



THE PORT AUTHORITY OF NY & NJ

**PROCUREMENT DEPARTMENT
ATTN: BID/PROPOSAL CUSTODIAN
ONE MADISON AVENUE, 7TH FLOOR
NEW YORK, NY 10010**

REQUEST FOR PROPOSALS

TITLE: LIMITED USE CONTACTLESS SMART CARDS FOR PATH

RFP NO.: 20713

SUBMIT PROPOSALS BEFORE THE DUE DATE AND TIME TO THE ABOVE ADDRESS

QUESTIONS DUE BY: March 23, 2010 TIME: 3:00 P.M.

PROPOSAL DUE DATE: April 19, 2010 TIME: 2:00 P.M.

CONTACT: James Summerville, Sr. Contracts Specialist

**PHONE: (212) 435-3954
FAX: (212) 435-3925
EMAIL jsummerville@panynj.gov**

TABLE OF CONTENTS

1. INFORMATION FOR PROPOSERS ON THIS REQUEST FOR PROPOSALS.....	7
A. General Information: The Port Authority of New York and New Jersey	7
B. Brief Summary of Scope of Work	7
C. Deadline for Receipt of Proposals	8
D. Submission of Proposals	8
E. Communications Regarding this RFP	9
F. Proposal Acceptance or Rejection	9
G. Union Jurisdiction	9
H. City Payroll Tax	9
I. Pre-Proposal Meeting(s)/Site Inspection(s):	10
J. Not Applicable	10
K. Not Applicable	10
L. Additional Proposer Information	10
2. SCOPE OF WORK	10
3. PROPOSER PREREQUISITES.....	10
4. FINANCIAL INFORMATION	10
5. EVALUATION CRITERIA AND RANKING	11
6. CERTIFICATION OF RECYCLED MATERIALS PROVISION	12
7. PROPOSAL SUBMISSION REQUIREMENTS	13
A. Letter of Transmittal	13
B. Executive Summary	14
C. Agreement on Terms of Discussion	14
D. Certifications With Respect to the Contractor's Integrity Provisions	14
E. Documentation of Proposer Prerequisites	14
F. Proposal	14
G. Acknowledgment of Addenda	16
H. Acceptance of Standard Contract Terms and Conditions	16

8. CONDITIONS FOR THE SUBMISSION OF A PROPOSAL	17
A. <i>Changes to this RFP</i>	17
B. <i>Proposal Preparation Costs</i>	17
C. <i>Disclosure of Proposal Contents / Use of Ideas and Materials</i>	17
D. <i>Ownership of Submitted Materials</i>	17
E. <i>Subcontractors</i>	17
F. <i>Conflict of Interest</i>	17
G. <i>Authorized Signature</i>	18
H. <i>References</i>	18
I. <i>Evaluation Procedures and Negotiation</i>	18
J. <i>Taxes and Costs</i>	18
K. <i>Most Advantageous Proposal/No Obligation to Award</i>	18
L. <i>Multiple Contract Awards</i>	18
M. <i>Right to Extend Contract</i>	18
N. <i>Rights of the Port Authority</i>	19
O. <i>No Personal Liability</i>	19
ATTACHMENT A: AGREEMENT ON TERMS OF DISCUSSION.....	20
ATTACHMENT B: STANDARD CONTRACT TERMS AND CONDITIONS.....	21
1. GENERAL AGREEMENT	21
2. PAYMENTS	21
3. DURATION	22
4. DEFINITIONS	22
5. GENERAL PROVISIONS.....	23
6. INTELLECTUAL PROPERTY.....	24
7. PROPRIETARY RIGHTS IN SUBJECT MATTER NOT WITHIN THE INTELLECTUAL PROPERTY CLAUSE 25	
8. INDEMNITY IN REGARD TO INFRINGEMENT MATTER.....	25
9. TIME IS OF THE ESSENCE	26

10.	FINAL PAYMENT	26
11.	DEFAULT, REVOCATION OR SUSPENSION OF CONTRACT	27
12.	WITHHOLDING OF PAYMENTS	30
13.	CONTRACTOR PERSONNEL STANDARDS OF PERFORMANCE	31
14.	HIGH SECURITY AREAS	31
16.	INSURANCE PROCURED BY THE CONTRACTOR	32
17.	ASSIGNMENTS AND SUBCONTRACTS.....	34
18.	CERTAIN CONTRACTOR'S WARRANTIES.....	34
19.	RIGHTS AND REMEDIES OF THE AUTHORITY.....	36
20.	RIGHTS AND REMEDIES OF THE CONTRACTOR.....	37
21.	TAX EXEMPTIONS.....	37
22.	TITLE TO EQUIPMENT	37
23.	NOTICE REQUIREMENTS.....	37
24.	SERVICE OF NOTICES ON THE CONTRACTOR.....	38
25.	NO THIRD PARTY RIGHTS	39
26.	INDEMNIFICATION AND RISKS ASSUMED BY THE CONTRACTOR	39
27.	APPLICABLE LAW	40
28.	AUTHORITY OF THE DIRECTOR	41
29.	APPROVALS BY THE DIRECTOR.....	42
30.	CONTRACT REVIEW AND COMPLIANCE AUDITS	42
31.	AUTHORITY ACCESS TO RECORDS	42
32.	CLAIMS OF THIRD PERSONS.....	43
33.	NO DISCRIMINATION IN EMPLOYMENT, EQUAL EMPLOYMENT OPPORTUNITY	43
34.	INTEGRITY	43

35.	CONFIDENTIAL INFORMATION/NON-PUBLICATION	48
36.	PROVISIONS OF LAW DEEMED INSERTED	49
37.	INVALID CLAUSES.....	49
38.	NO ESTOPPEL OR WAIVER.....	49
39.	NON-LIABILITY OF THE AUTHORITY REPRESENTATIVES	50
40.	MODIFICATION OF CONTRACT.....	50
41.	ENTIRE AGREEMENT	50
ATTACHMENT C: SCOPE OF WORK		51
1.	SCOPE OF WORK.....	51
2.	PROTOTYPE AND ASSOCIATED ACCEPTANCE TESTING	51
3.	PACKAGING.....	51
4.	INTERNAL CONTROL.....	51
5.	DELIVERY	52
6.	CARD RELIABILITY	52
7.	SOFTWARE	53
8.	SECURITY REQUIREMENTS	53
ATTACHMENT D: COST PROPOSAL		54
PRICE FORMS		55
ATTACHMENT E - PROPOSER REFERENCE FORM		57
ATTACHMENT F: CONTROL REQUIREMENTS.....		58
I.	APPLICATION CHECKLIST:	58
A.	General	58
B.	Hardening of operating system/database that supports the application.....	58
C.	License Management.....	58
D.	Logical Access Controls	59
E.	Application Controls	59
F.	Management Reporting	60
G.	Contingency Planning, Disaster Recovery and Backup Management	60
H.	Performance Monitoring.....	60
II.	CONTROL SECURITY REQUIREMENTS	60

A.	System Configuration	60
B.	Physical Protection	61
C.	Backup	61
D.	Access Controls	61
E.	Password Controls	62
F.	Documentation / Procedures	62
III.	DISASTER RECOVERY CHECKLIST	63
IV.	SECURITY ADMINISTRATION FUNCTION	65
V.	SECURITY REQUIREMENT	66
VI.	SYSTEM ADMINISTRATION & OPERATION MANUAL REQUIREMENTS	68
A.	General Information	68
B.	System	68
C.	Access Controls	69
D.	Password Controls	69
E.	Remote Access	69
F.	Operation	69
G.	Physical	69
H.	Anti-Virus Management	70
I.	Change Management	70
J.	Patch Management	70
K.	Reporting and Monitoring	70
L.	Problem & Incident Management	71
M.	Segregation of Duties	71
VII.	WEB-BASED APPLICATION CHECKLIST	71
A.	Web Environment Controls	71
B.	Web Site Management Issue	72
C.	Web Application Vulnerabilities and Controls	72
ATTACHMENT G – CERTIFIED ENVIRONMENTALLY PREFERABLE PRODUCTS/PRACTICES		74

1. INFORMATION FOR PROPOSERS ON THIS REQUEST FOR PROPOSALS

A. General Information: The Port Authority of New York and New Jersey

The Port Authority of New York and New Jersey (the “Port Authority” or the “Authority”) is an agency of the States of New York and New Jersey, created and existing by virtue of the Compact of April 30, 1921, made by and between the two States, and thereafter consented to by the Congress of the United States. It is charged with providing transportation, terminal and other facilities of trade and commerce within the Port District. The Port District comprises an area of about 1,500 square miles in both States, centering about New York Harbor. The Port District includes the Cities of New York and Yonkers in New York State, and the cities of Newark, Jersey City, Bayonne, Hoboken and Elizabeth in the State of New Jersey, and over 200 other municipalities, including all or part of seventeen counties, in the two States. The Port Authority manages and/or operates all of the region’s major commercial airports (Newark Liberty International, John F. Kennedy International, Teterboro, LaGuardia and Stewart International Airports), marine terminals in both New Jersey and New York (Port Newark and Elizabeth, Howland Hook and Brooklyn Piers); and its interstate tunnels and bridges (the Lincoln and Holland Tunnels; the George Washington, Bayonne, and Goethals Bridges; and the Outerbridge Crossing), which are vital “Gateways to the Nation.”

In addition, the Port Authority operates the Port Authority Bus Terminal in Manhattan, the largest facility of its kind in the world, and the George Washington Bridge and Journal Square Transportation Center bus stations. A key link in interstate commuter travel, the Port Authority also operates the Port Authority Trans-Hudson Corporation (PATH), a rapid rail transit system linking Newark, and the Jersey City and Hoboken waterfronts, with midtown and downtown Manhattan. A number of other key properties are managed by the agency including but not limited to a large satellite communications facility (the Teleport) in Staten Island, and a resource recovery co-generation plant in Newark. Prior to September 11, 2001, the Port Authority’s headquarters were located in the World Trade Center, and that complex is still owned and being partially redeveloped by the Authority.

The Port Authority is hereby seeking proposals from qualified firms to encode and furnish Limited Use Contactless Smart Cards for PATH, as more fully described herein. As used herein, the term “Port Authority” shall mean the Port Authority acting on behalf of PATH.

B. Brief Summary of Scope of Work

The successful Proposer shall provide the Port Authority with secure pre-cut and pre-encoded Limited Use Contactless Smart Cards (hereinafter, sometimes referred to as “Smart Cards” or the “Cards”) for use on the PATH system. The Smart Cards will support time-, value- and trip-based uses, and shall conform to the latest Regional Interoperability Standard for Electronic Transit Fare Payments (RIS) American Public Transportation Association, specifically:

- “Contactless Fare Media System Standard, Part I – Introduction and Overview (APTA S-UTFS-WP0-001-07), Version 1.0, January 27, 2007”;
- “Contactless Fare Media System Standard, Part II – Contactless Fare Media Data Format and Interface Standard (APTA S-UTFS-WP1-001-06), Version 1.0, October 8, 2006”;

- “Contactless Fare Media System Standard, Part III – Regional Central System Interface Standard (APTA S-UTFS-WP4-001-07), Version 1.0, January 27, 2007”; and
- “Contactless Fare Media System Standard, Part IV – Security Planning and Implementation Guidelines and Best Practices (APTA G-UTFS-WP3-001-06), Version 1.0, October 8, 2006.”

The complete versions of the aforementioned RIS documents shall be incorporated by reference in the contract (the “Contract”) resulting from this RFP. The successful Proposer shall ensure that the Cards adhere at all times to the standards expressed in the RIS documents and in any revisions thereto.

It is anticipated but not guaranteed that:

- The successful Proposer (“Contractor”) will be awarded a three-year Contract in May 2010;
- The Contractor will deliver an approved proto-type Smart Card to PATH no later than one month after notice to proceed (in writing) from PATH;
- The Contractor will deliver the first production batch of Smart Cards to PATH no later than August 2010.

C. Deadline for Receipt of Proposals

The due date specified on the cover page is the Proposal Due Date. Closing of due date is 2:00 P.M., Eastern Standard Time (EST)

If your Proposal is to be delivered by messenger, please note that only individuals with valid photo identification will be permitted access to the Authority’s offices. Messengers without valid identification shall be turned away and their packages not accepted.

The Port Authority assumes no responsibility for delays caused by any delivery service.

D. Submission of Proposals

One reproducible original (containing original signatures and clearly designated as such) and **fifteen (15) double-sided copies** of the proposal must be submitted on or before the due date and time in accordance with the information on the cover page of this RFP and sent or delivered to the address specified on the cover page. Proposals shall be submitted in recyclable format and contain only information requested hereunder.

Each copy of the proposal as well as the parcel(s) used for shipping must be conspicuously marked with the Proposer’s name and address along with the title of this RFP, this RFP number and the Proposal Due Date.

Proposers should also submit **sixteen (16) CD copies** of their proposals to assist in the review. If there is any difference between the CD and paper copy, the paper copy takes precedence.

E. Communications Regarding this RFP

All communications concerning this RFP should be directed to the Contracts Specialist listed on the cover page. All questions regarding this RFP should be submitted in writing to the Contracts Specialist at the email address listed on the cover page no later than 3:00 p.m. EST on the date specified on the cover page.

The Contracts Specialist is authorized only to direct the attention of prospective Proposers to various portions of this RFP so that they may read and interpret such portions themselves.

Neither the Contracts Specialist nor any other employee of the Port Authority is authorized to interpret the provisions of this RFP or give additional information as to its requirements. If interpretation or other information is required, it will be communicated to Proposers by written addenda and such writing shall form a part of this RFP.

F. Proposal Acceptance or Rejection

Acceptance shall be only by mailing to or delivering at the office designated by the Proposer in its proposal, a notice in writing signed by an authorized representative on behalf of the Port Authority specifically stating that the proposal is accepted or by execution of an agreement covering the subject matter of this RFP signed by authorized representatives of the Port Authority and the Proposer. No other act of the Port Authority, its Commissioners, officers, agents, representatives, or employees shall constitute acceptance of a proposal. Rejection of a proposal shall be only by either (a) a notice in writing specifically stating that the proposal is not accepted, signed by an authorized representative of the Port Authority and mailed to or delivered to the Proposer at the office designated in the Proposal, or (b) omission of the Port Authority to accept the proposal within 180 days after the Proposal Due Date. No other act of the Port Authority, its Commissioners, officers, agents, representatives or employees shall constitute rejection of a proposal.

G. Union Jurisdiction

Proposers are advised to ascertain whether any union now represented or not represented at the facility will claim jurisdiction over any aspect of the operations to be performed hereunder and their attention is directed to the Section of this RFP entitled "Contractor Personnel Standards of Performance" included in the "Standard Contract Terms and Provisions" (Attachment B) hereunder.

H. City Payroll Tax

Proposers should be aware of the payroll tax imposed by the:

- a. City of Newark, New Jersey for services performed in Newark, New Jersey;
- b. City of New York, New York for services performed in New York, New York;
and
- c. City of Yonkers, New York for services performed in Yonkers, New York.

These taxes, if applicable, are the sole responsibility of the Contractor. Proposers should consult their tax advisors as to the effect, if any, of these taxes. The Port Authority provides this notice for informational purposes only and is not responsible for either the

imposition or administration of such taxes. The Port Authority exemption set forth in the Paragraph entitled "Sales or Compensating Use Taxes", in the "Standard Contract Terms and Conditions" included herein, does not apply to these taxes.

I. Pre-Proposal Meeting(s)/Site Inspection(s):

None

J. Not Applicable

K. Not Applicable

L. Additional Proposer Information

Prospective Proposers are advised that additional vendor information, including, but not limited to forms, documents and other information, including and protest procedures, may be found on the Port Authority website at: <http://www.panynj.gov/business-opportunities/become-vendor.html>

2. SCOPE OF WORK

The full Scope of Work is set forth in detail in Attachment C, the "Scope of Work".

3. PROPOSER PREREQUISITES

Only Proposers who can demonstrate that they comply with the following should submit proposals as only proposals from such Proposers will be considered:

- A. The Proposer shall have had at least three (3) years of continuous experience immediately prior to the date of the submission of its proposal in the production and provision of at least two (2) million Limited Use Contactless Smart Cards in a transit environment in the United States, and as a business actually engaged in providing these services to commercial and industrial accounts under contract. The Proposer may fulfill this prerequisite if it can demonstrate that the persons or entities owning and controlling the Proposer have had a cumulative total of at least the same number of years and type of direct continuous experience immediately prior to the submission of this proposal as is required of the Proposer, or has owned and controlled other entities which meet the requirement.
- B. During the time period stated in (A) above, the Proposer shall demonstrate satisfactory performance of at least one (1) contract for similar services of similar scope, which conformed to the RIS Standards specified in the documents listed in Section 1.B, above;
- C. The Proposer shall demonstrate that it has earned gross revenues of at least \$500,000 a year for the last three (3) fiscal or calendar year(s) from the type of services or products described herein.

4. FINANCIAL INFORMATION

The Proposer will be required to demonstrate that it is financially capable of performing the contract resulting from this RFP ("Contract"). The determination of the Proposer's financial

qualifications and ability to perform this Contract will be in the sole discretion of the Port Authority. The Proposer shall submit, with its proposal, the following:

- A. (1) Certified financial statements, including applicable notes, reflecting the Proposer's assets, liabilities, net worth, revenues, expenses, profit or loss and cash flow for the most recent year or the Proposer's most recent fiscal year.

(2) Where the certified financial statements in (1) above are not available, then reviewed statements from an independent accountant setting forth the aforementioned information shall be provided.

Where the statements submitted pursuant to subparagraphs (1) and (2) aforementioned do not cover a period which includes a date not more than forty-five days prior to the Proposal Due Date, then the Proposer shall also submit a statement in writing, signed by an executive officer or his/her designee, that the present financial condition of the Proposer is at least as good as that shown on the statements submitted.

- B. A statement of work which the Proposer has on hand, including any work on which a bid and/or proposal has been submitted, containing a description of the work, the annual dollar value, the location by City and State, the current percentage of completion, the expected date for completion, and the name of an individual most familiar with the Proposer's work on these jobs.
- C. The name and address of the Proposer's banking institution, chief banking representative handling the Proposer's account, the Proposer's Federal Employer Identification Number (i.e., the number assigned to firms by the Federal Government for tax purposes), the Proposer's Dun and Bradstreet number, if any, the name of any credit service to which the Proposer furnished information and the number, if any, assigned by such service to the Proposer's account.

5. EVALUATION CRITERIA AND RANKING

All proposals will be reviewed by the Port Authority to determine if they adhere to the format required in this RFP, if they contain all required submissions and if the Proposer meets the prerequisites required for submission of a Proposal. For Proposals meeting such requirements, the following criteria, set forth in order of importance, will be utilized in the evaluation of proposals.

A. Cost of Proposal

The degree and extent to which the Proposal is cost effective to the Port Authority and the overall cost of the Limited Use Smart Cards and associated services.

B. Technical and Management Approach

The clarity and feasibility of the Proposal, which shall include the Proposer's management philosophy, principles and programs employed in performing the Scope of Work, and which shall include consideration of the:

- Proposer's approach for (i) securely encoding the Cards, (ii) secure, quality-focused production runs, (iii) packaging, (iv) secure delivery, and (v) accommodating changes to the Cards (if or when necessary);

- Management plans and work plan for this Contract;
- Proposed quality assurance and control program addressing how the Proposer will ensure compliance with the Contract requirements, including but not limited to adherence to the RIS standards specified in the documents referenced in Section 1.B, above;
- Business Risk: Consideration will be given to the degree of business risk assumed by the Port Authority. This will include but not be limited to an assessment of the impact resulting from the possible failure of the Contractor to perform under the terms and conditions of this Contract. As part of the evaluation, business risk will also be measured by the Port Authority's assessment of its ability to immediately replace the Contractor in a manner that maintains or improves the quality and continuity of providing the required Limited Use Smart Cards; and
- Certification of Environmentally Preferable Products/Practices.

C. Firm Qualifications and Experience:

- The extent to which the Proposer has experience in implementing and managing similar services in a similar environment to that necessary for the services to be provided hereunder.
- Experience of the Proposer's management team in utilizing technological advances in contactless fare media environment (e.g. construction, production, packaging, etc.).
- The Proposer's Background Check plan, which shall be considered "pass/fail".

6. CERTIFICATION OF RECYCLED MATERIALS PROVISION

Proposers shall submit with their proposal, as Attachment G, the Certified Environmentally Preferable Products / Practices Form attesting that the products or items offered by the Proposer contain the minimum percentage of post-consumer recovered material in accordance with the most recent guidelines issued by the United States Environmental Protection Agency (EPA), or, for commodities not so covered, the minimum percentage of post-consumer recovered materials established by other applicable regulatory agencies.

Recycling Definitions:

For purposes of this solicitation, the following definitions shall apply:

- a. **"Recovered Material"** shall be defined as any waste material or by-product that has been recovered or diverted from solid waste, excluding those materials and by-products generated from, and commonly reused within, an original manufacturing process.
- b. **"Post-consumer Material"** shall be defined as any material or finished product that has served its intended use and has been discarded for disposal or recovery having completed its life as a consumer item. "Post-consumer material" is included in the broader category of "Recovered Material".
- c. **"Pre-consumer Material"** shall be defined as any material or by-product generated after the manufacture of a product but before the product reaches the consumer, such as damaged or obsolete products. Pre-consumer Material does not include mill and manufacturing trim, scrap, or broken material that is generated at a manufacturing site and commonly reused on-site in the same or another manufacturing process.

- d. **"Recycled Product"** shall be defined as a product that contains the highest amount of post-consumer material practicable, or when post-consumer material is impracticable for a specific type of product, contains substantial amounts of Pre-consumer Material.
- e. **"Recyclable Product"** shall be defined as the ability of a product and its packaging to be reused, reconditioned for use, or recycled through existing recycling collection programs.
- f. **"Waste Reducing Product"** shall be defined as any product that will result in less waste generated due to its use rather than another product designed to serve the same function with an greater waste generation rate. This shall include, but not be limited to, those products that can be reused, refilled or have a longer life expectancy and contain a lesser amount of toxic constituents.

7. PROPOSAL SUBMISSION REQUIREMENTS

In order to expedite the evaluation of proposals, the Proposer's response to this RFP shall follow the format and order of items, using the same paragraph identifiers, as set forth below.

A. Letter of Transmittal

The Proposer shall submit a letter on its letterhead, signed by an authorized representative, stating its experience and qualifications in meeting the requirements of this RFP. This letter shall include a statement on whether the Proposer is submitting a proposal as a single entity, a joint venture, or is partnering with another firm in a prime/subcontracting relationship. In all cases, information required for a single entity is required for each participant in a joint venture.

The Letter of Transmittal shall contain:

- (1) Name and address of the Proposer and an original signature on the Letter of Transmittal by an authorized representative on behalf of the Proposer;
- (2) Name(s), title(s), email addresses and telephone number(s) of the individual(s) who are authorized to negotiate and execute the Contract;
- (3) Name, title, email address and telephone number of two contact persons (primary & backup) to which the Port Authority can address questions or issues related to this RFP;
- (4) Name and address of proposed subcontractors, if any;
- (5) If a corporation: (a) a statement of the names and residences of its officers, and (b) a copy of its Certificate of Incorporation, with a written declaration signed by the secretary of the corporation, with the corporate seal affixed thereto, that the copy furnished is a true copy of the Certificate of Incorporation as of the date of the opening of the Proposals;

If a partnership: a statement of the names and residences of its principal officers, indicating which are general and which are special partners;

If an individual: a statement of residence;

If a joint venture: information on each of the parties consistent with the information requested above; if the Contract is awarded to a common law joint venture (a partnership of business entities) each member will be jointly and severally liable under the Contract.

B. Executive Summary

The Proposer shall submit a summary presenting the major features of its proposal and how the proposal satisfies the requirements contained in this RFP, as well as the special competencies and expertise of the Proposer to meet the requirements of this RFP. Such summary shall not exceed two (2) 8.5 x 11 pages.

C. Agreement on Terms of Discussion

The Proposer shall submit a copy of the "Agreement on Terms of Discussion," signed by an authorized representative of the Proposer, which is included as Attachment A and shall be submitted by the Proposer without any alterations or deviations. Any Proposer who fails to sign the Port Authority's "Agreement on Terms of Discussion" will not have its proposal reviewed. If the Proposer is a joint venture, an authorized representative of each party must sign the Agreement.

D. Certifications With Respect to the Contractor's Integrity Provisions

The Proposer, by signing the Letter of Transmittal, makes the certifications in the "Contractor's Integrity Provisions," included as Section 32 of Attachment B to this RFP. If the Proposer cannot make any such certifications, it shall enclose an explanation of that inability ("Certification Statement").

E. Documentation of Proposer Prerequisites

The Proposer shall submit documentation to demonstrate that it meets all prerequisites included herein.

F. Proposal

The Proposer must submit a proposal that clearly describes its experience and capability to develop, produce and deliver the Limited Use Contactless Smart Cards (in accordance with the RIS standards referenced in the documents in Section 1.B, above), as described in this RFP, its approach to such work and the cost of such work to the Port Authority. At a minimum, the proposal shall address the following:

1. Cost Proposal

The Proposer shall submit a Cost Proposal indicating the compensation that it expects to receive. The Cost Proposal shall be complete and include all Work required by this RFP, including but not limited to material and labor costs, fuel costs, shipping, preparation, insurance, security, any salaries, health benefits and other benefits, overheads, profits, etc. The Cost Proposal should be submitted on Attachment D, "Cost Proposal".

2. Technical and Management Approach

- a. The Proposer should provide a complete description of how it intends to implement and manage the required services hereunder, including any information that would be helpful to the Port Authority in assessing its ability to provide the services described in the RFP.
 - b. The Proposer should provide a complete, detailed description of the processes it will utilize in producing the Smart Cards, focusing on both initial one-shot pre-production activities and ongoing production tasks, and in packaging and delivering the Smart Cards.
 - c. The proposal shall identify all activities that are included in the cost for pre-production of the Smart Cards.
 - d. The Proposer should provide a complete, detailed description of its production quality control / quality assurance program to ensure that the Smart Cards are produced and delivered in accordance with the specifications of this RFP.
 - e. The Proposer should submit proposed minimum service standards (and the appropriate measurements thereof), concepts or procedures that will further its objective to provide the highest possible level of service to the Port Authority, including how it will determine and maintain performance or service levels stipulated in the Scope of Work.
 - f. The Proposer should describe its security processes in producing and delivering the Smart Cards, and include any certifications it possesses (for example, SAS 70 level II certification for the area covered by the Scope of Work). The proposal should describe (i) the methodology to manage and secure the electronic keys that allow the pre-encoded cards to be used on the PATH System, (ii) the measures taken to prevent unauthorized use and loss of the electronic keys, (iii) how the electronic key will be transferred securely at the beginning of the Contract and returned securely to PATH at termination of the Contract; (iv) the processes for shipping and sealing the packages (including but not limited to affixing tamper-proof seals).
 - g. The Proposer should describe the system and environment which controls or is part of the process for developing, maintaining, encoding, and printing the Smart Cards. The Port Authority expects that the Proposer's system and environment shall conform to Control Requirements attached hereto as Attachment F.
 - h. The Proposer should indicate the total number of full-time (minimum thirty (30) hours/week) employees currently employed by the firm and the number employed in each of the preceding three (3) years.
 - i. Business Risk: The Proposer should submit risk assessment and succession plans that assess the business risk in taking on the significant amount of new work that will be required under this Contract. The risk assessment plan should take into account all work currently under contract, as well as work that is under contract to companies which the Proposer owns, controls or has an interest.
3. Firm Qualifications and Experience
- a. Using the form in Attachment E hereof, the Proposer shall submit a listing of all similar contracts under which it provided (within the last three [3] years) or is

providing pre-cut and pre-encoded Limited Use Contactless Smart Cards. For each contract listed, include:

- The name and address of the Contracting party;
 - The locations where the work was performed;
 - Duration of the Contract;
 - The approximate dollar amount of the Contract and number of cards provided;
 - A summary of the types of work performed; and
 - Representatives (and their phone numbers and email addresses) familiar with the work that the Port Authority may contact.
- b. The Proposer shall submit a detailed description explaining its technical expertise and past experience in utilizing technological advances in producing and delivering Limited Use Contactless Smart Cards, and the resulting benefits.
4. Contractor Identity Check/Background Screening Plan

The Proposer shall submit a Contractor Identity Check/Background Screening Plan, which demonstrates how the Proposer will ensure that only employees who were successfully prescreened and properly credentialed perform the services required herein. This Plan shall be applicable to all years of the Contract and shall include but not be limited to the following:

The length of time researched for the identity check/background screening on new hires, which shall be at a minimum of ten (10) years of employment history or verification of what an employee documented they have done in the last ten (10) years preceding the date of the investigation, resources utilized to perform this, and the frequency at which it is performed on current employees.

The Proposer shall provide any other information that is related to the above requirements in this Section, that the Proposer believes would be helpful to the Port Authority in the evaluation of its proposal.

G. Acknowledgment of Addenda

If any Addenda are sent as part of this RFP, the Proposer shall complete, sign and include with its Proposal the addenda form(s). In the event any Proposer fails to conform to these instructions, its proposal will nevertheless be construed as though the Addenda had been acknowledged.

H. Acceptance of Standard Contract Terms and Conditions

The Port Authority has attached to this RFP, as Attachment B, Standard Contract Terms and Conditions governing the Contract. The Proposer is expected to agree with these Standard Contract Terms and Conditions. However, if the Proposer has any specific exceptions, such exceptions should be set forth in a separate letter included with its response to this RFP. After the proposal due date, the Proposer will be precluded from raising any exceptions unless such exceptions are justified by and directly related to substantive changes in the business or technical requirements and are agreed to by the Proposer and the Port Authority.

8. CONDITIONS FOR THE SUBMISSION OF A PROPOSAL

In addition to all other requirements of this RFP, the Proposer agrees to the following conditions for the submission of its proposal.

A. Changes to this RFP

At any time, in its sole discretion, the Port Authority may by written addenda, modify, correct, amend, cancel and/or reissue this RFP. If an addendum is issued prior to the date proposals are due, it will be provided to all parties to whom RFP's were mailed. If an addendum is issued after proposals have been received, the addendum will be provided only to those whose proposals remain under consideration at such time.

B. Proposal Preparation Costs

The Port Authority shall not be liable for any costs incurred by the Proposer in the preparation, submittal, presentation, or revision of its proposal, or in any other aspect of the Proposer's pre-contract activity. No Proposer is entitled to any compensation except under an agreement for performance of services signed by an authorized representative of the Port Authority and the Proposer.

C. Disclosure of Proposal Contents / Use of Ideas and Materials

Proposal information is not generally considered confidential or proprietary. All information contained in the proposal is subject to the "Agreement on Terms of Discussion" attached hereto as Attachment A.

D. Ownership of Submitted Materials

All materials submitted in response to or in connection with this RFP shall become the property of the Port Authority. Selection or rejection of a Proposal shall not affect this right.

E. Subcontractors

If a Proposer intends to use subcontractor(s) the Proposer must identify in its proposal the names of the subcontractor(s) and the portions of the work the subcontractor(s) will perform.

F. Conflict of Interest

If the Proposer or any employee, agent or subcontractor of the Proposer may have a possible conflict of interest, or may give the appearance of a possible conflict of interest, the Proposer shall include in its proposal a statement indicating the nature of the conflict. The Port Authority reserves the right to disqualify the Proposer if, in its sole discretion, any interest disclosed from any source could create a conflict of interest or give the appearance of a conflict of interest. The Port Authority's determination regarding any questions of conflict of interest shall be final.

G. Authorized Signature

Proposals must be signed by an authorized corporate officer (e.g., President or Vice President), General Partner, or such other individual authorized to bind the Proposer to the provisions of its proposal and this RFP.

H. References

The Port Authority may consult any reference familiar with the Proposer regarding its current or prior operations and projects, financial resources, reputation, performance, or other matters. Submission of a proposal shall constitute permission by the Proposer for the Port Authority to make such inquiries and authorization to third parties to respond thereto.

I. Evaluation Procedures and Negotiation

Only Proposers which meet the prerequisites, if any, may have their proposals evaluated based on the evaluation criteria set forth in this RFP. The Port Authority may use such procedures that it deems appropriate to evaluate such proposals. The Port Authority may elect to initiate contract negotiations with one or more Proposers including negotiation of costs/price(s) and any other term or condition, including modifying any requirement of this RFP. The option of whether or not to initiate contract negotiations rests solely with the Port Authority.

J. Taxes and Costs

Purchases of services and tangible personal property by the Port Authority in the States of New York and New Jersey are generally exempt from state and local sales and compensating use taxes, and from most federal excises (Taxes). All costs associated with the Contract must reflect this exemption and be stated in U.S. currency.

K. Most Advantageous Proposal/No Obligation to Award

The Port Authority reserves the right to award the Contract to other than the Proposer proposing the lowest price. The Contract will be awarded to the Proposer whose proposal the Port Authority believes, in its sole discretion, will be the most advantageous to the Port Authority. Neither the release of this RFP nor the acceptance of any response thereto shall compel the Port Authority to accept any proposal. The Port Authority shall not be obligated in any manner whatsoever to any Proposer until a proposal is accepted by the Port Authority in the manner provided in the Section of this RFP entitled "Proposal Acceptance or Rejection."

L. Multiple Contract Awards

The Port Authority reserves the right to award multiple Contracts for the products, work and/or services that are the subject matter of this RFP and Proposers are hereby given notice that they may not be the Port Authority's only contractor for such products, work and/or services.

M. Right to Extend Contract

If this is a proposal for a contract for a term of years, including specified options for renewal, the Port Authority reserves the additional right to extend the contract term for an additional 120 days, upon the same terms and conditions of the original Contract negotiated between the Port Authority and the successful Proposer.

N. Rights of the Port Authority

1. The Port Authority reserves all its rights at law and equity with respect to this RFP including, but not limited to, the unqualified right, at any time and in its sole discretion, to change or modify this RFP, to reject any and all proposals, to waive defects or irregularities in proposals received, to seek clarification of proposals, to request additional information, to request any or all Proposers to make a presentation, to undertake discussions and modifications with one or more Proposers, or to negotiate an agreement with any Proposer or third person who, at any time, subsequent to the deadline for submissions to this RFP, may express an interest in the subject matter hereof, to terminate further participation in the proposal process by a Proposer or to proceed with any proposal or modified proposal, which in its judgment will, under all circumstances, best serve the Port Authority's interest. The Port Authority may, but shall not be obliged to, consider incomplete proposals or to request or accept additional material or information. The holding of any discussions with any Proposer shall not constitute acceptance of a proposal, and a proposal may be accepted with or without discussions.
2. No Proposer shall have any rights against the Port Authority arising from the contents of this RFP, the receipt of proposals, or the incorporation in or rejection of information contained in any proposal or in any other document. The Port Authority makes no representations, warranties, or guarantees that the information contained herein, or in any addenda hereto, is accurate, complete, or timely or that such information accurately represents the conditions that would be encountered during the performance of the contract. The furnishing of such information by the Port Authority shall not create or be deemed to create any obligation or liability upon it for any reason whatsoever and each Proposer, by submitting its proposal, expressly agrees that it has not relied upon the foregoing information, and that it shall not hold the Port Authority liable or responsible therefor in any manner whatsoever. Accordingly, nothing contained herein and no representation, statement or promise, of the Port Authority, its directors, officers, agents, representatives, or employees, oral or in writing, shall impair or limit the effect of the warranties of the Proposer required by this RFP or Contract and the Proposer agrees that it shall not hold the Port Authority liable or responsible therefor in any manner whatsoever.
3. At any time and from time to time after the opening of the proposals, the Port Authority may give oral or written notice to one or more Proposers to furnish additional information relating to its proposal and/or qualifications to perform the services contained in this RFP, or to meet with designated representatives of the Port Authority. The giving of such notice shall not be construed as an acceptance of a proposal. Information shall be submitted within three (3) calendar days after the Port Authority's request unless a shorter or longer time is specified therein.

O. No Personal Liability

Neither the Directors of PATH, Commissioners of the Port Authority, nor any of them, nor any officer, agent or employee thereof shall be charged personally with any liability by a Proposer or another or held liable to a Proposer or another under any term or provision of this RFP or any statements made herein or because of the submission or attempted submission of a proposal or other response hereto or otherwise.

ATTACHMENT A: AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority's Freedom of Information Policy and Procedure adopted by the Port Authority's Board of Commissioners on November 20, 2008, which may be found on the Port Authority website at: <http://www.panynj.gov/corporate-information/pdf/Freedom-of-Information-Policy-and-Procedure.pdf>, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause substantial injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

(Company)

(Signature)

(Title)

(Date)

**ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.**

ATTACHMENT B: STANDARD CONTRACT TERMS AND CONDITIONS

1. General Agreement

The undersigned (hereinafter referred to as the "Contractor" or "you") agrees to provide, and The Port Authority of New York and New Jersey (hereinafter referred to as the "Authority") agrees to receive, pre-cut and pre-encoded Limited Use Contactless Smart Cards, as more fully set forth in the Scope of Work attached hereto and made a part hereof. The Scope of Work requires the doing of all things necessary or proper for or incidental to the requirements as set forth in the Scope of Work. All things not expressly mentioned in the Scope of Work but involved in carrying out their intent are required by the Scope of Work and the Contractor shall perform the same as though they were specifically mentioned, described and delineated.

2. Payments

Subject to the provisions of this Contract, the Port Authority agrees to pay to the Contractor and the Contractor agrees to accept from the Port Authority as full and complete consideration for the performance of all its obligations under this Contract and as sole compensation for the Services performed by the Contractor hereunder, compensation calculated as follows:

- Pre-production costs associated with the Smart Cards; and
- The Costs associated with the number of actual Smart Cards provided, based upon the respective unit prices inserted by the Contractor in the Price Forms of the Cost Proposal forming a part of this Contract.

The manner of submission of all bills for payment to the Contractor by the Port Authority for Services rendered under this Contract shall be subject to the approval of the Port Authority Manager in all respects, including but not limited to format, breakdown of items presented and verifying records. All computations made by the Contractor and all billing and billing procedures shall be done in conformance with the following procedures:

All Services must be completed within the time frames specified or as designated by the Port Authority Manager. Contractor shall submit to the Manager by the fifth day of each month following the month of commencement of this Contract and on or by the fifth day of each month thereafter (including the month following the termination, revocation or expiration of this Contract) a complete and correct invoice for the Services performed during the preceding month accompanied by such information as may be required by the Manager for verification. The invoice must show the Contractor's Federal Tax Identification Number. Payment will be made within thirty (30) days of Port Authority verification of the invoice. No certificate, payment, acceptance of any Services or any other act or omission of any representative of the Port Authority shall operate to release the Contractor from any obligation under or upon this Contract, or to stop the Port Authority from showing at any time that such certificate, payment, acceptance, act or omission was incorrect or to preclude the Port Authority from recovering any monies paid in excess of those lawfully due and any damage sustained by the Port Authority.

In the event an audit of received invoices should indicate that the correct sum due the Contractor for the relevant billing period is less than the amount actually paid by the Port Authority, the Contractor shall pay to the Port Authority the difference promptly upon receipt of the Port Authority's statement

thereof. The Port Authority may, however, in its discretion elect to deduct said sum or sums from any subsequent payments payable to the Contractor hereunder.

"Final Payment", as the term is used throughout this Contract, shall mean the final payment made for services rendered in the last month of the Contract Term. However should this Contract be terminated for any reason prior to the last month of the Contract Term, then Final Payment shall be the payment made for services rendered in the month during which such termination becomes effective. The Contractor's acceptance of Final Payment shall act as a full and complete release to the Port Authority of all claims of and of all liability to the Contractor for all things done or furnished in connection with this Contract and for every act and neglect of the Port Authority and others relating to or arising out of this Contract, including claims arising out of breach of contract and claims based on claims of third persons. No payment, however, final or otherwise shall operate to release the Contractor from any obligations in connection with this Contract.

3. Duration

This agreement shall commence upon its complete execution and shall terminate at the completion of three years (the "Base Term"), on the dates and at the times set forth in the Notice of Award.

The Authority shall have the option to extend this Agreement for up to 120 days from the date originally fixed for expiration upon the same terms and conditions as set forth elsewhere in this Agreement, to be effected by written notice to the Contractor received no later than thirty (30) days prior to the original expiration date.

4. Definitions

Authority or Port Authority - shall mean the Port Authority of New York and New Jersey.

PATH - shall mean the Port Authority Trans-Hudson Corporation.

Contract, Document or Agreement - shall mean the writings setting forth the scope, terms, conditions and Specifications for the procurement of Goods and/or Services, as defined hereunder and shall include, but not be limited to: Invitation for Bid (IFB), Request for Quotation (RFQ), Request for Proposal (RFP), Purchase Order (PO), Cover Sheet, executed Signature Sheet, AND PRICING SHEETS with Contract prices inserted," "STANDARD CONTRACT TERMS AND CONDITIONS," and, if included, attachments, endorsements, schedules, exhibits, or drawings, the Authority's acceptance and any written addenda issued over the name of the Authority's Manager, Purchasing Services Division.

Days or Calendar Days - shall mean consecutive calendar days, Saturdays, Sundays, and holidays, included.

Week - unless otherwise specified, shall mean seven (7) consecutive calendar days, Saturdays, Sundays, and holidays.

Month - unless otherwise specified, shall mean a calendar month.

Director/General Manager - shall mean the Director/General Manager of PATH which operates the facility of PATH at which the services hereunder are to be performed, for the time being, or his/her successor in duties for the purpose of this Contract, acting personally or through one of his/her authorized representatives for the purpose of this Contract.

Superintendent/Manager – shall mean the Superintendent/Manager of the PATH Division responsible for operating the said Facility for the time being or his/her successor in duties for the purpose of this Contract, acting personally or through his/her duly authorized representative for the purpose of this Contract.

No person shall be deemed a representative of the Director/General Manager or Superintendent/Manager except to the extent specifically authorized in an express written notice to the Contractor signed by the Director/General Manager or Superintendent/Manager as the case may be. Further, no person shall be deemed a successor in duties of the Director/General Manager unless the Contractor is so notified in writing signed by the Authority's Manager, Purchasing Services Division. No person shall be deemed a successor in duties of the Superintendent/Manager unless the Contractor is so notified in a writing signed by the Director/General Manager.

"Services" or "Work" - shall mean all services, equipment and materials (including materials and equipment, if any, furnished by the Authority) and other facilities and all other things necessary or proper for, or incidental to the services to be performed or goods to be furnished in connection with the service to be provided hereunder, as set forth in the Scope of Work. As used herein, the term "Work Day" shall mean a day between Monday and Friday with Monday and Friday included.

"Specifications" shall mean all requirements of this RFP, technical and otherwise, for the performance of the Scope of Work and services hereunder.

Subcontractor - shall mean anyone who performs work (other than or in addition to the furnishing of materials, plant or equipment) in connection with the services to be provided hereunder, directly or indirectly for or on behalf of the Contractor (and whether or not in privity of contract with the Contractor), but shall not include any person who furnished merely his own personal labor or his own personal services. "Subcontractor", however, shall exclude the Contractor or any subsidiary or parent of the Contractor or any person, firm or corporation which has a substantial interest in the Contractor or in which the Contractor or the parent or the subsidiary of the Contractor, or an officer or principal of the Contractor or of the parent of the subsidiary of the Contractor has a substantial interest, provided, however, that for the purpose of the clause hereof entitled "Assignments and Subcontracts" the exclusion in this paragraph shall not apply to anyone but the Contractor itself.

5. General Provisions

- a. Under no circumstances shall you or your subcontractors communicate in any way with any department, board, agency, commission, or other organization or any person whether governmental or private in connection with the services to be performed hereunder except upon prior written approval and instructions of the Director, provided, however, that data from manufacturers and suppliers of materials, devices and equipment shall be obtained by you when you find such data necessary unless otherwise instructed by the Authority.
- b. Any services performed for the benefit of the Authority at any time by you or on your behalf, even if expressly and duly authorized by the Authority, shall be deemed to be rendered under and subject to this Agreement (unless referable to another expressly written, duly executed agreement by the same parties), whether such additional services are performed prior to, during or subsequent to the services described herein, and no rights or obligations shall arise out of such additional services except as provided under this Agreement.

- c. The Contractor shall observe and obey (and compel its officers, employees, guests, invitees, and those doing business with it, to observe and obey) the rules and regulations of the Port Authority now in effect, and such further rules and regulations which may from time to time during the effective period of this Contract, be promulgated by the Port Authority for reasons of safety, health, preservation of property, or maintenance of a good and orderly appearance of the Facilities, or for the safe and efficient operation of the Facilities. The Port Authority agrees that, except in cases of emergency, it shall give notice to the Contractor of every rule and regulation hereafter adopted by it.
- d. This Contract does not constitute the Contractor as an agent or representative of the Port Authority for any purpose whatsoever. The Contractor shall perform all services hereunder as an independent Contractor and the Contractor, its officers, and employees shall not be deemed to be agents, servants, or employees of the Port Authority.

6. Intellectual Property

- a. Except as provided below: as between the Port Authority and the Contractor all process flows, codes including but not limited to scripts, programs, routines, processes, procedures, documentation, estimates, reports, records, data, charts, documents, models, designs, renderings, drawings, specifications, photographs, computations, computer tapes or discs, and other documentation of any type whatsoever, whether electronic or in the form of writing, figures or delineations, which are prepared or compiled in connection with this Agreement, shall become the exclusive property of the Authority, and the Authority shall have the exclusive right to use or permit the use of them and any ideas or methods represented by them for any purpose and at any time without other compensation than that specifically provided for herein. With regard to training manuals or any other knowledge transfer documentation, communication or presentation prepared under this Agreement the Authority shall expressly have the right to use, alter and reproduce including electronically, said manuals for its internal business purposes. The Contractor hereby warrants and represents that the Authority will have at all times the ownership and rights provided for in the immediately preceding sentence free and clear of all claims of third persons whether presently existing or arising in the future and whether presently known to either of the parties to this Agreement or not. Any information given to the Port Authority before, with or after submission of the Agreement on Terms of Discussion, either orally or in writing, is not given in confidence and may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever except as otherwise set forth in the Agreement On Terms Of Discussion.
- b. All preexisting information or documentation including computer programs or code including source code, of the Contractor, utilized by the Contractor hereunder in the performance of his services hereunder shall be deemed licensed to the Authority for the duration and purposes of this agreement, but shall remain the property of the Contractor.
- c. When in the performance of the contract services the Contractor utilizes passwords or codes for any purpose, at any time during or after the performance of such services, upon written request by the Authority, the Contractor shall make available to the designated Authority representative all such passwords and codes.
- d. Third party software not specially prepared for the purpose of this agreement but utilized by the Contractor hereunder in the performance of his services hereunder shall be licensed to the Contractor and the Authority for the duration and purposes of this agreement but shall remain the property of said third party.

- e. The above-described software shall be furnished by the Contractor without additional compensation.

7. Proprietary Rights in Subject Matter Not Within the Intellectual Property Clause

If in accordance with this Contract the Contractor furnishes research, development or consultative services in connection with the performance of the Work and if in the course of such research, development, or consultation patentable or copyrightable subject matter or trade secrets or other proprietary matter is produced by the Contractor, its officers, agents, employees, subcontractors, or suppliers, not custom software, and not covered under clause 6 entitled Intellectual Property, the Authority shall have, without cost or expense to it, an irrevocable, non-exclusive, royalty-free license to make, have made, and use, either itself or by anyone on its behalf, such subject matter in connection with any activity now or hereafter engaged in or permitted by the Authority. Promptly upon request by the Authority, the Contractor shall furnish or obtain from the appropriate person a form of license satisfactory to the Authority, but it is expressly understood and agreed that as between the Contractor and the Authority the license herein provided for shall nevertheless arise for the benefit of the Authority immediately upon the production of said subject matter and shall not await formal exemplification in a written license agreement as provided for above. Such license may be transferred by the Authority to its successors, immediate or otherwise, in the operations of or ownership of any facility now or hereafter operated by the Authority or the Authority but such license shall not be otherwise transferable.

The right of the Authority as well as the Contractor to use all patented material, compositions of matter, manufactures, apparatus, appliances, processes of manufacture or types of construction as well as any copyrightable matter, trade secrets or other proprietary matters, shall be obtained by the Contractor without separate or additional compensation whether the same is patented or copyrighted before, during or after the performance of the Work.

8. Indemnity in Regard to Infringement Matter

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

The Contractor shall promptly and fully inform the Director of any claims or disputes for infringement or otherwise, whether existing or potential, of which it has knowledge relating to any Intellectual

Property used, developed or licensed in connection with the performance of the Work or otherwise in connection with this Contract.

9. Time is of the Essence

The Contractor's obligations for the performance and completion of all work within the time or times provided for in this Contract are of the essence of this Contract.

10. Final Payment

After satisfactory completion of all services required hereunder, and upon receipt from the Contractor of such information as may be required, the Director shall certify in writing to the Contractor the total compensation earned by the Contractor.

If so required, the Contractor shall thereupon furnish to the Authority a detailed sworn statement of all claims, just and unjust, of subcontractors, materialmen and other third persons then outstanding which he has reason to believe may thereafter be made on account of the services provided under this Agreement.

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

The acceptance by the Contractor, or by anyone claiming by or through him, of the Final Payment shall be and shall operate as a release to the Authority of all claims and of all liability to the Contractor for all things done or furnished in connection with this contract and for every act and neglect of the Authority and others relating to or arising out of the this contract, including claims arising out of breach of the contract and claims based on claims of third persons.

The Contractor's agreement as provided in the immediately preceding paragraph shall be deemed to be based upon the consideration forming part of this Contract as a whole and not to be gratuitous; but in any event even if deemed gratuitous and without consideration, such agreement as provided in the immediately preceding paragraph shall nevertheless be effective. Such release shall include all claims, whether or not in litigation and even though still under consideration by the Authority. Such release shall be effective notwithstanding any purported reservation of right by the Contractor to preserve such claim.

The acceptance of any check designated as "Final Payment" or bearing any similar designation shall be conclusively presumed to demonstrate the intent of the Contractor that such payment was intended to be accepted as final, with the consequences provided in this numbered clause, notwithstanding any purported reservation of rights.

The Contractor agrees that he shall not be entitled to, and hereby waives any right he might otherwise have to, and shall not seek any judgment whether under this Contract or otherwise for any such Final Payment or for an amount equivalent thereto or based thereon, or for any part thereof, if such judgment would have the effect of varying, setting aside, disregarding or making inapplicable the terms of this numbered clause or have the effect in any way of entitling the Contractor to accept such Final Payment or an amount equivalent thereto or based thereon or any part thereof other than in the

same fashion as a voluntary acceptance of a Final Payment subject to all the terms of this Contract including this numbered clause, unless and until the Contractor should obtain a judgment on any claim arising out of or in connection with this Contract (including a claim based on breach of contract) for an amount not included in said Final Payment.

11. Default, Revocation or Suspension of Contract

a. If one or more of the following events shall occur:

1. If fire or other cause shall destroy all or a substantial part of the Facility, asset or infrastructure necessary to perform the Scope of Work;
2. If any governmental agency shall condemn or take a temporary or permanent interest in all or a substantial part of the Facility, or all of a part of the Port Authority's interest herein;

then upon the occurrence of such event or at any time thereafter during the continuance thereof, the Port Authority shall have the right on twenty-four (24) hours written notice to the Contractor to revoke this Contract, such revocation to be effective upon the date and time specified in such notice.

In such event this Contract shall cease and expire on the effective date of revocation as if said date were the date of the expiration of this Contract. Such revocation shall not, however, relieve the Contractor of any liabilities or obligations hereunder which shall have accrued on or prior to the effective date of revocation.

b. If one or more of the following events shall occur:

1. The Contractor shall become insolvent, or shall take the benefit of any present or future insolvency statute, or shall make a general assignment for the benefit of creditors, or file a voluntary petition in bankruptcy or a petition or answer seeking an arrangement or its reorganization or the readjustment of its indebtedness under the federal bankruptcy laws or under any other law or statute of the United States or of any State thereof, or consent to the appointment of a receiver, trustee, or liquidator of all or substantially all its property; or
2. By order or decree of a court the Contractor shall be adjudged bankrupt or an order shall be made approving a petition filed by any of the creditors, or, if the Contractor is a corporation, by any of the stockholders of the Contractor, seeking its reorganization or the readjustment of its indebtedness under the federal bankruptcy laws or under any law or statute of the United States or of any State thereof; or
3. A petition under any part of the federal bankruptcy laws or an action under any present or future insolvency law or statute shall be filed against the Contractor and shall not be dismissed within thirty (30) days after the filing thereof; or
4. The interest of the Contractor under this Contract shall be transferred to, passed to or devolve upon, by operation of law or otherwise, any other person, firm or corporation, or
5. The Contractor, if a corporation, shall, without the prior written approval of the Port Authority, become a surviving or merged corporation in a merger, a constituent corporation in a consolidation, or a corporation in dissolution; or

6. If the Contractor is a partnership, and the said partnership shall be dissolved as the result of any act or omission of its copartners or any of them, or by operation of law or the order or decree of any court having jurisdiction, or for any other reason whatsoever; or
7. By or pursuant to, or under authority of any legislative act, resolution or rule, or any order or decree of any court or governmental board, agency or officer having jurisdiction, a receiver, trustee, or liquidator shall take possession or control of all or substantially all of the property of the Contractor and such possession or control of all or substantially all of the property of the Contractor and shall continue in effect for a period of fifteen (15) days;

then upon the occurrence of any such event or at any time thereafter during the continuance thereof, the Port Authority shall have the right upon five (5) days notice to the Contractor to terminate this Contract and the rights of the Contractor hereunder; termination to be effective upon the date and time specified in such notice as if said date were the date of the expiration of this Contract. Termination shall not relieve the Contractor of any liabilities or obligations hereunder which have accrued on or prior to the effective date of termination.

c. If any of the following shall occur:

1. The Contractor shall cease, abandon any part of the service, desert, stop or discontinue its services in the premises for any reason whatsoever and regardless of the fault of the Contractor; or
2. The Contractor shall fail to keep, perform and observe each and every other promise, covenant and agreement set forth in this Contract on its part to be kept, performed or observed, within five (5) days after receipt of notice of default thereunder from the Port Authority (except where fulfillment of its obligations requires activity over a greater period of time, and the Contractor shall have commenced to perform whatever may be required for fulfillment within five (5) days after receipt of notice and continues such performance without interruption except for causes beyond its control);

then upon the occurrence of any such event or during the continuance thereof, the Port Authority shall have the right on twenty four (24) hours notice to the Contractor to terminate this Contract and the rights of the Contractor hereunder, termination to be effective upon the date and time specified in such notice. Termination shall not relieve the Contractor of any liabilities which shall have accrued on or prior to the effective date of termination.

- d. If any of the events enumerated in this Section shall occur prior to commencement date of this Contract the Port Authority upon the occurrence of any such event or any time thereafter during the continuance thereof by twenty-four (24) hours notice may terminate or suspend this Contract and the rights of the Contractor hereunder, such termination or suspension to be effective upon the date specified in such notice.
- e. No payment by the Port Authority of any monies to the Contractor for any period or periods after default of any of the terms, covenants or conditions hereof to be performed, kept and observed by the Contractor and no act or thing done or omitted to be done by the Port Authority shall be deemed to be a waiver of the right of the Port Authority to terminate this Contract or of any other right or remedies to which the Port Authority may be entitled because of any breach thereof. No waiver by the Port Authority of any default on the part of the Contractor in the performance of any of the terms, covenants and conditions hereof to be performed, kept or observed by the Contractor

shall be or be construed to be a waiver by the Port Authority of any other subsequent default in the performance of any of the said terms, covenants and conditions.

- f. In addition to all other rights of revocation or termination hereunder and notwithstanding any other provision of this Contract the Port Authority may terminate this Contract and the rights of the Contractor hereunder without cause at any time upon five (5) days written notice to the Contractor and in such event this Contract shall cease and expire on the date set forth in the notice of termination as fully and completely as though such dates were the original expiration date hereof and if such effective date of termination is other than the last day of the month, the amount of the compensation due to the Contractor from the Port Authority shall be prorated when applicable on a daily basis. Such cancellation shall be without prejudice to the rights and obligations of the parties arising out of portions already performed but no allowance shall be made for anticipated profits.
- g. Any right of termination contained in this paragraph, shall be in addition to and not in lieu of any and all rights and remedies that the Port Authority shall have at law or in equity consequent upon the Contractor's breach of this Contract and shall be without prejudice to any and all such other rights and remedies. It is hereby specifically agreed and understood that the exercise by the Port Authority of any right of termination set forth in this paragraph shall not be or be deemed to be an exercise by the Port Authority of an election of remedies so as to preclude the Port Authority from any right to money damages it may have for the period prior to the effective date of termination to the original expiration date of the Contract, and this provision shall be deemed to survive the termination of this Contract as aforesaid.
- h. If (1) the Contractor fails to perform any of its obligations under this Contract or any other agreement between the Port Authority and the Contractor (including its obligation to the Port Authority to pay any claim lawfully made against it by any supplier, subcontractor or worker or other person which arises out of or in connection with the performance of this Contract or any other agreement with the Port Authority) or (2) any claim (just or unjust) which arises out of or in connection with this Contract or any other agreement between the Port Authority and the Contractor is made against the Port Authority or (3) any subcontractor under this Contract or any other agreement between the Port Authority and the Contractor fails to pay any claims lawfully made against it by any supplier, subcontractor, worker or other third person which arises out of or in connection with this Contract or any other agreement between the Port Authority and the Contractor or if in the opinion of the Port Authority any of the aforesaid contingencies is likely to arise, then the Port Authority shall have the right, in its discretion, to withhold out of any payment (final or otherwise) such sums as the Port Authority may deem ample to protect it against delay or loss or to assure the payment of just claims of third persons, and to apply such sums in such manner as the Port Authority may deem proper to secure such protection or satisfy such claims. All sums so applied shall be deducted from the Contractor's compensation. Omission by the Port Authority to withhold out of any payment, final or otherwise, a sum for any of the above contingencies, even though such contingency has occurred at the time of such payment, shall not be deemed to indicate that the Port Authority does not intend to exercise its right with respect to such contingency. Neither the above provisions for rights of the Port Authority to withhold and apply monies nor any exercise or attempted exercise of, or omission to exercise, such rights by the Port Authority shall create any obligation of any kind to such supplier, subcontractors, worker or other third persons. If, however, the payment of any amount due the Contractor shall be improperly delayed, the Port Authority shall pay the Contractor interest thereon at the rate of 6% per annum for the period of the delay, it being agreed that such interest shall be in lieu of and in liquidation of any damages to the Contractor because of such delay.

- i. If the Port Authority has paid any sum or has incurred any obligation or expense which the Contractor has agreed to pay or reimburse the Port Authority, or if the Port Authority is required or elects to pay any sum or sums or incurs any obligations or expense by reason of the failure, neglect or refusal of the Contractor to perform or fulfill any one or more of the conditions, covenants, or agreements contained in this Contract, or as a result of an act of omission of the Contractor contrary to the said conditions, covenants and agreements, the Contractor shall pay to the Port Authority the sum or sums so paid or expense so incurred, including all interests, costs and damages, promptly upon the receipt of the Port Authority's statement therefore. The Port Authority may, however, in its discretion, elect to deduct said sum or sums from any payment payable by it to the Contractor.
- j. If the Port Authority pays any installment to the Contractor without reducing said installment as provided in this Contract, it may reduce any succeeding installment by the proper amount, or it may bill the Contractor for the amount by which the installment paid should have been reduced and the Contractor shall pay to the Port Authority any such amount promptly upon receipt of the Port Authority's statement therefore.
- k. The Port Authority shall also have the rights set forth above in the event the Contractor shall become insolvent or bankrupt or if his affairs are placed in the hands of a receiver, trustee or assignee for the benefit of creditors.

12. Withholding of Payments

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

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

13. Contractor Personnel Standards of Performance

The Contractor shall furnish sufficiently trained management, supervisory, technical and operating personnel to perform the services required of the Contractor under this Contract. If, in the opinion of the Director, any of the Contractor's personnel are not satisfactory in the performance of services to be furnished hereunder, the Contractor shall remove such personnel and replace them with personnel satisfactory to the Director.

At the time the Contractor is carrying out its operations there may be other persons working physically in the vicinity or in the same logical or technical infrastructure. The Contractor shall so conduct its operations as to work in harmony and not endanger, interfere with or delay the operations of others, all to the best interests of The Authority and others and as may be directed by the Director.

14. High Security Areas

- a. Services under the Contract may be required in high security areas, as the same may be designated by the Manager from time to time. The Port Authority shall require the observance of certain security procedures with respect to the high security areas, which may include the escort to, at, and/or from said high security areas by security personnel designated by the Contractor or any subcontractor's personnel required to work therein.
- b. Twenty-four hours prior to the proposed performance of any work in a high security area, the Contractor shall notify the Manager. The Contractor shall conform to the procedures as may be established by the Manager from time to time and at any time for access to high security areas and the escorting of personnel hereunder. Prior to the start of work, the Contractor shall request a description from the Manager of the high security areas which will be in effect on the commencement date. The description of high security areas may be changed from time to time and at any time by the Manager during the term of the Contract.

15. Notification of Security Requirements

In case of conflict, the requirements set forth in the Proposal Submission Requirements shall take precedence over the security requirements in this section.

The Port Authority operates facilities and systems, at which terrorism or other criminal acts may have a significant impact on life safety and key infrastructures. The Authority reserves the right to impose multiple layers of security requirements on the performance of the Contract work, including on the Contractor, its staff and subcontractors and their staffs depending upon the level of security required, as determined by the Authority. The Contractor shall and shall instruct its subcontractors to cooperate with Authority staff in adopting security requirements. These security requirements may include but may not be limited to the following:

a. Identity Checks and Background Screening

Contractor/subcontractor identity checks and background screening shall include but shall not be limited to: (1) inspection of not less than two forms of valid/current government issued identification (at least one having an official photograph) to verify staff's name and residence; (2) screening of federal, state, and/or local criminal justice agency information databases and files; (3) screening of any terrorist identification files; (4) multi-year check of personal, employment and /or credit history; (5) access identification to include some form of biometric security methodology such as fingerprint, facial or iris scanning.

The Contractor may be required to have its staff, and any subcontractor's staff, authorize the Authority or its designee to perform background checks. Such authorization shall be in a form acceptable to the Authority. If the Authority directs the Contractor to have identity checks and background screening performed by a particular firm designated by the Authority, the Authority will compensate the Contractor for the cost of such screening pursuant to the Extra Work provisions of the Contract.

b. Issuance of Photo Identification cards:

If the Authority requires facility-specific identification cards for the Contractor's and subcontractors' staff, the Authority will supply such identification cards at no cost to the Contractor.

c. Access control, inspection, and monitoring by security guards:

The Authority will provide for facility access control, inspection and monitoring by Authority retained security guards. Should the Authority require the Contractor to hire security guards for the purpose of facility access control and inspection in lieu of or in addition to the Authority retained facility security guards, the Contractor will be reimbursed for the cost of such security guards pursuant to the Extra Work provisions of the Contract. However, this provision shall not relieve the Contractor of its responsibility to secure its equipment and work at the facility at its own expense.

d. Non Disclosure Agreement

The Contractor and subcontractors, when appropriate, shall sign Non-Disclosure Agreements (NDAs), or an Acknowledgment of an existing NDA, provided by the Authority as a condition of being granted access to Confidential Information categorized and protected as per *The Port Authority of New York & New Jersey Information Security Handbook (October 15, 2008, corrected as of February 9, 2009)*.

The Authority may impose, increase, and/or upgrade security requirements for the Contractor, subcontractors and their staffs during the term of this Contract to address changing security conditions and/or new governmental regulations.

16. Insurance Procured By the Contractor

The Contractor shall take out, maintain, and pay the premiums on Commercial General Liability Insurance, including but not limited to premises-operations, products-completed operations, and independent contractors coverage, with contractual liability language covering the obligations assumed by the Contractor under this Contract and, if vehicles are to be used to carry out the performance of this Contract, then the Contractor shall also take out, maintain, and pay the premiums on Automobile Liability Insurance covering owned, non-owned, and hired autos in the following minimum limits:

Commercial General Liability Insurance - \$ 1 million combined single limit per occurrence for bodily injury and property damage liability.

Automobile Liability Insurance - \$ 1 million combined single limit per accident for bodily injury and property damage liability.

Comprehensive Crime Insurance - \$ 500,000 per occurrence, including but not limited to coverage for theft, employee dishonesty, mysterious disappearance, loss inside and outside premises and depositors forgery coverage. The deductible shall not be more than twenty-five thousand dollars unless approved

by PATH and said deductible shall be the responsibility of the Contractor. The said policy shall include PATH as a loss payee.

In addition, the liability policy (ies) shall name "The Port Authority of NY & NJ and its wholly owned entities, their commissioners, directors, officers, partners, employees and agents as additional insured", including but not limited to premise-operations, products-completed operations on the Commercial General Liability Policy. Moreover, the Commercial General Liability Policy shall not contain any provisions for exclusions from liability other than provisions for exclusion from liability forming part of the most up to date ISO form or its equivalent unendorsed Commercial General Liability Policy. The liability policy (ies) and certificate of insurance shall contain separation of insured condition and severability of interests clause for all policies so that coverage will respond as if separate policies were in force for each insured. An act or omission of one of the insureds shall not reduce or void coverage to the other insureds. Furthermore, the Contractor's insurance shall be primary insurance as respects to the above additional insureds. Any insurance or self insurance maintained by the above additional insureds shall not contribute to any loss or claim. These insurance requirements shall be in effect for the duration of the contract to include any warrantee/guarantee period.

The certificate of insurance and liability policy (ies) must contain the following endorsement for the above liability coverages:

"The insurer(s) shall not, without obtaining the express advance written permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the Tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority, or the provisions of any statutes respecting suits against the Port Authority."

The Contractor shall also take out, maintain, and pay premiums on Workers' Compensation Insurance in accordance with the requirements of law in the state(s) where work will take place, and Employer's Liability Insurance with limits of not less than \$1 million each accident.

Each policy above shall contain a provision that the policy may not be canceled, terminated, or modified without thirty (30) days' prior written notice to the Port Authority of NY and NJ, Att: Facility Contract Administrator, at the location where the work will take place and to the General Manager, Risk Management.

The Port Authority may at any time during the term of this agreement change or modify the limits and coverages of insurance. Should the modification or change results in an additional premium, The General Manager, Risk Management for the Port Authority may consider such cost as an out-of-pocket expense.

Within five (5) days after the award of this agreement or contract and prior to the start of work, the Contractor must submit an original certificate of insurance, to the Port Authority of NY and NJ, Facility Contract Administrator, at the location where the work will take place. This certificate of insurance MUST show evidence of the above insurance policy (ies), stating the agreement/contract number prior to the start of work. The General Manager, Risk Management must approve the certificate(s) of insurance before any work can begin. Upon request by the Port Authority, the Contractor shall furnish to the General Manager, Risk Management, a certified copy of each policy, including the premiums.

If at any time the above liability insurance should be canceled, terminated, or modified so that the insurance is not in effect as above required, then, if the Manager shall so direct, the Contractor shall suspend performance of the contract at the premises. If the contract is so suspended, no extension of time shall be due on account thereof. If the contract is not suspended (whether or not because of omission of the Manager to order suspension), then the Authority may, at its option, obtain insurance affording coverage equal to the above required, the cost of such insurance to be payable by the Contractor to the Port Authority.

Renewal certificates of insurance or policies shall be delivered to the Facility Contractor Administrator, Port Authority at least fifteen (15) days prior to the expiration date of each expiring policy. The General Manager, Risk Management must approve the renewal certificate(s) of insurance before work can resume on the facility. If at any time any of the certificates or policies shall become unsatisfactory to the Port Authority, the Contractor shall promptly obtain a new and satisfactory certificate and policy.

The requirements for insurance procured by the Contractor shall not in any way be construed as a limitation on the nature or extent of the contractual obligations assumed by the Contractor under this contract. The insurance requirements are not a representation by the Authority as to the adequacy of the insurance to protect the Contractor against the obligations imposed on them by law or by this or any other Contract.

17. Assignments and Subcontracts

Any assignment or other transfer by the Contractor of this Contract or any part hereof or of any of his rights hereunder or of any monies due or to become due hereunder and any delegation of any of his duties hereunder without the express written consent of the Director shall be void and of no effect as to the Authority, provided, however, that the Contractor may subcontract portions of the Work to such persons as the Director, may, from time to time, expressly approve in writing. For each individual, partnership or corporation proposed by the Contractor as a subcontractor, the Contractor shall submit to the Authority a certification or, if a certification cannot be made, a statement by such person, partnership or corporation to the same effect as the certification or statement required from the Contractor pursuant to the clauses of the "Integrity" Section entitled "Certification of No Investigation Indictment, Conviction, Debarment Suspension, Disqualification and Disclosure of Other Information and "Non-Collusive Bidding and Code of Ethics Certification; Certification of No Solicitation Based on Commission, Percentage, Brokerage Contingent or Other Fee". All further subcontracting by any subcontractor shall also be subject to such approval of the Director.

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

18. Certain Contractor's Warranties

The Contractor represents and warrants:

- a. That he is financially responsible and experienced in, and competent to perform this Contract; that no representation, promise or statement, oral or in writing, has induced him to submit his Proposal, saving only those contained in the papers expressly made part of this Contract; that the facts stated or shown in any papers submitted or referred to in connection with his Proposal are true; and, if the Contractor be a corporation, that it is authorized to perform this Contract;
- b. That he has carefully examined and analyzed the provisions and requirements of this Contract, that from his own investigations he has satisfied himself as to the nature of all things needed for the performance of this Contract, the general and local conditions and all other matters which in any way affect this Contract or its performance, and that the time available to him for such examination, analysis, inspection and investigations was adequate;
- c. That the Contract is feasible of performance in accordance with all its provisions and requirements and that he can and will perform it in strict accordance with such provisions and requirements;
- d. That no Commissioner, officer, agent or employee of the Authority is personally interested directly or indirectly in this Contract or the compensation to be paid hereunder;
- e. That, except only for those representations, statements or promises expressly contained in this Contract, no representation, statement or promise, oral or in writing, of any kind whatsoever by the Authority, its Commissioners, officers: agents: employees or consultants has induced the Contractor to enter into this Contract or has been relied upon by the Contractor, including any with reference to: (1) the meaning, correctness, suitability or completeness of any provisions or requirements of this Contract; (2) the nature, existence or location of materials, structures, obstructions, utilities or conditions, which may be encountered at the installation sites; (3) the nature, quantity, quality or size of the materials, equipment, labor and other facilities needed for the performance of this Contract; (4) the general or local conditions which may in any way affect this Contract or its performance; (5) the price of the Contract; or (6) any other matters, whether similar to or different from those referred to in (1) through (5) immediately above, affecting or having any connection with this Contract, the bidding thereon, any discussions thereof, the performance thereof or those employed therein or connected or concerned therewith.
- f. That, notwithstanding any requirements of this Contract, any inspection or approval of the Contractor's services by the Authority, or the existence of any patent or trade name, the Contractor nevertheless warrants and represents that the services and any intellectual property supplied to the Authority hereunder shall be of the best quality and shall be fully fit for the purpose for which they are to be used. The Contractor unconditionally guarantees against defects or failures of any kind, including defects or failures in design, workmanship and materials, excepting solely defects or failures which the Contractor demonstrates to the satisfaction of the Authority have arisen solely from accident, abuse or fault of the Authority occurring after issuance of Final Payment hereunder and not due to fault on the Contractor's part. In the event of defects or failures in said services, or any part thereof, then upon receipt of notice thereof from the Authority, the Contractor shall correct such defects or failures as may be necessary or desirable, in the sole opinion of the Authority, to comply with the above guaranty.

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

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

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

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

19. Rights and Remedies of The Authority

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

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

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

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

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

20. Rights and Remedies of the Contractor

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

21. Tax Exemptions

Purchases of services and tangible personal property by the Port Authority are exempt from New York and New Jersey state and local sales and compensating use taxes. (Sales Taxes). Therefore, the Port Authority's purchase of the Contractor's services under this Contract is exempt from Sales Taxes. Accordingly, the Contractor must not include Sales Taxes in the price charged to the Port Authority for the contractor's services under this Contract.

22. Title to Equipment

Title to all equipment to be furnished hereunder by the Contractor shall be transferred to the Authority upon its delivery to the installation site.

The Contractor shall furnish such bills of sale and affidavits of title as the Authority shall reasonably request.

23. Notice Requirements

No claim against the Authority shall be made or asserted in any action or proceeding at law or in equity, and the Contractor shall not be entitled to allowance of such claim, unless the Contractor shall have complied with all requirements relating to the giving of written notice and of information with respect to such claim as provided in this clause. The failure of the Contractor to give such written notice and information as to any claim shall be conclusively deemed to be a waiver by the Contractor

of such claim, such written notice and information being conditions precedent to such claim. As used herein "claim" shall include any claim arising out of this agreement (including claims in the nature of breach of contract or fraud or misrepresentation before or subsequent to execution of this Agreement and claims of a type which are barred by the provisions of this agreement) for damages, payment or compensation of any nature or for performance of any part of this Agreement.

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

- a. In the case of any claims for which requirements are set forth elsewhere in this Agreement as to notice and information, such requirements shall apply.
- b. In the case of all other types of claims, notice shall have been given to the Director, as soon as practicable, and in any case within forty eight (48) hours after occurrence of the act, omission, or other circumstances upon which the claim is or will be based, stating as fully as practicable at the time all information relating thereto. Such information shall be supplemented with any further information as soon as practicable after it becomes or should become known to the Contractor, including daily records showing all costs which the Contractor may be incurring or all other circumstances which will affect any claim to be made which records shall be submitted to the Authority.

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

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

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

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

24. Service of Notices on the Contractor

Whenever provision is made in this Contract for the giving of any notice to the Contractor, its deposit in any post office box, enclosed in a postpaid wrapper addressed to the Contractor at his/her office, or

its delivery to his/her office, shall be sufficient service thereof as of the date of such deposit or delivery, except to the extent, if any, otherwise provided in the clause entitled "Submission to Jurisdiction". Until further notice to the Authority, the Contractor's office will be that stated in his/her Proposal. Notices may also be served personally upon the Contractor; or if a corporation, upon any officer, director or managing or general agent; or if a partnership upon any partner.

25. No Third Party Rights

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

26. Indemnification and Risks Assumed by the Contractor

To the extent permitted by law, the Contractor shall indemnify and hold harmless the Port Authority, its Commissioners, officers, representatives and employees from and against all claims and demands, just or unjust, of third persons (including employees, officers, and agents of the Port Authority) arising out of or in any way connected or alleged to arise out of or alleged to be in any way connected with the Contract and all other services and activities of the Contractor under this Contract and for all expenses incurred by it and by them in the defense, settlement or satisfaction thereof, including without limitation thereto, claims and demands for death, for personal injury or for property damage, direct or consequential, whether they arise from the acts or omissions of the Contractor, of the Port Authority, of third persons, or from the acts of God or the public enemy, or otherwise, including claims and demands of any local jurisdiction against the Port Authority in connection with this Contract.

The Contractor assumes the following risks, whether such risks arise from acts or omissions (negligent or not) of the Contractor, the Port Authority or third persons or from any other cause, excepting only risks occasioned solely by affirmative willful acts of the Port Authority done subsequent to the opening of proposals on this Contract, and shall to the extent permitted by law indemnify the Port Authority for all loss or damage incurred in connection with such risks:

- a. The risk of any and all loss or damage to Port Authority property, equipment (including but not limited to automotive and/or mobile equipment), materials and possessions, on or off the premises, the loss or damage of which shall arise out of the Contractor's operations hereunder. The Contractor shall if so directed by the Port Authority, repair, replace or rebuild to the satisfaction of the Port Authority, any and all parts of the premises or the Facility which may be damaged or destroyed by the acts or omissions of the Contractor, its officers, agents, or employees and if the Contractor shall fail so to repair, replace, or rebuild with due diligence the Port Authority may, at its option, perform any of the foregoing work and the Contractor shall pay to the Port Authority the cost thereof.
- b. The risk of any and all loss or damage of the Contractor's property, equipment (including but not limited to automotive and/or mobile equipment) materials and possessions on the Facility.
- c. The risk of claim, whether made against the Contractor or the Port Authority, for any and all loss or damages occurring to any property, equipment (including but not limited to automotive and/or mobile equipment), materials and possessions of the Contractor's agents, employees, materialmen and others performing work hereunder.

- d. The risk of claims for injuries, damage or loss of any kind just or unjust of third persons arising or alleged to arise out of the performance of work hereunder, whether such claims are made against the Contractor or the Port Authority.

If so directed, the Contractor shall at its own expense defend any suit based upon any such claim or demand, even if such suit, claim or demand is groundless, false or fraudulent, and in handling such shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority or the provision of any statutes respecting suits against the Port Authority.

Neither the requirements of the Port Authority under this Contract, nor of the Port Authority of the methods of performance hereunder nor the failure of the Port Authority to call attention to improper or inadequate methods or to require a change in the method of performance hereunder nor the failure of the Port Authority to direct the Contractor to take any particular precaution or other action or to refrain from doing any particular thing shall relieve the Contractor of its liability for injuries to persons or damage to property or environmental impairment arising out of its operations.

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

Neither the Authority's acceptance of the performance by the Contractor in part or in whole, nor the making of a payment shall release the Contractor from its obligations under this numbered clause.

Moreover, neither the enumeration in this numbered clause nor the enumeration elsewhere in this Contract of particular risks assumed by the Contractor or of particular claims for which it is responsible shall be deemed (a) to limit the effect of the provisions of this numbered clause or of any other clause of this Contract relating to such risks or claims, (b) to imply that it assumes or is responsible for risks or claims only of the type enumerated in this numbered clause or in any other clause of this Contract, or (c) to limit the risks which it would assume or the claims for which it would be responsible in the absence of such enumerations.

27. Applicable Law

This Contract shall be construed in accordance with the laws of the State of New York. The Contractor hereby consents to the exercise by the courts of the States of New York and New Jersey of jurisdiction in personam over it with respect to any matter arising out of or in connection with this Contract and waives any objection to such jurisdiction which it might otherwise have; and the Contractor agrees that mailing of process by registered mail addressed to it at the address of the Contractor set forth in the Proposal, shall have the same effect as personal service within the States of New York or New Jersey upon a domestic corporation of said State.

28. Authority of the Director

Inasmuch as the public interest requires that the Project to which this Contract relates shall be performed in the manner which the Authority, acting through the Director deems best, the Director shall have absolute authority to determine what is or is not necessary or proper for or incidental thereto and the Specifications shall be deemed merely the Director's present determination on this point. In the exercise of this authority, the Director shall have power to alter the Specifications, to require the performance of Work not required by them in their present form, even though of a totally different character from that not required, and to vary, increase and diminish the character, quantity and quality of, or to countermand any Work now or hereafter required. If at any time it shall be, from the viewpoint of the Authority, impracticable or undesirable in the judgment of the Director to proceed with or continue the performance of the Contract or any part thereof, whether or not for reasons beyond the control of the Authority, the Director shall have authority to suspend performance of any part or all of the Contract until such time as the Director may deem it practicable or desirable to proceed. Moreover, if at any time it shall be, from the viewpoint of the Authority impracticable or undesirable in the judgment of the Director to proceed with or continue the performance of the Contract or any part thereof for reasons within or beyond the control of the Authority, the Director shall have authority to cancel this Contract as to any or all portions not yet performed and as to any materials not yet installed even though delivered. Such cancellation shall be without prejudice to the rights and obligations of the parties arising out of portions already satisfactorily performed, but no allowance shall be made for anticipated profits. To resolve all disputes and to prevent litigation, the parties to this Contract authorize the Director to decide all questions of any nature whatsoever arising out of, under, or in connection with, or in any way related to or on account of, this Contract (including claims in the nature of breach of contract or fraud or misrepresentation before or subsequent to acceptance of the Contractor's Proposal and claims of a type which are barred by the provisions of this Contract) and such decision shall be conclusive, final and binding on the parties. The Director's decision may be based on such assistance as she may find desirable. The effect of the decision shall not be impaired or waived by any negotiation or settlement offers in connection with the question decided, whether or not she participated therein, or by any prior decision of her or others, which prior decisions shall be deemed subject to review, or by any termination or cancellation of this Contract.

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

In the performance of the Contract, the Contractor shall conform to all orders, directions and requirements of the Director and shall perform the Contract to her satisfaction at such times and places, by such methods and such manner and sequence as she may require, and the Contract shall at all stages be subject to her inspection. The Contractor shall employ no equipment, materials, methods or men to which she objects, and shall remove no materials, equipment or other facilities from the Authority site without permission. Upon request, she shall confirm in writing any oral order, direction, requirements or determination.

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

This provision shall be construed in accordance with the laws of the State of New York excluding its conflict of law provisions.

29. Approvals by the Director

The approval by the Director of any service required hereunder, shall be construed merely to mean that at that time the Director knows of no good reason for objecting thereto and no such approval shall release the Contractor from his full responsibility for the satisfactory performance of the services to be supplied. "Approved equal" shall mean approved by the Director.

30. Contract Review and Compliance Audits

The Contractor, and any subcontractors, shall provide system access and reasonable assistance to the Authority's External and Internal Audit staff or its consultants in their performance of financial, system, security and operational reviews including producing specific requested information, extraction of data and reports. The Contractor, and any subcontractors, shall support requests related to audits of the service level agreement and administration tasks and functions covered by this Contract.

The Authority reserves the right to use and load security and system software to evaluate the level of security and vulnerabilities in all systems which control, collect, dispense, contain, manage, administer, or monitor revenue "owned" by the Port Authority.

31. Authority Access to Records

The Authority shall have access during normal business hours to all records and documents of the Contractor relating to any amounts for which the Contractor has been compensated, or claims he should be compensated, by The Authority above those included in the lump sum compensation set forth elsewhere herein. All Contractor records shall be kept in the Port District. The Contractor shall obtain for The Authority similar access to similar records and documents of subcontractors. Such access shall be given or obtained both before and within a period of three (3) years after Final Payment to the Contractor, provided, however, that if within the aforesaid three (3) year period The Authority has notified the Contractor in writing of a pending claim by The Authority under or in connection with this Contract to which any of the aforesaid records and documents of the Contractor or of his subcontractors relate either directly or indirectly, then the period of such right of access shall be extended to the expiration of six (6) years from the date of Final Payment with respect to the records and documents involved.

The Contractor shall provide, at no cost to the Authority, access for and reasonable assistance to such auditors from the Authority or the Authority's external auditors that may, from time to time, be designated to audit detail records which support Contractor charges to the Authority. The Authority shall have access to the detail records that support Contractor charges to the Authority for up to one year following the termination of the contract.

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

32. Claims of Third Persons

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

33. No discrimination in employment, equal employment Opportunity

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

- a. The Contractor is advised to ascertain and comply with all applicable Federal, State and Local statutes, ordinances, rules and regulations and Federal Executive Orders pertaining to equal employment opportunity, affirmative action and non-discrimination in employment.
- b. Without limiting the generality of any other term or provision of this Contract, in the event of the Contractor's non-compliance with any such statutes, ordinances, rules, regulations or orders, this Contract may be canceled, terminated, or suspended in whole or in part.

34. Integrity

- a. **Certification of No Investigation (criminal or civil anti-trust), Indictment, Conviction, Debarment, Suspension, Disqualification and Disclosure of Other Information.**

By bidding on this Contract, each Proposer and each person signing on behalf of any Proposer certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that the Proposer and each parent and/or affiliate of the Proposer has not:

1. been indicted or convicted in any jurisdiction;
2. been suspended, debarred, found not responsible or otherwise disqualified from entering into any contract with any governmental agency or been denied a government contract for failure to meet standards related to the integrity of the Proposer;
3. had a contract terminated by any governmental agency for breach of contract or for any cause based in whole or in part on an indictment or conviction;
4. ever used a name, trade name or abbreviated name, or an Employer Identification Number different from those inserted in the Bid;
5. had any business or professional license suspended or revoked or, within the five years prior to bid opening, had any sanction imposed in excess of \$50,000 as a result of any judicial or administrative proceeding with respect to any license held or with respect to any violation of a federal, state or local environmental law, rule or regulation;
6. had any sanction imposed as a result of a judicial or administrative proceeding related to fraud, extortion, bribery, bid rigging, embezzlement, misrepresentation or anti-trust regardless of the dollar amount of the sanctions or the date of their imposition; and

7. been, and is not currently, the subject of a criminal investigation by any federal, state or local prosecuting or investigative agency and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency.

b. Non-Collusive Bidding, and Code of Ethics Certification, Certification of No Solicitation Based On Commission, Percentage, Brokerage, Contingent or Other Fees.

By bidding on this Contract each Proposer and each person signing on behalf of any Proposer certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, that

1. the prices in its bid have been arrived at independently without collusion, consultation, communication or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other Proposer or with any competitor;
2. the prices quoted in its bid have not been and will not be knowingly disclosed directly or indirectly by the Proposer prior to the official opening of such bid to any other Proposer or to any competitor;
3. no attempt has been made and none will be made by the Proposer to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition;
4. this organization has not made any offers or agreements or taken any other action with respect to any Authority employee or former employee or immediate family member of either which would constitute a breach of ethical standards under the Code of Ethics dated April 11, 1996 (a copy of which is available upon request to the individual named in the clause hereof entitled "Proposer's Questions"), nor does this organization have any knowledge of any act on the part of an Authority employee or former Authority employee relating either directly or indirectly to this organization which constitutes a breach of the ethical standards set forth in said Code;
5. no person or selling agency other than a bona fide employee or bona fide established commercial or selling agency maintained by the Proposer for the purpose of securing business has been employed or retained by the Proposer to solicit or secure this Contract on the understanding that a commission, percentage, brokerage, contingent, or other fee would be paid to such person or selling agency;
6. has not offered, promised or given, demanded or accepted, any undue advantage, directly or indirectly, to or from a public official or employee, political candidate, party or party official, or any private sector employee (including a person who directs or works for a private sector enterprise in any capacity), in order to obtain, retain, or direct business or to secure any other improper advantage in connection with this Contract; and
7. no person or organization has been retained, employed or designated on behalf of the Bidder to impact any Port Authority determination with respect to (i) the solicitation, evaluation or award of this Contract; or (ii) the preparation of specifications or request for submissions in connection with this Contract.

The foregoing certifications shall be deemed to be made by the Proposer as follows:

- if the Proposer is a corporation, such certification shall be deemed to have been made not only with respect to the Proposer itself, but also with respect to each parent, affiliate, director, and

officer of the Proposer, as well as, to the best of the certifier's knowledge and belief, each stockholder of the Proposer with an ownership interest in excess of 10%;

- if the Proposer is a partnership, such certification shall be deemed to have been made not only with respect to the Proposer itself, but also with respect to each partner.

Moreover, the foregoing certifications, if made by a corporate Proposer, shall be deemed to have been authorized by the Board of Directors of the Proposer, and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of such certification as the act and deed of the corporation.

In any case where the Bidder cannot make the foregoing certifications, the Bidder shall so state and shall furnish with the signed bid a signed statement that sets forth in detail the reasons therefor. If the Bidder is uncertain as to whether it can make the foregoing certifications, it shall so indicate in a signed statement furnished with its bid, setting forth in such statement the reasons for its uncertainty. With respect to the foregoing certification in paragraph "B.7", if the Bidder cannot make the certification, it shall provide, in writing, with the signed bid: (i) a list of the name(s), address(es), telephone number(s), and place(s) of principal employment of each such individual or organization; and (ii) a statement as to whether such individual or organization has a "financial interest" in this Contract, as described in the Procurement Disclosure policy of the Authority (a copy of which is available upon request to the Director of the Procurement Department of the Authority). Such disclosure is to be updated, as necessary, up to the time of award of this Contract. As a result of such disclosure, The Port Authority shall take appropriate action up to and including a finding of non-responsibility.

Failure to make the required disclosures shall lead to administrative actions up to and including a finding of non-responsibility.

Notwithstanding that the Proposer may be able to make the foregoing certifications at the time the Proposal is submitted, the Proposer shall immediately notify the Authority in writing during the period in which its Proposal is under consideration of any change of circumstances which might under this clause make it unable to make the foregoing certifications or require disclosure. The foregoing certifications or signed statement shall be deemed to have been made by the Proposer with full knowledge that they would become a part of the records of the Authority and that the Authority will rely on their truth and accuracy in awarding this Contract. In the event that the Authority should determine at any time prior or subsequent to the award of this Contract that the Proposer has falsely certified as to any material item in the foregoing certifications or has willfully or fraudulently furnished a signed statement which is false in any material respect, or has not fully and accurately represented any circumstance with respect to any item in the foregoing certifications required; to be disclosed, the Authority may determine that the Proposer is not a responsible Proposer with respect to its bid on the Contract or with respect to future bids on Authority contracts and may exercise such other remedies as are provided to it by the Contract with respect to these matters. In addition, Proposers are advised that knowingly providing a false certification or statement pursuant hereto may be the basis for prosecution for offering a false instrument for filing (see, e.g. New York Penal Law, Section 175.30 et seq.). Proposers are also advised that the inability to make such certification will not in and of itself disqualify a Proposer, and that in each instance the Authority will evaluate the reasons therefor provided by the Proposer. Under certain circumstances the Proposer may be required as a condition of Contract award to enter into a Monitoring Agreement under which it will be required to take certain specified actions, including compensating an independent Monitor to be selected by the Port Authority, said Monitor to be charged with, among other things, auditing the actions of the Proposer to determine

whether its business practices and relationships indicate a level of integrity sufficient to permit it to continue business with the Port Authority.

c. Proposer Eligibility for Award of Contracts - Determination by an Agency of State of New York or New Jersey Concerning Eligibility to Receive Public Contracts

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

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

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

d. No Gifts, Gratuities, Offers of Employment, Etc.

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

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

The Proposer shall insure that no gratuities of any kind or nature whatsoever shall be solicited or accepted by it and by its personnel for any reason whatsoever from the passengers, tenants, customers or other persons using the Facility and shall so instruct its personnel.

In addition, during the term of this contract, the Proposer shall not make an offer of employment or use confidential information in a manner proscribed by the Code of Ethics and Financial

Disclosure dated April 11, 1996 (a copy of which is available upon request to the Office of the Secretary of the Port Authority).

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

e. Definitions

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

Affiliate - Two or more firms are affiliates if a parent owns more than fifty percent of the voting stock of each of the firms, or a common shareholder or group of shareholders owns more than fifty percent of the voting stock of each of the firms, or if the firms have a common proprietor or general partner.

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

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

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

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

If the solicitation is a Request for Proposal:

Bid - shall mean Proposal;

Bidder - shall mean Proposer;

Bidding - shall mean submitting a Proposal.

In a Contract resulting from the taking of bids:

Bid - shall mean bid;

Bidder - shall mean Bidder;

Bidding - shall mean executing this Contract.

In a Contract resulting from the taking of Proposals:

Bid - shall mean Proposal;

Bidder - shall mean Proposer;

Bidding - shall mean executing this Contract.

f. Conflict of Interest

During the term of this Agreement, you shall not participate in any way in the preparation, negotiation or award of any contract (other than a contract for your own services to the Authority) to which it is contemplated the Authority may become a party or participate in any way in the

review or resolution of a claim in connection with such a contract, if you have substantial financial interest in the contractor or potential contractor of the Authority or if you have an arrangement for future employment or for any other business relationship with said contractor or potential contractor, nor shall you at any time take any other action which might be viewed as or give the appearance of a conflict of interest on your part. If the possibility of such an arrangement for future employment or for another business arrangement has been or is the subject of a previous or current discussion or if you have reason to believe such an arrangement may be the subject of future discussion, or if you have any financial interest, substantial or not, in a contractor or potential contractor of the Authority, and your participation in the preparation, negotiation or award of any contract with such a contractor or the review or resolution of a claim in connection with such a contract is contemplated or if you have reason to believe that any other situation exists which might be viewed as or give the appearance of a conflict of interest you shall immediately inform the Director in writing of such situation giving the full details thereof. Unless you receive the specific written approval of the Director, you shall not take the contemplated action which might be viewed as or give the appearance of a conflict of interest. In the event the Director shall determine that the performance by you of a portion of your services under this Agreement is precluded by the provisions of this numbered paragraph, or a portion of your said service is determined by the Director to be no longer appropriate because of such preclusion, then the Director shall have full authority on behalf of both parties to order that such portion of your services not be performed by you, reserving the right, however, to have the services performed by others and reserving the right to reduce the lump sum compensation as he/she may deem reasonable in his/her sole discretion. Your execution of this Agreement shall constitute a representation by you that at the time of such execution you know of no circumstances, present or anticipated, which come within the provisions of this paragraph or which might otherwise be viewed as or give the appearance of a conflict of interest on your part.

35. Confidential Information/Non-Publication

- a. As used herein, confidential information shall mean all information disclosed to the Contractor or the personnel provided by the Contractor hereunder which relates to the Authority's and/or PATH's past, present, and future research, development and business activities including, but not limited to, software and documentation licensed to the Authority or proprietary to the Authority and/or PATH and all associated software, source code procedures and documentation. Confidential information shall also mean any other tangible or intangible information or materials including but not limited to computer identification numbers, access codes, passwords, and reports obtained and/or used during the performance of the Contractor's Services under this Contract.
- b. Confidential information shall also mean and include collectively, as per The Port Authority of New York & New Jersey Information Security Handbook (October 15, 2008, corrected as of February, 9 2009), Confidential Proprietary Information, Confidential Privileged Information and information that is labeled, marked or otherwise identified by or on behalf of the Authority so as to reasonably connote that such information is confidential, privileged, sensitive or proprietary in nature. Confidential Information shall also include all work product that contains or is derived from any of the foregoing, whether in whole or in part, regardless of whether prepared by the Authority or a third-party or when the Authority receives such information from others and agrees to treat such information as Confidential.
- c. The Contractor shall hold all such confidential information in trust and confidence for the Authority, and agrees that the Contractor and the personnel provided by the Contractor hereunder shall not, during or after the termination or expiration of this Contract, disclose to any person, firm or corporation, nor use for its own business or benefit, any information obtained by it under or in

connection with the supplying of services contemplated by this Contract. The Contractor and the personnel provided by the Contractor hereunder shall not violate in any manner any patent, copyright, trade secret or other proprietary right of the Authority or third persons in connection with their services hereunder, either before or after termination or expiration of this Contract. The Contractor and the personnel provided by the Contractor hereunder shall not willfully or otherwise perform any dishonest or fraudulent acts, breach any security procedures, or damage or destroy any hardware, software or documentation, proprietary or otherwise, in connection with their services hereunder. The Contractor shall promptly and fully inform the Director/General Manager in writing of any patent, copyright, trade secret or other intellectual property rights or disputes, whether existing or potential, of which the Contractor has knowledge, relating to any idea, design, method, material, equipment or other matter related to this Contract or coming to the Contractor's attention in connection with this Contract."

- d. The Contractor shall not issue nor permit to be issued any press release, advertisement, or literature of any kind, which refers to the Port Authority or to the fact that goods have been, are being or will be provided to it and/or that services have been, are being or will be performed for it in connection with this Agreement, unless the vendor first obtains the written approval of the Port Authority. Such approval may be withheld if for any reason the Port Authority believes that the publication of such information would be harmful to the public interest or is in any way undesirable.

36. Provisions of Law Deemed Inserted

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

37. Invalid Clauses

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

38. No Estoppel or Waiver

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

39. Non-Liability of the Authority Representatives

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

40. Modification of Contract

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

41. Entire Agreement

This Contract, including the Request for Proposals for the provision of Limited Use Contactless Smart Cards for PATH (including its Scope of Work and other attachments, endorsements and exhibits, if any) as well as the Proposal submitted by the Contractor, contains the entire agreement between the parties. In the event of any inconsistency between this Contract and other attachments, endorsements and exhibits, if any, including the Proposal submitted by the Contractor, this Contract shall be controlling.

ATTACHMENT C: SCOPE OF WORK

1. Scope of Work

The Contractor shall provide PATH with secure pre-cut and pre-encoded Limited Use Contactless Smart Cards, in accordance with the specifications provided by PATH at or after Contract award, for use on the PATH system. The Smart Cards will support time-, value- and trip-based uses, and shall conform to the latest Regional Interoperability Standard for Electronic Transit Fare Payments (RIS) American Public Transportation Association, as referenced in the documents listed in Section 1.B, above.

2. Prototype and Associated Acceptance Testing

After Contract award, PATH and the Contractor shall develop a plan for receiving, testing and accepting the prototype Smart Card, with the assumption that PATH shall receive the approved prototype Smart Card no later than thirty days after notice to proceed from PATH. It is further assumed that after acceptance by PATH of the approved prototype Smart Card, PATH shall order the first batch of Smart Cards (estimated at 40,000), with delivery subject to the terms specified in Section 4, below ("Delivery").

Failure to provide the approved prototype Smart Card within thirty days after notice to proceed from PATH may result in termination or cancelation of the Contract, subject to the provisions for termination and cancelation stated herein.

Note that one-time pre-production cost are payable ONLY after the prototype card is approved by PATH.

3. Packaging

Each Card shall be individually wrapped with a frequency blocking material for protection against accidental activation. The protective material shall be semi-transparent so that the serial number, expiration date, and product type can be easily read.

The Cards shall be packaged in allotments of 500, in clear sealed packages, each with printed bar coded labels, and a printed text label in English, containing the following information:

1. The Package Number and the Serial Numbers in that package (i.e. Package 1 would read Package 1 [1 – 500]).
2. The Product Type and Expiration Date.

The boxes shall be shipped with tamper-proof seals affixed.

4. Internal Control

With each delivery, PATH shall receive a database/spreadsheet file indicating the quantity of encoded Cards and the Card serial numbers contained in the shipment. PATH will advise on the format and method of delivery of this database/spreadsheet after award of the Contract.

The Contractor shall maintain a detailed database/spreadsheet of all Cards created for all shipments. The database shall include the batch number, serial numbers, and product on the Card and expiration date. In addition, the Contractor should maintain in its database all Cards created for PATH, including discarded and corrupt Cards, so that PATH knows what was produced, delivered and destroyed. This database/spreadsheet shall be sent to PATH with each delivery and upon request at any time. The

Contractor shall provide PATH with all requested information along with each delivery and within twenty-four (24) hours of written request by PATH.

5. Delivery

The Cards shall be packed under the supervision of responsible personnel and be kept in an appropriately secure location before shipment.

The Cards are to be delivered via mail within thirty (30) days of PATH's written approval to produce the Cards, but not longer than fifteen (15) days after Contractor has encoded the Cards.

As set forth in Section 3, above, each delivery box shall visibly contain the Expiration Date of the batch and Product Type.

Unless otherwise provided, complete shipment of all Cards ordered must be in one delivery, FOB delivery point, freight included. The Contractor shall be responsible for any Card losses before acknowledgement of receipt of the Cards by PATH. Upon acceptance of any delivery, a PATH representative will sign only for the number of boxes received in the delivery. PATH will then have up to seven (7) calendar days to verify the contents of each box.

Payment will not be made on partial deliveries unless authorized in advance by PATH and the discount, if any, will be taken on the total order.

Failure to deliver the Cards in accordance with the terms of this section may result in termination or cancelation of the Contract, subject to the provisions for termination and cancelation stated herein.

6. Card Reliability

PATH reserves the right to refuse or reject any Card delivery for which, in the sole opinion of PATH, the workmanship is not of the acceptable level -- i.e., defective printing, wrapping, etc. A defect is defined as a use failure event or poor workmanship. Furthermore, usage failures shall be defined and measured by the latest applicable transit card industry standards (identified in the RIS Standards).

The Contractor shall replace all defective Cards at no charge to PATH and shall document each Card replaced. The Contractor shall replace defective Cards and deliver replacement Cards within thirty (30) days of notification by PATH, but not longer than fifteen (15) days after the Contractor has encoded the replacement cards.

If the issued Cards do not meet or exceed the reliability rate of 99.9%, as determined solely by PATH in using the Contractor-supplied testing device that will be provided during the pre-production process, the Contractor shall provide a written report identifying the technical explanations of the causes of the problem and recommending the corrective steps and resolution. PATH shall determine, at its sole discretion, acceptance of such recommendations.

If defective problems persist, the Port Authority may terminate or cancel the Contract, subject to the provisions for termination and cancelation stated herein.

7. Software

After award of the Contract, the Contractor will be provided with all scripts, software, graphics, and appropriate documentation required for the encoding process. It is the Contractor's responsibility to ensure that the Smart Cards will function with, and be accepted by, the PATH Fare Collection System.

8. Security Requirements

Within 15 days after Contract Award, the Contractor shall develop a security plan – for review and acceptance by PATH – that will define the (i) the security processes for the electronic keys that allow the pre-encoded cards to be used on the PATH System, (ii) the measures taken to prevent unauthorized use and loss of the electronic keys, (iii) how the electronic key will be transferred at the beginning of the Contract and returned to PATH at termination of the Contract; (iv) the processes for shipping and sealing the packages (including but not limited to affixing tamper-proof seals). PATH shall review such security plan and respond with either comments or acceptance.

Failure by the Contractor to adhere to the approved security plan, including any authorized use or loss of the electronic keys, may result in termination or cancelation of the Contract, subject to the provisions for termination and cancelation stated herein.

ATTACHMENT D: COST PROPOSAL

Entry of Prices

- a. The prices quoted shall be written in figures, in ink, preferably in black ink where required in the spaces provided on the Pricing Sheet(s) below.
- b. All Proposers are asked to ensure that all charges quoted for similar operations in the Contract are consistent.
- c. Prices must be submitted for each Item required on the Pricing Sheet(s).
- d. All Proposers are asked to ensure that all figures are inserted as required, and that all computations made have been verified for accuracy. The Proposer is advised that the Port Authority may verify only that Proposal or those Proposals that it deems appropriate and may not check each and every proposal submitted for computational errors. In the event that errors in computation are made by the Proposer, the Port Authority reserves the right to correct any error and to recompute the Total Estimated Contract Price, as required, based upon the applicable Unit Price inserted by the Proposer, which amount shall govern in all cases.
- e. In the event that a Proposer quotes an amount in the Total Estimated column but omits to quote a Unit Price for that amount in the space provided, the Port Authority reserves the right to compute and insert the appropriate Unit Price.
- f. The Total Estimated Contract Price is solely for the purpose of facilitating comparisons of Proposals. Compensation shall be in accordance with the section of this Contract entitled "Payment."

PRICE FORMS

1. **One-time Pre-production Cost¹:** \$ _____²

2. **Price for the Smart Card for Orders 1 through 8 per year³**

Year	Estimated Quantity per order		Estimated Orders per Year		Unit Price (per Card)		Lump sum price for the delivery of 8 orders	Total Estimated Cost
1	40,000	x	8	x	\$	+	\$	\$
2	40,000	x	8	x	\$	+	\$	\$
3	40,000	x	8	x	\$	+	\$	\$

3. **Price for the Smart Card for Orders 9 and above per year⁴**

Year	Estimated Quantity per order		Estimated Orders per Year		Unit Price (per Card)		Lump sum price for the delivery of 5 orders	Total Estimated Cost
1	40,000	x	5	x	\$	+	\$	\$
2	40,000	x	5	x	\$	+	\$	\$
3	40,000	x	5	x	\$	+	\$	\$

4. **Total Estimated Cost of the Contract**

Sections 1 + 2 + 3 = \$ _____

5. **Blended Hourly Rate for Any Changes to the Smart Card⁵:** \$ _____

6. **ASSUMPTIONS & NOTES:** Provide assumptions or notes to clarify or explain the cost structure submitted. Use additional sheets/pages if necessary.

Attachment	Contractor's Assumptions/Notes/Clarifications
One-time preproduction costs	

¹ In the Section entitled "Assumptions & Notes", the Proposer shall identify the activities that are included in the one-time pre-production cost

² The one-time pre-production cost is payable ONLY after the proto-type card is approved by PATH.

³ The same unit price shall prevail for Orders 1 though 8

⁴ The same unit price shall prevail for Orders 9 and above.

⁵ For informational purposes only

Three-year price for 8 orders per year, with Packaging (Orders 1-8)	
Three-year price for 5 orders per year, without Packaging (9 or More Orders)	
Miscellaneous	

ATTACHMENT E - PROPOSER REFERENCE FORM

Name of Proposer: _____

Please provide a list of references on the firm's performance of similar work within the last five years, including all current contracts. Use additional sheets as necessary.

Include the following information for each reference:

Customer Name: _____

Address: _____

Contact Name and Title: _____

Phone, Fax Number, and Email Address of Contact: _____

Contract date(s): _____

Contract cost: _____

Description and location of work: _____

Customer Name: _____

Address: _____

Contact Name and Title: _____

Phone, Fax Number, and Email Address of Contact: _____

Contract date(s): _____

Contract cost: _____

Description and location of Work: _____

Customer Name: _____

Address: _____

Contact Name and Title: _____

Phone, Fax Number, and Email Address of Contact: _____

Contract date (s): _____

Contract cost: _____

Description and location of work: _____

ATTACHMENT F: CONTROL REQUIREMENTS

- I. Application Controls Checklist
- II. Control Security Requirements
- III. Disaster Recovery Plan Checklist
- IV. Security Administration Function
- V. Security Requirement
- VI. System Administration & Operation Manual Requirements
- VII. Web-Based Application Checklist

I. APPLICATION CHECKLIST:

A. General

- Overview of the application, what the function is, who uses the application, and where it is physically located.
- Documented procedures, flowcharts and processes maps.
- Physical access to the application hardware should be appropriately restricted.
- If vendor(s) support the application, a vendor contract and service level agreement should be in place. The SLA should have provisions for uptime, performance monitoring, updates, etc.
- The application should have the PA's warning banner on the login screen.
- Remote access should be restricted and documented in accordance with PA policy.
- Determine what form of output is possible through the application.

B. Hardening of operating system/database that supports the application:

- Disable unnecessary ports/services.
- Remove all samples from the box.
- Change all default passwords; delete all default content and scripts.
- Limit user account access.
- Document system accounts like administrator, root, oracle, and sys.
- Document user/group access rights
- Users/groups should be setup with least access required to perform job responsibilities.
- Follow PA password standards (90-day expiration, lockout after 3 incorrect password attempts, concurrent logins, 6 alphanumeric characters)
- Set "automatic session timeout" to 15 minutes of inactivity and require user to log back in with a valid ID and password.
- Implement access control at the database level (i.e. user roles and permissions, passwords, secure links)
- Apply all new patches and fixes to operating system and application software for security.
- Use secure encrypted remote access methods.
- If the application is a web application, log (and monitor) web traffic and trend the activity looking for abnormal activity.
- Ensure that appropriate security and vulnerability assessment tools are running.

C. License Management

- Ensure that application licensing requirements are documented, reviewed and maintained.
- Application licenses should be current/valid and individuals/groups with application access should have completed the necessary access request forms and adhere to licensing requirements.

D. Logical Access Controls

- Procedures to grant/revoke access should be documented.
 - Access request forms for adding/modifying/deleting users should be used.
- Ensure that security administrator procedures exist to:
 - create/remove application access in a timely manner
 - review user roles/permissions
- Validate that all users have accessed the application within the past 90 days.
 - Review dormant accounts
- Ensure that password controls for the application are consistent with PA requirements
 - Passwords must be at least 6 alphanumeric characters long
 - Passwords must be changed every 90 days
 - Passwords must not be shared
 - UserID accounts should be locked after a three logon failures.
- Password file should be securely stored with limited access and encrypted.
- Application forces initial passwords to be changed and the initial passwords should not be easily guessable.
- Each user has a unique userID.
- Should have a segregation of duties/roles.
 - Roles are setup with least access required to perform job responsibilities.

E. Application Controls

E.1 Data Validation & Input Controls

- The application should have input controls to verify the validity of the data entered.

E.2 Data Retention and Management

- All data should be classified according to its sensitivity (confidential, etc.) and protected accordingly.
- Data archive strategy should be documented and in place.
 - Should specify how long active data is kept.
- Sensitive data like credit card #s and social security #s should be encrypted.

E.3 Application Interfaces

- Interface file should be secured and archived.
- Reconciliation of data should be done on a batch record and totals. Detail data reconciliations should be completed on periodic basis.

E.4 Processing Controls

- Application databases/interfaces should have the necessary controls to prevent processing of inaccurate, duplicate, or unauthorized transactions and producing inaccurate outputs.
- Controls to ensure that all data is processed and accounted for should be in place.
- Rejected items should be logged, tracked and resolved in a timely manner.

E.5 Change Management

- Processes and tools should be used to report, track, approve, fix, and monitor changes on the application.
- The application and all changes to the application should be tested before being put into production.
 - Documentation of approval for change and evidence of testing should be in place.

E.6 Application Logging, Audit Trails and Record Retention

- Users and roles should be tracked and reviewed
 - Maintain documentation
- All failed logon attempts should be logged.
- All sensitive transactions and changes should be logged and an audit trail created.
- Audit trails should contain who made the change, when it was made, and what was changed.
- Only the security administrator should have access to change or delete these logs or audit trails.
- Audit trails should be reviewed by the business owner(s) and security administrator.

F. Management Reporting

- Management reporting should be produced through the application.
- Transaction logs should be maintained.

G. Contingency Planning, Disaster Recovery and Backup Management

- A Business contingency plan and a disaster recovery plan for the application should be documented.
- Plans should be tested and the outcomes of the tests (success/failure) should be documented.
- Backup copies of these plans should be stored off-site.
- Backup procedures should be documented and regular backups of the application and the application data should be stored off-site.
- Application executables should be stored off-site or in escrow.
- Application configurations should be documented and backed-up.

H. Performance Monitoring

- Incident monitoring procedures should be documented and incidents logs should be reviewed to ensure that appropriate action is taken.
- Performance statistics should be examined and reviewed periodically by system administrators/business owner(s).
 - There should be SLA and /or requirement with the vendor for “uptime”.

II. CONTROL SECURITY REQUIREMENTS

A. System Configuration

- Default accounts are secured/locked/or removed.
- Public and Guest accounts/profiles should be secured with no access.
- Controlled use of administrative accounts.
- Limited assignment of administrative privileges and roles.
- Access violation reports.
- Audit trails for operating, application and database systems
- Not display last user who signed on
- No use of login scripts for accounts.
- LDAP compliant
- Encryption of data in storage and transmission of data via the network.
- Unnecessary services removed and/or disabled.
- Secured and approved remote access strategy.
- Data archiving in place.

- Data Retention Policy and Procedures in place.
- Requirement for user name and password
- System timeout for inactivity set to 15 minutes.
- All default settings or passwords changed.
- Test facility which replicates the production system.
- Patching up to date. Patch Management Procedures and documentation includes testing.
- Virus software implemented and up to date.

B. Physical Protection

- Appropriate fire suppression systems in place.
- Temperature and humidity monitoring.
- Environmental condition adequately controlled (no water, dirt, clutter) and monitored.
- Physical access secured by single authentication mechanism i.e. swipe card.
- Physical security adequate for equipment (locked cabinets).
- Security cameras installed in sensitive areas.
- Power surge protection and emergency power backup are in place.

C. Backup

- Backup data maintained off-site
- System backup is encrypted.
- Full system backups exist.
- Backup tapes are tested periodically.

D. Access Controls

- Background checks are performed on all personnel.
- Account expiration for contractors and consultants
- Account password is not the same as account name
- No concurrent login capabilities
- No accounts assigned to individuals who no longer require the account
- Default accounts are locked or secured.
- Accounts never logged into are removed.
- Accounts adequately identify the user – no generic accounts.
- Accounts not used by multiple individuals
- Administrator account passwords adequately secured.
- Disabled accounts are deleted.
- No test accounts on production.
- No generic accounts
- No excessive privileges on accounts – least privilege granted.
- Guest accounts are removed
- Inactive accounts are removed
- Review of profiles, access levels, privileges
- Access reports by user and privilege
- All user account profile should include Employee ID number and full user name.
- Assigned Security Administrator
- Baseline tools or security products are implemented on a quarterly basis.
- Adequate network zoning
- Adequate performance monitoring
- Intrusion Detection System in place

- Secured and authorized remote access
- Firewalls in place
- Warning message/banner
- No modems (dial up or wireless)

E. Password Controls

- Password encryption enabled.
- Password uniqueness functions enabled.
- Passwords expire every ninety days.
- Forced password change at initial log on.
- Passwords set for a minimum of six characters, combination of letters, numbers, and special characters.
- Retention of unsuccessful login attempts and length of account lockout time set to PA standards.
- Password dictionaries
- Account lockout function enabled and set according to standards.
- Password age in compliance with PA standards

F. Documentation / Procedures

- Security Administration Procedures documented
- Procedure for granting, modifying or deleting access to the system are documented
- Access request forms authorized
- Access request forms retained
- Access request forms are used to assign access
- Change Management procedures documented
- Test results documented
- Backup, restart and recovery procedures documented
- Disaster Recovery Plans and Business Resumption Plans documented and comprehensive.
- Documentation is current for System Manuals, Operating Instructions
- Documentation is up to date for Firewall rule sets.
- Inventory listings of equipment and software.
- Adequate training
- Password reset procedures controlled (Help desk function)
- System Administration procedures documented
- Data retention and archiving procedures documented
- Roles and Responsibilities defined and documented
- Virus Patch Management procedures documented
- Batch and Interface Management procedures documented
- Patch Management procedure documented
- Escalation procedures documented
- Incident Response procedures documented
- Incident and Error logging/tracking.
- Topologies exist and are up to date (system/network diagrams)
- System monitoring/performance
- Log reviews
- Management reporting – like Access Reports, Exception transaction reporting

III. DISASTER RECOVERY CHECKLIST

Disaster recovery is a plan which could be executed in the event of a total disaster in order to bring the computer systems back to a functioning whole. Typically, the disaster in question is one, which destroys a complete site that requires restoration of support, particularly Information Technology support. Most commonly considered causes of disasters are fire, explosion, flooding, hurricanes and tornados. Disaster recovery planning normally involves alternate locations for major systems as well as the planning and testing of switch over measures, emergency transportation and so on.

The Disaster Recovery plan should include at a minimum the following areas.

1. Disaster Recovery

- Manager Responsibilities
- Plan Administration
 - Distribution of the Disaster Recovery Plan – All team members, LAN and an offsite location should have a copy of the current plan and its attachments.
 - Maintenance of the Business Impact Analysis
 - Training of the Disaster Recovery Team
 - Testing of the Disaster Recovery Plan
 - Evaluation/Review of the Disaster Recovery Plan and Tests – the DR Plan should be reviewed and the DR Test should be performed at a minimum twice a year. Update the plan to reflect changes in activities, procedures, performance, staff, and etc. Set a regular time for the review.
 - Maintenance of the Disaster Recovery Test Results – Maintain copies of the test results and what scenarios and areas of the plan were tested.

2. Business Impact Analysis - Minimize the impact on the business with respect to dollar losses and operational interference

- Critical Time Frame - Recover the system and/or component of the system within the critical time frames established and accepted by the user community. This should include the time estimate of how long it would take to recover the whole system or any sub components.
- Application System Impact Statements - This area is where a business owner decision of what areas of the system has a priority in how it is brought back into normal operation. How long could these operations be performed without computer support?
 - Essential – Are systems or components of the system that are very critical and need to be back in operation immediately because the business cannot function.
 - Delayed – Are systems that are needed but could be delayed and could not adversely effect the business process.
 - Suspended – Are system or components that are not critical and can wait until the full system is back to normal operation.
- Recovery Strategy & Approach

3. Disaster Definition – All possible interruptions should be defined, and then the steps to minimize their impact need to be documented. This includes disk array failure, power loss, loss of network, loss of wireless network, loss remote access, equipment, computer processor failures, etc.

- Detailed Recovery Steps for each Disaster Definition - This should be the technical steps to recover the different areas of the system like the Operating system, database, application, routers, firewall, and etc.
- Escalation Plans and Decision Points

4. Data Center Systems – Dependencies should be notated.
- System Components- A copy of all essential office equipment and records should be stored off-site. Specify any special computer hardware, software, databases, networks or other technology.
 - Backup Strategy
 - Storage Rotation
 - Back-up Files
 - Off Site Storage of Back-up Files
 - Back-up Files Retrieval Process, Vendor information and Forms for Off Site Storage
 - Hardware -
 - Hardware inventory for system in operation
 - Desktop Workstations (In Office)
 - Desktop Workstation location
 - Desktop Workstations (Offsite including at home users)
 - Laptops
 - Software -
 - Software inventory of the system in operation
 - Systems, Applications and Network Software
 - Communications
 - Operations
 - Off-Site Inventory
 - Supplemental Hardware/Software Inventory

5. Escalation Plans and Decision Points

6. Disaster Recovery Emergency Procedures

- Plan Procedure Checklist - should have a checklist of the plan procedures and area for documenting exceptions where the plan was not adhere to and what was done in its place. Disaster Recovery Procedures in a check list with approval format.
- Disaster Recovery Organization – should have the full disaster recovery team listed by position or individual and what are their responsibilities. This section of the plan should include Port Authority and PATH personnel, PA/PATH management, and all vendors that work or have responsibilities during a disaster. This area should be reviewed semi-annually for updates and changes.
 - Recovery Organization Chart
 - Disaster Recovery Team & Recovery Team Responsibilities
 - Recovery Management & Senior Manager Responsibilities
 - Damage Assessment and Salvage Team & Team Responsibilities

Problems and Changes - Need to be documented and what was done to rectify them.

Essential Position – Require back-up personnel to be assigned.

7. Pre-Disaster - What steps need to be in place prior to a disaster for this plan to work? If there are any assumptions, they should be notated here.

- Recovery Management
 - Damage Assessment and Salvage
 - Hardware Installation
8. Contacts information - This area should be reviewed semi-annually for updates and changes.
 - Disaster Recovery Team - This should include primary and secondary phone numbers, home address, emergency contact information, and their backups information.
 - Vendor Phone/Address List – Include account information and account representative information.
 - Command Center – Primary and Alternative site locations, hot spots, phone numbers, time scheduling
 9. Post-Disaster – Detail what steps need to be taken to move from disaster mode back to normal operations.

IV. SECURITY ADMINISTRATION FUNCTION

Responsible for:

- ◆ Establishment of access rights, groups, profiles etc. for a system or application for which they are responsible and documenting their use and definitions.
- ◆ The development of security procedures which define the granting of access and the administration of security functions of their system or application. The ongoing review and update of these security procedures.
- ◆ Responsible for the development of add/change/delete access requests forms.
- ◆ The development of procedures for changing or deleting accounts or privileges when staff leave or change assignments. Execution of these procedures in a timely manner.
- ◆ Regular review of who has access to their data and determining if it is appropriate and still required.
- ◆ Ensuring that users are required to acknowledge, in writing, that they have been informed of the organization's position on security and confidentiality of information prior to access being given.
- ◆ Assigning appropriate expiration dates for accounts used by temporary/consulting staff.
- ◆ The development of procedures for responding to, documenting and escalating security incidents.
- ◆ The investigation and appropriate escalation of a security incident matter.
- ◆ Setting any global system or application controls (i.e. password controls, time out, concurrent logins) consistent with the Port Authority Technology Standard and Guidelines.
- ◆ Restricting remote access and monitoring and reviewing the activity log. (Limit or no use of modems. Modems should be configured according to the Port Authority Technology Standard and Guidelines as certified by the Information Systems Security Officer.)

- ◆ Development and review of reports such as Kane Security Analyst, ISS or ESM to monitor areas of security exposure.
- ◆ Daily event log reviews for irregular activities and security violations.
- ◆ Keeps management and the business unit informed on security issues.
- ◆ Development of regular processing schedules for the production of security reports i.e. unsuccessful logon attempts, audit trail reports.
- ◆ Development of procedures for reviewing the reports and logs on a regular basis and taking appropriate corrective action.
- ◆ Responsible for ensuring that the system complies with the Port Authority Technology Standard and Guidelines.
- ◆ Determining high-risk activities, establishing logs of those activities and tables and determining appropriate review cycles.
- ◆ Ensuring that operating system, database system and application security issues are coordinated.
- ◆ Keeping abreast of vulnerabilities of systems, databases, or application as they are discovered and patching them or implementing compensation controls.
- ◆ Development of procedures for the disposal of unneeded confidential data produced from the application.
- ◆ Ensure all system hardware (i.e. servers, comm. rooms, backup tapes, etc.) and software are secured from tampering or damaging.
- ◆ Ensure that operating systems at a minimum complies with the Distributed Systems Environment in the Port Authority Technology Standard and Guidelines and industry standards.
- ◆ Document a virus protection and recovery plan.
- ◆ Firewall Administration, Firewall configuration, rules, logs, and patches
- ◆ Intrusion Detection System Administration, monitoring network traffic across the firewall and in the DMZ.
- ◆ Router and Switches Administration, configuration file, backups, patches, and change controls.

V. SECURITY REQUIREMENT

Network architecture

Diagram

Router and Switch Configurations

Firewall Configuration

IDS Nodes and System Signatures

Alerts and Logs

Failover & Redundancy

UNIX

Administration

- Port and Services (unnecessary)
- Utilities (unnecessary)
- Access Rights/ Segregation of Duties
- Redundancy / Data Replication
- System Log & Violation Logs
- Root
- Vulnerability Scanner

Windows

- Administration
- Services and Ports (unnecessary)
- Utilities (unnecessary)
- Access Rights/ Segregation of Duties
- Patches
- System Log, Audit Trails & Violation Logs
- IIS
- Administrator & Guest
- Vulnerability Scanner

Oracle

- Administration
- Services (unnecessary)
- Utilities (unnecessary)
- Access Rights/ Segregation of Duties
- Redundancy / Data Replication
- Audit Trail and Triggers
- Sys, System, Internal
- Vulnerability Scanner

System Administration

- Batch Management & Processing
- System Monitoring (HP Open View & SNMP)
- Vulnerability Software & Baseline Tools (i.e. ISS & Tripewire)
- Patch Management (Proactive)
- Virus Management
- Instance Management
- Performance Monitoring
- Change Control - System, Application

Web Logic & XML

- SSL certificates (HTTPS)
- Key Generation & Management – Smart Card
- Access Rights/ Segregation of Duties
- Audit Trails & Violation Logs
- Java, SSL, Web Logic Patch Management

Remote Access

- Security

Authentication and Integrity
Blue Ridge – VPN
IBM Mail Box
PA Approval via TSD (MF)

Security Administration

Review of Audit Trails and Violation Logs

Documentation

System Administration Manuals
Security Administration Manuals
User Manuals

General

Login Banner
Physical Security
System Defaults
Authentication & Password Controls (90 day exp., 15 min. timeout, 3 attempts, concurrent logins, 6 alpha numeric)

Escalation Procedures

Incident Response Procedures
Archiving
Backup and Recovery
Disaster Recovery (Plan & Testing)
Business Resumption (Plan & Testing)
Software Inventory
Hardware Inventory
Account Expiration for Consultants and Contractors
Vulnerability Scanner

VI. SYSTEM ADMINISTRATION & OPERATION MANUAL REQUIREMENTS

A. General Information

- 1) Server name
 - a) IP address
 - b) Location
 - c) Operating system – version, patch level
 - d) Database – version, patch level
 - e) Application
- 2) LDAP and Domain Controller Configuration
- 3) Diagrams
 - a) Network topology
 - b) Application flowcharts

B. System

- 4) System Configuration
- 5) System Applications and Services
- 6) Network Time Synchronization
- 7) Patch Management
 - a) Normal and Emergency Procedures

- 8) System Schedule
 - a) System downtime
 - b) System backups
 - c) System batch processing

C. Access Controls

- 9) Roles / Profiles (Access Control List)
 - a) List of ACLs
 - b) Creation and updates to ACL
 - c) Testing and Approval of ACL
- 10) Granting and Revoking User Access
 - a) Access Request Forms
- 11) User Accounts and Access Reports
 - a) Generating Reports
 - b) Report Distribution and Report Approvals/Reviews

D. Password Controls

- 12) Password Configuration
 - a) Length
 - b) Alpha/numeric
 - c) Password dictionary
 - d) Password age
 - e) Password expiration
- 13) Account Policies
 - a) Concurrent log in
 - b) Vendor/Consultant Account Expiration (usually the length of the contract)

E. Remote Access

- 14) Strategy/Approach
- 15) Approvals

F. Operation

- 16) Administrator(s) roles and responsibilities
 - a) Chart or description
- 17) Startup and Shutdown Server procedures
- 18) Batch processing
 - a) Production runs – list of batch programs with schedules
- 19) Backups
 - a) Schedule – frequency
 - b) Testing of tapes
 - c) Offsite locations
 - i) When picked up
 - ii) Where stored
 - d) Tape encryption
 - i) Each tape and/or disk files should have an external label
 - e) Tape destruction – scratching and disposal of tapes
- 20) Recovery
 - a) Procedures

G. Physical

- 21) Server Location

- a) Site Security
- b) Server Mounting
 - i) What is the rack configuration and who has access to the keys
- c) Environmental Controls
 - i) Humidity and Temperature Monitoring

H. Anti-Virus Management

- 22) Engine and Definition Management
- 23) Emergency Updates
- 24) Remote Distribution Server

I. Change Management

- 25) Testing Environment
- 26) Normal Procedures
- 27) Emergency Procedures
- 28) Requests are documented
- 29) Specific timetables/scheduling are documented
- 30) Documented reason for request and approvals
 - a) name of requester
 - b) phone number and department
 - c) requester's signature
 - d) reason for change
 - e) List of modules that need to be changed
 - f) Supervisor's name
 - g) Supervisor's approval (changes must be approved by someone other than the requester).
- 31) Determine if priorities are assigned to the change requests.
- 32) Budget/costs are communicated to system owner.
- 33) Process used to control and monitor change requests (central repository/ tracking system).

J. Patch Management

- 34) Procedures
 - a) Operating System
 - b) Database
 - c) Application
- 35) Testing
- 36) Approvals
- 37) Remote Distribution

K. Reporting and Monitoring

- 38) System Monitoring
 - a) System Utilization and Performance
 - i) CPU
 - ii) Disk space
 - b) System Response time
- 39) System Reporting –
 - i) Report generation schedule and distribution
 - ii) Review and approval

- a) System Performance
- b) Audit Trails
- c) Violation Reports

L. Problem & Incident Management

- 40) Problem reporting/resolution tracking system
 - a) Problems are appropriately logged and prioritized.
 - b) Corrective measures are documented.

M. Segregation of Duties

- 41) Developers and or Programmer have no access to the production server.
- 42) OS administrators have no access to the Production database and application.

VII. WEB-BASED APPLICATION CHECKLIST

A. Web Environment Controls

- Network Architecture:
 - Ensure firewall hides the structure of the internal network.
 - Ensure outside traffic is filtered by the external firewall, and should be allowed to access the DMZ with only those services that are required (i.e. HTTP, HTTPS, FTP)
 - Ensure that all traffic passing between the internal and external networks pass through the DMZ.
 - Intrusion Response Controls Intrusion Detection/Prevention:
 - Use intelligent IDS (intrusion detection system) or IPS (intrusion prevention system) to detect or block DoS (denial of service) attacks.
 - Prepare an intrusion response strategy and document and test policies and procedures to respond to intrusions in a timely manner and eliminate potential errors, and omissions.
- Hardening of Host/Operating System:
 - Disable unnecessary ports/services
 - Remove all sample sites from the box
 - Change all default passwords; delete all default content and scripts.
 - Limit user account access.
 - Follow PA password standards (i.e. 90-day expiration, minimum of 6 alphanumeric characters, lock account after 3 incorrect passwords)
 - Set “automatic session logout” to 15 minutes of inactivity and require user to log back in with a valid ID and password.
 - Implement access control at the database level (i.e. user roles and permissions, passwords, secure links)
 - Apply all new patches and fixes to operating system and application software for security.
 - Use secure and encrypted remote access methods.
 - Log (and monitor) web traffic and trend the activity looking for abnormal activity.
- Directory Structure for Web Server:
 - Use separate directories, partitions or disk locations for web server logs, contents, scripts and other information vs. system directories and user information. In addition, use a single directory exclusively for all programs executed as part of web server content
- Web Server Security Related Configuration Settings
 - Block an IP if there are numerous requests for the URL to prevent a possible attack. (IP scan)

B. Web Site Management Issue

- Use certificates on the site. So users can confirm they are on the right site.
- A formal “content management” process (and supporting tools) should be in place to provide change controls, approvals, version controls, and security over changes to web site content to prevent unauthorized changes.
- Validate links periodically to identify dead or misdirected links for correction
- Ensure compliance with Payment Card Industry (PCI) Data Security Standard (DSS) Requirements (e.g. Visa, Master Card, etc).
- Systems monitoring should be in place for the server and other relevant devices including the use of automated systems management tools.
- Backups of the website including web server configuration files, static content files, script directories and etc. regularly.
- Secure application, logs, encryption keys, certificates and passwords on the production box. If possible move them to another secured or restrict access to administrators only.
- In the System Development Life Cycle (SDLC), ensure that there are application development and coding standards.
- Legal Issues:
 - The site should have a privacy statement and term of usage.
 - American Disability Act – Section 508 should be consider during the development process due to the requirement that federal agencies’ electronic and information technology is accessible to people with disabilities.
- Web Authentication: To prevent passwords from being passed in the clear, have authentication occur within an SSL encrypted tunnel. Use SSL (certificate) to protect the password.
- Access Controls:
 - Ensure that separation of duties occur at the two levels of access control for web applications: Functional access controls (URL –based) and Data-level access control (handled within application)
- Password Reset:
 - For internal applications, reset passwords via the helpdesk or security administrator of the site
 - Send forgotten password to known e-mail address or via customer service screens after the user has been validated for customer service application.
- Conduct regular audits, vulnerability testing, security scanners and MD5 hash comparisons of the production site. (MD5 – An algorithm that produces a checksum that is revalidated to detect any modification to sensitive hidden form fields, files, directories, etc.)
- All sensitive or confidential data (including passwords, session IDs for sensitive applications, confidential or sensitive business transactions, etc.) should be transmitted between browser and server within an SSL-encrypted session.

C. Web Application Vulnerabilities and Controls

- Best Practice and Standards:
 - The Open Web Application Security Project (OWASP) - www.owasp.org
 - www.webappsec.org (a consortium of web application security professionals)
 - Center for Internet Security (CIS) – www.cisecurity.org
- Sessions IDs:
 - Ensure sessions IDs are difficult to spoof/guess.
 - Session IDs should be long (at least 30-40 digits for secured applications) and contain alphanumeric characters
 - Session Ids should be unique, random and non-predictable.

- Session IDs should expire after a reasonable time limit (1-3 hours) or for inactivity (10-15 minutes)
- Ensure session IDs are negotiated whenever a user crosses a secured boundary (from an unsecured to a secured portion of the site)
- Ensure session IDs are transferred only within an SSL session.
- Cookies:
 - Session cookies should be assigned randomly (non-sequential).
 - Ensure that session cookies/tokens are non-persistent and are not written to a user's browser history or cache. Use a server-based session cookie/token.
 - Ensure session cookies expire and are removed from the server for elapsed time (30 minutes-2 hours) or inactivity (10-15 minutes)
 - Invalidate the session cookie/token on the server when the user logs out or leaves the site.
- Use the Post HTTP Methods to transfer information from the browser to the server.
- Preventing Hacking Reconnaissance:
 - HTTP Status Error Codes should be monitored.
 - Never use default names for directories, (e.g document root, CGI directories, etc.)
 - DNS (Domain Name Services) zone transfer – Ensure default names are changed because these are keywords hackers are searching, (e.g. “gateway”, “firewall”, and “proxy”).
- Store User dependent Data in a Session table:
 - Whenever possible, only the session ID should be stored on the browser and sent with each request
 - All other user-specific and session-specific variables should be stored on the server in a session table.
- Perform data validation & integrity checks for field values and ensure the HTML special characters are stripped for all HTML request.
- At a minimum, applications should strip all (HTML) meta-characters (e.g. <, >, &, etc.), including OS and related SQL meta characters, from user input.
- Restrict the use of the hidden fields.
- Ensure that ID, passwords and system comments are not be included in scripts and pages.
- Ensure the application will not process SQL commands from the user browser
- Do not allow site pages to be cached by user browsers.
- Error Messages:
 - Applications should trap all specific system error messages, especially those from other infrastructure components that reveal information about the application internals.
 - Ensure that only generic messages with little to no information content should be sent to the user's browser.

ATTACHMENT G – Certified Environmentally Preferable Products/Practices

Proposer Name: _____ Date: _____

In line with the Port Authority's efforts to promote products and practices which reduce our impact on the environment and human health, Proposers are encouraged to provide information regarding their environmentally preferable/sustainable business practices as they relate to this contract wherever possible. Proposers **must** complete this form and submit it with their response, if appropriate. Proposers **must** submit appropriate documentation to support the items for which the Proposer indicates a "Yes" and present this documentation in the proper sequence of this Attachment.

1. Packaging

Has the Proposer implemented any of the following environmental initiatives? (A checkmark indicates "Yes")

- _____ Use of corrugated materials that exceed the EPA recommended post-consumer recycled content
- _____ Use of other packaging materials that contain recycled content and are recyclable in most local programs
- _____ Promotes waste prevention and source reduction by reducing the extent of the packaging and/or offering packaging take-back services, or shipping carton return
- _____ Reduces or eliminates materials which have been bleached with chlorine or chlorine derivatives
- _____ Eliminates any packaging that may contain polyvinyl chloride (PVC), or polystyrene or heavy metals

If yes, a description of the practices being followed must be included with the submission.

2. Business Practices / Operations / Manufacturing

Does the Proposer engage in practices that serve to reduce or minimize an impact to the environment, including, but not necessarily limited to, the following items? (A checkmark indicates "Yes")

- _____ Recycles materials in the warehouse or other operations
- _____ Use of alternative fuel vehicles or vehicles equipped with diesel emission control devices for delivery or transportation purposes
- _____ Use of energy efficient office equipment or signage or the incorporation of green building design elements
- _____ Use of recycled paper (that meets federal specifications) in their marketing and/or resource materials
- _____ Other sustainable initiative

If yes, a description of the practices being followed must be included with the submission.

3. Training and Education

Does the Proposer conduct/offer a program to train or inform customers and employees of the environmental benefits of the products to be offered under this contract, and/or does the Proposer conduct environmental training of its own staff?

- ☐ Yes ☐ No If yes, Proposer must attach a description of the training offered and the specific criteria targeted by the training.

4. Certifications

Has the Proposer or any of its manufacturers and/or subcontractors obtained any of the following product / industry certifications? (A checkmark indicates "Yes")

- _____ ISO 14000 or adopted some other equivalent environmental management system
- _____ Other industry environmental standards (where applicable), such as the CERES principles, LEED Certification, C2C Protocol, Responsible Care Codes of Practice or other similar standards
- _____ Third Party product certifications such as Green Seal, Scientific Certification Systems, Smartwood, etc.

If yes, Proposers must attach copies of the certificates obtained.

5. Other Environmental Criteria

Proposers are encouraged to respond to criteria specifically indicated in this RFP as "Management Approach" (and attach the appropriate documentation) to receive consideration in the evaluation.

I hereby certify, under penalty of the law that the above statements are true and correct.

_____ **Name** _____ **Date**