

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Bid No. S2-Z5701-PIR

CITY OF PHILADELPHIA

DEPARTMENT OF COMMERCE

DIVISION OF AVIATION

PHILADELPHIA AIRPORT SYSTEM

FACILITY MAINTENANCE CONTRACT 5B

(Building Systems, Airfield Support and Landscaping)

PRE-QUALIFICATION INSTRUCTIONS

AND

INFORMATION REQUEST

SUBMITTAL DATE: DECEMBER 20, 2010 at 10:30AM

Vendors having questions or comments concerning this Pre-qualification Information Request should contact Deatrice Isaac of the Procurement Department at (215) 686-4777, Fax (215) 686-4727

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

INDEX

PRE-QUALIFICATION INSTRUCTIONS	PAGE
1. GENERAL	2
2. BIDDER SELECTION PROCESS.....	15
3. SYSTEM DESCRIPTIONS:	
<i>Mechanical Services:</i>	
3.1 ESCALATORS, ELEVATORS & MOVING WALKWAYS	17
3.2 STORM WATER & SANITARY DRAINAGE.....	25
3.3 FIRE PROTECTION SYSTEMS.....	26
3.4 HEATING, VENTILATION & AIR CONDITIONING (HVAC).....	35
<i>Electrical Services:</i>	
3.5 FACILITIES AUTOMATED CONTROL SYSTEMS.....	40
3.6 UNINTERRUPTIBLE POWER SUPPLY.....	43
3.7 SWITCH GEAR.....	44
3.8 HIGH VOLTAGE CABLE REPAIR.....	65
3.9 FIRE ALARM AND DETECTION SYSTEM.....	66
<i>Other Services:</i>	
3.10 FENCING AND GUIDERAILS.	68
3.11 BIRD CONTROL	68
3.12 AIRFIELD SUPPORT SERVICES.....	69
3.13 BUILDING MOUNTED SIGNAGE.....	70
3.14 GLASS, PLASTIC REPLACEMENT	70
3.15 INTERIOR COSMETIC REPAIRS & EXTERIOR FINISHES RESTORATION/MAINTENANCE.....	71
3.16 AIRPORT EXHIBITIONS & DECORATIONS.....	71
3.17 SPECIALIZED EQUIPMENT SERVICES.....	72
3.18 ROOFING.....	73
3.19 LANDSCAPING SERVICES.....	73
4. ADD-ONS.....	74
5. INSURANCE.....	74
6. PRE-QUALIFICATION INFORMATION REQUEST.....	77
7. EXHIBIT A: DISADVANTAGED MINORITY, WOMEN, AND DISABLED FORMS.....	A1

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

**CITY OF PHILADELPHIA
DEPARTMENT OF COMMERCE – DIVISION OF AVIATION
PHILADELPHIA AIRPORT SYSTEM**

FACILITY MAINTENANCE CONTRACT

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST (PIR)

1 GENERAL BID SUBMISSION

1.1 The City of Philadelphia is seeking a Prime Contractor interested in providing Facility Maintenance Services for the Division of Aviation at the Philadelphia International Airport (PHL) and Northeast Philadelphia Airport (PNE). The bidder must be able to meet the requirements in this document.

1.2 Types of Maintenance:
The bidder must be able to provide, either through its own firm or its subcontractor(s), the following types of services:

Mechanical Services:

- A. Escalator/Elevator/Moving Walkways
- E. Storm Water and Sanitary Drainage
- F. Fire Protection Systems
- G. Heating, Ventilation and Air Conditioning (HVAC)

Electrical Services:

- H. Facilities Automated Control Systems
- I. Uninterrupted Power Supply
- J. Switch Gear
- K. High Voltage Cable Repair
- L. Fire Alarm and Detection System

Other Services:

- M. Fencing and Guiderails
- N. Bird Control
- O. Airfield Support Services
- P. Building mounted Signage
- Q. Glass, Plastic Replacement
- R. Interior Cosmetic Repairs & Exterior Finishes Restoration/Maintenance
- S. Airport Exhibitions & Decorations
- T. Specialized Equipment Services
- U. Roofing
- V. Landscaping

1.3 **CONTRACT TERM: 7/1/2011 to 6/30/2012** (“Initial Term”), with an option to renew for up to three (3) additional one (1) year periods, (“the Renewal Term”) exercisable at the City’s sole discretion; as of the Initial Term or then current Renewal Term. The City may, at its sole discretion, renew the contract for an additional period of up to three (3) months, commencing as of the expiration of the Initial term (the “Additional Performance Period”), if a decision has been made not to renew the contract for an entire year.

1.4 **BIDDER QUALIFICATION:** These items **MUST** be adhered to in order to be eligible for award consideration.

1.4.1 Bidders wishing to be considered for providing maintenance service at the Philadelphia International Airport and the Philadelphia Northeast Airport and to be eligible for an award after the pre-qualification process **MUST** comply with the following pre-qualification requirements:

1.4.2 Demonstrate service experience as generally described in Facilities similar in size and scope to those referred to in this document, minimum contract amount to be **\$6,000,000.00** per year.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

- 1.4.3 Supply references and descriptions of these contracts (minimum 3). One of these references can be the City of Philadelphia.
- 1.4.4 Substitution of experience by a subcontractor is acceptable.
- 1.4.5 Substitution of experience by a subcontractor must be documented with references in the same manner.
- 1.4.6 The City reserves the right to evaluate and rule on the acceptability of the proposed subcontractors and to recommend that Prime bidders propose other subcontractors.
- 1.4.7 After completion of the pre-qualification process, the Prime Contractor may only change their pre-qualified sub-contractors after notification and approval by the Airport Maintenance Manager.
- 1.4.8 The Company or subcontractor performing the work **MUST** be a current National Board Inspection Code (NBIC) "R" Stamp holder; and provide the name of the Inspection & Insurance Company that they use. A copy of the certificate **MUST** be submitted with this Pre-qualification information package. The "R" Stamp certificate must be kept current during the life of the contract to include any and all renewal periods.
- 1.4.9 The bidder **MUST** also demonstrate that it has the financial (Refer to section 1.7) capacity to carry out the maintenance contract and post the required Bid Performance Security and Payment Bond and meet all other formal requirements as listed in Invitation & Bid S2-Z5701-0 (to be issued at a later date).
- 1.4.10 Bidder shall submit evidence of all permits, licenses and regulatory agency documentation as required by sections.
- 1.4.11 A Bid Bond in the amount of \$2,500,000.00 shall be submitted with Invitation and Bid # S2-Z5701-0 (to be issued at a later date).
- 1.4.12 Under each section, required maintenance listed in this PIR is minimum requirements for personnel required. To satisfy the requirements of the PIR, in Section 6, bidders shall include a statement with their PIR that all personnel requirements contained herein shall be met by the prime and the subcontractors. For on-site managers, however, bidder shall include their required experience, training, etc with the PIR.
- 1.4.13 PERSONNEL ASSIGNMENT APPROVAL:
- 1.4.13.1 The City will have the authority to instruct the successful bidder to remove undesirable personnel from performance of work for just cause. Personnel removed shall be replaced with equally qualified and experienced personnel. The City's decision will be final in all cases.
- 1.4.13.2 Successful bidder shall furnish certification papers and documentation of the assigned personnel's qualifications for on site crew to the City for written approval of acceptance. The successful bidder may change personnel only with equally qualified personnel with approval of the City.
- 1.4.13.3 The successful bidder understands and agrees that should the City refuse to approve any personnel assignments or request removal of any of the successful bidder's personnel that the City shall do so in writing stating the reason(s) or cause(s) for not approving or for requesting removal of any personnel on the work.
- 1.4.13.4 The successful bidder may reassign personnel between locations and provide temporary personnel assignments with prior approval of the City.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

1.4.13.5 Various position description guidelines are outlined herein. Quality of personnel is an important requirement of this service contract. These descriptions are to be utilized as guidelines and all personnel retained are subject to the approval of the City as referenced in Section 1.4.13.1. The City will utilize these guidelines during the review and approval process related to personnel assignments.

1.4.13.5.1 MANAGER

Responsible for ensuring that Airport Systems are operated and maintained with the highest levels of safety, security, efficiency, cost effectiveness and in a first class condition. Accountable to the Director of Aviation or designee.

Duties

Communicate operating philosophy, objectives, and expectations to the facility management staff. Responsible for resolving problems and/or conflicts and maintaining open communication with various parties. Assimilate management information and write reports detailing activity for the reporting period. Reviews and approves all expenditures for materials, equipment, tools, supplies, and subcontracts. Prepare proposals for additions, deletions, and changes to the contract scope as requested. Track, analyze, and trend project costs. Prepare regular invoicing based on contract type, terms and conditions. Prepare goal setting and employee performance reviews as applicable and administers pay for performance program. Review and recommend staff and employee training programs, workshops, seminars, and classes.

Manage personnel including hiring, firing, and promoting staff. Responsible for the completion of required documentation and forms. Manage the total overall operation of the facility in the areas of safety, comfort, productivity, and efficiency to contract standards.

Requirements

Completion of a Bachelors Degree program. A combination of education and/or work experience equivalent would be considered in meeting the requirements. A minimum of 10 years of facility management expertise. Five years of experience is desired in the area of operations and maintenance project management and three years of experience in the construction, renovation, or maintenance of large Airport installations or industrial complexes. Strong organizational, participative management and verbal and written communication skills are required.

1.4.13.5.2 ASSISTANT MANAGER

Responsible for ensuring that Airport Systems are operated and maintained with the highest levels of safety, security, efficiency, cost effectiveness and in a first class condition. Manage turnkey work and other technical or administrative project management functions. Assist the Manager for the facility operations. Assistant Manager is accountable to the Manager for the facility operations.

Duties

Performs the following duties as directed by the Manager. Communicate operating philosophy, objectives, and expectations to the facility management staff. Responsible for resolving problems and/or conflicts and maintaining open communication with various parties. Assimilate management information and write reports detailing activity for the reporting period.

Reviews and approves expenditures for materials, equipment, tools, supplies, and subcontracts. Prepare proposals for additions, deletions, and changes to the contract

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

scope as requested. Track, analyze, and trend project costs. Prepare regular invoicing based on contract type, terms and conditions. Prepare goal setting and employee performance reviews as applicable and administers pay for performance program. Review and recommend staff and employee training programs, workshops, seminars, and classes.

Manage personnel including hiring, firing, and promoting staff. Responsible for the completion of required documentation and forms. Assist with the total overall management operation of the facility in the areas of safety, comfort, productivity, and efficiency to contract standards.

Requirements

Completion of a Bachelors Degree program. A combination of education and/or work experience equivalent will be considered in meeting the requirement. A minimum of 7 years of facility management and/or project management expertise. Experience is desired in the area of operations and maintenance project management, construction, renovation, or maintenance of large Airport installations or industrial complexes. Strong organizational, participative management and verbal and written communication skills are required.

1.4.13.5.3 SUPERVISOR

Responsible for ensuring that the customer's facility is operated and maintained cost effectively, safely, efficiently, and in a first class condition. Accountable to the Manager for the facility operations. Initiate, direct, and monitor the performance of the technical staff.

Duties

Communicate operating philosophy, objectives, and expectations to the technical staff. Order all materials, equipment, tools, and supplies required to perform job tasks.

Prepare goal setting and employee performance reviews as applicable and administers pay for performance program. Review and recommend staff and employee training programs, workshops, seminars, and classes. Manage personnel including scheduling of required manpower. Responsible for the completion of required documentation and forms.

Requirements

High school diploma. Education and/or work experience equivalent to a minimum of 7 years of technical facility management expertise. Three years of experience is desired in the area of operations and maintenance project management. Strong organizational, participative management and verbal and written communications skills are required.

1.4.13.5.4 ELEVATOR MECHANIC

Employees classified as elevator mechanics perform many tasks related to vertical transportation equipment. As a general description areas of expertise include construction, repair, modernization and maintenance of elevators, escalators, dumbwaiters, moving walks and moving ramps. Included are all components of the equipment, mechanical and electrical, with the exception of the physical structure containing the equipment (i.e. building steel, concrete, roofing etc.) and main power supply to the equipment (this work is performed by electricians). Elevator mechanics have completed an accredited apprenticeship program similar to the International Union of Elevator Constructors.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

1.4.13.5.5 Duties

Elevator mechanics assigned to the maintenance and repair will perform tasks on elevators, escalator, moving walkway, and dumbwaiters. to keep the equipment operating properly, smoothly and efficiently. This includes regular schedules for preventive maintenance examinations covering lubrication, adjustments and observation.

Elevator mechanics shall also respond to "trouble calls" (shut downs, reports of improper operation, etc.) and troubleshoot electrical and mechanical problems to restore operation. Repairs are performed accordingly. Repairs may require a team, which consists of a mechanic and helper.

Maintenance tasks for traction elevators include but are not limited to examination of the operation of motors, generators, and controllers.

Replacement of contacts, cleaning of door and gate switches, cleaning and lubrication of door operator, examination of door hardware, hoist machine, gearbox, and bearings, lubricate governor, check hoist ropes for wear, equalize hoist rope tension, check and replace faulty indicating lights, lanterns and gongs, check hall push button operation, check dispatching operation.

Maintenance tasks for hydraulic elevators include maintaining hydraulic fluid at proper levels, repairing leaks on pump and valves, packing gland, and checking piping for signs of leakage. Maintenance for escalator/and moving walkways include handrail drive adjusting as necessary, operation of stop switches and skirt switches of inner panels and skirt fastenings and trim, comb segments treads, and risers. Application of lubrication, including ring gear oil level, handrail drive chains, step chains, upper and lower bearings, non-reversing device, and main drive gear bearings. Periodic examination of brake operation for slide per ANSI A17.1 code requirements, step flanges, and general cleaning of the entire escalator/moving walkway assembly.

Additionally, mechanics shall perform safety tests in conjunction with ANSI A17.1 code and local inspection authority. Employees classified as helper or apprentice and in an Apprenticeship Program will work under the direct supervision of an elevator mechanic.

1.4.13.5.6 MECHANIC

Inspect, test, repair and perform preventive maintenance on mechanical systems. Work under general direction; must use personal judgment to analyze and select the appropriate course of action or determine when repair or maintenance is required. Provide guidance and specific direction to other members of the work group.

Duties

Inspect and diagnose complex mechanical systems such as air compressors, jetways, baggage handling systems, etc. Inspect and diagnose mechanical systems using a variety of tools and instruments. Perform specified preventive maintenance including belt adjustments, oiling, greasing, and cleaning of equipment.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Communicate with various parties on the work performed and present status of specialty systems. Interpret engineering drawings in reference to layout, location, and operation of the system(s).

Schedule maintenance tasks to ensure job completion. Assign specific work tasks to work group members.

Requirements

A minimum of 3 years of industry experience. High school diploma or equivalent. Completion of the required company training. Ability to communicate in both oral and written form.

1.4.13.5.7 ELECTRICIAN

Performs a variety of duties in and around the Terminal building to repair equipment and systems. Repairs, installs, replaces, tests, and troubleshoots electrical circuits, equipment, and appliances using hand tools and testing instruments to supply electrical power for equipment operation. Has the ability to work with minimum supervision.

Duties

Inspects and tests electrical lighting, signal, communication and power circuits and equipment in both alternating and direct current applications. Isolates defects in wiring, switches, motors and other electrical equipment. Examines tests and troubleshoots elements of systems such as distribution panels, controls, circuit fixtures and motors to locate obvious faults such as blown fuses, short circuits, broken wires, and loose connections. Repairs electrical circuits and equipment, replaces faulty switches, sockets, plugs, wiring, etc. and other simple elements of electrical systems, fixtures and appliances. Dismantles equipment, replacing defective parts. Checks clearance of parts with precision instruments. Installs new wiring and electrical equipment. Studies blueprints and diagrams to ascertain layout, location, and specifications of items to be installed. Estimates quantities of materials needed and prepares requisitions, for approval. Cuts and shapes conduit and fastens it in place with brackets or similarly installs armored cable. Records time and material expended on each work order. Assists in the training of others.

Uses electrical repair tool kits, ammeters, ohmmeters, test lamps, fault meters, watt meters, blueprints, wiring diagrams, specifications, and related hand and power tools.

Requirements

High school or Vocational School graduate with courses in blueprint reading, electricity, and/or mathematics. Four year electrician's apprenticeship or six years verifiable on-the-job training as an electrician. Must have a thorough knowledge of the electrical codes as applied. Must know and apply safety procedures.

1.4.13.5.8 DIRECTOR OF EXHIBITIONS

The Director of Exhibitions, Philadelphia International Airport, is responsible for the visual arts program that sites temporary art exhibitions throughout the Airport facility. The Director is the chief curator and is responsible for the creation and organization of all aspects of the exhibitions program including exhibition space allocation, exhibition planning and design, loan agreements, informational text, art program brochure, budget planning, research, and staff supervision.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

The Director of Exhibitions reports to the Director of Aviation and works with Airport staff including Deputies and Airport Managers. This position is unique because the individual is responsible for the conceptualization, development, design, and implementation of an Airport art program unlike any other in the United States.

The programs objectives are continually redefined to remain timely and progressive in terms of procedures, standards, and subject matter.

Knowledge of:

Local, regional, and national artists and arts institutions
Museum and curatorial standards
Presentation of art in Airport facilities
Airport practices and standards
Exhibition planning and design
Interior renovations and space planning
Contemporary public art practices

Ability to:

Organize, curate, and present exhibitions that are appealing to an arts community and general public with a special emphasis on regional arts activities.

Develop and create new exhibition procedures and standards, as this program is unique in its concept.

Consult with Director of Aviation regarding the Airport's community-based initiatives.

Coordinate exhibitions that relate to regional special events.

Interview and meet with radio, television, and print media.

Establish and maintain working relationships with other Airport departments, the public, and local, regional, and national artists and arts institutions.

Work with construction contractors and architects

Coordinates design and installation activities with the exhibitions program staff.

Supervises Airport staff and outside Contractors with the fabrication and installation of exhibits to insure that they are completed as conceived and within time and budgetary limitations.

Conceive and design exhibitions with the greatest visual appeal, educational impact, and optimum traffic flow through the exhibition areas.

Determine the artistic importance, the relationships between works, their placement, and the educational benefits of works in the exhibition.

Develops and writes label information and didactic panels for general audience understanding and appeal. .

Prepare and edit press releases and brochures that relate to the art program.

Minimum Acceptable Training and Experience:

Education:

Completion of Bachelor's degree program at an accredited college or university with major in art related field.

General Experience:

Ten years experience as director of a visual arts exhibitions program in a gallery, museum, or other public facility.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Specific Experience:

In addition to the above requirements, individual must also have two years of experience as director of exhibitions program at a major Airport facility.

1.4.13.5.9 EXHIBITIONS PREPARATOR

The Exhibition Preparatory for the Airport's Exhibitions Program is responsible to assist the Director of Exhibitions in exhibition installation and design. The preparatory must be an experienced art handler. Primary duties include planning for each exhibition installation, construction of pedestals and other exhibition furniture, ordering of equipment and supplies, and maintaining the artwork and cases on a daily basis. All work is performed in accordance with standard museum practices. Reports to the Director of Exhibitions. Nature of work requires manual dexterity and skilled care in the handling of valuable art objects.

Knowledge of:

Museum art handling standards and procedures. The ability to handle valuable and delicate works of art with extreme care.

Museum packing standards and procedures. The ability to safely unpack and repack art objects.

Standard tools, practices, and methods used in painting, rough and finish carpentry work, and the use of different materials such as various kinds of lumber, fabrics, plastics, mechanical fasteners, and adhesives.

Standard power tools

Picture framing standards including matting and label fabrication

Airport practices and standards

Lighting effects for exhibitions

Contemporary public art practices

Ability to:

Supervise freelance art handlers and art shippers

Construct and prepare props, backgrounds, and exhibit furniture

Prepare, hang, and install art objects for exhibit

Move and handle art objects safely

Physically handle delicate, often large-scale, and valuable works of art with extreme care; work from sketches and follow instructions as to construction and installation of museum exhibits.

Select and use a variety of materials, techniques, and equipment to create safely present the artwork.

Requisitions lumber, paint, fabrics, lighting, tools, and materials as needed for specific installations and anticipates long-range material and equipment needs and advises accordingly.

Good oral communication skills

Check and clean exhibition areas on a regular basis to insure that the exhibitions are maintained as originally designed

Provide for the proper security of art objects by arranging the appropriate security measures and devices when necessary.

Minimum Acceptable Training and Experience:

Education:

Completion of bachelor's degree program at an accredited college or university with major in art related field.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

General Experience:

Two years of progressively responsible experience in the preparation, construction, and installation of exhibit displays; or an equivalent combination of training and experience.

Specific Experience:

One year full time experience as lead exhibition preparatory in an Airport exhibitions program.

1.4.13.5.10 EXHIBITIONS ASSISTANT

General Definition

The Exhibitions Assistant is responsible to assist the Director of Exhibitions in the administration of the Airport's art program. The Exhibitions Assistant will coordinate the Youth Art Gallery and be responsible for all registrar duties. The Exhibitions Assistant will work closely with the Exhibitions Preparatory as needed and reports to the Director of Exhibitions.

Knowledge of:

Knowledge of museum registrar standards and practices.

Contemporary public art

Museum art handling standards and procedures. The ability to handle valuable and delicate works of art with extreme caring.

Standard tools, practices, and methods used in painting, and a familiarity with different materials such as various kinds of lumber, fabrics, plastics, mechanical fasteners, and adhesives.

Airport practices and standards

Ability to:

Supervise freelance art handlers and art shippers

Prepare, hang, and install art objects for exhibit

Move and handle art objects safely

Schedule Youth Art Gallery exhibitions

Physically handle delicate and valuable works of art

Good communication skills both verbal and written

Minimum Acceptable Training and Experience:

Education:

Completion of bachelor's degree program at an accredited college or university with major in art related field.

General Experience:

Two years of progressively responsible experience in assisting with administrative duties at a gallery, museum, or exhibition facility; or an equivalent combination of training and experience.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Specific Experience:

One year full time experience as a registrar or administrative assistant in a gallery, museum, or other exhibition facility. Installation experience in an Airport exhibitions program.

1.4.13.5.11 HORTICULTURIST

This is supervisory landscape work intended to enhance the aesthetics of the Airport's exterior grounds. The Horticulturist is responsible for ensuring that the appropriate material and labor resources are allocated to maintain the exterior grounds year round. Performs oversight responsibility for daily sub-contractor maintenance functions, establishes work plans and coordinates execution of landscaping activities. Reports to the Manager.

Knowledge of:

Principles, practices, materials and instruments used in landscaping work.
Principles and practices of planning and land use.
Principles and practices of horticulture and plant ecology.
Materials and methods used in cultivating and maintaining flowers, shrubs, trees and lawns.
Common insects, fungi and diseases which attack flowers, shrubs, trees and lawns.
Ability to read and interpret architectural plans and specifications.

Duties:

Subcontractor administration – schedules, assigns work areas and supervises the activities of subcontractors.
Reviews site designs, plans, specification and other documents in order to provide cost estimates and time completion schedules.
Inspects landscape installations and recommends appropriate care and maintenance.
Identifies and treats insects, fungi and diseases which attack flowers, shrubs, trees and lawns.
Supports the execution of landscape projects and special Airport events/celebrations (i.e. holiday decorations, new construction openings, etc.)
Provides routine progress reports to Airport's Maintenance Manager.

Requirements:

High School Diploma. Education and/or work experience equivalent to a minimum of 4 years supervising horticultural maintenance at an Airport or industrial complex. Ability to physically perform the duties and to work in the environmental conditions required by this position. Strong organizational, participative supervision, verbal and written communication skills are required. The ability to work with minimum supervision.

1.4.14 MANDATORY PRE-BID MEETING AND MANDATORY SITE INSPECTION

1.4.14.1 There will be a Mandatory Pre-Bid and Mandatory Site Inspection required for the Invitation and Bid to be issued at a later date. Date and location will be contained in Invitation and Bid document.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

1.4.14.2 Any plans that are not contained in this PIR will be made available for review to prospective bidders during the mandatory site visit and will be provided to the successful bidder. If a bidder wishes to view plans again, they may contact Allan F. Moore, Airport Maintenance Manager at 215-937-6942.

1.4.14.3 Prospective bidders are advised that due to the security policies of the Airport, the Prime bidder can only bring four (4) additional people with him/her on the site inspection tour(s). Bidders wishing to visit the Northeast Philadelphia Airport must notify Allan F. Moore, Airport Maintenance Manager at 215-937-6942 at least seven (7) days prior to the site inspection date.

1.5 MANAGEMENT AND MAINTENANCE PROGRAM:

1.5.1 Prospective bidders (Prime bidders only) shall develop and submit with their PIR a ***Comprehensive Management and Supervision Program*** to administer the contract including City interface. The City uses a computerized Maintenance Management System for all work orders and preventive maintenance procedures. The Contractor shall be expected to accurately enter hours, parts used, tests performed and mechanic assignments, and other information through this system on a daily basis. The Management and Supervision program is subject to the approval of the City, and the Airport Maintenance Manager. The bidder must submit with their PIR an example of an existing or prior contract for facilities management of typical pre-planned scheduled work (e.g., escalator and elevator car maintenance) at least forty-eight (48) hours prior to implementation and an example of a post work detailed report with drawings and relevant exhibits. Additionally, submit another example of post work detailed report, detailing of parts used or next scheduled parts replacement for next scheduled service with drawings and relevant exhibits (e.g., critical wiring).

1.5.2 The bidders shall also develop and submit with their PIR a written and comprehensive ***Quality Control Plan*** to ensure the requirements of the contract will be provided as specified for each System. The plan shall indicate what measures (to include all checklists, forms, reports, etc.) will be used to evaluate performance and the frequency at which these measures will be instituted. The ***Quality Control Plan*** will be subject to the approval of the Airport Maintenance Manager. The successful bidder cannot set any additional standards to this Plan without the approval of the Airport Maintenance Manager or his/her designee.

1.5.3 The intent of the ***Quality Control Plan*** shall be to identify and correct any deficiencies in the quality of services before the level of performance becomes unacceptable, and/or the City staff and others point out the deficiencies. The successful bidder does not have the authority to set any Quality standards.

1.5.4 The Plan shall be comprehensive, complete and must include, but not limited to the following:

1.5.4.1 An inspection system covering all the services required under these specifications for operation, maintenance, and repair of related equipment. A checklist is to be provided for inspecting contract performance during regularly scheduled or unscheduled inspections, including the name(s) of the individual(s) who will perform the inspection.

1.5.4.2 A system for identifying and correcting deficiencies in the quality of services before the level of performance becomes unacceptable.

1.5.4.3 A file of all inspections conducted by the successful bidder and the corrective action taken. This documentation shall be made available to the City during the term of the contract.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

1.5.4.4 See paragraph 1.10 entitled “Systems Technical Personnel Qualifications” in the Invitation and Bid for individual System service personnel qualifications to be submitted with the Invitation and Bid.

1.6 RAMP-UP PLAN

1.6.1 Prospective bidders shall develop and submit with their PIR a written comprehensive Ramp-Up plan, describing how they will assemble their staff, acquire inventory, setup operational and administrative areas and interface during transition period. The plan shall also provide for any other action, which may be required for a successful contract implementation.

1.7 FINANCIAL INFORMATION

1.7.1 A copy of your company’s financial statements detailing Balance Sheet and Profit and Loss Statement for the last three (3) years and a copy of your most Recent Certified Public Accountant’s audit for your firm.

1.7.2 List bank reference(s), name and telephone number of a person familiar with your accounts, type of accounts, loans or lines of credit and relevant dates that accounts were established. The City may call these references. List the names and telephone numbers of your major suppliers and the annual dollar amount of business done with each. These persons may be contacted as credit references.

1.7.3 If you are a partnership or a joint venture, give the date of agreement, County and State where agreement was filed and name and address of each partner. Three years of financials for each part of the joint venture must be submitted with the Pre-Qualification submittal. If you are a Corporation, give the date and state of organization and the names and addresses of the officers. A copy of joint venture agreement shall be submitted with the Pre-qualification S2-Z5701-0.

1.7.4 List all bankruptcy filings against you, your company or related companies in the last seven (7) years.

1.7.5 Bidder is to state if the company, or its subcontractors or any partners or officers of the company are delinquent in payment of any debt or obligations to the City of Philadelphia.

1.7.6 List the surety companies that have heretofore issued performance bonds to you for prior contracts. Give names and addresses of each surety company, amount of each bond and the term of each bond. List any performance bonds that were called the last five years due to unsuccessful completion of the contract.

1.7.7 Contractor shall demonstrate that it has the necessary start up capital of at least **\$3,000,000.00** and will break down costs to create parts inventory, fit out offices, retain personnel, and cover other costs related to mobilization on this contract. NOTE: (The potential bidder may state/show either with statements or examples of past project’s costs that they have the financials (or credit line) available to start up a job of this size and scope).

1.7.8 **NOTE:** Proprietary documents must be stamped “Propriety/Confidential” with an explanation as to why that submittal is proprietary/confidential. The City of Philadelphia recognizes that certain information regarding a prospective bidder’s internal company information can be considered proprietary; and the City will make every effort to maintain the confidentiality of the information received.

1.8 BIDDER COST

1.8.1 The City shall not be liable for any cost associated with the development, preparation, transmittal or presentation of any information or material submitted in response to this PIR.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

1.9 RESERVATION OF RIGHTS

1.9.1 The City reserves and may exercise the following rights and options with respect to this Pre-qualification process:

1.9.1.1 To pre-qualify one or more bidders.

1.9.1.2 To reject any and all PIR received pursuant to this request.

1.9.1.3 To supplement, amend, or otherwise modify the PIR at any time prior to Bidder Pre-qualification, and to cancel this process with or without the substitution process.

1.9.1.4 To request additional Pre-qualification information and to verify the contents of the PIRs submitted by bidders.

1.9.1.5 To render final decision on any defect or technicality in the PIRs received.

1.9.1.6 Everything submitted becomes the sole property of the City and will be retained or returned at the City's discretion.

1.10 Office Economic Opportunity - Economic Opportunity Plan (EOP)

1.10.1 The Invitation and Bid must be in compliance with Executive Order 17-600. See attached Exhibit A for Contractor's Certification along with a sample of the Economic Opportunity Plan (EOP) which will be required as part of the Invitation and Bid submission (due at a later date); please read these guidelines carefully.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

2 BIDDER SELECTION PROCESS

2.1 THE PIR EVALUATION STAGE

- 2.1.1 Bidders will complete the enclosed Pre-qualification Information Request and provide the required information concerning their firm, capabilities, and experience to provide services described herein.
- 2.1.2 An original and six (6) copies of the Pre-qualification Information Request and supporting documentation shall be returned to the following address no later than **10:30am** on / /2010:

**BID ROOM SUPERVISOR
PROCUREMENT DEPARTMENT
CITY OF PHILADELPHIA
MUNICIPAL SERVICES BUILDING
1401 JFK BLVD. – ROOM 170B
PHILADELPHIA, PA 19102-1685**

- 2.1.2.1 The PIR must be in one package labeled **S2Z57010 (PIR)**. The bid document will be submitted at a later date.
- 2.1.3 Bidders are cautioned that late submissions will not be accepted and incomplete submissions may be rejected.
- 2.1.4 The City of Philadelphia will review and evaluate the PIRs to determine the Bidder's responsiveness to the information request, their capabilities and the acceptability of their answers concerning their maintenance procedures.
- 2.1.5 Following receipt of the information request the City reserves the right to request additional information from bidders, as required, to make an informed decision.
- 2.1.6 All bidders who submit complete PIRs will be informed in writing of the City's decision to qualify, as approved for bidding or disqualify as not approved for bidding. **ALL BIDDERS WILL BE NOTIFIED BY FAX OR PHONE CALL.**
- 2.1.7 Bidders who wish to appeal the decision on their disqualification must send their appeal in writing within two (2) business days from date of notification to Beatrice Isaac, Procurement Buyer at:

Municipal Services Building
Procurement Department, Room 120
Philadelphia, PA 19102-1685

2.2 THE INVITATION AND BID EVALUATION STAGE

- 2.2.1 The Invitation and Bid will be made available in concurrence with the Notice to Approved Bidders.
- 2.2.2 The bids of the pre-qualified bidders will be publicly opened by the Procurement Department at the time specified in the bid documents.
- 2.2.3 The bid must be complete; to include all signatures, pricing and all other required information.
- 2.2.4 The Invitation and Bid will specify the contract requirements and the performance that the Contractor is expected to effect. The bidder must detail all costs associated with the services to be provided. The bid will require the bidder to itemize these costs.
- 2.2.5 The bidder will be required to submit, with the bid:

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

- 2.2.5.1 A fully completed Invitation and Bid complete as to required bid signatures and corporate seal. A bid with counter terms and conditions will be disqualified.
- 2.2.5.2 Any additional information specified and required by the bid document.
- 2.2.6 In accordance with the City of Philadelphia's Regulations Relating to Local Bidding Preferences for Procurement Contracts, this bid may be subject to a 5% local bid preference. In order to determine eligibility to receive the 5% preference, if applicable, **bidder or subcontractor must be certified at the time of the bid opening and must submit with the bid the Local Business Entity Certification number** as issued by the Procurement Department for the prime contractor or the applicable subcontractor. If the prime relies upon its subcontractor's LBE status in order to be eligible for the preference, the name and certification number of the subcontractor **must** be submitted with the bid. **Failure to submit the prime's LBE certification number or the subcontractor's name and the LBE certification number with the bid will deem bidder ineligible for the 5% preference.**

Further, by submission of this bid, bidder makes the following certification in connection with the grant of any local bidding preference:

"I certify, that if awarded this contract on the basis of application of the LBE preference, my company or my subcontractor, throughout the entirety of this contract, will perform the majority of the work under this contract within the geographic limits of the City of Philadelphia, and I will, or cause my subcontractor to, maintain within the City a majority of the inventory or equipment that will be used on this contract or the amount of inventory that is customary for this industry."

Prime or subcontractor's LBE Certification Number _____

If applicable:

Subcontractor's Name _____

NOTE: If you wish to apply for Local Business Entity (LBE) certification, go to www.phila.gov/bids. Please provide sufficient time prior to bidding for processing of the LBE application.

- 2.2.7 The City will then review the bids in terms of bidder's cost and responsiveness to the mandatory requirements of the City.

2.3 THE AWARD STAGE

- 2.3.1 The City will award the Invitation and Bid to that pre-qualified bidder submitting the lowest responsive and responsible **Bid quotation**. Upon notice of award by the City, the awarded bidder will be required to post an Individual Performance Bond for 100% of the contract amount if awarded the contract and Payment Bond in the sum of fifty percent (50%) of the amount of the first year of the contract amount with an approved surety company as surety thereon conditioned upon the full payment of subcontractors and others furnishing labor and materials in the performance of this contract (forms shall be attached to the bid document to be issued at a later date). There will be a bond preparation fee of \$1000.00 associated to this. If the City elects to renew the contract, the Contractor shall be obligated to perform all terms and conditions of the contract throughout the Additional Performance Period, as of the effective date indicated in the City's Renewal Notice as issued. The Performance Security and Payment Bond shall be and remain in full force through out the Initial Term and any additional Performance Period(s), without notice of contract renewal by the City to the surety or the consent of the surety thereto. It is the sole responsibility of the Contractor to ensure that such bond(s) remain in full force and effect as provided in this section, and failure to do so shall be an event of default pursuant to Section 16, Default, of the "Terms and Conditions of Bidding and Contract," attached to the Invitation and Bid.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3 SYSTEM DESCRIPTION: The following discussion is designed to provide to interested bidders some insight into the Systems to be maintained at PHL. It contains information related to system maintenance requirements and is intended only as general information at this time. Bidder(s) are expected to respond based on the actual specifications in the Invitation and Bid (which includes documentation related to maintenance requirements), not to this document. Similar services may be required at Northeast Philadelphia Airport (PNE). The Prime Bidders will be responsible for both locations. For the PIR System descriptions, detailed information on units throughout the PHL Terminal Complex is included, but the full detailing will be contained in the Invitation and Bid.

Note: The equipment lists may not be all-inclusive, but represent the scale of work scope to be performed under the terms of the contract resulting from the forthcoming Invitation and Bid. Complete equipment list shall be provided in the bid document.

3.1 ESCALATORS/ELEVATORS/MOVING WALKWAYS

3.1.1 GENERAL DESCRIPTION

3.1.1.1 The Contractor will be required to furnish all necessary labor, tools, transportation, services, supervision, materials and equipment, as necessary to provide regular examinations, Comprehensive Preventive Maintenance, testing, repairs and “call back service” on escalators, elevators and moving walkways at Philadelphia International Airport.

3.1.1.2 The performance requirement of the Prime Contractor is to have the escalators, elevators and moving walkways operational at all times, except for dedicated maintenance periods. Set forth below is a technical description for select escalators, elevators and moving walkways for information purposes, to demonstrate the significance of the scope of responsibility associated with this schedule.

3.1.1.3 The information on the Escalators, Elevators, and Moving Walkways are intended only as general information at this time. Bidder(s) are expected to respond based on the actual specifications in the Invitation and Bid (which includes documentation related to maintenance requirements), not to this document.

3.1.2 TECHNICAL DESCRIPTION

3.1.2.1 Overall Equipment

	EXISTING	FUTURE
A EAST TERMINAL:	8 Escalators	
	24 Elevators	
	1 Moving Walkways	
B TERMINAL:	5 Escalators	
	15 Elevators	
	4 Moving Walkways	
C TERMINAL:	9 Escalators	
	8 Elevators	
	6 Moving Walkways	
D TERMINAL:	7 Escalators	
	9 Elevators	
	2 Moving Walkways	
E TERMINAL:	6 Escalators	
	8 Elevators	
	2 Moving Walkways	
F TERMINAL:	5 Elevators	

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

	2 Escalators	
A/B LINK:	4 Moving Walkways	
A WEST TERMINAL:	20 Elevators	
	17 Escalators	
	7 Moving Walkways	
RAMP CONTROL TOWER	1 Elevator	
TOTAL UNITS:	170 EXISTING UNITS	0 FUTURE UNITS

3.1.2.2 TERMINAL A EAST

3.1.2.2.1 TERMINAL A EAST ELEVATORS

MFGR.	NO.	TYPE	CAP LBS.	F/M	STOPS/ OPENINGS
MECO	AE-1PK	OH Geared Traction	4000	350	6/6 (F)
MECO	AE-2PK	OH Geared Traction	4000	350	6/6 (F)
MECO	AE-3PK	OH Geared Traction	4000	350	6/6 (F)
MECO	AE-4P	Hydro	2500	125	2/2 (F)
MECO	AE-5P	Hydro	2500	125	2/2 (F&R)
MECO	AE-6P	Hydro	2500	125	2/2 (F&R)
MECO	AE-7F	Hydro	3000	125	2/2 (F)
MECO	AE-8P	Hydro	2500	125	2/2 (F&R)
MECO	AE-9P	Hydro	3000	125	2/2 (F&R)
MECO	AE-10P	Hydro	2500	125	2/2 (F)
MECO	AE-11P	Hydro	2500	125	2/2 (F&R)
MECO	AE-12P	Hydro	2500	125	2/2 (F&R)
MECO	AE-13S	Hydro	4000	125	2/2 (F)
MECO	AE-14P	Hydro	2500	125	2/2 (F&R)
MECO	AE-15F	Hydro Baggage Lift	2500	125	2/2 (F)
MECO	AE25P	Hydro	2500	125	2/2 (F)
MECO	AE26P	Hydro	2500	125	2/2 (F)
Kone	AE-32P	Passenger – In Ground Hydraulic	3500	125	2/2
Kone	AE-33P	Passenger- Holeless Hydraulic	3500	100	2/2 (F)
Kone	AE-34E	32” Escal	28’-4”	100	1 st to 3 rd
Kone	AE-35E	32” Escal	28’-4”	100	1 st to 3 rd
Kone	AE-36E	40” Escal	19’-3”	100	G to F
Kone	AE-37E	40” Escal	19’-3”	100	G to F
Kone	AE-40P	Passenger – In Ground Hydraulic	3500	125	2/2

3.1.2.2.2 TERMINAL A EAST ESCALATORS

MFGR.	NO.	TYPE	RISE	F/M	SERVICE LEVEL
MECO	AE-17E	40” Escal	20’-11”	90	G to T
MECO	AE-18E	40” Escal	20’-11”	90	G to T
MECO	AE-19E	24” Escal	20’-11”	90	G to T
MECO	AE-20E	40” Escal	20’-11”	90	G to T
MECO	AE-21E	40” Escal	20’-11”	90	G to T
MECO	AE-22E	40” Escal	20’-11”	90	G to T

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

MECO	AE-29E	40" Escal	13'-8"	100	G to T
MECO	AE-30E	40" Escal	13'-8"	100	G to T

3.1.2.2.3 TERMINAL A EAST TERMINAL MOVING WALKWAYS

MFGR.	NO.	TYPE	RISE	F/M	LEVEL
MECO	AE-24	40" Moving Walkway	150'-0"	110	G

3.1.2.3 TERMINAL B

3.1.2.3.1 TERMINAL B ELEVATORS

MFGR.	NO.	TYPE	CAP LBS.	F/M	STOPS/ OPENINGS
MECO	B1PK	OH Geared Traction	4000	350	6/6 (F)
MECO	B2PK	OH Geared Traction	4000	350	6/6 (F)
MECO	B3PK	OH Geared Traction	4000	350	6/6 (F)
MECO	B4PK	OH Geared Traction	4000	350	6/6 (F)
MECO	B7P	Hydro	2500	125	2/2 (F&R)
MECO	B9P	Hydro	2500	125	2/2 (F&R)
MECO	B11F	Hydro	3000	75	4/4 (F)
Security	B12P	Hydraulic	2500	125	3/2 (F&R)
MECO	B15P	Hydro	2500	125	2/2 (F)
MECO	B20S	Hydro	5,000	100	2/2 (F&R)
MECO	B21F	Hydro	10,000	60	2/2
MECO	B22P	Hydro	2500	125	
MECO	B25HP	Holeless Hydraulic	2500	125	2/2 (F&R)
MECO	B26HP	Holeless Hydraulic	2500	125	2/2 (F&R)
Security	B-27P	Hydro	6000	125	3/3 (F&R)

3.1.2.3.2 TERMINAL B ESCALATORS

MFGR.	NO.	TYPE	RISE	F/M	SERVICE LEVEL
MECO	B1E	40" Escal	21'-6"	90	G to T
MECO	B2E	40" Escal	21'-6"	90	G to T
MECO	B4E	24" Escal	21'-6"	90	G to T
MECO	B23E	40" Escal	17'-4"	90	G to T
MECO	B24E	40" Escal	17'-4"	90	G to T

3.1.2.3.3 TERMINAL B MOVING WALKWAYS

MFGR.	NO.	TYPE	LENGTH	F/M	LEVEL
MECO	B16W	40" Moving Walkway	188'-0"	120	T
MECO	B17W	40" Moving Walkway	188'-0"	120	T
MECO	B18W	40" Moving Walkway	212'	120	T
MECO	B19W	40" Moving Walkway	212'	120	T

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.1.2.4 TERMINAL C

3.1.2.4.1 TERMINAL C ELEVATORS

MFGR.	NO.	TYPE	LBS.	F/M	STOPS/ OPENINGS
MECO	C5PK	OH Geared Traction	2500	350	6/6 (F)
MECO	C6PK	OH Geared Traction	2500	350	6/6 (F)
MECO	C7PK	OH Geared Traction	2500	350	6/6 (F)
MECO	C7P	Hydro	2500	125	2/2 (F&R)
MECO	C9P	Hydro	2500	125	2/2 (F&R)
MECO	C20P	Hydro	2500	125	2/2 (F)
Otis	C23P	Hydro	2500	100	3/3 (F&R)
MECO	C25P	Hydro	2500	125	

3.1.2.4.2 TERMINAL C ESCALATORS

MFGR.	NO.	TYPE	RISE	F/M	SERVICE LEVEL
MECO	C1E	40" Escal	20'-0"	90	G to T
MECO	C2E	40" Escal	20'-0"	90	G to T
West.	C4E	24" Escal	20'-6"	90	G to T
MECO	C21E	40" Escal	16'-10"	90	G to T
MECO	C22E	40" Escal	16'-10"	90	G to T
MECO	C23E	40" Escal	17'	90	T to 3 rd
MECO	C24E	40" Escal	17'	90	T to 3 rd
MECO	C26E	40" Escal	17'-2"	90	G to T
MECO	C27E	40" Escal	17'-2"	90	G to T

3.1.2.4.3 TERMINAL C MOVING WALKWAYS

MFGR.	NO.	TYPE	LENGTH	F/M	LEVEL
MECO	C16W	40" Moving Walkway	210'-0"	110	T
MECO	C17W	40" Moving Walkway	210'-0"	110	T
MECO	C18W	40" Moving Walkway	248'	110	T
MECO	C19W	40" Moving Walkway	248'	110	T
MECO	C28W	40" Moving Walkway	364'	110	T
MECO	C29W	40" Moving Walkway	364'	110	T

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.1.2.5 TERMINAL D

3.1.2.5.1 TERMINAL D ELEVATORS

MFGR.	NO.	TYPE	LBS.	F/M	CAPSTOPS/ OPENINGS
MECO	D8PK	OH Geared Traction	2500	125	6/6 (F)
MECO	D9PK	OH Geared Traction	2500	125	6/6 (F)
MECO	D10PK	OH Geared Traction	2500	125	6/6 (F)
West.	D7P	Hydro	2500	125	2/2 (F&R)
Dover	D8P	Hydro	2500	125	2/2 (F&R)
Security	D9P	Hydro	2500	125	2/2 (F&R)
West.	D10P	Hydro	3000	125	2/2 (F)
MECO	D12F	OH Geared Traction	4000	200	2/2 (F)
Dover	D15S	Hydro	6000	100	2/2(F)

3.1.2.5.2 TERMINAL D ESCALATORS

MFGR.	NO.	TYPE	RISE	F/M	LEVEL
MECO	D1E	40" Escal	20'-6"	90	G to T
MECO	D2E	40" Escal	20'-6"	90	G to T
MECO	D3E	24" Escal	20'-6"	90	G to T
MECO	D4E	24" Escal	20'-6"	90	G to T
MECO	D5E	40" Escal	17'-6"	90	G to T
MECO	D6E	40" Escal	17'-6"	90	G to T
MECO/Otis	D11E	24" Escal	13'-6"	90	G to F

3.1.2.5.3 TERMINAL D MOVING WALKWAYS

MFGR.	NO.	TYPE	LENGTH	F/M	LEVEL
MECO	D-13W	40" Moving Walkway	284'-0"	110	T
MECO	D-14W	40" Moving Walkway	284'-0"	110	T

3.1.2.6 TERMINAL E

3.1.2.6.1 TERMINAL E ELEVATORS

MFGR.	NO.	TYPE	CAP LBS.	F/M	STOPS/ OPENINGS
MECO	E7P	Hydro	2500	125	2/2 (F&R)
MECO	E8-P	Hydro	2500	125	2/2 (F&R)
MECO	E9-P	Hydro	2500	125	2/2 (F&R)
MECO	E10-P	Hydro	3000	125	2/2 (F)
MECO	E11-P	Hydro	3000	125	2/2 (F)
MECO	E12-P	Hydro	3000	125	2/2 (F)
MECO	E13-P	Hydro	2500	100	2/2
West.	E30-S	Hydro	3000	125	2/2 (F)

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.1.2.6.2 TERMINAL E ESCALATORS

MFGR.	NO.	TYPE	RISE	F/M	SERVICE LEVEL
MECO	E-1E	40" Escal	20'-0"	90	C to T
MECO	E-2E	40" Escal	20'-0"	90	C to T
MECO	E-3E	24" Escal	20'-6"	90	C to T
MECO	E-4E	24" Escal	20'-6"	90	G to T
MECO	E-5E	40" Escal	18'-0"	90	C to T
MECO	E-6E	40" Escal	18'-0"	90	G to T

3.1.2.6.3 TERMINAL E MOVING WALKWAYS

MFGR.	NO.	TYPE	LENGTH	F/M	LEVEL
MECO	E-15W	40" Moving Walkway	300'	110	T
MECO	E-16W	40" Moving Walkway	300'	110	T

3.1.2.7 TERMINAL F

3.1.2.7.1 TERMINAL F ELEVATORS

MFGR.	NO.	TYPE	CAP LBS.	F/M	STOPS/ OPENINGS
Kone	F-1P	Ecosystem "Moonscape"	2500	200	4/4 (F)
Kone	F-2P	In Ground Hydraulic	2500	100	2/2 (F)
Kone	F-3P	In Ground Hydraulic	4000	80	2/2 (F&R)
Kone	F-4S	In Ground Hydraulic	4000	125	3/3 (F&R)
Kone	F-5P	In Ground Hydraulic	2500	100	2/2 (F)

3.1.2.7.2 TERMINAL F ESCALATORS

MFGR.	NO.	TYPE	RISE	F/M	SERVICE LEVEL
Kone	F-6E	40" Escal	18'-0"	100	1 st to 2 nd
Kone	F-7E	40" Escal	18'-0"	100	1 st to 2 nd

3.1.2.8 A-B LINK

3.1.2.8.1 A-B LINK MOVING WALKWAYS

MFGR.	NO.	TYPE	LENGTH	F/M	LEVEL
MECO	A/B-25W	40" Moving Walkway	150'	110	T
MECO	A/B-26W	40" Moving Walkway	150'	110	T
Kone	AB-38W	48" Walk	144'-8"	120	2
Kone	AB-39W	48" Walk	144'-8"	120	2

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.1.2.9 TERMINAL A WEST

3.1.2.9.1 TERMINAL A WEST ELEVATORS

MFGR.	NO.	TYPE	CAP LBS.	F/M	STOPS/ OPENINGS
Kone	AW-1P	Passenger-Holeless Hydraulic	3500	100	2/2 (F)
Kone	AW-2P	Passenger-Holeless Hydraulic	3500	100	2/2 (F)
Kone	AW-3P	Passenger-Holeless Hydraulic	3500	100	2/2 (F)
Kone	AW-4P	Passenger-Holeless Hydraulic	3500	100	2/2 (F)
Kone	AW-5F	Service In Ground Hydraulic	8000	100	2/2 (F&R)
Kone	AW-6P	Passenger-Holeless Hydraulic	3500	100	2/2 (F)
Kone	AW-7F	Service In Ground Hydraulic	8000	125	4/4 (F&R)
Kone	AW-9P	Passenger-Holeless Hydraulic	3500	100	2/2 (F)
Kone	AW-10P	Passenger-Holeless Hydraulic	3500	100	2/2 (F)
Kone	AW-11P	Passenger-Traction	3500	350	2/2
Kone	AW-12P	Passenger-Holeless Hydraulic	3500	100	2/2 (F)
Kone	AW-13P	Passenger-Holeless Hydraulic	3500	100	2/2 (F)
Kone	AW-14F	Service In Ground Hydraulic	8000	125	4/4
Kone	AW-15F	Service In Ground Hydraulic	8000	125	4/4
Kone	AW-18P	Passenger-Holeless Hydraulic	3500	100	2/2 (F)
Kone	AW-19PK	Passenger Traction	8000	200	7/7 (F)
Kone	AW-20PK	Passenger Traction	8000	200	7/7 (F)
Kone	AW-21PK	Passenger Traction	8000	200	7/7 (F)
Kone	AW-22PK	Passenger Traction	8000	200	7/7 (F)
Kone	AW-24	Passenger-Holeless Hydraulic	3500	100	2/2 (F)

3.1.2.9.2 TERMINAL A WEST ESCALATORS

MFGR.	NO.	TYPE	RISE	F/M	SERVICE LEVEL
Kone	AW-23E	32" Escal	16'-0"	100	2 nd to 3 rd
Kone	AW-24E	32" Escal	16'-0"	100	2 nd to 3 rd
Kone	AW-25E	32" Escal	16'-0"	100	2 nd to 3 rd
Kone	AW-26E	32" Escal	16'-0"	100	2 nd to 3 rd
Kone	AW-27E	32" Escal	16'-0"	100	2 nd to 3 rd
Kone	AW-28E	40" Escal	15'-0"	100	Grnd to 2 nd
Kone	AW-29E	40" Escal	15'-0"	100	Grnd to 2 nd
Kone	AW-30E	32" Escal	22'-8"	100	2 nd to 3 rd
Kone	AW-31E	32" Escal	41'-2"	100	2 nd to Mezz
Kone	AW-32E	32" Escal	41'-2"	100	2 nd to Mezz
Kone	AW-33E	32" Escal	22'-8"	100	2 nd to 3 rd
Kone	AW-34E	40" Escal	15'-0"	100	Grnd to 2 nd

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Kone	AW-35E	40" Escal	15'-0"	100	Grnd to 2 nd
Kone	AW-36E	40" Escal	20'-11"	100	2 nd to 3 rd
Kone	AW-37E	40" Escal	20'-11"	100	2 nd to 3 rd
Kone	AW-38E	40" Escal	20'-11"	100	1 st to 2 nd
Kone	AW-39E	40" Escal	20'-11"	100	1 st to 2 nd

3.1.2.9.3 TERMINAL A WEST MOVING WALKWAYS

MFGR.	NO.	TYPE	LENGTH	F/M	LEVEL
Kone	AW-40W	48" Walk	318'-0"	120	2 nd
Kone	AW-41W	48" Walk	318'-0"	120	2 nd
Kone	AW-42W	48" Walk	140'-0"	120	3 rd
Kone	AW-43W	48" Walk	270'-0"	120	3 rd
Kone	AW-44W	48" Walk	200'-0"	120	3 rd
Kone	AW-45W	48" Walk	140'-0"	120	3 rd
Kone	AW-46W	48" Walk	225'-0"	120	3 rd

3.1.2.10 RAMP CONTROL TOWER

3.1.2.10.1 RAMP CONTROL TOWER ELEVATORS

MFGR.	NO.	TYPE	CAP LBS.	F/M	STOPS/ OPENINGS
Thyssen / Security	A-B Tower	Passenger Traction	4000	350	6/6

3.1.3 PERSONNEL

3.1.3.1 The Contractor shall be experienced in escalator, elevator and moving walkway service, repair and Maintenance and shall have technically qualified personnel available to perform all phases of the contract requirements. Contractor shall have an established good reputation within the community in which work is to be performed. Contractor shall be presently retained by other facilities with similar (or more complex) equipment. The Contractor shall be properly licensed at all levels necessary to perform work covered by the specification/contract.

3.1.3.2 The Contractor must possess a stock of parts necessary to maintain and repair the equipment under the specifications and further assure that the assigned personnel have access to these parts. In addition personnel who are assigned to perform preventive maintenance and repairs must be equipped with the necessary tools and equipment for the performances of all services. Full time supervision must be provided.

3.1.3.3 Service technicians specifically trained and experienced in the care and maintenance of equipment similar to the type covered by this contract shall be assigned to perform maintenance as stipulated in the specification/contract. Service technicians assigned by the Contractor shall be qualified in all respects to perform the maintenance and repairs that may become necessary during the term of this contract. A response time of 15 minutes will be required. A response time is defined as the time that it takes for the appropriate personnel to arrive at the problem area after the problem has occurred. The Contractor shall obtain backup technicians who are also qualified in all respects to assume the responsibilities of the maintenance of the elevators and escalators covered by the Agreement in the event of sickness or by absence of the assigned technician.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.1.4 RECORDS/DOCUMENTATION

- 3.1.4.1 The Contractor shall provide, use, and properly maintain a maintenance check chart for each device. The check charts shall be posted in the respective machine room. Entries for each chart shall be made by Contractor personnel to indicate the status of all scheduled items of maintenance performed and initialed for validity. In addition, the Contractor shall provide, use, and properly maintain a “callback” log for each device. It too shall be kept in the respective machine room. The log should indicate date, reason for call, corrective measures taken, and name of person making entry.
- 3.1.4.2 The Contractor shall prepare and regularly submit written condition reports on all equipment at monthly meetings with the City. Condition reports shall be prepared on the Contractor’s letterhead, dated and signed by an authorized representative of the Contractor.
- 3.1.4.3 Condition reports may be submitted at any time, but not less frequent than ninety (90) day intervals. The condition reports shall inform the City of Philadelphia of the current condition of the equipment and performance measurements relating to criteria specified and include recommendations regarding the need for repairs, alterations, and/or modifications to the equipment not specified.

3.2 STORMWATER AND SANITARY DRAINAGE

3.2.1 GENERAL DESCRIPTION

- 3.2.1.1 The Contractor will be required to furnish all labor, tools, transportation, services, supervision, materials, permits and equipment as necessary to inspect, test and maintain Stormwater and Sanitary Drainage System at the Philadelphia International Airport and Philadelphia Northeast Airport.

3.2.2 TECHNICAL DESCRIPTION

The primary systems will require the following components to be maintained as a minimum.

i.) Stormwater:

Maintenance of the stormwater system shall be performed as directed for the removal and disposal of debris and sediment from stormwater structures such as catch basins, manholes sumps and scuppers, and from connecting pipes of such. The repair and re-attachment of manhole frames, replacement of manhole covers, and the resetting of brick will be managed as part of this system.

ii.) Sanitary:

Maintenance of the sanitary systems shall be performed as directed to remove and dispose of debris, sediment, sludge grease, detergent build-up from sanitary structures such as sanitary sewers, culverts, drain tile, sewage treatment plants and pump stations, and all interconnecting piping, as well as inside piping.

iii.) Mitigation System:

Mitigation system maintenance is required to address groundwater contamination found in the Qp Aquifer. This system consisting of four groundwater extraction wells will require periodic well rehabilitation due to the build-up of iron scale within the system.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

iv.) Aircraft Rescue and Fire Fighting Training (ARFFT) Septic System:

The system services the new Aircraft Rescue and Fire Fighting Training facility located at the west end of the airport grounds.

3.2.3 PERSONNEL REQUIREMENTS

3.2.3.1 Licensed personnel thoroughly familiar with these systems and regulatory standards shall perform this work. The contractor must be capable of responding 24 hours a day, 7 days a week.

3.2.4 RECORDS/DOCUMENTATION

3.2.4.1 The Contractor will be required to furnish written records of all inspections, test results and repairs. Additionally, a videotape library should be maintained chronicling incremental line conditions.

3.3 FIRE PROTECTION SYSTEMS

3.3.1 GENERAL DESCRIPTION

3.3.1.1 The work includes but is not limited to furnishing labor, transportation, equipment, materials, supplies and supervision necessary to provide maintenance and inspection service for the water-based Fire Protection and FM 200 Systems throughout the Philadelphia International Airport and Philadelphia Northeast Airport. All work shall be in accordance with NFPA 25 Standard for Inspection, Testing and Maintenance of Water-Based Fire Protection Systems. Annual certification shall be performed in accordance with the Philadelphia Fire Prevention Code paragraph F-501-4 I periodic test requirements.

3.3.2 TECHNICAL DESCRIPTION

3.3.2.1 The Contractor will perform maintenance on various fire suppression systems within the Terminal Complex (approximately 2.0 million sq. ft.), Vehicle Storage Facility, Maintenance Support Building, Warehouse, Hog Island Road Tunnel and Airfield Lighting Vaults.

3.3.2.2 Location Systems

- a) Terminal Complex
 - Dry Pipe System
 - Wet Pipe System
 - Pre-action System
 - Fire Cycle System
 - Fire Pump System
 - FM 200 System
- b) Vehicle Storage Facility
 - Wet Pipe System
- c) Maintenance Support Building
 - Wet Pipe System
- d) Hog Island Road Tunnel
 - Dry Pipe System
- f) Airfield Lighting Vaults
 - FM 200 System

BACKFLOW PREVENTER SCHEDULE						
BUILDING SERVED	DEVICE NO. (BFP)	SERVICE TYPE		TYPE OF DEVICE		SIZE
		FIRE	DOMESTIC	REDUCED PRESSURE	DOUBLE CHECK	
BAGGAGE CLAIM A EAST	BFP 1F	•			•	6"

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

	BFP#2F	•			•	
	BFP#10		•	•		
TICKETING A EAST	BFP#3F	•			•	
	BFP#2D		•	•		
CONCOURSE A EAST	BFP#4F	•			•	
	BFP#5F		•	•		
	BFP#3D	•			•	
BAGGAGE CLAIM B/C	BFP#6F	•				
	BFP#4D		•	•		
	BFP#7F	•			•	
	BFP#8F	•			•	
	BFP#5D		•	•		
TICKETING B/C	BFP#6D	•			•	
	BFP#7D		•	•		
	BFP#9F	•			•	
	BFP#10F	•			•	
BAGGAGE CLAIM D	BFP#11F	•			•	
	BFP#8D		•	•		
TICKETING D	BFP#12F	•			•	
	BFP#9D		•	•		
CONCOURSE "D" HAMMERHEAD	BFP #16F	•		•		
	BFP #27D		•		•	4"
BAGGAGE CLAIM E	BFP#13F	•			•	
	BFP#10D		•	•		
SATELLITE THERMAL PLANT	BFP#14F	•			•	
	BFP#11D		•	•		
TICKETING E	BFP#15F	•			•	
	BFP#12D		•	•		
CONCOURSE E	BFP#13D		•	•		
TERMINAL F	BFP #17F	•		•		
	BFP #15D		•		•	4"
	BFP #16D		•		•	4"
	BFP #18F	•		•		
	BFP #19F	•		•		
METER PIT NO. 5 (LOCATED IN THE VICINITY OF BAGGAGE CLAIM E)	BFP#14D		•	•		
METER PIT NO. 9 (LOCATED WEST OF BAGGAGE CLAIM A)	BFP#19D	•			•	
METER PIT NO. 8	BFP#20D		•	•		

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

(LOCATED IN PARKING GARAGE A-B WEST OF MARRIOTT HOTEL)						
CENTRAL UTILITIES BUILDING (RAC)	BFP#25D	•			•	
	BFP#26D		•	•		
TERMINAL A WEST	BFP #20F	•			•	8"
	BFP#21D		•	•		
	BFP#22D		•	•		4"

FIRE PROTECTION SYSTEM ZONE SCHEDULE					
LOCATION	SERVICE SIZE	ZONE	AREA	SQ. FT.	SERVICE SIZE
				ZONE / AREA	ZONE / AREA
TERMINAL A WEST GROUND LEVEL SECT 1		ZONE 100	10210		
		ZONE 101	20300		
TERMINAL A WEST GROUND LEVEL SECT 2		ZONE 102	18780		
		ZONE 103	18950		
TERMINAL A WEST GROUND LEVEL SECT 3		ZONE 104	6740		
		ZONE 105	2270		
TERMINAL A WEST GROUND LEVEL SECT 4		ZONE 106	8200		
		ZONE 107	15500		
TERMINAL A WEST GROUND LEVEL SECT 5, 6, 9 & 10		ZONE 108	39210		
		ZONE 109	34930		
TERMINAL A WEST GROUND LEVEL SECT 5		ZONE 110	1490		
		ZONE 111	995		
TERMINAL A WEST GROUND LEVEL SECT 6		ZONE 112	3720		
TERMINAL A WEST GROUND LEVEL SECT 7		ZONE 113	960		
		ZONE 114	1600		
		ZONE 115	32060		
TERMINAL A WEST GROUND LEVEL SECT 8		ZONE 116	15510		
TERMINAL A WEST GROUND LEVEL SECT 6, 7, 10 & 11		ZONE 117	39210		
TERMINAL A WEST GROUND LEVEL SECT 8		ZONE 118	1040/1730		
		ZONE 119	9350		
TERMINAL A WEST GROUND LEVEL SECT 13		ZONE 120	10050		

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

TERMINAL A WEST GROUND LEVEL SECT 11, 12 & 13		ZONE 121	49010		
TERMINAL A WEST GROUND LEVEL SECT 9, 10, 11 & 12		ZONE 122	50760		
TERMINAL A WEST, GARAGE CORE LEVEL "A"		ZONE 123	3700		
TERMINAL A WEST SECOND AND THIRD LEVEL LEVEL SECT 1		ZONE 200	3860/27215		
TERMINAL A WEST THIRD LEVEL SECT 1 & 2		ZONE 201	7115		
		ZONE 202	3930		
TERMINAL A WEST THIRD LEVEL SECT 2		ZONE 203	5360		
		ZONE 204	3890		
		ZONE 205	5860		
TERMINAL A WEST THIRD LEVEL SECT 3		ZONE 206	8520	206A	
				206B	
		ZONE 207	6605	207A	
				207B	
			207C		
TERMINAL A WEST THIRD LEVEL SECT 3, 4 & 5		ZONE 208	16950	208A	6905
				208B	10045
TERMINAL A WEST THIRD LEVEL SECT 4 & 5		ZONE 209	11510		
		ZONE 210		210A	
				210B	
TERMINAL A WEST SECOND LEVEL SECT 4, 5, 6, 9 & 10		ZONE 211	12065/12890		
TERMINAL A WEST SECOND LEVEL SECT 5 & 6		ZONE 212	20725		
TERMINAL A WEST THIRD LEVEL SECT 4 & 5		ZONE 213	25675		
TERMINAL A WEST THIRD LEVEL SECT 5 & 6		ZONE 214	11580		
TERMINAL A WEST THIRD LEVEL SECT 6 & 7		ZONE 215	11580		
TERMINAL A WEST SECOND LEVEL SECT 6 & 7		ZONE 216	29745		

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

TERMINAL A WEST THIRD LEVEL SECT 7 & 8		ZONE 217	8105		
TERMINAL A WEST THIRD LEVEL SECT 7 & 8		ZONE 218	17488/3385		
TERMINAL A WEST SECOND LEVEL SECT 6, 7, 10 & 11		ZONE 219	12890		
TERMINAL A WEST SECOND AND THIRD LEVEL SECT 8 & 14		ZONE 220	3415/4820		
TERMINAL A WEST SECOND LEVEL SECT 8		ZONE 221	6555		
TERMINAL A WEST THIRD LEVEL SECT 8		ZONE 222	7250		
TERMINAL A WEST SECOND LEVEL SECT 11, 13 & 14		ZONE 223	12890		
TERMINAL A WEST SECOND LEVEL SECT 13		ZONE 224	12455		
TERMINAL A WEST GARAGE CORE LEVEL "B"		ZONE 225	7000		
TERMINAL A WEST THIRD LEVEL SECT 5, 6, 9 & 10		ZONE 300	49785		
TERMINAL A WEST THIRD LEVEL SECT 5 & 6		ZONE 301	32445		
TERMINAL A WEST THIRD LEVEL SECT 6, 7, 10 & 11		ZONE 302	45055		
TERMINAL A WEST THIRD LEVEL SECT 6 & 7		ZONE 303	34895		
TERMINAL A WEST THIRD LEVEL SECT 12 & 13		ZONE 304	33270		
TERMINAL A WEST THIRD LEVEL SECT 7, 11 & 14		ZONE 305	15554		
TERMINAL A WEST THIRD LEVEL SECT 13		ZONE 306	4890		
TERMINAL A WEST GARAGE CORE LEVEL "C"		ZONE 307	9280		
TERMINAL A WEST MEZZANINE LEVEL SECTOR 5		ZONE 400	10185		

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

TERMINAL A WEST MEZZANINE LEVEL SECTOR 5 & 6		ZONE 401	13550		
TERMINAL A WEST MEZZANINE LEVEL SECTOR 5 & 6		ZONE 402	10520		
TERMINAL A WEST MEZZANINE LEVEL SECTOR 6 & 7		ZONE 403	10660		
TERMINAL A WEST MEZZANINE LEVEL SECTOR 6 & 7		ZONE 404	10120		
TERMINAL A WEST MEZZANINE LEVEL SECTOR 7		ZONE 405	9505		
TERMINAL A WEST GARAGE CORE LEVEL "D"		ZONE 406	6286		
TERMINAL A WEST GARAGE CORE LEVEL "E"		ZONE 500	3730		
TERMINAL A WEST GARAGE CORE LEVEL "F"		ZONE 600	3730		
TERMINAL A WEST GARAGE CORE LEVEL "G"		ZONE 700	3730		
TERMINAL A WEST GARAGE CORE MACHINE ROOM		ZONE 800	1860		
BAGGAGE CLAIM A EAST	6"	ZONE 1-1		3,000	3"
		ZONE 1-2		7,000	4"
		ZONE 1-3		46,440	4"
	6"	ZONE 2-1		8,000	3"
		ZONE 2-2		27,000	4"
TERMINAL A EAST	6"	ZONE 3-1		74,300	6"
		ZONE-3-2		3,600	4"
CONCOURSE A EAST	6"	ZONE 4-1		65,000	4"
		ZONE 4-2		5,200	4"
	6"	ZONE 5-1		70,000	4"
BAGGAGE CLAIM B/C	8"	ZONE 7-1	AREA 7-1-1	65,000	600
		ZONE 7-2	AREA 7-2-1	65,000	600
TICKETING BUILDING B/C	12"	ZONE 9/10-1		9,840	
		ZONE 9/10-2		13,600	
		ZONE 9/10-3		9,800	
		ZONE 9/10-4		11,700	
		ZONE 9/10-5		400	

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

		ZONE 9/10-6		550	
		ZONE 9/10-7		23,000	
		ZONE 9/10-8		26,700	
TICKETING BUILDING B/C	12"	ZONE 9/10-9		25,800	
		ZONE 9/10-10		26,500	
		ZONE 9/10-11		32,000	
		ZONE 9/10-12		240	N/A
		ZONE 9/10-13		510	N/A
		ZONE 9/10-14		320	N/A
		ZONE 9/10-15		640	N/A
TICKETING BUILDING B/C	12"	ZONE 9/10-20		26,500	
		ZONE 9/10-21		28,100	
		ZONE 9/10-22		34,300	
		ZONE 9/10-23		32,300	
TICKETING BUILDING B/C	12"	ZONE 9/10-16		2,300	
		ZONE 9/10-17		3,460	
		ZONE 9/10-18		2,050	
		ZONE 9/10-19		7,900	
TICKETING BUILDING B/C 3 RD FLOOR	12"	ZONE 9/10-24		2,700	
		ZONE 9/10-25		10,400	
		ZONE 9/10-28		13,400	
		ZONE 9/10-29		8,900	
TICKETING BUILDING B/C 3 RD FLOOR	12"	ZONE 9/10-26		15,400	
		ZONE 9/10-27		1,920	
		ZONE 9/10-31		2,120	
		ZONE 9/10-32		3,100	
		ZONE 9/10-30		5,000	
TICKETING BUILDING B/C 4 TH FLOOR	12"	ZONE 9/10-33		4,600	
CONCOURSE "C"	8"	ZONE 9/10-1		9,300	4"

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

HAMMERHEAD		ZONE 9/10-2		512	2"	
		ZONE 9/10-3		60,240	4"	
		ZONE 9/10-4		33,728	4"	
BAGGAGE CLAIM "D"	6"	ZONE 11-1		8,560	5"	
CONCOURSE "D" HAMMERHEAD	6"	ZONE 1-A		18,440	4"	
		ZONE 1-B		1,570	4"	
		ZONE 1-C		11,225	6"	
		ZONE 2-A		26,000	4"	
TERMINAL E	8"	ZONE 12-1		14,000	4"	
			AREA 12-2-1		2,160	4"
		ZONE 12-2	AREA 12-2-2	18,400	1,936	3"
		ZONE 12-3	AREA 12-3-1	18,400	2,700	6" 3"
BAGGAGE CLAIM "E"	6"	ZONE 13-1		8,300	4"	
SATELLITE THERMAL PLANT	4"	ZONE 14-1		6,400	4"	
TERMINAL "E" TICKETING BUILDING	6"	ZONE 15-1		14,000	4"	
			AREA 15-2-1		2,180	4"
		ZONE 15-2	AREA 15-2-2	18,400	1,938	3"
		ZONE 15-3	AREA 15-3-1	18,400	2,700	8" 3"
TERMINAL F SECTOR 1 – TERMINAL BLDG	4"	ZONE 16-1				
TERMINAL F SECTOR 1 – CONCOURSE 1	4"	ZONE 16-2				
TERMINAL F SECTOR 1 – MEZZANINE	4"	ZONE 16-3				
TERMINAL F SECTOR 2 HUB BLDG	6"	ZONE 16-4				
TERMINAL F SECTOR 2 CONCOURSE 2	6"	ZONE 16-5				
TERMINAL F SECTOR 3 CONCOURSE 3	6"	ZONE 16-6				
TERMINAL F SECTOR 4 BAGGAGE	4"	ZONE 16-7				
TERMINAL F TOWER	4"	ZONE 16-8				

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

FM 200 System	Location	Area (SF)
FM1 – FLER	Field Lighting Equipment Room	1,000
FM2 – FLV2	Field Lighting Vault 2	1,000
FM3 – FLV3	Field Lighting Vault 3	1,500
FM4 – FLV4	Field Lighting Vault 4	2,500
FM5 – B/C1	US Airways Communication Room, Main Terminal Complex 1 st Floor Terminal B	80
FM6 – B/C2	US Airways Communication Room, Main Terminal Complex 1 st Floor Midway Between Terminals B and C	144
FM7 – B/C3	US Airways Communication Room, Main Terminal Complex 1 st Floor Midway Between Terminals B and C	80
FM8 – B/C4	DOA Main Communication Room, Main Terminal Complex 1 st Floor Midway Between Terminals B and C	220
FM9 – B/C5	Telephone Equipment Room, Main Terminal Complex 1 st Floor Terminal B	594
FM10-AW1	Tele/Com Room, Terminal A West, Ground Floor Sector 2	208
FM11-AW2	Baggage System Rooms, Terminal A West, Ground Floor Sector 2	525
FM12-AW3	Audio Paging Equipment Room, Terminal A West, Ground Floor Sector 4	420
FM13-AW4	Main Tele/Com Room, Terminal A West, Ground Floor Sector 5	520
FM14-AW5	Tele/Com Room, Terminal A West, Ground Floor Sector 7	482
FM15-AW6	Cute LAN Room, Terminal A West, Ground Floor Sector 7	635
FM16-AW7	Computer Room, Terminal A West, Third Level Sector 7	243
FM17-AW8	TECS Room, Terminal A West, Third Level Sector 11	384
FM18-F1	DOA MDF and US Airways MDF, Terminal F First Floor Sector 1	208
FM19-F2	US Airways Closet “A” and DOA Closet “A”, Terminal F, First Floor Sector 1	100
FM20-F3	US Airways Closet “B”, Terminal F, First Floor Sector 1	64
FM21-F4	US Airways Closet “C” and DOA Closet “C”, Terminal F, First Floor Sector 2	106
FM22-F5	US Airways Closet “D” and DOA Closet “D”, Terminal F, First Floor Sector 2	128
FM23-F6	US Airways Closet “E” and DOA Closet “E”, Terminal F, First Floor Sector 3	94
FM24-F7	US Airways Closet “F” and DOA Closet “F”, Terminal F, First Floor Sector 3	98
FM25-F8	Comm. Room, Terminal F, Mezz. Lower Level, Sector 1	182
FM26-AE1	Baggage Control Room E, Terminal A East Lower Level, Sector 23	245

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.3.3 PERSONNEL REQUIREMENTS

3.3.3.1 The Contractor must have skilled personnel to achieve the Airport's objective in reducing and eliminating any needless losses to Division of Aviation, our employees and the public caused by decreased efficiency, work interruptions, equipment breakdowns, or property damage. The Contractor will be required to comply with City of Philadelphia and State licensing requirements, as well as having a minimum of five years experience in the maintenance of Fire Protection Systems.

3.3.4 RECORDS/DOCUMENTATION

3.3.4.1 The Contractor will be required to keep written records of all inspections and repairs to the Fire Protection System. The Contractor will be responsible for the completion of regulatory documents necessary for certification.

3.4 HEATING, VENTILATION & AIR CONDITIONING (HVAC)

3.4.1 GENERAL DESCRIPTION

3.4.1.1 The Contractor's company or pre-qualified subcontractor performing the work MUST be a NBIC R-Stamp holder per Para. 1.4.8 of PIR S5-Z4955-0. In addition, the Contractor will be required to furnish all necessary labor, tools, transportation, services, permits, supervision, materials and equipment, as necessary to conduct a comprehensive preventive maintenance program of specified cooling equipment and appurtenances.

3.4.1.2 The Terminal Complex HVAC units and other machinery in the mechanical rooms are controlled from the Central Utility Building (CUB), the Satellite Thermal Plant (STP), and the Terminal A West Thermal Plant, where the main equipment is housed. The CUB has 4 giant chillers with a combined cooling capacity of over 5000 tons. The STP has 2 chillers and 2 chillers are housed at the former Overseas Terminal.

3.4.1.3 **A copy of the NBIC R-Stamp Certification must be submitted with the PIR.**

3.4.2 TECHNICAL DESCRIPTION

3.4.2.1 Technical Description

Service and Repair Specifications for the Following:

Former overseas terminal building on Island Avenue.

- A. Two (2) Trane Cen-Tra-Vac Chillers, model #PVC1J, S/NL2J15633 and L2J15634.
- B. Two (2) Taco Chilled water circulation pumps.
- C. Two (2) Taco Condenser water pumps.
- D. One (1) Tower Tech Cooling Tower, model
- E. Two (2) Quincy air compressors, model #216, S/N 3000424 and 3000433.

Equipment List-Central Utility Bldg. – CUB

- A. Trane 1200 ton centrifugal liquid chiller model (CVHB-155N-AT) #4
- B. Trane 1200 ton centrifugal liquid chiller model (CVHE-125N-AV) #2
- C. Trane 1500 centrifugal liquid chiller model (HT-K1-E3-EC-A) #3
- D. Trane 1200 ton centrifugal liquid chiller model (CVHF-128N) #1

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

- E. Baltimore Air Coil Cooling Tower 2400 ton model 3000
- F. Marley Cooling Towers 1-1200 ton and 1-1500 ton

Equipment List-Satellite Thermal Plant – STP

- A. Three (3) Trane centrifugal chillers 1200 ton, 123 refrigerant
- B. Two (2) boilers, 500 horse power, Kewanee
- C. Marley Towers, 2400 tons
- D. One (1) boiler, 500 horsepower, Clever Brooks
- E. Marley Towers, 1200 tons

Equipment List – Terminal A West

- A. Three (3) Trane 1500 ton centrifugal chillers, 123 refrigerant
- B. Two (2) Clever Brooks boilers, 750 horsepower
- C. Five (5) Marley Cooling Towers, 1800 tons

PUMP SCHEDULES

Pump #	GPM	Duty	Type	HP	Location
01	2580	CHW	Double Suction	30	STP
02	2580	CHW	Double Suction	30	STP
03	2580	CHW	Double Suction	30	STP
04	4300	CHW	Double Suction	200	STP
05	4300	CHW	Double Suction	200	STP
06	3600	CW	Double Suction	75	STP
07	3600	CW	Double Suction	75	STP
08	3600	CW	Double Suction	200	STP
09	1800	Hot Water	Double Suction	200	STP
10	1800	Hot Water	Double Suction	200	STP
13	3150	CHW	Double Suction	55	STP
14	1750	CHW	Double Suction	150	STP
15	3600	CW	Double Suction	100	STP
16	1650	Hot Water	Double Suction	150	STP
17	1650	Hot Water	Double Suction	150	STP
01	3600	Condenser	Vertical	100	CUB
02	1750	Condenser	Horizontal	100	CUB
03	3600	Condenser	Vertical	100	CUB
04	4500	Condenser	Vertical	100	CUB
05	3600	Chill Return	Horizontal	100	CUB
06	3600	CHWR	Vertical	100	CUB
07	3600	CHWR	Vertical	100	CUB
08	1550	CHWR	Vertical	100	CUB
09	2040	Chilled Water	Horizontal	125	CUB
10	2040	Chilled Water	Horizontal	125	CUB
11	2040	Chilled Water	Horizontal	125	CUB
12	2040	Chilled Water	Vertical	125	CUB
13	2040	Chilled Water	Vertical	125	CUB
14	2400	Sec. Chilled	Vertical	100	A-Mech
15	2400	Sec. CHW	Vertical	100	A-Mech
16	470	Hot Water	End Suction	40	A-Mech
17	470	Hot Water	End Suction	40	A-Mech
P-1	465	CW30% A/F	End Suction	20	MR-14
P-2	465	HW Heat 30% A/F	End Suction	20	MR-14
P-3	275	HW Heat 30% A/F	End Suction	20	MR-14

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

P-4	275	HW Heat 30% A/F	End Suction	20	MR-14
P-5	400	Ch. H 30% A/F	Hor/split case	15	MR-13
P-6	400	Ch. H 30% A/F	Hor/split case	15	MR-13
P-7	150	HW Heat 30% A/F	In-Line	5	MR-13
P-8	150	HW Heat 30% A/F	In-Line	5	MR-13
P-1	900	Ch.W 30% A/F	Hor/split	40	Tunnel B
P-2	900	Ch. W 30% A/F	Hor/split	40	Tunnel B
P-3	575	H.W. 30% A/F	End Suction	25	Tunnel B
P-4	575	H.W. 30% A/F	End Suction	25	Tunnel B
P-1	900	Ch. W. 30% A/F	Hor/split case	40	Tunnel C
P-2	900	Ch. W. 30% A/F	Hor/split case	40	Tunnel C
P-3	575	H.W. 30% A/F	End Suction	30	Tunnel C
P-4	575	H.W. 30% A/F	End Suction	30	Tunnel C
HP-5-1	925	H.W.	End Suction	50	MR-5
HP-5-2	925	H.W.	End Suction	50	MR-5
P-1	3600	CHW	Hor/split case	75	Terminal A West
P-2	3600	CHW	Hor/split case	75	Terminal A West
P-3	3600	CHW	Hor/split case	75	Terminal A West
P-4	3600	CHW	Hor/split case	250	Terminal A West
P-5	3600	CHW	Hor/split case	250	Terminal A West
P-6	3600	CHW	Hor/split case	250	Terminal A West
P-7	4500	CW	Hor/split case	125	Terminal A West
P-8	4500	CW	Hor/split case	125	Terminal A West
P-9	4500	CW	Hor/split case	125	Terminal A West
P-10	1675	H.W.	Hor/split case	40	Terminal A West
P-11	1675	H.W.	Hor/split case	40	Terminal A West
P-12	1675	H.W.	Hor/split case	40	Terminal A West
P-13	1675	H.W.	Hor/split case	125	Terminal A West
P-14	1675	H.W.	Hor/split case	125	Terminal A West
P-15	18	Fuel Oil	Rotary	2	Terminal A West
P-16	18	Fuel Oil	Rotary	2	Terminal A West
P-17	18	Fuel Oil	Submersible	1/3	Terminal A West
P-18	18	Fuel Oil	Submersible	1/3	Terminal A West

3.4.2.1.1 Variable Frequency Drives

Central Utility Building	5-Drives
Satellite Thermal Plant #1	7-Drives
Terminal A West Thermal Plant	5-Drives
A-Mechanical Room	4-Drives
B-Mechanical Room	2-Drives
C-Mechanical Room	2-Drives
Mechanical Room #13	2-Drives

3.4.2.1.2 Rooftop Units-HVAC

A East Terminal	53 Bohn air handlers
A West Terminal	54 Dunham Bush air handlers
B Terminal	4 Mammoth AHU's
Departures	2 Pace (30 Tons DX)
Arrival	11 Dunham Bush AHU's
Bridge	6 Dunham Bush AHU's
Train & Bus	2 G.E. (20 Tons DX)

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

L. Level Bag M/U Terminal Bag Tunnel B-C 3 Rupp (Heat-Vent)
32 Bohn AHU's
12 Joy Model 45 Venaxial Exhaust Fans

C Terminal

Departures 2 Pace (20 Tons DX), 1 Pace (60 Tons DX)
Arrival 14 Dunham Bush
Bridge 10 Nesbitt Model RMA 150
Train & Bus 2 G.E. (20 Tons)
Terminal 31 Bohn

Main Terminal 18 Bohn

D Terminal

Departures 6 Mamouth (Air Handlers)
Arrival 7 Mamouth (Air Handlers)
Bridge 9 Mamouth (Air Handlers)

D & E 5 Mamouth (Air Handlers)

E Terminal

Departures 18 Mamouth (Air Handlers)
Arrival 8 Mamouth (Air Handlers)
Bridge 10 Mamouth (Air Handlers)
Bus & Train 2 G.E. (20 Tons DX)

F Terminal

3.4.2.1.2.1 One hundred seven (107) HVAC air-handling units located in various mechanical rooms at Philadelphia international airport and northeast airports.

3.4.2.1.2.2 Northeast Philadelphia airport – 8 DX units/exhaust fans

3.4.2.1.2.3 Overseas Terminal – 6 DX air handlers (loft units)

MAKE	SERIAL NUMBERS	MODEL NUMBERS
#1 Trane	K2K227483	Type M-3
#2 Trane	K2K227984	Type M-35
#3 Trane	K2K227985	Type M-41
#4 Trane	K2K227987	Type M-25
#5 Trane	K2K227986	Type M-35
#6 Trane	K2K227982	Type M-35

3.4.2.2 Main terminal – 14 mechanical rooms 47 air handlers (H/C)

AIR HANDLERS

Location Type/Model

3.4.2.2.1 Central Util. Bldg.

AHU-1 York CS-113-FO-FCLP

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

	AHU-2	York CS-113-FO-FCLP
	AHU-3	York CS-113-FO-FCLP
3.4.2.2.2	Mechanical Room #1	
	AHU-1	Chrysler Airtemp AV06
3.4.2.2.3	Mechanical Room #2	
	AHU-2	Centraire HC215
	AHU-4	Centraire HC211
	AHU-3	Centraire HC216
3.4.2.2.4	Mechanical Room #4	
	AHU-6	Chrysler Airtemp SH06
	AHU-7	Centraire HV216
	AHU-8	Centraire HS211
3.4.2.2.5	Mechanical Room #6	
	AHU-21	Chrysler AV06
	AHU-20	Chrysler AV06
3.4.2.2.6	Mechanical Room #7	
	AHU-10	Centraire HC 10
	AHU-5	Chrysler Airtemp HV29
	AHU-14	Centraire HC126
	AHU-11	Centraire HC316
	AHU-12	Centraire HC110
	AHU-13	Centraire HC219
	AHU-33	Centraire HC210
3.4.2.2.7	Mechanical Room #8	
	AHU-17	Chrysler AV08
	AHU-19	Chrysler Airtemp AV09
	AHU-28	Chrysler Airtemp AV11
	AHU-30	Chrysler AV15
	AHU-18	Centraire HC213
	AHU-27	Chrysler AV11
	AHU-29	Chrysler AV11
	AHU-15	Airtherme HC-118
	AHU-16	Airtherme Ch215
	AHU-16	Airtherme HC215
	AHU-25	Chrysler AV11
	AHU-26A	Centraire HC111
	AHU-24	Centraire HC216
	AHU-15A	Centraire HC215
3.4.2.2.8	Mechanical Room #10	
	AHU-10	Westinghouse PHY 4369
3.4.2.2.9	Mechanical Room #12	
	AHU-69	Westinghouse PHY 4369
	AHU-68	Westinghouse PHY 4369-10

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.4.2.2.10 Mechanical Room #13

AHU-74	Westinghouse VA 1616
AHU-75	Westinghouse PHY 4369

3.4.2.2.11 Mechanical Room #14

AHU-76	Westinghouse HA 17236
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3.4.2.2.12 Mechanical Room #15

AHU	Carrier Airtemp
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3.4.2.2.13 Mechanical Room #16

AHU-63	Chrysler HH-36
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3.4.3 PERSONNEL REQUIREMENTS

3.4.3.1 The maintenance personnel required should have experience with the types of HVAC equipment noted herein. Factory training is recommended. Workers must be skilled in the trades involved and possess in-depth knowledge of troubleshooting. Contractor personnel will be required to compile with OSHA and EPA regulations.

3.4.4 RECORDS/DOCUMENTATION

3.4.4.1 The Contractor will provide a preventive maintenance program based on the manufacturer's procedures manual. The Contractor will be responsible for maintaining records and documents of completed repairs, PM's and regulatory forms.

3.5 FACILITIES AUTOMATED CONTROL SYSTEMS

3.5.1 GENERAL DESCRIPTION

3.5.1.1 The systems listed herein require specialized technical support and equipment for management of industrial computers, data gathering panels and transmission lines.

i) Supervisory Control and Data Acquisition Systems (SCADA)

The SCADA System is a central monitoring and control system for the Airport's Electrical Distribution System. The system consists of General Electric and Cutler Hammer components.

Maintenance Support Procedure – Periodic Maintenance

Quarterly Visit

1. Call up each HMI screen (verify functionality and navigation).
2. Check analog readings in the HMI (voltage, current, etc.).
3. Check digital status readings in the HMI (breaker status, etc.).
4. Check trend data for a random measurement/device (verify consistency and identify any missing data).
5. Check alarm readings (current HMI alarms consistency / absence).
6. Check for communication failures with metering devices.
7. Check for communication failures with other SCADA PC nodes.
8. Manage SCADA computer's hard disk drive (backup, etc.).
9. Check Windows 2000 diagnostic data (Windows Event Viewer).

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

10. Check Wonderware Intouch log data (Wonderware Intouch Logger).
11. Check SCADA system initialization (reboot PC).
12. Visually inspect SCADA hardware in each substation (meters and communication equipment).
13. Report status of system & make recommendations for repairs and upgrades.

Support of electrical distribution system personnel may be necessary.

ii) Airfield Lighting Computerized Control System

The basic purpose of the Airfield Lighting System is to aid pilots in the safe operation of an aircraft. PHL's Airport Lighting Computerized Control System (ALCCS) was developed by Crouse-Hinds, Airport Lighting Products to provide command and monitoring information in real time, to the Air-Traffic Controllers and to the Maintenance Staff, as well as historical information on the status of the Airfield Lighting.

iii) Automated Lighting Control Systems (ALCS)

Systems for Terminals A West and F to regulate interior and exterior lighting levels during the daylight periods.

Lutron Equipment – Terminal 'A' West

- 37 CXP42-2774ML-20-CGP519
42 Circuit Lighting Control Panels
- 2 GR6MXINP
Lighting Control Processor
- 15 NTOMX-2B-WH
Sov Wall Control
- 3 MX-RPTR
Low Voltage Digital Signal Booster
- 4 OMX-AV
Contact Closure Input Device used to accept input from photo switch
- 1 Desktop P.C.
(Not on site yet) We will be supplying a laptop PC to meet specification and DOA requirements. However only one PC may be connected to the control system at a time.
- 2 NTOMX-62JWH
Wall jack to connect the PC to the lighting control system
- 3 PJ62P-ADPT-1
RS-232 to RS-485 converter. Required to convert the output of the PC into RS-485 protocol.

Maintenance of Lutron Equipment (GP Panels)

Controls – Every 6 Months

Clean front surface of control with a soft towel moistened with a mild soap solution (non- ammonia based). Do not spray cleaning solution onto control as it may reach internal components.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Power Panels

1. Clean any dirt from air vent openings with a vacuum and check for any obstructions which may block air flow. Please maintain 6" of obstructed area on top, bottom and front of power panel.
2. If any extra wiring is brought into power panel, be sure all metal chips, wire strands, insulation or other debris is thoroughly removed before reapplying power.
3. In the unlikely event of damage to dimming equipment, install the bypass jumper into (DH-SH-H) terminal block of the affected circuit. This will eliminate dimming equipment from circuit and apply full power to fixtures.

Fixtures

1. It is important that lamps are maintained properly to prevent what may appear as dimming equipment malfunctions. When lamps begin to fail on a circuit, Lutron recommends group relamping of the entire circuit.
2. Fluorescent lamps must be burned in at full light output for at least 100 hours to achieve proper dimming performance.

3.5.2 TECHNICAL DESCRIPTION

3.5.2.1 Noted below by system is the name of the manufacturer or installing company or system designer.

3.5.2.1.1 SCADA: Initial provider General Electric Power Leader System

3.5.2.2 The SCADA system is a central monitoring and control system for the airport's electrical distribution system. SCADA monitors circuit breaker status, voltages and currents throughout the electrical system, and allows remote operation of some devices. The system is a General Electric Power Leader System employing the General Electric Genius Local Area Network (LAN). The system software is Windows 2000 based Intouch software, including GE PMCS, Cutler Hammer Powernet and Wonderware Intouch .

3.5.2.3 Furnish all labor, tools, equipment, connections, material and work required for the maintenance as specified for the SCADA system. The system consists of six (6) IBM-compatible personal computers with Intel Pentium-4, 1.8 GHz processors, programmable logic controllers, input/output devices, interconnecting wiring and software.

3.5.2.4 The SCADA system consists of the following components:

Six (6) Pentium-4, 1.8GHz IBM-compatible personal computers with Ethernet LAN cards GE Genius LAN card (PCIM), 153.6k, each with SVGA monitor, dot-matrix printer and keyboard and 20 Gigabyte hard disk drive.

(3) GE Series 90-70 programmable logic controllers in 9-slot racks, with a total of 12 Genius Bus Controllers, 2 Programmable Processor Modules and Power Supplies.

(50) GE Power Irac power monitoring devices.

(11) GE Ethernet Gateway Serial Port Servers.

(114) GE MicroVersa Trip Unit Circuit Breaker Protective Device.

(40) GE PQM Power Quality Meters.

(40) GE Multilin Feeder Protection Relays (either ML-750 or ML-735).

(6) Modbus Concentrator Protocol Converters.

(35) GE Genius Input/Output (I/O) blocks, 8 point.

(53) GE Electronic Power Meters.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

- (4) Cutler Hammer D-725 Data Collector Nodes.
- (2) Cutler Hammer Netlink Ethernet Gateway Serial Port Servers .
- (2) Master Network Translator Units.
- (12) Westinghouse Digitrip RMS 800 Circuit breaker trip units.
- (1) Mimic Panel Control Wiring Belden #9182.

3.5.2.5 The SCADA system monitors the following equipment:

- Main Terminal Substation – (27) 15KV circuit breakers
- Main Terminal Substation – (26) 5KV circuit breakers
- Terminal ‘A’ West Unit Substations – (108) circuit breakers
- Terminal ‘A’ West Emergency Substation – (6) circuit breakers
- Cargo City Substation – (22) 15KV circuit breakers
- Cargo City Substation – (18) 5KV circuit breakers
- Unit substations – (24) low-voltage circuit breakers
- Double-ended unit substations (18) low-voltage circuit breakers
- Engine generator sets (2)
- Smoke control system (status only)

3.5.2.6 ALCCS: Designed by Crouse-Hinds Airport Lighting Products

3.5.3 PERSONNEL REQUIREMENTS

3.5.3.1 The Contractor shall have the following personnel available for system work.

i) Service Manager

The Service Manager will be assigned to the project activities. The Manager shall demonstrate management of projects with similar equipment and size. A response time of 24 hours or less will be required.

ii) Service Technicians

The Contractor’s Service Technicians will have worked in the security, access control, fire protection or related fields and can verify work with similar systems. The Technician will have successfully completed training with the equipment manufacturer and can demonstrate the proper operation, maintenance, troubleshooting and service of the equipment.

3.5.4 RECORDS/DOCUMENTATION

The Contractor will provide a preventative maintenance program and test schedule for these systems with the appropriate forms. All documentation will be the property of the Owner but maintained by the Contractor. All spare parts will be documented in a spare parts inventory showing parts on-hand, their location and any on order. Trouble and normal service calls will be documented and kept on-site for future reference.

3.6 UNINTERRUPTED POWER SUPPLY

3.6.1 GENERAL DESCRIPTION

3.6.1.1 The Contractor will be required to furnish all labor, tools, transportation, services, supervision, materials and equipment as necessary to maintain Uninterruptible Power Supplies at the Philadelphia International Airport, and Philadelphia Northeast Airport.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.6.2 TECHNICAL DESCRIPTION

3.6.2.1 This contract will include a 30KVA “General Power Systems” Model LE3030-1 UPS, and all UPS’s above 5 KVA.

3.6.3 PERSONNEL REQUIREMENTS

3.6.3.1 The Contractor will be required to have a minimum of five years experience in the maintenance of UPS systems. A response time of one hour will be required for the UPS system. A response time is defined as the time that it takes for the appropriate personnel to arrive at the problem area after the problem has occurred.

3.6.3.2 Include proof of this experience in the PIR document.

3.6.4 RECORDS/DOCUMENTATION

3.6.4.1 The Contractor will be required to keep written records of all inspections and repairs to the UPS systems.

3.7 SWITCHGEAR

3.7.1 GENERAL DESCRIPTION

3.7.1.1 The Contractor will be required to furnish all labor, tools, transportation services, supervision, materials and equipment as necessary to maintain the 15 KV and 5 KV switchgear at the Philadelphia International Airport.

Equipment	Quantity	
	Existing	Future
Medium Voltage Service Switchgear	4	
Generator Switchgear	1	
Medium Voltage Oil Switches	9	
Unit Substations	42	
Other Medium Voltage Switching Equipment	244	

3.7.2 TECHNICAL DESCRIPTION

3.7.2.1 The contract will include the testing and maintenance of 15 KV and 5 KV switchgear, unit subs and radial switchgear.

3.7.2.2 Medium Voltage Substation Equipment

3.7.2.2.1 Listed below are locations and descriptions of major medium voltage substation equipment.

3.7.2.2.2 **Main Terminal Substation:**

Dual Service, Dual Voltage

15 KV Equipment Descriptions

30 GE breakers 1200A, 13.2KV rollout type, 250 MVA Rating.

2 Main Breakers (P.E.lines)

28 Feeder Breakers

1 Tie Breaker

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

- 2 PH SEQ + UV Relays
- 2 Frequency Relays
- 6 Bus Diff. Relays
- 30 Digital Meters (EPM)
- 2 Basler Neutral o/c Relays
- 2 Basler Dir. o/c Relays
- 32 GE 3PH Digital o/c Relays
- Device 136 VDC Battery Bank & Rectifier/Charger
- Over Voltage Relay
- Device 86 Lockout Relay
- Device 43 Auto/Manual Control
- CB Lift Truck
- Las

5 KV Equipment Descriptions

30 GE type VBI 4.16-350-3 1200A
5KV rollout type breakers.

- 6 Trans Diff. Relays
- 2 Trans Sudden PRS Relay
- 1 PH SEQ + UV Relay
- 36 Digital Meters (EPM)
- 2 Basler Sync Check Relays
- 36 GE 3PH Digital o/c Relays
- 2 8MVA 13.2kV – 4.16 Silicone Filled Transformers
- Power Factor Correction
- 2 Capacitor Banks
- 3 Tie 5Kv CB's T2,T3, T4
- CB Test Station
- Ground Truck
- CTs, PTs & CPTs

Emergency Generator Switchgear

5KV Equipment Descriptions

- 3 GE Air Circuit Breakers type VG1 4.16-350-3 1200A
- 1 Mimic Board with remote operation capability and indicator lights
- 1 5KV Load Bank
- 1 Generator Control System
- Generator No. 1 & Generator No. 2 & Master Control
- Switchgear Sections
- Over Voltage Relay
- Device 136 VDC Battery Bank & Rectifier/Charger
- CTs, Las & PTs

3.7.2.2.3 **Cargo City Substation:** Dual Service, Dual Voltage

15 KV Equipment Descriptions

20 GE VB1 13.8-500-3, 1200A
13.2KV rollout type, 500 MVA Rating.

- 2 Main Breakers (P.E.lines)
- 17 Feeder Breakers
- 1 Tie Breaker
- 2 PH SEQ + UV Relays
- 6 Bus Diff. Relays
- 22 Digital Meters (EPM)
- 1 Basler SYNC Check Relays

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

- 2 Basler Dir. o/c Relays
- 24 GE 3PH Digital o/c Relays
- 2 900 KVAR Power Factor Correction Capacitor Banks
- Ground Truck
- CB Test Station
- Over Voltage Relay
- Device 86 Lockout Relays
- Device 43 Auto/Manual Control
- CB Lift Truck
- Las

5 KV Equipment Descriptions

- 11 GE type VBI 4.16-350-3 1200A
- 5KV rollout type breakers.

- 6 Trans Diff. Relays
- 2 Trans Sudden PRS Relay
- 2 PH SEQ + UV Relay
- 18 Digital Meters (EPM)
- 1 Basler Sync Check Relays
- 20 GE 3PH Digital o/c Relays
- 2 4MVA 13.2kV – 4.16 Silicone Filled Transformers
- Device 136 VDC Battery Bank & Rectifier/Charger
- CT's, PT's & CPT's

3.7.2.2.4 **Bernard Henry Substation (Island Avenue)**

15 KV Equipment

Medium Voltage Circuit Breakers

- 10 Cutler-Hammer VCP-W; Type 150VCP-W500; Style 8349A24G02
- 1 Ground Truck; Manual Ground and Test; Device Type VCP-W)
- CB Test Station
- CB Lift Truck
- Ground Truck
- CTs, PTs & CPTs , Las

Relay and Metering

- 10 Digitrip 3000 Device 51/50/N
- 8 IQDP-4000
- 2 IQ Analyzer
- 10 Lockout Relay 86 Trip/Reset Switch
- 8 Device 43A Local/Remote Select Switch
- 3 Device 87B-2 ABB – Overcurrent, Overvoltage Bus
- Differential Relay
- 3 Device 27/59 Basler – Under/Over Voltage Relay – Type BE1-27/59
- 1 Device 86-1 Lockout Relay (Trip/Reset)
- 1 Device 86B-1 Lockout Relay (Trip/Reset)
- 1 Device 86V-1 Lockout Relay (Trip/Reset)
- 3 Device 43 Remote/Auto/Local Selector Switch
- 1 Device 25 ABB – Syncro Verifier Relay
- 2 Device 27/47 ABB – Reverse Phase Voltage Relay
- 2 Device 27/47X ABB – Type MG-6 Aux Relay
- 29 Indicator Lights

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.7.2.2.5 **Philadelphia Northeast Airport Substation:** Dual Service Single Voltage

5KV Equipment Descriptions

- 3 5KV Air Circuit Breakers Rollout type
- 2 Main Breakers
- 1 Tie Breaker
- 6 5KV Fused Contactors
- 4 Feeder Contactors
- Spare Contactors
- Ammeters
- Voltmeters
- Kilowatthour Meters
- Protective Relays
- Ground Relays
- Phasing Relays
- Voltage and Auxiliary Relays
- Current Transformers
- Potential Transformers

3.7.2.3 Unit Substations

3.7.2.3.1 Listed below for information only are unit substations and descriptions of major substation equipment. The work to be performed on an “as required” basis. All liquid filled transformers are classified as non PCB.

3.7.2.3.2 **Substation TBD**

15 KV Equipment

- 2 15KV fused switches – General Electric 13.2KV Type SE 1005-600A
- 2 15KV Load Break Disconnects – Cutler Hammer
- 18 Magnum Draw out Breakers Digitrip Trip Units – Cutler Hammer

Transformer

- 2 2000 kVA Dry Type Transformers – Cutler Hammer .

Relay and Metering

- 2 Voltage Relays – GE12IAV69B1A
- 2 Overcurrent Relays – GE12IAC95F1A
- 1 Overcurrent Relay – GE12IAC25
- 2 Negative Phase Sequence Voltage Relays GENBV11A3A
- 2 Watthour meters
- 2 Voltmeters and control switch
- 2 3 Phase ammeters and control switch
- 3 Auto manual transfer and control switches
- 2 Circuit breaker position indicating lamps
- 2 UV Relays
- 1 Auto Transfer System
- 2 Lightning Protectors
- Power Analyzer
- TU SS Protecion
- Device 25
- Device 43
- Device 59
- Device 63

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Device 86
CTs, PTs & CPTs, Las

Low-Voltage Circuit Breakers

- 2 General Electric Type AK-3A-75S- 3000A
- 1 General Electric Type AKU-3A-25-600A
- 1 General Electric Type AK-3A-50S-1600A

3.7.2.3.3 **Substation TBE**

15KV Equipment

- 2 15KV Fused switches – General Electric 13.2KV Type SE 1005-600A

Transformer

- 2 1500/1725 KVA – 13200-480Y/277 G.E. Pyranol TX Class OA-30
Gauges – Oil temp pressure, oil level – core hot spot temp.

Relay and Metering

- 2 Voltage Relays – GE121AV69B1A
- 2 Overcurrent Relays – GE121AC95F1A
- 1 Overcurrent Relay – GE121AC25
- 2 Negative Phase Sequence Voltage Relays – GENBV11A3A
- 2 Watthour Meters
- 2 Voltmeters and control switch
- 2 3 phase ammeters and control switch
- 3 Auto Manual transfer and control switches
- 2 Circuit breaker position indicating lamps

Low Voltage Circuit Breakers

- 2 General Electric Type AK-3A-755-3000A
- 12 General Electric Type AKU-3A-25-600A
- 1 General Electric Type AK-50S-1600A

3.7.2.3.4 **Substation FPE**

15KV Equipment

- 2 15KV Fused Switches – General Electric 13.2KV Type SE 100S-600A

Transformer

- 2 1500/1725 KVA – 13200-480Y/277 GE Pyranol TX Class OA -30
Gauges – oil temp and pressure, oil level – core hot spot temp.

Relay and Metering

- 2 Voltage Relays – GE121AV69B1A
- 2 Overcurrent Relays – GE121AC95F1A
- 1 Overcurrent Relay – GE121AC25
- 2 Negative Phase Sequence Voltage Relays – GE-NBV11A3A
- 2 Watthour Meters
- 2 Voltmeters and control switch
- 2 3 phase ammeters and control switches
- 3 Auto-Manual transfer and control switches
- 2 Circuit breakers Position indicating lamps

Low Voltage Circuit Breakers

- 2 General Electric Type AK-3A-755-3000A
- 13 General Electric Type AKU-3A-25-600A

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

1 General Electric Type AK-3A-50S-1600A

3.7.2.3.5 Substation CUB

15KV Equipment

2 15KV fused switches – General Electric 13.2KV – Type SE 100s-600A

Transformer

2 1000KVA – 13200-480Y/277 GE Pyranol TX Class OA-30
Gauges – Oil temp – pressure, oil level – core hot spot temp.

Relay and Metering

2 Voltage Relays – GE121AV69B1A
2 Overcurrent Relays – GE121AC95F1A
1 Overcurrent Relay – GE121AC25
2 Negative Phase Sequence Voltage Relays – GENBV11A3A
2 Watthour Meters
2 Voltmeters and control switch
2 3 phase ammeters and control Switches
3 Auto Manual transfer and control switches
2 Circuit breaker position indicating lamps

Low Voltage Circuit Breakers

3 General Electric Type AK-3A-50S-1600A
2 General Electric Type AK-6A-25M
2 General Electric Type AK-3A-25

3.7.2.3.6 SUBSTATION S2A

15KV Equipment

2 15KV Motor Operated Switches GE – Type 100E-1-OEM-600amp
2 Undervoltage Relays GE – 121AV54E1A
2 Control Switch
4 Indicating Lights

Transformer

1 FPE Dry Type Class AA/FA-30
1000/1333 KVA Transformer
13200 – 208Y/120

Low Voltage Section

1 Watthour Meters
1 Volt Meter and Control Switch
1 Ammeter Control Switch and CTs

Power Circuit Breakers

1 FPE 100H-1-4000 Amp

Molded Case Circuit Breakers

2 150A 65,000 AIC @ 240 volts
5 300A 65,000 AIC @ 240 volts
2 400A 65,000 AIC @ 240 volts
1 500A 65,000 AIC @ 240 volts
2 600A 65,000 AIC @ 240 volts
2 700A 65,000 AIC @ 240 volts
1 800A 65,000 AIC @ 240 volts

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.7.2.3.7 Substation S2B

15KV Equipment

- 2 15KV Motor Operated Switches GE Type 100E-1-OEM-600 amp
- 2 Undervoltage Relays GE Type 121AV54E1A
- 2 Control Switch
- 4 Indicating Lights

Transformer

- 1 FPE Dry Type Class AA/FA-30, 1000/1333KVA Transformer, 13200-208Y/120

Low Voltage Section

- 2 Watthour meters
- 1 Voltmeter and Control Switch
- 1 Ammeter Control Switch and CTs

Power Circuit Breakers

- 1 FPE 100H-1-4000 amp – Electrically operated 208/120V Control

Molded Case Circuit Breakers

- 1 1000A, 65,000 Amps I.C. @240 volts
- 1 175A, 65,000 Amps I.C. @240 volts
- 3 600A, 65,000 Amps I.C. @240 volts
- 1 350A, 65,000 Amps I.C. @240 volts
- 2 300A, 65,000 Amps I.C. @240 volts
- 2 400A, 65,000 Amps I.C. @240 volts
- 1 150A, 65,000 Amps I.C. @240 volts
- 1 1600A, 65,000 Amps I.C. @240 volts

3.7.2.3.8 SUBSTATION S3A

15KV Equipment

- 2 15KV Motor Operated Switches GE – Type 100E-1-OEM-600amp
- 2 Undervoltage Relays GE-121AV54E1A
- 2 Control Switch
- 4 Indicating Lights

Transformer

- 1 FPE Dry Type Class AA/FA-30 1000/1333 KVA Transformer 13200-208Y/120

Low Voltage Section

- 1 Watthour meter
- 1 Voltmeter and Control Switch
- 1 Ammeter Control Switch and CTs
- 1 Power Circuit Breaker – Electrically operated FPE 100H-1 4000 amp

Molded Case Circuit Breakers

- 1 125A, 65,000 Amps I.C. @ 240 volts
- 1 150A, 65,000 Amps I.C. @ 240 volts
- 1 250A, 65,000 Amps I.C. @ 240 volts
- 6 300A, 65,000 Amps I.C. @ 240 volts
- 2 350A, 65,000 Amps I.C. @ 240 volts
- 2 400A, 65,000 Amps I.C. @ 240 volts

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

- 2 500A, 65,000 Amps I.C. @ 240 volts
- 2 600A, 65,000 Amps I.C. @ 240 volts
- 1 1000A, 65,000 Amps I.C. @ 240 volts

3.7.2.3.9 SUBSTATION S3B

15KV Equipment – Same as S2A

- 2 15KV switches motor operated
- 2 Undervoltage Relays 6E121AV54E1A
- 2 Control switch
- 4 Indicating lights

Transformer

- 1 FPE Dry Type Class AA/FA-30, 1000/1333 KVA Transformer, 13200 – 208Y/120

Low Voltage Section

- 1 Watthour meters
- 1 Voltmeter and Control Switch
- 1 Ammeter Control Switch and Cts

Power Circuit Breakers

- 1 FPE 100H-1-4000 amp – Electrically operated 208/120V Control

Molded Case Circuit Breakers

- 1 1000A, 65,000 Amps I.C. @ 240 volts
- 3 300A, 65,000 Amps I.C. @ 240 volts
- 3 400A, 65,000 Amps I.C. @ 240 volts
- 2 350A, 65,000 Amps I.C. @ 240 volts
- 1 600A, 65,000 Amps I.C. @ 240 volts
- 2 800A, 65,000 Amps I.C. @ 240 volts
- 1 175A, 65,000 Amps I.C. @ 240 volts
- 4 500, 65,000 Amps I.C. @ 240 volts

3.7.2.3.10 SUBSTATION S4B

15KV Equipment

- 2 15KV Motor Operated Switches GE Type 100E-1-OEM-600 amp
- 2 Undervoltage Relays GE Type 1214V54E1A
- 2 Control Switch
- 4 Indicating Lights

Transformer

- 1 FPE Dry Type Class AA/FA-30, 1000/1333 KVA Transformer, 13200-208Y/120

Low Voltage Section

- 1 Watthour Meter
- 1 Voltmeter and Control Switch
- 1 Ammeter Control Switch and Cts
- 1 Transformer Temperature Control

Power Circuit Breakers

- 1 FPE 100H-1-4000 amp – electrically operated

Molded Case Circuit Breakers

- 1 800A, 65,000 Amps I.C. @ 240 volts

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

- 1 700A, 65,000 Amps I.C. @ 240 volts
- 1 600A, 65,000 Amps I.C. @ 240 volts
- 3 500A, 65,000 Amps I.C. @ 240 volts
- 2 400A, 65,000 Amps I.C. @ 240 volts
- 2 300A, 65,000 Amps I.C. @ 240 volts
- 1 175A, 65,000 Amps I.C. @ 240 volts
- 1 150A, 65,000 Amps I.C. @ 240 volts
- 1 500A, 65,000 Amps I.C. @ 240 volts

3.7.2.3.11 SUBSTATION BBC

15 KV Equipment

- 2 15KV Fused switches – Westinghouse 13.2KV WLI 600A

Transformer

- 2 2000/2300 KVA – 13200)-480Y/277 Cutler-Hammer Silicone Filled Class AA/FA Gauges: Temp. Level 480/277 Volt Equipment

Circuit Breakers

- 3 Cutler-Hammer Circuit Breaker Type DS632 3200A (Main/Tie/Main)
- 6 circuit breaker indicator lamps (3 each of Red and Green for MTM)
- 19 Cutler-Hammer Circuit Breakers Type DS416 6-600A 12-400A 1-200A

Relay and Metering

- 22 Digitrip RMS810
- 3 IQ Data Plus II
- 1 Westinghouse Assemblies Electronic Monitor II

3.7.2.3.12 SUBSTATION S4A

15KV Equipment

- 2 15KV Motor Operated Switches GE Type 100E-1-OEM-600 amp
- 2 Undervoltage Relays GE 121AV54E1A
- 2 Control Switch
- 4 Indicating Lights

Transformer

- 1 FPE Dry Type Class AA/FA-30 1000/1333 KVA Transformer 13200 – 208Y/120
- 1 10KVA 13,200 – 120V Oil-O/A Control Transformer

Low Voltage Section

- 1 Watthour Meters
- 1 Volt Meter & Control Switch
- 1 Ammeter Control Switch & CTS

Power Circuit Breakers

- 1 FPE 100H-1-4000 Amp

Molded Case Circuit Breakers

- 2 150A, 65,000 Amps @ 240 volts
- 5 300A, 65,000 Amps @ 240 volts
- 2 400A, 65,000 Amps @ 240 volts
- 1 500A, 65,000 Amps @ 240 volts

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

- 2 600A, 65,000 Amps @ 240 volts
- 2 700A, 65,000 Amps @ 240 volts
- 1 800A, 65,000 Amps @ 240 volts

3.7.2.3.13 SUBSTATION ETBB

5 KV Equipment

- 1 5KV Manual Primary Selector Switch
- 1 5KV Air Load Break Switch
- 1 5KV Auto Transfer Switch

Transformer

- 1 225KVA 4160) – 208Y/120 Transformer 208Y/120 Volt Equipment

Circuit Breakers

- 1 Molded Case Circuit Breaker 800A @ 240V
- 6 Siemens Circuit Breakers; LSIG 2-400A, 2-300A, 2-200A

Relay and Metering

- 1 Overcurrent Relay GE121AC25
- 1 Volt Meter, Analog with 1,2,3 N Selector Switch
- 1 Ampere Meter, Analog with 1,2,3 N Selector Switch

3.7.2.3.14 SUBSTATION ETBC

5 KV Equipment

- 1 5KV Manual Primary Selector Switch
- 1 5KV Air Load Break Switch
- 1 5KV Auto Transfer Switch

Transformer

- 1 225KVA 4160) – 208Y/120 Transformer 208Y/120 Volt Equipment

Circuit Breakers

- 1 Molded Case Circuit Breaker 800A @ 240V
- 7 Siemens Circuit Breakers; LSIG 2-400A, 2-300A, 3-200A

Relay and Metering

- 1 Overcurrent Relay GE121AC25
- 1 Volt Meter, Analog with 1,2,3 N Selector Switch
- 1 Ampere Meter, Analog with 1,2,3 N Selector Switch

3.7.2.3.15 SUBSTATION ETBE

5 KV Equipment

- 1 5KV Manual Primary Selector Switch
- 1 5KV Air Load Break Switch
- 1 5KV Auto Transfer Switch

Transformer

- 1 300KVA 4160) –480Y/277 Transformer 480Y/277 Volt Equipment

Circuit Breakers

- 1 Molded Case Circuit Breaker 800A
- 6 Siemens Circuit Breakers; LSIG 4-400A, 4-200A

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Relay and Metering

- 1 Overcurrent Relay GE121AC25
- 1 Volt Meter, Analog with 1,2,3 N Selector Switch
- 1 Ampere Meter, Analog with 1,2,3 N Selector Switch

3.7.2.3.16 **SUBSTATION ETBD-1**

5KV Equipment

- 1 5KV Manual Primary Selector Switch
- 1 5KV Air Load Break Switch
- 1 5KV Auto Transfer Switch

Transformer

- 1 G.E. Dry Type 225KVA Transformer 4160 – 480Y/277V, 3 phase

Low Voltage Section

- 1 Overcurrent Relay GE121AC25
- 1 Volt Meter, Control Switch and PTs
- 1 Ammeter, Control Switch & CTs

Molded Case Circuit Breakers

- 1 400A 14,000 amps I.C. @ 480 volts

Low Voltage Switches

- 3 200A 600VAC
- 1 100A 600VAC

3.7.2.3.17 **SUBSTATION ETBD-2**

5KV Equipment

- 1 5KV Manual Primary Selector Switch
- 1 5KV Air Load Break Switch
- 1 5KV Auto Transfer Switch

Transformer

- 1 G.E. Dry Type 225KVA Transformer 4160 – 480Y/277v, 3 phase

Low Voltage Section

- 1 Overcurrent and Relay GE121AC25
- 1 Volt Meter and Control Switch
- 1 Ammeter, Control Switch & CTs

Molded Case Circuit Breakers

- 1 400A 14,000 amps I.C. @ 480 volts

Low Voltage Air Switches

- 1 400A 240VAC
- 2 200A 240VAC
- 5 100A 240VAC
- 1 60A 240VAC

3.7.2.3.18 **SUBSTATION ECUB**

5KV Equipment

- 1 5KV Manual Primary Selector Switch
- 1 5KV Air Load Break Switch
- 1 5KV Auto Transfer Switch

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Transformer

- 1 G.E. Dry Type 112.5KVA Transformer 4160 – 208Y/120V, 3 phase

Low Voltage Section

- 1 Overcurrent Relay GE121AC25
- 1 Volt Meter and Control Switch
- 1 Ammeter, Control Switch & CTs

Molded Case Circuit Breakers

- 1 400A 10,000 amperes 40VAC

Low Voltage Air Switches

- 3 200A 240VAC
- 4 100A 240VAC

3.7.2.3.19 SUBSTATION TBA

15 KV Equipment

- 2 15KV Fused switches – Siemens Interrupter Switch Type QB 600A

Transformer

- 2 1000/1333 KVA – 13200)-480Y/277 International Transformer Corporation; Type HV15HTUL; Class AA/FA;

480/277 Volt Equipment

- 1 Switch Gear – Siemens

Circuit Breakers

- 3 Siemens Low Voltage Power Circuit Breaker; Type RL; 1600A
- 7 Siemens Low Voltage Power Circuit Breaker; Type RL;

Relay and Metering

- 4 Device 27 Undervoltage Relay
- 3 Volt Meter; Analog with 1,2,3 N Selector Switch
- 3 Ampere Meter; Analog with 1,2,3 N Selector Switch
- 10 Siemens Static Trip III RMS-TSIG-T Relay
- 4 Device 27 Basler – Undervoltage Relay; Model BE1-27
- 2 Device 52 GE – Watthour Meters; Model DSM-64
- 7 Ampere Meters, Analog with 1,2,3 N Selector Switch

3.7.2.3.20 SUBSTATION FCA

15 KV Equipment

- 2 15KV Fused switches – Siemens Interrupter Switch Type QB 600A

Transformer

- (2) 2000/2667 KVA – 13200)-480Y/277 ABB; Class AA/FA;

480/277 Volt Equipment

Switch Gear – Siemens

Circuit Breakers

- 3 Siemens Low Voltage Power Circuit Breaker; Type RL; 1600A
- 7 Siemens Low Voltage Power Circuit Breaker; Type RL;

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Relay and Metering

- 3 Volt Meter; Analog with 1,2,3 N Selector Switch
- 3 Ampere Meter; Analog with 1,2,3 N Selector Switch
- 10 Siemens Static Trip III RMS-TSIG-T Relay
- 4 Device 27 Basler – Undervoltage Relay; Model BE1-27
- 2 Device 52 GE – Watthour Meters; Model DSM-64
- 7 Ampere Meters, Analog with 1,2,3 N Selector Switch

3.7.2.3.21 SUBSTATION TV-1

15 KV Equipment

- 1 Load Break Switch (Oil Filled) Powell-ESCO Co.; Style MA-K
- 2 15KV Fused switches – Westinghouse 13.2KV WLI 600A

Transformer

- 2 500/665 KVA – 13200)-208Y/120 Westinghouse; Class AA/FA; Dry Type1

208Y/120 Volt Equipment

Switch Gear

- 1 Westinghouse Pow R Line C Switchboard; 2000A Supply/Section Rating; 50K RMS Sym. Ampere @ 240V

Circuit Breakers

- 3 Westinghouse SPB 100 Low Voltage Power Circuit Breakers 2000A
- 8 Branch Circuit Breakers (Unknown Current/Make)

Relay and Metering

- 3 RMS 800
- 3 IQ Data Plus II (Main/Tie/Main)

3.7.2.3.22 SUBSTATION TV-2

15 KV Equipment

- 1 Load Break Switch (Oil Filled) Powell-ESCO Co.; Style MA-K
- 2 15KV Fused switches – Square D 13.2KV HVL Load Current Interrupter Switch 600A

Transformer

- 2 2000/2667 KVA – 13200)-480Y/277 Square D Power Dry Insulated VPI Dry Type Transformer

480/277 Volt Equipment

Switch Gear

- 1 Square D Switchboard

Circuit Breakers

- 3 Square D SE Electronic Trip Circuit Breakers 3200A
- 15 Square D Circuit Breakers 5-800A, 9-600A, 1-640A

Relay and Metering

- 2 I Q Data Plus II

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.7.2.3.23 SUBSTATION TV-3

15 KV Equipment

- 1 Load Break Switch (Oil Filled) Powell-ESCO Co.; Style MA-K
- 2 15KV Fused switches – Westinghouse 13.2KV WLI 600A

Transformer

- 2 500/665 KVA – 13200)-208Y/120 Westinghouse; Class AA/FA; Dry Type1

208Y/120 Volt Equipment

Switch Gear

- 1 Westinghouse Pow R Line C Switchboard; 2000A Supply/Section Rating; 50K RMS Sym. Ampere @ 240V

Circuit Breakers

- 3 Westinghouse SPB 100 Low Voltage Power Circuit Breakers 2000A
- 6 Branch Circuit Breakers (Unknown Current/Make)

Relay and Metering

- 3 RMS 800
- 3 IQ Data Plus II (Main/Tie/Main)

3.7.2.3.24 SUBSTATION TV-3.2

15 KV Equipment

- 1 Line1/Line 2 Select Switch
- 1 15KV Fused Switch

Transformer

- 1 300KVA 13200)-480Y/277V Transformer

208Y/120 Volt Equipment

Switch Gear

- 1 Siemens PSC Switchboard

Circuit Breakers

- 1 Secondary Main 500A

Relay and Metering

- (1) Watthour Meter GE; Model DSM-65
- (1) Volt Meter; Analog with 1,2,3 N Selector Switch
- (1) Ampere Meter; Analog with 1,2,3 N Selector Switch

3.7.2.3.25 SUBSTATION TV-4

15 KV Equipment

- 1 Load Break Switch (Oil Filled) Powell-ESCO Co.; Style MA-K
- 2 15KV Fused switches – Westinghouse 13.2KV WLI 600A

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Transformer

- 1 500/665 KVA – 13200)-208Y/120 Westinghouse; Class AA/FA; Dry Type1

208Y/120 Volt Equipment

Switch Gear

- 1 Westinghouse Pow R Line C Switchboard; 2000A Supply/Section Rating; 50K RMS Sym. Ampere @ 240V

Circuit Breakers

- 3 Westinghouse SPB 100 Low Voltage Power Circuit Breakers 2000A
- 6 Branch Circuit Breakers (Unknown Current/Make)

Relay and Metering

- 3 RMS 800
- 3 IQ Data Plus II (Main/Tie/Main)

3.7.2.3.26 **SUBSTATION TV-5**

15 KV Equipment

- 2 15KV Fused switches – Westinghouse 13.2KV WLI 600A

Transformer

- (1) 500KVA 13200) -208Y/120V Westinghouse Dry Type Transformer; Class AA/FA

208Y/120 Volt Equipment

Switch Gear

- 1 Westinghouse Pow R Line Switchboard

Circuit Breakers

- 3 Westinghouse System Pow R Breakers SPM 100 2000A
- 9 Westinghouse Branch Breakers with ground fault protection. 1-1400A, 8-600A

Relay and Metering

- 3 RMS 800
- 2 I Q Data Plus II

3.7.2.3.27 **SUBSTATION TV-6**

15 KV Equipment

- 1 Load Break Switch (Oil Filled) Powell-ESCO Co.; Style ST1T2
- 2 15KV Fused switches – Westinghouse 13.2KV WLI 600A

Transformer

- 2 500KVA 13200) -208Y/120V Westinghouse Dry Type Transformer

208Y/120 Volt Equipment

Switch Gear

- 1 Westinghouse Pow R Line C Switchboard; 2000A

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Circuit Breakers

- 3 Westinghouse System Pow R Breakers SPM 100 2000A
- 6 Westinghouse Branch Breakers with ground fault protection. 600A

Relay and Metering

- 3 RMS 800
- 2 I Q Data Plus II

3.7.2.3.28 **SUBSTATION ETBA**

5 KV Equipment

4.16 KV Switches

- 2 5KV Fused switches – Siemens Switch 600A
- 1 Primary Select Control Interlock of the main fused switches

Transformer

- 1 225 KVA – 4160)-480Y/277 ITE Power Transformer; Type HV05HTUL;

480/277 Volt Equipment

Switch Gear

- 1 Siemens I-T-E Switchboard Type PSC

Circuit Breakers

- 1 Siemens Low Voltage Power Circuit Breaker 400A
- 8 Low Voltage Power Circuit Breakers; 1-300A, 4-60A, 2-50A, 1-20A

Relay and Metering

- 1 I_T_E Sensitrip III Solid State Relay (Secondary Main)
- 1 Volt Meter; Analog with 1,2,3 N Selector Switch
- 1 Ampere Meter; Analog with 1,2,3 N Selector Switch
- 1 Device 52 GE – Watthour Meters; Model DSM-65

3.7.3.29 **SUBSTATION EFCA**

5 KV Equipment

4.16 KV Switches

- 2 5KV Fused switches – Siemens Switch 600A
- 1 Primary Select Control Interlock of the main fused switches

Transformer

- 1 225 KVA – 4160)-480Y/277 ITE Power Transformer; Type HV05HTUL;

480/277 Volt Equipment

Switch Gear

- 1 Siemens I-T-E Switchboard Type RC III

Circuit Breakers

- 1 Secondary Main 400A
- 8 Low Voltage Power Circuit Breakers; 1-200A, 4-60A, 3-45A, 2-25A, 1-15A

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Relay and Metering

- 1 Volt Meter; Analog with 1,2,3 N Selector Switch
- 1 Ampere Meter; Analog with 1,2,3 N Selector Switch
- 1 Device 52 GE – Watthour Meters; Model DSM-65

3.7.2.3.30 **SUBSTATION EBBC**

5 KV Equipment

- 2 5KV Fused switches – Westinghouse 4.16KV WLI 600A

Transformer

- 1 750/852 KVA – 4160)-480Y/277 Cutler-Hammer; Silicone Filled; Class AA/FA; Gauges: Temp., Level

480/277 Volt Equipment

Circuit Breakers

- 13 Cutler-Hammer Circuit Breakers Type DS416; 3-1200A 1-800A 7-600A 2-400A
- 6 Circuit breaker indicator lamps (3 each of Red and Green for Main/Tie/Main)

Relay and Metering

- 13 Digitrip RMS810
- 3 IQ Data Plus II
- 1 Westinghouse Assemblies Electronic Monitor II

3.7.2.3.31 **SUBSTATION STP**

15 KV Equipment

- 1 15KV Fused switches – GE Model S-9727, B2484

Transformer

- 1 2000/2666 KVA – 13200Δ-480Y/277 GE; Class AA/FA; TYPE Vent

480/277 Volt Equipment

Circuit Breakers

- 3 GE Low Voltage Power Circuit Breaker Type AKR-7D-100; (Main/Tie/Main) 1600A
- 6 Circuit breaker indicator lamps (3 each of Red and Green for MTM)
- 10 GE Low Voltage Power Circuit Breaker Type AKR-7D-100; 1-1600A, 3-800A, 2-500A, 2-400A, 2-300A

Relay and Metering

- 13 MicroVerse Trip Plus Units
- 1 Device 43 Loca;/Remote Selector
- 2 Power Measurement Ltd. 3710 ACM
- 2 Device 27-2 GE AC Undervoltage Relay
- 2 Device 60-2 GE Unbalance Relay

3.7.2.3.32 **SUBSTATION 1C1-N1 (TERMINAL A West)**

Still Supported by GE Mfg.

15 KV Equipment

- 1 15KV Fused switches – GE Model S-9727, B2484

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Transformer

2 2500/3333 KVA – 13200Δ 480Y/277 General Electric Dry
Type Class AA/FFA 115°C Rise Gauges: Temp., Level

480/277 Volt Equipment

Circuit Breakers

3 GE WavePro Circuit Breaker Type 3000A (Main/Tie/Main)
1 Circuit Breaker Indicator Lamp
24 GE WavePro Circuit Breaker Type 1-600A 23-800A

Relay and Metering

3.7.2.3.33 **SUBSTATION 1T1-N3 (TERMINAL A West)**
Still Supported by GE Mfg.

15 KV Equipment

1 15KV Fused switches – GE Model S-9727, B2484

Transformer

2 2500/3333 KVA – 13200 Δ 480Y/277 General Electric Dry
Type Class AA/FFA 115°C Rise Gauges: Temp., Level

480/277 Volt Equipment

Circuit Breakers

3 GE WavePro Circuit Breaker Type 3000A (Main/Tie/Main)
1 Circuit Breaker Indication Lamp
20 GE WavePro Circuit Breaker Type 1-600A 19-800A

Relay and Metering

3.7.2.3.34 **SUBSTATION 1T1-N5 (TERMINAL A West)**
Still Supported by GE Mfg.

15 KV Equipment

2 15KV Fused switches – 600A

Transformer

2 500/3333 KVA – 13200 Δ 480Y/277 General Electric Dry
Type Class AA/FFA 115°C Rise Gauges: Temp., Level

480/277 Volt Equipment

Circuit Breakers

3 GE WavePro Circuit Breaker Type 1000A (Main/Tie/Main)
1 Circuit Breaker Indicator Lamp
16 GE WavePro Circuit Breaker Type 18-100A 1-800A

Relay and Metering

3.7.2.3.35 **SUBSTATION 1T4-N6 (TERMINAL A West)**
Still Supported by GE Mfg.

15 KV Equipment

2 15 KV Fused Switches – 600A

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Transformer

- 2 2500/3333 KVA – 13200 Δ 480Y/277 General Electric Dry Type Class AA/FFA 115°C Rise Gauges: Temp., Level

480/277 Volt Equipment

Circuit Breakers

- 3 GE WavePro Circuit Breaker Type 3000A (Main/Tie/Main)
- 1 Circuit Breaker Indicator Lamp
- 21 GE WavePro Circuit Breaker Type 1-600A 23-800A

Relay and Metering

3.7.2.3.36 **SUBSTATION 1C1-E2 (TERMINAL A West)**

Still Supported by GE Mfg.

15 KV Equipment

- 2 5 KV Fused Switches – 600A

Transformer

- 2 750/1000 KVA – 4160 Δ 480Y/277 General Electric Dry Type Class AA/FFA 115°C Rise Gauges: Temp., Level

480/277 Volt Equipment

Circuit Breakers

- 3 GE Insulated Circuit Breaker Type 100A (Main/Tie/Main)
- 1 Circuit Breaker Indicator Lamp
- 16 GE Molded Case Circuit Breaker Type 15-100A 1-200A

Relay and Metering

3.7.2.3.37 **SUBSTATION 1T1-E4 (TERMINAL A West)**

Still Supported by GE Mfg.

15 KV Equipment

- 2 5KV Fused Switches – 600A

Transformer

- 2 750/1000 KVA – 4160 Δ 480Y/277 General Electric Dry Type Class AA/FFA 115°C Rise Gauges: Temp., Level

480/277 Volt Equipment

Circuit Breakers

- 3 GE Insulated Circuit Breaker Type 1000A (Main/Tie/Main)
- 1 Circuit Breaker Indicator Lamp
- 19 GE Molded Case Circuit Breaker Type 15-100A 1-200A

3.7.2.3.38 **SUBSTATION S4C (TERMINAL D HAMMERHEAD)**

15KV Equipment

- 16 Cutler Hammer Magnum Draw out Breakers with Digitrip Trip Units
- 2 Cutler Hammer 15 KV, Load Break Disconnects
- 1 Auto Transfer System

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Transformer

- 2 Cutler Hammer Dry Type 2000KVA Transformer

Relay and Metering

- 2 Power Meters
 - Device 43
 - Device 86
 - Device 27
 - Device 59
 - Tuss Protection
 - Power Analyzer
 - CTs, PTs & CPTs, Las
- 2 UV Relays

3.7.2.3.39 SUBSTATION TBF (TERMINAL F)

15KV Equipment

- 14 Cutler Hammer Magnum Draw out Breakers with Digitrip Trip Units
- 2 Cutler Hammer 15 KV, 600amp Load Break Disconnects
- 1 Auto Transfer System

Transformer

- 2 Cutler Hammer Dry Type 2000KVA Transformer 13200 - 480Y/277v, 3 phase

Relay and Metering

- 2 Power Meters
 - Device 43
 - Device 86
 - Device 27
 - Device 59
 - Phase Sequence/Loss of Phase
 - TU SS Protection
 - CTs, PTs & CPTs, Las

3.7.2.3.40 SUBSTATION ETBF (TERMINAL F)

5KV Equipment

- 3 Cutler Hammer SPB-100 Breaker with Digitrip Trip Units
- 2 Cutler Hammer 5000V, 600AMP Load Break Disconnects
- 1 5KV Auto Transfer System

Transformer

- 2 Cutler Hammer Dry Type 500KVA Transformer 41600 – 480Y/277v, 3 phase

Circuit Breakers

- 13 Molded Case Breakers

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Relay and Metering

- 2 Power Meters
 - Device 43
 - Device 86
 - Device 27
 - Device 59
- Phase Sequence/Loss of Phase
- TU SS Protection
- CTs, PTs & CPTs, Las

3.7.2.3.41 **SUBSTATION FLV-3**

5KV Equipment

- 1 S&C 600A, 5 KV Load Break Disconnect
- 4 Allen Bradley Contactors 5KV
- 3 Westinghouse SPB 800 Frame Digitrip RMS-800 Trip Units
- 1 Auto Transfer System
- 2 Power Measurements 3710 ACM Meters

Circuit Breakers

- 10 Molded Case Breakers

Relay and Metering

- TU SS Protection
- IQ Power Analyzer
- CTs, PTs & CPTs, Las

3.7.2.3.42 **SUBSTATION FLV-4**

5KV Equipment

- 3 Insulated Case Breaker Bolt in Type SPB Westinghouse 800AMP Frame Digitrip RMS-810 Trip Units
- 1 Auto Transfer System

Transformer

- 2 500KVA Oil Filled Transformers

Circuit Breakers

- 10 Molded Case Breakers

Relay and Metering

- 2 UV Relays
- TU SS Protection
- IQ Power Analyzer
- CTs, PTs & CPTs, Las

3.7.2.4 Medium Voltage Switches

- 3.7.2.4.1 Oil Filled Automatic Transfer Switch. Powell ESCO Co. Oil Filled Load Break Switch Style C800, 600A

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Motor Operated Automatic Transfer Mechanism.

3.7.2.4.1.1 1 – Field Lighting Equipment Room.

3.7.2.4.1.2 2 – Field Lighting Vault 3.

3.7.2.4.1.3 5 – Substations TV-1,2,3,4,6.

3.7.2.4.1.4 1 – Field Lighting Vault 2.

3.7.2.4.2 Site Distribution Exterior Loop Switch (Air and Liquid Filled)

3.7.2.4.2.1 Main Terminal Substation: 4 – 15 KV Loop Switches.

3.7.2.4.2.2 Satellite Thermal Plant: 2 – 15KV Loop Switches.

3.7.2.4.2.3 Terminal A West: 4 – 15KV Loop Switches.

3.7.2.4.2.4 Terminal F: 2 – 15KV Loop Switches.

3.7.2.4.3 Medium Voltage Contactors

3.7.2.4.3.1 Field Lighting Equipment Room.
3– Allen Bradley 5KV Circuit Breakers,
Remotely Operated

3.7.2.4.4 Medium Voltage Air Switches; Metal Enclosed Switchgear Fused; High Voltage Switch

3.7.2.4.4.1 Field Lighting Equipment Room: 3 – 4.16KV 600A Switches

3.7.2.4.4.2 Field Lighting Vault 3: 2 – 4.16KV 600A Switches

3.7.2.4.4.3 Bernard Henry Substation: 3 – 15KV 600A Switches

3.7.2.4.4.4 Tunnel B: 1 – 15KV 600A Switch.

3.7.3 PERSONNEL REQUIREMENTS

3.7.1.1 This work shall be performed by personnel thoroughly familiar with the equipment, testing, and adjusting and safety standards with a minimum of five years experience. Critical response time will be required.

3.7.2 RECORDS/DOCUMENTATION

3.7.2.1 The Contractor will be required to furnish written records of all inspections, test results and repairs to the switchgear.

3.8 HIGH VOLTAGE CABLE REPAIR

3.8.1 GENERAL DESCRIPTION

3.8.1.1 The Contractor will be required to furnish all labor, tools, transportation, services, supervision, materials and equipment as necessary to locate, repair or replace underground cable, aerial wiring, and associated splices and terminations as required throughout the Philadelphia International Airport and Philadelphia Northeast Airport.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.8.1 TECHNICAL DESCRIPTION

3.8.1.1 The Contractor will be responsible for investigating and repairing faults of 5 KV and 15 KV cables, and repairing or replacing splices and termination to the same.

3.8.2 PERSONNEL REQUIREMENTS

3.8.2.1 Personnel shall be certified for repairing 15 KV and 5 KV cables with a minimum of five years experience. There shall be a response time of one hour for high voltage cable repair. Contractor shall have sufficient equipment and personnel to perform within the scope of the contract.

3.8.3 RECORDS/DOCUMENTATION

3.8.3.1 Detailed written reports including test results and readings, estimate of repairs, estimate of time and materials shall be submitted to the Division of Aviation for each service call.

3.9 FIRE ALARM AND DETECTION SYSTEM

3.9.1 GENERAL DESCRIPTION

3.9.1.1 The work shall include but not be limited to furnishing labor, equipment, materials, apparatus, supplies, and supervision necessary to provide maintenance and inspection services for the Fire Alarm and Detection System throughout Philadelphia International Airport. All work shall be in accordance with NFPA 72, 1999, National Fire Alarm Code. Annual certification of the system shall be performed in accordance with the City of Philadelphia Fire Prevention Code and the requirements of Tinicum Township as applicable.

3.9.2 TECHNICAL DESCRIPTION

3.9.2.1 The Fire Alarm and Detection System at the Philadelphia International Airport is a networked system comprised of 45 addressable nodes throughout the campus. These nodes are connected via various Class 'A' copper and fiber network loops and report back to the main fire alarm control room located in Rm. T-15, in Terminal C. The system is monitored via a graphic fire control system, which is located in the communications also located in Terminal C.

3.9.2.2 Field wiring (signaling line circuits, strobe circuits, speaker circuits, etc.) are wired Class 'B', with the exception of the majority of the 'A' East complex which houses the AutoPlex control system – currently configured as Class 'A'. Field devices include manual pull stations, smoke detectors, heat detectors, duct smoke detectors, contact monitor modules, control modules or addressable relays, strobes, speaker strobe combination, and horn strobe combination. Each node or Data Gathering Panel (DGP), located within the airport terminals A-West through F, accomplishes notification through voice evacuation. There are some panels located throughout the campus, which notify occupants via strobe and horn strobe combination. The Fire Alarm and Detection system interfaces with the following systems (monitor and control functions): tenant fire alarm panels, fire suppression systems, baggage handling systems, smoke control and mechanical HVAC systems, elevator and escalators, security and compartmentation door control.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.9.2.2.1 Location of Nodes

Node	Area	Panel Type	Initiating Point Total
1	Graphic Annunciator Node	TFX-800	n/a
2	“D” Concourse	TFX-800	300
3	“D” Terminal	TFX-500	98
4	“D” Baggage	TFX-500	109
5	“D” Garage	TFX-500	139
6	Engine 78	TFX-800	n/a
7	“E” Concourse	TFX-800	286
8	“E” Terminal	TFX-500	145
9	“E” Baggage	TFX-800	138
10	Firegraph	-	n/a
11	“B” Terminal 1	TFX-500	131
12	“B” Terminal 2	TFX-500	112
13	“B” Terminal 3	TFX-500	134
14	“B” Concourse	TFX-800	473
15	C.U.B.	TFX-500	49
16	“C” Baggage	TFX-500	112
17	“C” Garage	TFX-500	143
18	“B” Baggage	TFX-800	264
19	“C” Concourse	TFX-800	417
20	“C” Terminal 1	TFX-500	149
21	“C” Terminal 2	TFX-500	86
22	“A” East Concourse	TFX-800	568
23	“A” East Baggage	TFX-800	238
24	Lighting Vault #4	TFX-500	5
25	Engine 78 – Hub	-	n/a
26	“F” Concourse	TFX-800	252
27	“F” Terminal	TFX-800	180
28	“Term-A” West Terminal East	TFX-800	455
29	“Term-A” West Terminal Mezzanine	TFX-800	490
30	“Term-A” West Terminal West	TFX-800	500
31	“Term-A west” Concourse	TFX-800	342
32	“Term-A” West Football #1	TFX-800	359
33	“Term-A” West Football #2	TFX-800	n/a
34	Ramp Control Tower	TFX-500	105
35	Firegraph #2	-	n/a
36	“Term-A” West Concourse (Flr 1)	TFX-800	316
37	Runway 8-26 Tunnel	TFX-500	24
38	ARFF Training Facility	TFX-500	29
39	Garage Terminal “1”	TFX-500	77
40	Garage E/F	TFX-800	198
41	Deicing Facility	TFX-500	20
42	USAir Express Hanger	TFX-400	50
43	“Term-A” West DRU	TFX-800	n/a
44	“Term-A” West USAir Club- Mezz. #2	TFX-800	70
45	Carpenter’s Shop	TFX-800	13
			total

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

			7,576
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3.9.3 PERSONNEL REQUIREMENTS

3.9.3.1 The contractor must have skilled personnel to achieve the Airport's objective in reducing and eliminating any needless losses to the Division of Aviation, our employees and the public caused by decreased efficiency, work interruptions, equipment breakdowns, or property damage. Service Personnel shall hold a level 1 certification, minimum, by the National Institute for Certification in Engineering

3.10 FENCING AND GUIDERAILS

3.10.1 GENERAL DESCRIPTION

3.10.1.1 The Contractor will be required to furnish all labor, tools, transportation, services, supervision, materials and equipment as necessary to provide inspection, installation, repairs and/or related materials for chain link fencing, gates and guiderails at the Philadelphia International Airport and Philadelphia Northeast Airport.

3.10.2 TECHNICAL DESCRIPTION

3.10.2.1 This contract will involve the repair and replacement of chain link fencing as described by Federal Aviation Administration Advisory Circular No. 150/5370-10A, change 13.

3.10.2.2 This contract will also involve repair and replacement of guiderails according to Pennsylvania Department of Transportation Publication 408 and the Roadway Construction Standards.

3.10.3 PERSONNEL REQUIREMENTS

3.10.3.1 Personnel shall respond to fencing requirements within two hours seven days a week.

3.10.4 RECORDS/DOCUMENTATION

3.10.4.1 The Contractor shall maintain records of wages and benefits paid or provided to each employee for at least two years following the City's final payment under this contract. Such reports shall be available for inspection and copying by authorized representatives of the City at all reasonable times. Written reports of all fencing repairs including materials, labor and insurance information shall be presented to DOA.

3.11 BIRD CONTROL

3.11.1 GENERAL DESCRIPTION

3.11.1.1 The Contractor will be required to furnish all labor, tools, transportation, services, supervision, materials and equipment as necessary to control birds and clean up at the Philadelphia International Airport and the Philadelphia Northeast Airport. The Contractor shall use the best available technology without killing roosting, nesting, migrating or feeding birds from the Philadelphia International Airport and the Philadelphia Northeast Airport. The Contractor shall not use any chemical or device that may cause injury or discomfort to the traveling public.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.11.12 TECHNICAL DESCRIPTION

3.11.12.1 The areas to be treated are all roof areas, bus areas behind terminals, underneath bridge areas, beam structures, pipes, signs, eaves, train platforms, any other areas as required in the following locations:

- 3.11.12.1.1 Terminal "A West" Arrival
- 3.11.12.1.2 Terminal "A West" Departure
- 3.11.12.1.3 Terminal "A East" Arrival.
- 3.11.12.1.4 Terminal "A East" Departure.
- 3.11.12.1.5 Terminal "A East" Train Platform.
- 3.11.12.1.6 Terminal "B" Arrival.
- 3.11.12.1.7 Terminal "B" Departure.
- 3.11.12.1.8 Terminal "B" Train Platform.
- 3.11.12.1.9 Terminal "C" Arrival.
- 3.11.12.1.10 Terminal "C" Departure.
- 3.11.12.1.11 Terminal "C" Train Platform.
- 3.11.12.1.12 Terminal "D" Arrival.
- 3.11.12.1.13 Terminal "D" Departure.
- 3.11.12.1.14 Terminal "D" Train Platform.
- 3.11.12.1.15 Terminal "E" Arrival.
- 3.11.12.1.16 Terminal "E" Departure.
- 3.11.12.1.17 Terminal "E" Train Platform.

3.11.13 PERSONNEL REQUIREMENTS

3.11.13.1 Personnel shall have a minimum of five (5) years documentable experience in bird control, and be capable of 2 hour response to emergency calls seven days a week. Personnel shall be licensed federally, statewide and locally.

3.11.14 RECORDS AND DOCUMENTATION

3.11.14.1 The Contractor shall keep written records of all work orders to submit to the Division of Aviation.

3.12 AIRFIELD SUPPORT SERVICES

3.12.1 GENERAL DESCRIPTION

3.12.1.1 The Contractor will be required to furnish all labor, tools, transportation, services, materials, equipment and supervision as necessary to perform runway rubber removal, pavement repairs well as eliminate obstructions, control airfield vegetation and otherwise support maintenance of (replace turf management on) Airport grounds and preventive and corrective maintenance of the Aircraft Rescue and Fire Fighting Training Facility (ARFFT).

3.12.2 TECHNICAL DESCRIPTION

3.12.2.1 This service will include but be limited to removing accumulated rubber deposits from designated areas of bituminous runway surfaces using high-pressure water and chemicals. Removing pavement markings and performing repairs of bituminous or concrete pavements. Additionally, grounds work services will include tree topping, grading, seeding, weed control, and related landscaping services.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.12.2.2 The planned preventative maintenance of the ARFFT Live Fire Trainer A-2000 and associated propane fuel supply and vaporizer system will include inspections and routine cleaning. On-call corrective maintenance support with 24 hour response during normal daytime business hours Monday through Friday, including all parts, materials, and labor to implement necessary repairs.

3.12.3 PERSONNEL REQUIREMENTS

3.12.3.1 The Contractor shall provide all labor necessary to properly operate and maintain equipment. The labor provided to properly operate and maintain equipment in the ARFFT Facility must be by an OEM trained technician. A supervisor or lead worker familiar with Airfield Operations and Communications must be present with the crew at all times.

3.12.4 RECORDS/DOCUMENTATION

3.12.4.1 The Contractor shall keep written records of all work orders to submit to the Division of Aviation.

3.13 BUILDING MOUNTED SIGNAGE

3.13.1 Specific System maintenance requirements will be detailed in Contract. Specifications to be incorporated in request for Bids.

3.14 GLASS & PLASTIC REPLACEMENT

3.14.1 GENERAL DESCRIPTION

3.14.1.1 The Contractor will be required to furnish all labor, tools, transportation, and services, to provide replacement glass, plastics, glazing services and framing when required, in and around the Terminal Buildings at the Philadelphia International Airport and Northeast Philadelphia Airport.

3.14.2 TECHNICAL DESCRIPTION

Types of glass included, not limited to:

- Clear, double strength "B".
- Clear, single strength "B".
- Polished plate, 1/4" thick.
- Bulletproof 1 13/16" thick.
- Florentine pattern, 1/8" thick.
- Safety, clear, 1/4" thick.
- Patterned or figured for partitions, 7/32" thick: Libbey Owen "Flatex" or "Louvrex".
- Mirror, clear, transparent, 1/4" thick
- Heat absorbing, blue-green tint, 1/4" thick: Pittsburgh Plate Glass "Salex".
- Heat absorbing, bronze tint, 1/4" thick: Pittsburgh Plate Glass "Solarbronze".
- Heat absorbing, gray tint, 1/4" thick: Pittsburgh Plate Glass "Solarbronze".
- Polished plate, tempered, 1/4" thick.
- Polished plate, tempered, 1/2" thick.
- Insulating, 1/2" thick (2 panes 1/8" polished plate with 1/4" air space).
- Insulating, 1" thick (2 panes 1/4" polished plate with 1/2" air space).
- Mirrors
- Types of plastic included:
- Acrylic, clear, masked, 1/8" thick: Plexiglass "G" grade.
- Acrylic, clear, masked, 1/4" thick: Plexiglass "G" grade.
- Acrylic, clear, masked, abrasion resistant 1/8" thick: Dupont Lucite SAR.
- Acrylic, clear, masked, abrasion resistant 1/4" thick: Dupont Lucite SAR.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

- Acrylic, opaque white masked, 1/8" thick: Plexiglass "G" grade.
- Vinyl sheet, laminated with treated steel wire mesh imbedded between sheets.
- Light transmission, minimum 75%; non-combustible, W/A flame spread rate of 25 as tested by UL, weather and corrosion resistant shatter proof, tensile strength of 8500 PSI, impact strength of 3.0 lb./inch 1/4" thick.
- Clear polycarbonate, unbreakable, 1/4" thick: Lexon.
- Clear polycarbonate, unbreakable, 1/4" thick: Tuffak by Rohm and Haas.
- Plastic sheeting (suitable for elevators) 1/8" X 48" X 96".

3.14.3 PERSONNEL REQUIREMENTS

3.14.3.1 Personnel shall be available to complete installations within 24 hours for all on-site inventory.

3.14.4 RECORDS/DOCUMENTATION

3.14.4.1 The Contractor will forward to the Division of Aviation all records of repairs.

3.15 INTERIOR COSMETIC REPAIRS & EXTERIOR FINISHES/ RESTORATION/ MAINTENANCE

3.15.1 GENERAL DESCRIPTION

3.15.1.1 The Contractor will be required to furnish all labor, tools, transportation, services, supervision, materials and equipment as necessary to provide repairs to interior and exterior floors, walls, soffits, ceilings and column enclosure finishes and furniture.

3.15.2 TECHNICAL DESCRIPTION

3.15.2.1 This contract will involve the periodic maintenance, which includes repair and replacement of terrazzo, sheet metal, masonry, fiberglass Composite, drywall and other floor, wall, and ceiling maintenance services at the Philadelphia International Airport and the Philadelphia Northeast Airport.

3.15.3 PERSONNEL REQUIREMENTS

3.15.3.1 Contractor will employ personnel with a minimum of three years experience in flooring, wall, soffit, column enclosure and ceiling repairs.

3.15.4 RECORDS/DOCUMENTATION

3.15.4.1 Contractor will submit written inspection reports monthly to the Division of Aviation.

3.16 AIRPORT EXHIBITIONS AND DECORATIONS

3.16.1 GENERAL DESCRIPTION

3.16.1.1 The Contractor will be required to furnish all labor, tools, transportation, services, supervision, materials and equipment as necessary to install, remove and store decorations and conduct a professional exhibit program in accordance with Division of Aviation requirements.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.16.2 TECHNICAL DESCRIPTION

3.16.2.1 Contractor will be responsible for the storage of all interior and exterior decorations. The Contractor shall furnish all electrical wiring and connections to the decorations. Contractor shall establish set up, take down and maintain various exhibits at the city Airports.

3.16.3 PERSONNEL REQUIREMENTS

3.16.3.1 Personnel shall be available to perform the specified work as outlined in contract specifications.

3.16.4 RECORDS/DOCUMENTATION

3.16.4.1 Written records of inventory replacement and exhibit programs shall be submitted to the Division of Aviation.

3.17 SPECIALIZED EQUIPMENT SERVICES

3.17.1 GENERAL DESCRIPTION

3.17.1.1 The work includes but is not limited to furnishing highway construction equipment, personnel lifts, fueling equipment, operators and supervision as required on an as needed basis.

3.17.2 TECHNICAL DESCRIPTION

3.17.2.1 The Contractor shall obtain and pay for all permits, licenses, fees and other charges required by the State, County and City Regulations.

3.17.2.2 Any period of time when equipment does not or cannot perform its assigned work shall be considered as "Downtime". As to any equipment that is inoperable, Contractor shall repair and return it to service within 24 hours or shall supply a replacement within the 24-hour period.

3.17.3 PERSONNEL REQUIREMENTS

3.17.3.1 Contractor may have his own supervisory and maintenance personnel on-site as needed. Equipment Operators must be fully trained on the correct and safe operation of the equipment. Operators of heavy and highway mobile equipment must have a Commercial Driver's License and participate in a Drug and Alcohol Testing Program.

3.17.4 RECORDS/DOCUMENTATION

3.17.4.1 Contractor will be required to maintain a complete set of time records of personnel assigned to work under this contract. Each record shall include the names and addresses of such personnel. Records shall be furnished to the City upon request.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.18 ROOFING

3.18.1 GENERAL REQUIREMENTS

3.18.1.1 The work includes but is not limited to furnishing labor, transportation, equipment, materials, supplies and supervision necessary to provide maintenance services to repair/restore/replace roofing throughout the Philadelphia Airport's System. A major portion of this work will involve leak management and scheduled housekeeping to reduce roof membrane punctures, clogged drains and gutters.

3.18.2 TECHNICAL DESCRIPTION

3.18.2.1 The majority of the Terminal Complex roofs are covered using Ethyl Propylene Diene Monomer (EPDM) material system. Other Airport roofs to be maintained are of various types and composition including but not limited to rolled roofing, build-up roofing, gravel and asphalt shingles. The Contractor shall be certified and experienced in repair and replacement techniques involving warranty work.

3.18.3 PERSONNEL REQUIREMENTS

3.18.3.1 The Contractor must use workman skilled in the trades involved in roofing work, which may include roofers, boilermakers, brick masons and various technicians. The Contractor must have personnel experienced in infrared scanning, asbestos core testing, roof tensile test and wind uplift test practices.

3.18.4 RECORDS/DOCUMENTATION

3.18.4.1 The Contractor will provide and execute a preventative maintenance program designed to meet roof warranty terms and conditions. The Contractor will be responsible for maintaining records and documents of completed repairs, PM's, test and inspections.

3.19 LANDSCAPING SERVICES

3.19.1 GENERAL DESCRIPTION

3.19.1.1 The Contractor will be required to furnish all labor, tools, transportation, services, supervision, materials and equipment as necessary to maintain trees, shrubs, ground covers, mulched beds and gravel beds, train platforms, and interior plants and trees at the Philadelphia International Airport and the Northeast Philadelphia Airport.

3.19.2 TECHNICAL DESCRIPTION

3.19.2.1 Contract will include pruning, weeding, re-mulching, reseeding, planting, removal and replacement of dead growth, fertilizing, watering, insect and disease control of turf, trees and shrubs, addition of red tippie stone to all guiderail and gravel areas and removal of all trash and debris. Interior work will include watering, pruning, spraying, feeding, cleaning, re-potting plants, applying insecticides, pesticides, and plant areas and all as required by the Division of Aviation. Work at the train platforms will include pruning, weeding, re-mulching, reseeding, planting, removal and replacement of dead growth, fertilizing, watering, insect and disease control of plants, trees and shrubs, and removal of all trash and debris.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

3.19.3 PERSONNEL REQUIREMENTS

3.19.3.1 The below listed requirements are minimum requirements for the positions listed. To satisfy the requirements of the PIR on this section C, bidders shall include a statement with their PIR that all personnel requirements contained herein shall be met by the Prime and all of their subcontractors. For on-site managers, however, bidder shall include their required experience, training, etc. with the PIR.

3.19.3.2 Foreman - shall have a minimum of five years experience and licensed to apply all insecticides and pesticides in compliance with Federal and State pesticide acts and registration requirements.

3.19.3.3 Gardeners - shall have a minimum of three years experience in the planting, care and maintenance of trees, hedges, shrubs, ornamental plants, flowers, turf, mulch and gravel areas used in landscaping industry.

3.19.3.4 Plant Technician - shall have a minimum of two years experience in the care and maintenance of interior plants.

3.19.3.5 Education - formal education in Forestry, Horticulture, Landscape Design or related field is acceptable in lieu of work experience for select personnel.

3.19.4 RECORDS/DOCUMENTATION

3.19.4.1 The Contractor shall submit written monthly inspection reports to the Division of Aviation.

4 ADD ONS

4.1 The City reserves the right to add, delete and/or acquire other product/services that the vendor can supply that are similar to, but not specifically called for in this bid. The procedure for such acquisitions shall be as follows:

4.1.1 Procurement or the using department will obtain from the Vendor a letter (on his/her letterhead) verifying the items to be added. The letter shall include the complete description of the item, the location (if applicable), the bid number, bid schedule number, the price to the City and the applicable contract period; and upon receipt and approval by the Procurement Department shall automatically become part of the contract.

5. Insurance

Contractor shall procure and maintain at its sole cost and expense during the entire period of the contract (including any applicable warranty and/or renewal periods) the types of insurance specified below. All insurance required herein, except the Professional Liability, shall be written on an "occurrence" basis and not a "claims-made" basis. In no event shall work be performed until the required evidence of insurance has been furnished. If the Contractor fails to obtain or maintain the required insurance, the City shall have the right to treat such failure as a material breach of contract and to exercise all appropriate rights and remedies. The insurance shall provide for at least thirty (30) days prior written notice to be given to the City in the event coverage is materially changed, cancelled, or non-renewed.

Additional Insured Requirement

The City of Philadelphia, its officers, employees, and agents, shall be named as additional insured on all policies required hereunder except the Workers' Compensation and Employer's Liability and Professional Liability. Also, an endorsement is required stating that the coverage afforded the City and its officers, employees, and agents, as additional insured, will be primary to any other coverage available to them.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

The City's coverage as an additional insured shall be primary coverage and all policies shall also waive all subrogation rights as to the City.

(a) **Workers' Compensation and Employers' Liability**

- (1) Workers' Compensation: Statutory Limits
- (2) Employers' Liability: \$1,000,000 Each Accident – Bodily Injury by Accident; \$1,000,000 Each Employee – Bodily Injury by Disease; and \$1,000,000 Policy Limit – Bodily Injury by Disease.
- (3) Other states insurance including Pennsylvania.

(b) **General Liability Insurance**

- (1) Limit of Liability: \$2,000,000 per occurrence combined single limit for bodily injury (including death) and property damage liability; \$1,000,000 advertising injury; \$2,000,000 general aggregate and \$1,000,000 aggregate for products and completed operations. The City may require higher limits of liability if, in the City's sole discretion, the potential risk so warrants.
- (2) Coverage: Premises operations; blanket contractual liability; personal injury liability; products and completed operations; independent contractors, employees and volunteers as additional insured; cross liability; broad form property damage (including completed operations).

(c) **Automobile Liability Insurance**

- (1) Limit of Liability: \$1,000,000 per occurrence combined single limit for bodily injury (including death) and property damage liability.
- (2) Coverage: Owned, non-owned, and hired vehicles.

(d) **Umbrella Liability Insurance**

- (1) Limit of Liability: \$25,000,000 per occurrence, when combined with insurance required under (a), (b) and (c) above.
- (2) Coverage: Umbrella Liability Form; coverage on pay-on-behalf basis; first dollar defense.

(e) **Professional Liability Insurance (for Architectural and Engineering Services)**

- (1) Limit of Liability: \$2,000,000 with a deductible not to exceed \$100,000.
- (2) Coverage: Errors and omissions including liability assumed under Contract.
- (3) Professional Liability Insurance may be written on a claims-made basis provided that coverage for occurrences arising out of the performance of the services required under the Contract shall be maintained in full force and effect under the policy or "tail" coverage for a period of at least two (2) years after expiration of the Contract.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Certificates of Insurance evidencing the required coverage shall be submitted to the City within the (10) days of notice of contract award. The City reserves the right to require Contractor to furnish certified copies of original policies of all insurance required under this contract at any time upon ten (10) days prior written notice to the Contractor.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

CITY OF PHILADELPHIA

FACILITY MAINTENANCE CONTRACT

PRE-QUALIFICATION AND INFORMATION REQUEST

DESCRIBE THE EXPERIENCE OF THE PRIME BIDDER AND SUBCONTRACTORS IN PROVIDING MAINTENANCE SERVICES. PRIME BIDDER MAY SUBMIT MULTIPLE SUBCONTRACTORS FOR EACH SYSTEM. AN ADDITIONAL INFORMATION REQUEST SHEET FOR EACH SUBCONTRACTOR SHALL BE ATTACHED BEHIND SHEET FOR PRIME BIDDER. CITE RECENT INSTALLATIONS OF COMPARABLE SIZE OR NATURE; INCLUDE FULL INFORMATION ON THE INSTALLATION (S), INCLUDING AGENCY, LOCATION, SIZE, TYPE, CONTACT PERSON (S), ETC. NOTE EXPERIENCE APPLYING QUANTITATIVE PERFORMANCE MEASURES AND QUALITY CONTROL PROGRAMS THAT APPLY TO MANAGEMENT OF PERSONNEL AND SYSTEMS. THE USE OF SUBCONTRACTORS DOES NOT ALLEVIATE THE MBEC REQUIREMENTS REFERENCED IN THE USE OF SUBCONTRACTORS DOES NOT ALLEVIATE THE OEO REQUIREMENTS AS DEFINED IN EXHIBIT A.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

**CITY OF PHILADELPHIA
FACILITY MAINTENANCE CONTRACT
PRE-QUALIFICATION INFORMATION REQUEST**

BIDDER QUALIFICATIONS:

1. Company Name: _____

2. Years In Business: _____

3. Type of Organization: Corporation: _____

Other (explain): _____

4. If a Corporation, answer the following:

Date of Incorporation: _____

State of Incorporation: _____

President's Name: _____

Vice President's Name: _____

Secretary's Name: _____

Treasurer's Name: _____

5. If other than a Corporation, describe organization and name Principals:

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

PRE-QUALIFICATION INFORMATION REQUEST

REFERENCES AND EXPERIENCE

1. State the types of systems your firm has sold, installed and/or maintained in the last three (3) years. Indicate the customer for each system. Use additional sheets if necessary.

Type of System: _____

Name	Address
------	---------

Contact Name	Phone Number
--------------	--------------

Type of System: _____

Name	Address
------	---------

Contact Name	Phone Number
--------------	--------------

2. State the systems your company is actively maintaining and for whom you maintain them. Use additional sheets if necessary.

Type of System: _____

Name	Address
------	---------

Contact Name	Phone Number
--------------	--------------

Type of System: _____

Name	Address
------	---------

Contact Name	Phone Number
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PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

PRE-QUALIFICATION INFORMATION REQUEST

REFERENCES AND EXPERIENCE

3. Identify the end-user customers in your customer base. Provide the company name, address, telephone number, and the name of a principal of the company (together with that person's position) who may be contacted for reference. Identify systems your organization has sold, installed and/or maintained. Identify systems you did not sell initially but now maintain. It is understood that the responding bidder gives City permission to call or write to these end users. Use additional sheets if necessary.

Type of System: _____

Name	Address
Contact Name	Phone Number

Type of System: _____

Name	Address
Contact Name	Phone Number

4. State the number of employees in your organization by the following categories:

	Local Area	Nationally
Management	_____	_____
Sales	_____	_____
Clerical	_____	_____
Technical	_____	_____
Installation	_____	_____
Maintenance/Service	_____	_____
Other	_____	_____
Total	_____	_____

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

PRE-QUALIFICATION INFORMATION REQUEST

REFERENCES AND EXPERIENCE

5. How many of maintenance personnel have attended system schools and been certified by the manufacturer as qualified to perform maintenance on their systems? Specify the systems by manufacturer, type and the number of employees who attended for each. In particular, identify the trained service personnel by name and their work locations. Identify the installation personnel and maintenance personnel separately.

6. Identify the service location that will maintain the City's systems.

FINANCIAL

Provide Bank References:

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

**CITY OF PHILADELPHIA
FACILITY MAINTENANCE CONTRACT
PRE-QUALIFICATION INFORMATION REQUEST**

ANSWER THE FOLLOWING QUESTIONS IN THE SPACES PROVIDED. IF ADDITIONAL SPACE IS REQUIRED, ATTACH SHEETS, BUT BE CERTAIN TO REFER TO THE INFORMATION REQUEST NUMBERS.

MENU OF SCHEDULES

Mechanical Services:

- A. Escalator/Elevator/Moving Walkways
- E. Storm Water and Sanitary Drainage
- F. Fire Protection Systems
- G. Heating, Ventilation and Air Conditioning (HVAC)

Electrical Services:

- H. Facilities Automated Control Systems
- I. Uninterrupted Power Supply
- J. Switch Gear
- K. High Voltage Cable Repair
- L. Fire Alarm and Detection System

Other Services:

- M. Fencing and Guiderails
- N. Bird Control
- O. Airfield Support Services
- P. Building Mounted Signage
- Q. Glass, Plastic Replacement
- R. Interior Cosmetic Repairs & Exterior Finishes Restoration/Maintenance
- S. Airport Exhibitions & Decorations
- T. Specialized Equipment Services
- U. Roofing
- V. Landscaping

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

**CITY OF PHILADELPHIA
FACILITY MAINTENANCE CONTRACT
PRE-QUALIFICATION INFORMATION REQUEST**

ANSWER THE QUESTIONS IN THE SPACES PROVIDED. IF ADDITIONAL SPACE IS REQUIRED, ATTACH ADDITIONAL SHEETS, BUT BE SURE TO REFER TO THE INFORMATION REQUEST LETTERS.

A. ESCALATOR/ELEVATOR/MOVING WALKWAYS

_____ CHECK HERE IF SAME AS PRIME. IF NOT, PROVIDE SUB CONTRACTOR INFORMATION BELOW.

FIRM NAME _____

HOME ADDRESS _____
(Street)

CITY: _____

STATE: _____

CONTACT NAME: _____

CONTACT PHONE: _____

YEAR's IN BUSINESS UNDER THIS NAME: _____

GROSS SALES: 2006 _____
(Actual)

2007 _____
(Actual)

2008 _____
(Actual)

2009 _____
(Estimate)

State the number of employees in the above referenced organization by the following categories:

	Local Area	Nationally
Management	_____	_____
Sales	_____	_____
Clerical	_____	_____
Technical	_____	_____
Installation	_____	_____
Maintenance/Service	_____	_____
Other	_____	_____
Total	=====	=====

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

**CITY OF PHILADELPHIA
FACILITY MAINTENANCE CONTRACT
PRE-QUALIFICATION INFORMATION REQUEST**

ANSWER THE QUESTIONS IN THE SPACES PROVIDED. IF ADDITIONAL SPACE IS REQUIRED, ATTACH ADDITIONAL SHEETS, BUT BE SURE TO REFER TO THE INFORMATION REQUEST LETTERS.

J. SWITCH GEAR

_____ CHECK HERE IF SAME AS PRIME. IF NOT, PROVIDE SUB CONTRACTOR INFORMATION BELOW.

FIRM NAME: _____

HOME ADDRESS: _____
(Street)

CITY: _____

STATE: _____

CONTACT NAME: _____

CONTACT PHONE: _____

YEAR'S IN BUSINESS UNDER THIS NAME: _____

GROSS SALES: 2006 _____
(Actual)

 2007 _____
(Actual)

 2008 _____
(Actual)

 2009 _____
(Estimate)

State the number of employees in the above referenced organization by the following categories:

	Local Area	Nationally
Management	_____	_____
Sales	_____	_____
Clerical	_____	_____
Technical	_____	_____
Installation	_____	_____
Maintenance/Service	_____	_____
Other	_____	_____
Total	=====	=====

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

**CITY OF PHILADELPHIA
FACILITY MAINTENANCE CONTRACT
PRE-QUALIFICATION INFORMATION REQUEST**

ANSWER THE QUESTIONS IN THE SPACES PROVIDED. IF ADDITIONAL SPACE IS REQUIRED, ATTACH ADDITIONAL SHEETS, BUT BE SURE TO REFER TO THE INFORMATION REQUEST LETTERS.

L. FIRE ALARM AND DETECTION SYSTEM

_____ CHECK HERE IF SAME AS PRIME. IF NOT, PROVIDE SUB CONTRACTOR INFORMATION BELOW.

FIRM NAME: _____

HOME ADDRESS: _____
(Street)

CITY: _____

STATE: _____

CONTACT NAME: _____

CONTACT PHONE: _____

YEAR'S IN BUSINESS UNDER THIS NAME: _____

GROSS SALES: 2006 _____
(Actual)

 2007 _____
(Actual)

 2008 _____
(Actual)

 2009 _____
(Estimate)

State the number of employees in the above referenced organization by the following categories:

	Local Area	Nationally
Management	_____	_____
Sales	_____	_____
Clerical	_____	_____
Technical	_____	_____
Installation	_____	_____
Maintenance/Service	_____	_____
Other	_____	_____
Total	=====	=====

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

**CITY OF PHILADELPHIA
FACILITY MAINTENANCE CONTRACT
PRE-QUALIFICATION INFORMATION REQUEST**

ANSWER THE QUESTIONS IN THE SPACES PROVIDED. IF ADDITIONAL SPACE IS REQUIRED, ATTACH ADDITIONAL SHEETS, BUT BE SURE TO REFER TO THE INFORMATION REQUEST LETTERS.

M. FENCING & GUIDERAILS (SUB-CONTRACTOR IF APPLICABLE)

_____ CHECK HERE IF SAME AS PRIME. IF NOT, PROVIDE SUB CONTRACTOR INFORMATION BELOW.

FIRM NAME: _____

HOME ADDRESS: _____
(Street)

CITY: _____

STATE: _____

CONTACT NAME: _____

CONTACT PHONE: _____

YEAR'S IN BUSINESS UNDER THIS NAME: _____

GROSS SALES: 2006 _____
(Actual)

2007 _____
(Actual)

2008 _____
(Actual)

2009 _____
(Estimate)

State the number of employees in the above referenced organization by the following categories:

	Local Area	Nationally
Management	_____	_____
Sales	_____	_____
Clerical	_____	_____
Technical	_____	_____
Installation	_____	_____
Maintenance/Service	_____	_____
Other	_____	_____
Total	=====	=====

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

**CITY OF PHILADELPHIA
FACILITY MAINTENANCE CONTRACT
PRE-QUALIFICATION INFORMATION REQUEST**

ANSWER THE QUESTIONS IN THE SPACES PROVIDED. IF ADDITIONAL SPACE IS REQUIRED, ATTACH ADDITIONAL SHEETS, BUT BE SURE TO REFER TO THE INFORMATION REQUEST LETTERS

N. BIRD CONTROL

_____ CHECK HERE IF SAME AS PRIME. IF NOT, PROVIDE SUB CONTRACTOR INFORMATION BELOW.

FIRM NAME: _____

HOME ADDRESS: _____
(Street)

CITY: _____

STATE: _____

CONTACT NAME: _____

CONTACT PHONE: _____

YEAR'S IN BUSINESS UNDER THIS NAME: _____

GROSS SALES: 2006 _____
(Actual)

 2007 _____
(Actual)

 2008 _____
(Actual)

 2009 _____
(Estimate)

State the number of employees in the above referenced organization by the following categories:

	Local Area	Nationally
Management	_____	_____
Sales	_____	_____
Clerical	_____	_____
Technical	_____	_____
Installation	_____	_____
Maintenance/Service	_____	_____
Other	_____	_____
Total	=====	=====

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

**CITY OF PHILADELPHIA
FACILITY MAINTENANCE CONTRACT
PRE-QUALIFICATION INFORMATION REQUEST**

ANSWER THE QUESTIONS IN THE SPACES PROVIDED. IF ADDITIONAL SPACE IS REQUIRED, ATTACH ADDITIONAL SHEETS, BUT BE SURE TO REFER TO THE INFORMATION REQUEST LETTERS

O. AIRFIELD SUPPORT SERVICES

_____ CHECK HERE IF SAME AS PRIME. IF NOT, PROVIDE SUB CONTRACTOR INFORMATION BELOW.

FIRM NAME: _____

HOME ADDRESS: _____
(Street)

CITY: _____

STATE: _____

CONTACT NAME: _____

CONTACT PHONE: _____

YEAR'S IN BUSINESS UNDER THIS NAME: _____

GROSS SALES: 2006 _____
(Actual)

 2007 _____
(Actual)

 2008 _____
(Actual)

 2009 _____
(Estimate)

State the number of employees in the above referenced organization by the following categories:

	Local Area	Nationally
Management	_____	_____
Sales	_____	_____
Clerical	_____	_____
Technical	_____	_____
Installation	_____	_____
Maintenance/Service	_____	_____
Other	_____	_____
Total	=====	=====

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

**CITY OF PHILADELPHIA
FACILITY MAINTENANCE CONTRACT
PRE-QUALIFICATION INFORMATION REQUEST**

ANSWER THE QUESTIONS IN THE SPACES PROVIDED. IF ADDITIONAL SPACE IS REQUIRED, ATTACH ADDITIONAL SHEETS, BUT BE SURE TO REFER TO THE INFORMATION REQUEST LETTERS

P. BUILDING MOUNTED SIGNAGE

_____ CHECK HERE IF SAME AS PRIME. IF NOT, PROVIDE SUB CONTRACTOR INFORMATION BELOW.

FIRM NAME: _____

HOME ADDRESS: _____
(Street)

CITY: _____

STATE: _____

CONTACT NAME: _____

CONTACT PHONE: _____

YEAR'S IN BUSINESS UNDER THIS NAME: _____

GROSS SALES: 2006 _____
(Actual)

 2007 _____
(Actual)

 2008 _____
(Actual)

 2009 _____
(Estimate)

State the number of employees in the above referenced organization by the following categories:

	Local Area	Nationally
Management	_____	_____
Sales	_____	_____
Clerical	_____	_____
Technical	_____	_____
Installation	_____	_____
Maintenance/Service	_____	_____
Other	_____	_____
Total	=====	=====

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

**CITY OF PHILADELPHIA
FACILITY MAINTENANCE CONTRACT
PRE-QUALIFICATION INFORMATION REQUEST**

ANSWER THE QUESTIONS IN THE SPACES PROVIDED. IF ADDITIONAL SPACE IS REQUIRED, ATTACH ADDITIONAL SHEETS, BUT BE SURE TO REFER TO THE INFORMATION REQUEST LETTERS

R. INTERIOR COSMETIC REPAIRS & EXTERIOR FINISHES RESTORATION/MAINTENANCE

_____ CHECK HERE IF SAME AS PRIME. IF NOT, PROVIDE SUB CONTRACTOR INFORMATION BELOW.

FIRM NAME: _____

HOME ADDRESS: _____
(Street)

CITY: _____

STATE: _____

CONTACT NAME: _____

CONTACT PHONE: _____

YEAR'S IN BUSINESS UNDER THIS NAME: _____

GROSS SALES: 2006 _____
(Actual)

2007 _____
(Actual)

2008 _____
(Actual)

2009 _____
(Estimate)

State the number of employees in the above referenced organization by the following categories:

	Local Area	Nationally
Management	_____	_____
Sales	_____	_____
Clerical	_____	_____
Technical	_____	_____
Installation	_____	_____
Maintenance/Service	_____	_____
Other	_____	_____
Total	=====	=====

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

**CITY OF PHILADELPHIA
FACILITY MAINTENANCE CONTRACT
PRE-QUALIFICATION INFORMATION REQUEST**

CERTIFICATION STATEMENT:

I certify that the information presented in this Pre-qualification Information Request is complete and accurate and that the firm authorizes me named to submit this information request on its behalf.

Firm Name

Authorized Signature

Name

Title

Date

EXHIBIT A
Contractor's Certification of Compliance with Chapter 17-600 of The Philadelphia Code.

**Contractor's Certification of Compliance with
Chapter 17-1600 of The Philadelphia Code**

**Economic Opportunity Plans
Bid No S2Z5701PIR**

Chapter 17-1600 of The Philadelphia Code provides for the development and implementation of "Economic Opportunity Plans" in connection with certain City contracts and projects. It is recommended that, as a prospective bidder, you read the Ordinance which is located at www.legistar.com.

For this Bid, Bidders are required, as a matter of responsibility and bid responsiveness, to memorialize through an Economic Opportunity Plan, its Best and Good Faith Efforts to 1. provide meaningful and representative opportunities for Minority ("MBE"), Woman ("WBE"), Disadvantaged ("DBE") and Disabled Owned Business Enterprises ("DSBE") (collectively "M/W/DSBEs") and 2. provide an appropriately diverse workforce in all phases of the contract with regard to the employment of minority and female persons.

The form of Economic Opportunity Plan, as set forth hereto and incorporated herein, is part of this Invitation and Bid and establishes numeric ranges for the participation of M/W/DSBEs in this Bid and goals which serve as a benchmark for the employment of minority and female persons in the performance of the contract.

Please sign and date below, your agreement to comply with these Economic Opportunity Plan requirements.

I, the undersigned Bidder, as a matter of responsibility and bid responsiveness, agree to comply with the Economic Opportunity Plan requirements that are contained in City of Philadelphia Bid No. S2Z5701PIR. I represent and acknowledge that I understand these requirements and that my Bid includes a completed Economic Opportunity Plan which identifies: M/W/DSBEs that I commit to use as contract participants in this Bid for specific work and/or supply effort; my commitment to employ an appropriately diverse workforce in connection with the Project; and, if applicable, my further documentation of Best and Good Faith Efforts. I represent that any M/W/DSBE that I have a commitment with will perform a Commercially Acceptable Function by performing the services or supply effort identified in this Economic Opportunity Plan. I represent that all information submitted to the City including without limitation, the Economic Opportunity Plan and all forms and attachments thereto, are true and correct and I understand and acknowledge that my submission of false information is subject to the penalties of 18 Pa.C.S. Section 4904 relating to unsworn falsification to authorities. I also acknowledge that if awarded a contract resulting from this Invitation and Bid, I understand that it is a felony in the third degree under 18 Pa.C.S. Section 4107.2 (a)(4) if, in the course of the contract, I fraudulently obtain public moneys reserved for or allocated or available to minority business enterprises or women's business enterprises.

SIGNATURE AND TITLE

DATE

NAME OF FIRM

City of Philadelphia

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

**City of Philadelphia
Economic Opportunity Plan
[CITY BID NUMBER S2-Z5701-PIR]**

I. Introduction, Definitions and Goals

- A. Chapter 17-1600 of The Philadelphia Code requires the development and implementation of “Economic Opportunity Plan(s)” for certain classes of contracts and covered projects as defined in Section 17-1601. The Economic Opportunity Plan (“Plan”) memorializes the successful Bidder’s best and good faith efforts to provide meaningful and representative opportunities for Minority Business Enterprises (“MBEs”), Woman Business Enterprises (“WBEs”) and Disabled Business Enterprises (“DSBEs”), Disadvantaged Business Enterprises¹ (“DBEs”) (collectively, “M/W/DSBEs”) and an appropriately diverse building trades workforce in connection with the contract or covered project.

This Invitation and Bid and any resulting contract are subject to the Plan requirements as described in Section 17-1603 (2). Accordingly, by submission of its Bid, a responsive and responsible Bidder makes a legally binding commitment to abide by the provisions of this Plan which include Bidder’s commitment to exercise its best and good faith efforts throughout the contract term to provide meaningful and representative contracting opportunities for M/W/DSBEs and to employ an appropriately diverse workforce of tradespeople including minority and female persons in all phases of any contract awarded under this Bid.

Bidder hereby verifies that all information submitted to the City including without limitation, the Plan and all forms and attachments thereto, are true and correct and is notified that the submission of false information by Bidder is subject to the penalties of 18 Pa.C.S. Section 4904 relating to unsworn falsification to authorities. Bidder also acknowledges that if it is awarded a contract resulting from this Invitation and Bid, it is a felony in the third degree under 18 Pa.C.S. Section 4107.2 (a)(4) if, in the course of this contract, it fraudulently obtains public moneys reserved for or allocated or available to **minority business enterprises or women's business enterprises.**

- B. For the purposes of this Plan, MBE, WBE, DBE and DSBE shall refer to certified businesses so recognized by the City of Philadelphia through its Office of Economic Opportunity (“OEO”). Only the work or supply effort of firms that are certified as M/W/DSBEs by an OEO approved certifying agency² at the time of bid opening will be eligible to receive credit as a Best and Good Faith Effort. In order to be counted, certified firms must successfully complete and submit to the OEO an application to be included in the OEO Registry which is a list of registered M/W/DSBEs maintained by the OEO and available online at www.phila.gov/oeo/directory. If bidder or bidder’s subcontractor(s) is certified by an approved certifying agency, a copy of that certification should be furnished with the bid.**

¹Disadvantaged Business Enterprises (“DBEs”) are those socially or economically disadvantaged minority and woman owned businesses certified under 49 C.F.R. Part 26. If Bidder makes solicitation(s) and commitment(s) with a DBE, Bidder shall indicate which category, MBE or WBE, is submitted for credit.

²A list of “OEO approved certifying agencies” can be found at www.phila.gov/oeo

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

C. For this Plan, the term “Best and Good Faith Efforts,” the sufficiency of which shall be in the sole determination of the City, means: a Bidder’s efforts, the scope, intensity and appropriateness of which are designed and performed to foster meaningful and representative opportunities for participation by M/W/DSBEs and an appropriately diverse workforce and to achieve the objectives of Chapter 17-1600. Best and Good Faith Efforts are rebuttably presumed met, when a Bidder makes commitments within the M/W/DSBE Participation Ranges established for this Bid and commits to employ a diverse workforce as enumerated herein.

D. Goals

1. M/W/DSBE Participation Ranges

As a benchmark for the Bidder’s expression of its Best and Good Faith Efforts to provide meaningful and representative opportunities for M/W/DSBEs in the contract, the following participation ranges have been developed. These participation ranges represent, in the absence of discrimination in the solicitation and selection of M/W/DSBEs, the percentage of MBE, WBE and DSBE participation that is reasonably attainable on this contract through the exercise of Bidder’s Best and Good Faith Efforts. In order to maximize opportunities for as many businesses as possible, a firm that is certified in two or more categories (e.g. MBE and WBE and DSBE or WBE and DSBE) will only be credited toward one participation range as either an MBE or WBE or DSBE. The firm will not be credited toward more than one category. These ranges are based upon an analysis of factors such as the size and scope of the contract and the availability of MBEs, WBEs and DSBEs to perform various elements of the contract:

BID	MBE	WBE	DSBE
S2-Z5701-PIR	20-35%	15-20%	0-1%

2. Employment Goals

Bidder agrees to exhaust its Best and Good Faith Efforts to employ minority persons and females in its workforce of apprentices and journeymen at the following levels³:

- Minority Apprentices – 50% of all hours worked by all apprentices
- Minority Journeymen – 32% of all journey hours worked across all trades
- Female Apprentices – 7% of all hours worked by all apprentices
- Female Journeypersons - 7% of all hours worked across all trades

II. Bidder Responsiveness and Responsibility

A. Bidder shall identify all its M/W/DSBE commitments and evidence its agreement to employ minority persons and females at the levels stated herein on the form entitled, “M/W/DSBE Participation and Workforce Commitments.” The Bidder’s identified commitment to use an M/W/DSBE on this form constitutes a representation by Bidder, that the M/W/DSBE is capable of completing the subcontract with its own workforce, and that the Bidder has made a legally binding commitment with the firm.

³ These goals, which have been adopted by the Economic Opportunity Cabinet, are the recommendations of the Mayor’s Commission on Construction Industry Diversity.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

The listing of the M/W/DSBE firm by Bidder further represents that if Bidder is awarded the contract, Bidder will subcontract with the listed firm(s) for the work or supply effort described and the dollar/percentage amount(s) set forth on the form. In calculating the percentage of M/W/DSBE participation, Bidder shall apply the standard mathematical rules in rounding off numbers. In the event of inconsistency between the dollar and percentage amounts listed on the form, the percentage will govern. Bidder is to maintain the M/W/DSBE percentage commitments throughout the term of the contract which shall apply to the total amount of the contract and any additional increases. In the event the Successful Bidder's contract is increased by change order and/or modification, or amendment, it shall be the responsibility of the Successful Bidder to apply its Best and Good Faith Efforts to the amended amount in order to maintain any participation ranges committed to on the total dollar amount of the contract at the time of contract completion.

1. Commercially Acceptable Function

A Bidder that enters into a subcontract with an M/W/DSBE shall be considered to have made a Best and Good Faith Effort in that regard only if its M/W/DSBE subcontractor performs a commercially acceptable function ("CAF"). An M/W/DSBE is considered to perform a CAF when it engages in meaningful work or supply effort that provides for a distinct element of the subcontract (as required by the work to be performed in accordance with Bid specifications), where the distinct element is worthy of the dollar amount of the subcontract and where the M/W/DSBE carries out its responsibilities by actually performing, managing and supervising the work involved. The City may evaluate the amount of work subcontracted, industry practices and any other relevant factors in determining whether the M/W/DSBE is performing a CAF and in determining the amount of credit the Bidder receives towards the participation ranges. For example, a Bidder using an M/W/DSBE non-stocking supplier (i.e., a firm that does not manufacture or warehouse the materials or equipment of the general character described by the Bid specifications and required under the contract) to furnish equipment or materials will only receive credit towards the participation ranges for the fees or commissions charged, not the entire value of the equipment or materials furnished.

- B. Upon award, letters of intent, quotations, and any other accompanying documents regarding commitments with M/W/DSBEs, including the M/W/DSBE Participation and Workforce Commitments Form, become part of the contract. M/W/DSBE commitments are to be memorialized in a written subcontract agreement and are to be maintained throughout the term of the contract and shall apply to the total contract value (including approved change orders and amendments). Any change in commitment, including but not limited to termination of the subcontract, reduction in the scope of committed work, substitutions for the listed firms, changes or reductions in the listed dollar/percentage amounts, must be pre-approved in writing by OEO. Throughout the term of the contract, Bidder is required to continue its Best and Good Faith Efforts.
- C. In the event Bidder does not identify on the M/W/DSBE Participation and Workforce Commitments Form that it has made M/W/DSBE commitments within the participation ranges established for this Bid and/or does not agree to the employment goals described herein, Bidder must complete and submit a *Documentation of Best and Good Faith Efforts Form* ("BGFE Form"), documenting its solicitations and any commitments with M/W/DSBEs, and detailing any efforts made to include M/W/DSBEs in the contract and to employ a diverse workforce. The submission of the BGFE Form is an element of bid responsiveness and failure to include this form may result in the rejection of the Bid. The BGFE Form must include at a minimum, certification and documentary evidence that the following actions were taken:

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

1. Solicitation directed to both qualified M/W/DSBEs registered with OEO and qualified M/W/DSBEs certified by agencies approved by OEO. Bidder must provide a list of all certification directories used for soliciting participation for this Bid. Bidder must determine with reasonable certainty if the M/W/DSBEs are interested by taking appropriate steps to follow up on initial solicitations; one time contact, without follow up, is not acceptable; and
2. Bidder provided interested M/W/DSBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation; and
3. Bidder negotiated in good faith with interested M/W/DSBEs. A Bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including M/W/DSBE subcontractors, and would take a firm's price and capabilities as well as the objectives of the Plan into consideration; and
4. Documentation of the following:
 - i. Any commitments to use M/W/DSBEs in its bid for subcontracted services and materials supply even when Bidder would otherwise prefer to self-perform/supply these items; and
 - ii. Correspondence between the Bidder and any M/W/DSBE(s) related to this Bid; and
 - iii. Attendance logs and/or records of any scheduled pre-bid meeting; and
5. Certification and evidence that the following actions were taken or documentation of the following, or an explanation why these actions were not taken or why documentation does not exist:
 - i. Any arms length business assistance provided to interested M/W/DSBEs which may include access/introduction to major manufacturer/suppliers, lines of credit and union halls; and
 - ii. Solicitation through job fairs, newspapers, periodicals, advertisements and other organizations or media that are owned by M/W/DSBEs and/or focus on M/W/DSBEs; and
 - iii. Telephone logs of communications related to this Bid; and
 - iv. Notification of and access to bid documents at the Bidder's office or other office locations for open and timely review; and
 - v. Bidder sought assistance from the Urban Affairs Coalition, Careerlink Philadelphia, Opportunity Industrial Center and the Philadelphia Workforce Development Corporation to perform employment outreach; and
 - vi. Bidder published its policy of nondiscrimination in the hiring, retention and promotion of employees; and
 - vii. Any agreement with an apprenticeship or training program that targets the employment of minority persons, disabled persons and women.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

III. Evaluation of Responsiveness and Responsibility

A. Evaluation and Determination

1. The City, acting through its OEO, will evaluate the responsiveness of the Bidder's Plan to these requirements. OEO reserves the right to request further documentation and/or clarifying information at any time prior to the award of the contract which may result in Bidder's amendment of its M/W/DSBE Participation and Workforce Commitments Form or BGFE Form.

B. Administrative Reconsideration

1. If the OEO determines that the apparent low Bidder has not made sufficient Best and Good Faith Efforts, the Bidder will be notified and may file a written appeal with OEO within forty-eight (48) hours of the date of notification. The decision of OEO may be appealed in writing within forty-eight (48) hours of the date of OEO's decision to Chief Operating Officer of the Commerce Department or his designee whose decision shall be final. If it is determined that the apparent low Bidder did not make sufficient Best and Good Faith Efforts, its Bid will be rejected.
2. Notwithstanding compliance with the requirements set forth herein, the City reserves the right to reject any or all bids as deemed in the best interest of the City.

IV. Compliance and Monitoring of Best and Good Faith Efforts

- A. The Successful Bidder agrees to cooperate with OEO in its compliance monitoring efforts, and to submit, within the time limits prescribed by OEO, all documentation which may be requested by OEO relative to the awarded contract, including the items described below. The Successful Bidder must provide as required and maintain the following contract documentation for a period of three (3) years following acceptance of final payment under the contract:

- Copies of signed contracts and purchase orders with M/W/DSBE subcontractors;
- Evidence of payments (cancelled checks, invoices, etc.) to subcontractors and suppliers to verify participation;
- Telephone logs and correspondence relating to M/W/DSBE commitments.

- B. The Successful Bidder shall ensure that all its on-site contractors submit, to the extent required by law, certified payrolls to the City's Labor Standards Unit in the format prescribed by that agency which includes hours worked by minority and female apprentices and journeypersons.

C. Prompt Payment of M/W/DSBEs

1. The Successful Bidder shall within five (5) business days after receipt of a payment from the City for work performed under the contract, deliver to its M/W/DSBE subcontractors their proportionate share of such payment for work performed (including the supply of materials). In connection with payment of its M/W/DSBE subcontractors, the Successful Bidder agrees to fully comply with the City's payment reporting process which may include the use of electronic payment verification systems.

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

2. Each month of the contract term and at the conclusion of the contract, the Successful Bidder shall provide to the OEO documentation reconciling actual dollar amounts paid to M/W/DSBE subcontractors to M/W/DSBE commitments presented in the Plan.

D. Oversight Committee

1. For this project, the City, in its sole discretion, may establish a Project Oversight Committee consisting of representatives from the Bidder's company, representatives of the building trades, the construction manager, and the City which may include the Project site's District Councilperson, OEO, and appropriate community organizations ("Committee"). The Committee will meet regularly to provide advice for the purpose of facilitating compliance with the Plan.
2. If a Project Oversight Committee is established, the City will convene meetings of the Committee no later than one (1) month after issuance of the Notice To Proceed.

V. Remedies and Penalties for Non-Compliance

A. The Successful Bidder agrees that its compliance with the requirements of the Plan is material to the contract. Any failure to comply with these requirements may constitute a substantial breach of the contract. It is further agreed and understood that in the event the City determines that the Successful Bidder hereunder has failed to comply with these requirements the City may, in addition to remedies reserved under Section 17-1605 of The Philadelphia Code, any other rights and remedies the City may have under the contract, or any bond filed in connection therewith or at law or in equity, exercise one or more of the remedies below, which shall be deemed cumulative and concurrent:

- a. Withhold payment(s) or any part thereof until corrective action is taken.
- b. Terminate the contract, in whole or in part.
- c. Suspend/Debar the successful bidder from bidding on and/or participating in any future City contracts for a period of up to three (3) years.
- d. Recover as liquidated damages, one percent of the total dollar amount of the contract for each one percent (or fraction thereof) of the commitment shortfall. (NOTE: The "total dollar amount of the contract" shall include approved change orders, amendments and for requirements contracts shall be based on actual quantities ordered by the City.)

The remedies enumerated above are for the sole benefit of the City and City's failure to enforce any provision or the City's indulgence of any non-compliance with any provision hereunder, shall not operate as a waiver of any of the City's rights in connection with any contract resulting from this Invitation and Bid nor shall it give rise to actions by any third parties including identified M/W/DSBE subcontractors. No privity of contract exists between the City and the M/W/DSBE subcontractor identified in any contract resulting from this Invitation and Bid. The City does not intend to give or confer upon any such M/W/DSBE subcontractor(s) any legal rights or remedies in connection with subcontracted services under any law or Executive Order or by any reason of any contract resulting from the Invitation and Bid except such rights or remedies that the M/W/DSBE subcontractor may seek as a private cause of action under any legally binding contract to which it may be a party.

[See Forms on following pages; these Forms, as completed by Bidder, must be submitted with the Bid as a matter of Responsiveness and Responsibility]

**EXHIBIT B
CITY OF PHILADELPHIA
PREVAILING WAGE RATE SCHEDULE
S2Z5701 PIR
FACILITY MAINTENANCE FOR PHILADELPHIA
INTERNATIONAL AND NORTHEAST AIRPORTS
REVISED: July 14, 2010**

I. MEMORANDUM

TO: Municipal Operating Departments and Awarding Agencies
FROM: Perritti DiVirgilio, Director, Fair Labor Standards
DATE: Effective: July 14, 2010
RE: Updated Prevailing Wage Schedule for the City of Philadelphia

The Philadelphia Labor Standards Unit has issued an updated prevailing wage rate schedule for construction projects done on behalf of the City of Philadelphia. Enclosed herein you will find the two (2) decisions, which comprise the updated prevailing wage schedule. They are as the follows:

- I. Building Construction**
- II. Heavy and Highway Construction**

Please direct any questions or concerns regarding the prevailing wage rate schedule to my attention:

**Philadelphia Labor Standards Unit
Municipal Services Bldg., 5th Floor Room 530
1401 John F. Kennedy Blvd.
Philadelphia, PA 19102-1670
Telephone Numbers: (215) 686-2132
Fax Number: (215) 686-2116**

Thank you for your cooperation.

Page 1 of 16
 Prevailing Wage Schedule (Effective 7/14/10)
 Building Construction (cont'd)

**PREVAILING WAGE RATE SCHEDULE
 FOR CONSTRUCTION WORK DONE ON BEHALF OF CITY OF PHILADELPHIA
 INCLUDING REPAIR, ALTERATION, AND REMODELING WORK**

I. BUILDING CONSTRUCTION

A. Job Classification and Wage Rates

	Basic Hourly Rate	Fringe Benefits
ASBESTOS WORKER		
Journeyman	\$ 39.64	\$28.00
Handler Level 1	23.52	17.34
Handler Level 2	33.43	17.34
BOILERMAKER	38.08	25.29
BRICKLAYER	34.06	22.55
CARPENTER	37.40	23.64
CEMENT MASON	32.20	25.71
DRY WALL FINISHER	33.00	22.41
ELECTRICIAN	46.85	26.13
(as of 5/2/2011)	48.78	26.13
(as of 4/30/2012)	50.68	26.13
ELEVATOR CONSTRUCTOR	46.90	20.24
GLAZIER	36.67	24.53
IRONWORKER		
Structural & Ornamental	44.70	26.75
Reinforcing (Rodsetter)	37.43	24.90
Rigger & Machinery Mover	35.02	23.48
LABORER		
Journeyman Class One	23.85	22.30
Journeyman Class Two	23.95	22.30
Journeyman Class Three	24.00	22.30
Journeyman Class Four	24.15	22.30
Journeyman Class Five	24.25	22.30
Journeyman Class Six	23.99	22.30
Journeyman Class Seven	25.10	22.30
Journeyman Class Eight	25.15	22.30
Journeyman Class Nine	25.25	22.30
Journeyman Class Ten	25.40	22.30
Journeyman Class Eleven	25.65	22.30
Lather & Plaster	24.37	22.30

PRE-QUALIFICATION INSTRUCTIONS AND INFORMATION REQUEST

Page 2 of 16

Prevailing Wage Schedule (Effective 7/14/10)

Building Construction (cont'd)

**LABORER: ASBESTOS ABATEMENT,
LEAD ABATEMENT,
TOXIC WASTE HANDLING,
HAZARDOUS WASTE HANDLING**

MASTER ABATEMENT TECHNICIAN 25.97 21.73

LANDSCAPE LABORER

Class I 18.31 20.63

Class II 18.31 20.63

LATHER 37.40 23.64

LINE CONSTRUCTION

Lineman 44.62

19.50

Winch Truck Operator 31.24 14.11

Line Truck Driver 29.01 13.50

Groundhand 26.77 12.89

Watch/Flag Person 19.08 10.78

MARBLE SETTER 34.36 21.77

MARBLE FINISHER 28.63 19.97

MILLWRIGHT 35.13 26.34

PAINTER

Brush & Roller 32.31 20.84

Spray, Steel, & Swing 33.56 20.84

Bridges 40.85 20.84

PILEDRIVERMAN 37.60 27.57

PLASTERER 32.90 24.85

PLUMBER 41.53 26.01

POINTER, CAULKER, & CLEANER 35.05 21.60

POWER EQUIPMENT OPERATOR

Group One 40.04 22.07

Group One A 43.04 22.96

Group Two 39.79 22.00

Group Two A 42.80 22.88

Group Three 35.71 20.79

Group Four 35.40 20.71

Group Five 33.68 20.20

Group Six 32.69 19.91

Group Seven A 48.05 25.55

Group Seven B 47.75 25.47

*****TOXIC/HAZARDOUS WASTE REMOVAL*****

Add 20 percent to basic hourly rate for all classifications

Page 3 of 16

Prevailing Wage Schedule (Effective 7/14/10)

Building Construction (cont'd)

ROOFER	30.75	24.95
SHEET METAL WORKER	38.36	32.65
SOFT FLOOR LAYER (Resilient Floor)	37.41	24.06
SPRINKLER FITTER	46.12	20.35
(as of 1/1/11)	46.62	20.35
STEAM FITTER	44.93	26.43
STONE MASON	34.36	21.77
TERRAZZO MECHANIC	35.41	21.72
TERRAZZO FINISHER	32.41	19.06
TILE SETTER	36.15	21.03
TILE FINISHER	29.11	20.59
TRUCK DRIVER		
Journeyman Class I	25.90	13.48
Journeyman Class II	26.00	13.48
Journeyman Class III	26.25	13.48
WALL COVERER	32.69	20.84
WELDER - Rate for craft to which welding work is incidental.		

B. Job Classification Definitions: Building Construction

1. Laborer Classifications:

Class One: Strip concrete, dismantle concrete, load, unload, handle and/or transport reinforced steel and steel mesh, carry lumber, handle miscellaneous building materials, operate jack hammers, use paving breakers and other pneumatic tools, build scaffolds, perform raking, handle asphalt, perform spading and concrete pit work, perform grading, perform form pinning or shorting, perform demolition work with exception of burners, lay conduits, lay ducts, perform sheathing or lagging, lay non-metallic pipe, perform caulking.

Class Two: Mason Tender, Power Buggies, Burners on Demolition.

Class Three: Wagon drill operator (single)

Class Four: Powderman, wagon drill operator (multiple), perform circular caissons excavations, caisson groundman, perform underpinning excavation, perform laborers' work at depth of eight (8) feet or below.

Class Five: Caisson bottom worker.

Class Six: Yard worker.

Class Seven: Trackmen, Brakemen, Groutmen, Bottom Shaft Men, All Other Men in Free Air Tunnels.

Class Eight: Caisson Foreman

Class Nine: Miner Helper, Form Setters.

Class Ten: Miners Bore Driver, Blasters, Drillers, Pneumatic Shield Operator.

Class Eleven: Welders & Burners.

Page 4 of 16

Prevailing Wage Schedule (Effective 7/14/10)

Building Construction (cont'd)

Landscape Laborers:

Class I: Landscape laborer

Class II: Farm tractor driver, hydro seeder, mulched nozzle worker, backhoe operator, bulldozer crawler type loader, tree crane operator.

Laborer - Lather and Plasterer: Wheel and/or hod carry any lather and plaster materials used by lathering and plastering contractors' build scaffolds; build runways; perform clean-up and removal of debris as covered by lathering and plastering contractor's contract; deliver any material used by lathering and plastering contractor, from curbside to building and back, unless motor vehicles are permitted to enter building with required materials; all mortar designated for use by plasterer shall be carried via wheel barrow or hod; all plastering and fire proofing machines, as well as guns and mixers requiring the assistance of a worker other than plasterer operator, shall be manned by helper (tender).

2. Truck driver classifications

Class I: Helper, stake body truck operator (single axle, dumpster).

Class II: Dump truck operator, tandem truck operator, batch truck operator, semi-trailer truck operator, agitator-mixer truck operator, dump Crete type vehicle operator, asphalt distributor, farm tractor operator (when tractor used to transport materials), stake body truck (tandem) operator.

Class III: Euclid type; off highway equipment back truck operator; belly dump truck operator; double-hitched equipment trailer operator; straddle carrier (Ross) operator; low-bed trailer truck operator.

3. Power Equipment Operator Classifications - Building

Group One:

Handling steel and stone in connection with erection Cranes doing hook work

Any machines handling machinery

Cable spinning machine

Helicopters

Concrete Pumps (building)

Machines similar to above, including remote control equipment

****Toxic/Hazardous Waste Removal Rate-20 Per Cent Added to All Classifications**

Group One A:

Handling steel and stone in connection with erection.

Cranes doing hook work

Any machines handling machinery

Concrete Pumps (Building)

High Rail/Burro Crane

Rail Loader (Winch Boom Type)

Page 5 of 16

Prevailing Wage Schedule (Effective 7/14/10)

Building Construction (cont'd)

Group One (A): (cont'd)

All equipment in this group which previously received the hour in lieu of an oiler will receive Wage Group I (A). Equipment in this Wage Group that does not require an oiler.

Machines similar to above, including remote control equipment

Group Two:

All types of cranes
All types of backhoes
Cableways
Draglines
Keystones
All types of shovels
Derricks
Pavers 21E and over
Trenching machines
Trench shovels
Gradalls
Front- end Loaders
Boat Captain
Hoist with Two Towers
Building Hoists-double drum (unless used as a single drum)
Pippin type backhoes
Tandem scrapers
Tower type crane operation erecting dismantling jumping or jacking
Drills self-contained (Drillmaster type)
Fork lift (20ft. and over)
Motor Patrols (fine grade)
Batch Plant with Mixer
Carralls, Scrapers, Tournapulls
Roller (High Grade Finishing)
Spreaders (Asphalt)
Bulldozers and Tractors
Mechanic-Welder
Conveyor Loaders (Euclid-Type Wheel)
Concrete Pumps (Heavy Highway)
Milling Machine
Bobcat
Side Boom

Page 6 of 16

Prevailing Wage Schedule (Effective 7/14/10)

Building Construction (cont'd)

Group Two: (cont'd)

Directional Boring Machines
Vermeer Saw Type Machine (other than hand held)
Tractor Mounted Hydro Axe
Chipper with boom
All Autograde and concrete finishing machines
Bundle Pullers/Extractors (Tubular)

Machines similar to the above including remote control equipment

*Surcharge

**Toxic/Hazardous Waste Removal Rate-20 Per Cent Added to All Classifications

Group Two (A):

Crawler backhoes and Crawler gradalls over one (1) cubic yard factory rating
Hydraulic backhoes over one (1) cubic yard factory rating
Single person operation truck cranes 15 ton and over factory rating
Cherry picker type machinery and equipment 15 ton and over factory rating, etc.
Cranes doing hook work will be paid Wage Group I (A).
All equipment in this Group which previously received the hour in lieu of an oiler will receive Wage Group II (A) including concrete pumps (Heavy/Highway).

Machines similar to the above including remote control equipment

*Surcharge

**Toxic/Hazardous Waste Removal Rate-20 Per Cent Added to All Classifications

Group Three:

Asphalt Plant Engineers
Conveyors (except building conveyors)
Well Drillers
Forklift Trucks of all types
Ditch Witch (small trenchers)
Motor Patrols
Fine Grade machines
Rollers
Concrete Breaking Machines (Guillotine Only)
Stump Grinder
High or Low Pressure Boilers
Building Hoist (single drum)
Elevator Operator (New Construction)

Machines similar to above including remote control equipment

**Toxic/Hazardous Waste Removal Rate-20 Per Cent Added to All Classifications

Group Four:

Seamen Pulverizing Mixer
Form Line Graders
Farm Tractors
Road Finishing Machines
Concrete Spreaders (Heavy Highway)

Page 7 of 16

Prevailing Wage Schedule (Effective 7/14/10)

Building Construction

Group Four: (cont'd)

Power Broom (self-contained)

Seed Spreader

Grease Truck

Machines similar to the above including remote control equipment

**Toxic/Hazardous Waste Removal Rate-20 Per Cent Added to All Classifications

Group Five:

Compressors

Pumps

Well pint pumps

Conveyors (Building)

Welding Machines

Heaters

Tireman, Power Equipment

Maintenance Engineers (Power Boats)

Miscellaneous Equipment

Operator

Elevator Operator (Renovations)

House Car

Machines similar to above including remote control equipment

**Toxic/Hazardous Waste Removal Rate-20 Per Cent Added to All Classifications

Group Six:

Fireman

Oilers and Deck Hands (Personnel Boats)/Grease Truck Helpers

*Surcharge

**Toxic/Hazardous Waste Removal Rate-20 Per Cent Added to All Classifications

Group Seven (A):

Handling steel and stone in connection with erection

Cranes doing hook work

Any machines handling machinery

Cable spinning machine

Helicopters

Concrete pumps (Building)

High Rail/Burro Crane

Rail Loader (Winch Boom Type)

Machines similar to above, including remote control equipment

**Toxic/Hazardous Waste Removal Rate-20 Per Cent Added to All Classifications

Group Seven B:

All types of cranes

All types of backhoes

Cableways

Conveyor Loader (Euclid-Type Wheel)

Page 8 of 16

Prevailing Wage Schedule (Effective 7/14/10)

Building Construction

Group Seven B: (cont'd)

Drag Lines
Keystones
All types of shovels
Derricks
Pavers 21E and over
Trench shovels
Trenching machines
Gradalls
Front-end Loaders
Boat Captain
Hoist with two towers
Concrete Pumps (Heavy, Highway)
Building Hoists-double drum (unless used as a single drum)
Milling Machine
Mucking Machines in Tunnel
Pippin type backhoes
Bobcat
Tandem scrapers
Side Boom
Tower type crane—operation, erecting, dismantling,
Jumping or jacking
Directional Boring Machines
Vermeer Saw Type Machine (other than hand held)
Drills self-contained (Drillmaster type)
Fork Lift (20 ft & over)
Track or Mounted Hydro Axe
Motor Patrols (Fine Grade)
Chipper with boom
Batch Plant with Mixer
All autograde and concrete finishing machines
Caryalls, Scapers & Tournapulls
Rollers (High Grade Finishing)
Bundle Pullers/Extractors (Tubular)
Spreaders (Asphalt)
Bulldozers and Tractors
Mechanic – Welders
Production Switch Tamper
Ballast Regulators
Tie Replacer
Rail/Road Loader
Power Jack liner

Machines similar to above, including remote control equipment

****Toxic/Hazardous Waste Removal Rate-20 Per Cent Added to All Classifications**

Page 9 of 16
 Prevailing Wage Schedule (Effective 7/14/10)
 Heavy and Highway Construction

II. HEAVY AND HIGHWAY CONSTRUCTION

A. JOB CLASSIFICATION AND WAGE RATES

	Basic Hourly Rate	Fringe Benefits
CARPENTER	\$38.05	\$23.40
CEMENT MASON	31.10	25.46
ELECTRICIAN	46.85	26.13
IRONWORKERS		
Rigger & Machinery Mover	35.02	23.48
Structural & Ornamental	44.70	26.75
Reinforcing Steel Mesh, Rebar Work	37.43	24.90
LABORERS		
Group One	24.95	22.00
Group Two	25.15	22.00
Group Three	25.15	22.00
Group Four	19.75	22.00
Group Five	25.80	22.00
Group Six	25.85	22.00
Group Seven	25.70	22.00
Group Eight	25.45	22.00
Group Nine	25.30	22.00
Group Ten	25.45	22.00
Group Eleven	25.35	22.00
Group Twelve	27.05	22.00
Group Thirteen	29.08	22.00
Group Fourteen	25.10	22.00
LANDSCAPING LABORER		
Class I	18.44	19.90
Class II	18.44	19.90
LINE CONSTRUCTION		
Lineman	44.62	19.50
Winch Truck Operator	31.24	15.92
Truck Driver	29.01	15.32
Groundman	26.77	14.72
Watch/Flag Person	19.08	12.66
MILLWRIGHT	35.13	26.44

Page 10 of 16
 Prevailing Wage Schedule (Effective 7/14/10)
 Heavy and Highway Construction (cont'd)

PAINTERS

Brush & Roller	32.31	20.84
Spray, Steel & Swing	33.56	20.84
Bridges	40.85	20.94

POWER EQUIPMENT OPERATOR

Group One	40.04	22.07
Group One A	43.04	22.96
Group Two	39.79	22.00
Group Two A	42.80	22.88
Group Three	35.71	20.79
Group Four	35.40	20.71
Group Five	33.68	20.20
Group Six	32.69	19.91
Group Seven A	48.05	25.55
Group Seven B	47.75	25.47

TOXIC/HAZARDOUS WASTE REMOVAL

Add 20 percent to basic hourly rate for all classifications

PILEDRIVERMAN	37.60	27.57
TRUCK DRIVER		
Class I	25.90	13.48
Class II	26.00	13.48
Class III	26.25	13.48

B. Job Classification Definitions: Heavy and Highway Construction

1. Laborer Classifications:

Group One: Yard workers: (laborer, scale mixer man, burner man, dustman, feeder).

Group Two: General laborer; Asphalt Shoeless; Sheeting, Shoring & Lagging – Laborer; Stone, Granite & Artificial Stone Setting Laborer; Hod Carriers; Scaffold Building; Relief Joint & Approach Slabs; Assembling & Placing Gabions; Pneumatic Tool Laborers; Concrete Forms & Stripping Laborers; Concrete Lumber Material Laborers; Steel & Steel Mesh (carrying & handling); Form Spinners; Mortar Mixers; Pouring & Placing Concrete; Grade Men

Group Three: Vibrator Laborers; Finish Surface Asphalt Rockers; Jackhammer Operators; Paving Breaker Operator; Pipe layer & Caulker (all joints up to within 5 feet of the Building Foundation Line); Conduit & Duct Layers

Group Four: Flag person

Group Five: Miners

Group Six: Welders and Burners.

Group Seven: Miner Bore Driver; Blasters; Drillers Pneumatic Shield Operator

Group Eight: Form Setters

Page 11 of 16

Prevailing Wage Schedule (Effective 7/14/10)

Heavy and Highway Construction (cont'd)

Group Nine: Trackmen; Bracken; Groutmen; Bottom Shaft Men; All other Laborers in Free Air Tunnels; Underpinning (When an underpinning excavation for a pier hole of five feet square or less and eight feet or more deep is dug, the rate shall apply only after a depth of eight feet is reached, to the men working in the bottom)

1. Laborer Classifications: (cont'd)

Group Ten: Circular Caissons (Where an excavation for circular caissons are dug eight feet or more below the natural grade level adjacent to the starting point of the caisson hole, at ground level, for the men working in the bottom); Welders, Burners & Air Tigers

Group Eleven: Powder men; Multiple Wagon Drill Operator Laborer

Group Twelve: Caisson Laborer Foreman

Group Thirteen: Toxic/Hazardous waste Handler

Group Fourteen: Wagon Drill/Hydraulic Track Drill Operator Laborer

Landscape Laborers:

Class I: Landscape laborer

Class II: Farm tractor driver, hydro seeder, mulched nozzle worker, backhoe operator, bulldozer crawler type loader, tree crane operator.

2. Power Equipment Operator Classifications - Heavy, & Highway

Group One:

Handling steel and stone in connection with erection Cranes doing hook work

Any machines handling machinery

Cable spinning machine

Helicopters

Concrete Pumps (building)

Machines similar to above including remote control equipment

Group One A:

Handling steel and stone in connection with erection.

Cranes doing hook work

Any machines handling machinery

Concrete Pumps (Building)

High Rail/Burro Crane

Rail Loader (Winch Boom Type)

All equipment in this group which previously received the hour in lieu of an oiler will receive Wage Group I (A). Equipment in this Wage Group that does not require an oiler.

Machines similar to above, including remote control equipment

Page 12 of 16

**Prevailing Wage Schedule (Effective 7/14/10)
Heavy and Highway Construction (cont'd)**

Group Two:

- All types of cranes
- All types of backhoes
- Cableways
- Draglines
- Keystones
- All types of shovels
- Derricks
- Pavers 21E and over
- Trenching machines
- Trench shovels
- Gradalls
- Front- end Loaders
- Boat Captain
- Hoist with Two Towers
- Building Hoists-double drum (unless used as a single drum)
- Pippin type backhoes
- Tandem scrapers
- Tower type crane operation erecting dismantling jumping or jacking
- Drills self-contained (Drillmaster type)
- Fork lift (20ft. and over)
- Motor Patrols (fine grade)
- Batch Plant with Mixer
- Carryalls, Scrapers, Tournapulls
- Roller (High Grade Finishing)
- Spreaders (Asphalt)
- Bulldozers and Tractors
- Mechanic-Welder
- Conveyor Loaders (Euclid-Type Wheel)
- Concrete Pumps (Heavy Highway)
- Milling Machine
- Bobcat
- Side Boom
- Directional Boring Machines
- Vermeer Saw Type Machine (other than hand held)
- Tractor Mounted Hydro Axe
- Chipper with boom
- All Autograde and concrete finishing machines
- Bundle Pullers/Extractors (Tubular)
- Machines similar to the above including remote control equipment

Page 13 of 16

**Prevailing Wage Schedule (Effective 7/14/10)
Heavy and Highway Construction (cont'd)**

Group Two A:

Crawler backhoes and Crawler gradalls over one (1) cubic yard factory rating
Hydraulic backhoes over one (1) cubic yard factory rating
Single person operation truck cranes 15 ton and over factory rating
Cherry picker type machinery and equipment 15 ton and over factory rating, etc.
Cranes doing hook work will be paid Wage Group I (A).
All equipment in this Group which previously received the hour in lieu of an oiler will receive Wage Group II (A) including concrete pumps (Heavy/Highway).

Machines similar to the above including remote control equipment

Group Three:

Asphalt Plant Engineers
Conveyors (except building conveyors)
Well Drillers
Forklift Trucks of all types
Ditch Witch (small trenchers)
Motor Patrols
Fine Grade machines
Rollers
Concrete Breaking Machines (Guillotine Only)
Stump Grinder
High or Low Pressure Boilers
Building Hoist (single drum)
Elevator Operator (New Construction)
Machines similar to above including remote control equipment

Group Four:

Seamen Pulverizing Mixer
Form Line Graders
Farm Tractors
Road Finishing Machines
Concrete Spreaders (Heavy Highway)
Power Broom (self-contained)
Seed Spreader
Grease Truck
Machines similar to the above including remote control equipment

Group Five:

Compressors
Pumps
Well pint pumps
Conveyors (Building)
Welding Machines
Heaters
Tireman, Power Equipment
Maintenance Engineers (Power Boats)
Miscellaneous Equipment

Operator

Page 14 of 16
Prevailing Wage Schedule (Effective 7/14/10)
Heavy and Highway Construction (cont'd)

Group Five (cont'd):

Elevator Operator (Renovations)
House Car
Machines similar to above including remote control equipment

Group Six:

Fireman
Oilers and Deck Hands (Personnel Boats)
Grease Truck Helpers

Group Seven (A):

Handling steel and stone in connection with erection
Cranes doing hook work
Any machines handling machinery
Cable spinning machine
Helicopters
Concrete pumps (Building)
High Rail/Burro Crane
Rail Loader (Winch Boom Type)
Machines similar to above, including remote control equipment

**Toxic/Hazardous Waste Removal Rate-20 Per Cent Added to All Classifications

Group Seven B:

All types of cranes
All types of backhoes
Cableways
Conveyor Loader (Euclid-Type Wheel)
Drag Lines
Keystones
All types of shovels
Derricks
Pavers 21E and over
Trench shovels
Trenching machines
Gradalls
Front-end Loaders
Boat Captain
Hoist with two towers
Concrete Pumps (Heavy, Highway)
Building Hoists-double drum (unless used as a single drum)
Milling Machine
Mucking Machines in Tunnel
Pippin type backhoes
Bobcat
Tandem scrapers

Page 15 of 16
Prevailing Wage Schedule (Effective 7/14/10)
Heavy and Highway Construction (cont'd)

Group Seven B cont'd:

Side Boom
Tower type crane operation, erecting, dismantling,
Jumping or jacking
Directional Boring Machines
Vermeer Saw Type Machine
(other than hand held)
Drills self-contained (Drillmaster type)
Fork Lift (20 ft & over)
Tractor Mounted Hydro Axe
Motor Patrols (Fine Grade)
Chipper with boom
Batch Plant with Mixer
All autograde and concrete finishing machines
Caryalls, Scapers & Tournapulls
Rollers (High Grade Finishing)
Bundle Pullers/Extractors (Tubular)
Spreaders (Asphalt)
Bulldozers and Tractors
Mechanic – Welders
Production Switch Tamper
Ballast Regulators
Tie Replacer
Rail/Road Loader
Power Jack liner

Machines similar to above, including remote control equipment

*Surcharge

**Toxic/Hazardous Waste Removal Rate-20 Per Cent Added to All Classifications

3. Truck Driver Classifications:

Class I: Helper, stake body truck operator (single axle, dumpster)

Class II: Dump truck operator, tandem truck operator, batch truck operator, semi-trailer truck operator, agitator-mixer truck operator, dump Crete type vehicle operator, asphalt distributor, farm tractor operator (when used to transport materials), stake body truck (tandem) operator.

Class III: Euclid type, off highway equipment back truck operator, belly dump truck operator, double-hitched equipment trailer operator, straddle carrier (Ross) operator; lobed trailer truck operator.

Page 16 of 16
Prevailing Wage Schedule (Effective 7/14/10)
Heavy and Highway Construction (cont'd)

NOTE:

1. Contractors are advised to contact the Philadelphia Labor Standards Unit with any questions regarding job classification, prevailing wage rates, and fringe benefits.
2. Prior to employing apprentices on a public works project, the contractor is required to provide written evidence of employee's registration with a statewide training program recognized by the U.S. Bureau of Apprenticeship and Training (BAT). Contractors shall forward proper documentation for each bona fide apprentice to:

Philadelphia Labor Standards Unit
Municipal Services Building
1401 John F. Kennedy Boulevard - 5th Floor, Room 530
Philadelphia, PA 19102-1670
Telephone Number: (215) 686-2132