or the bidder) and the terms or prices contained or inserted in the Contract Booklet or Contract Drawings, said Booklet and Drawings shall control.
- 5) The Bid Analysis is not part of the Contract. No information hereon (whether supplied by the Authority or the bidder) and no information deduced from information hereon, including quantities of materials or work, shall be deemed to vary, alter or modify any provision of the Contract, including provisions therein as to compensation and performance. The unit prices contained hereon serve the sole purpose of informing the Port Authority as to components of the bidder's price quoted in the Contract. The items of materials or work contained hereon shall not be deemed to be an exhaustive list of the items of materials or work required by the Contract Drawings and Specifications in their present form.

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY  
ANALYSIS OF BID

PROJECT: ALLEY POND PARK - WETLAND MITIGATION

DATE \_\_\_\_\_

THIS IS NOT PART OF THE CONTRACT

SHEET NO. 2 OF 2

(Additional Items of Materials or Work May Be Listed)

CONTRACTOR \_\_\_\_\_

CONTRACT NO. LGA-124.039

UNIT NO.	DESCRIPTION (1)	QUANTITY	UNIT (2)	UNIT PRICE	AMOUNT
10	Existing Wetland Protection Fence		LF		
11	WETLAND SPECIALIST (GROWING & INSTALL)		YR		
12	WATERFOWL PROTECTION FENCE		LF		
13	SPARTINA ALTERNIFLORA		EA		
14	WETLAND SPECIALIST/MONITORING & MAINTENANCE	5	YR		
15	CLEAN FILL		CU. YD		
16	TOPSOIL		CU. YD		
17	EROSION CONTROL MAT		SF		
18	PLANTING VEGETATED BUFFER		LS		
19	MAINTENANCE VEGETATED BUFFER	1	YR		
20	SURVEY		LS		