

Torres Rojas, Genara

FOI #14495

From: foia@foia.com
Sent: Monday, December 30, 2013 12:55 PM
To: Duffy, Daniel
Cc: Torres Rojas, Genara; Van Duyne Sheree
Subject: Freedom of Information Online Request Form

Information:

First Name: Rose
Last Name: Santos
Company: FOIA Group, Inc.
Mailing Address 1: PO Box 368
Mailing Address 2: PO Box 368
City: Depew
State: NY
Zip Code: 14043
Email Address: foia@foia.com
Phone: 7166080800
Required copies of the records: No

List of specific record(s):

Good morning, under the provisions of the New York Freedom of Information Law New Jersey Open Public Records Act, I hereby request a copy of the following documents identified to 30251: 1 ALL documents related to the award and procurement of a Transparency Website for the Port Authority of New York New Jersey. This includes: a. Award information b. Contract information c. Board meeting minutes where the project was discussed d. Any other documents that pertain to the establishment of a transparency website by a third party contractor or contract holder. Please confirm receipt and processing of this request. If you have any questions please contact me at foia@foia.com. I agree to pay reasonable foia fees. however, please notify me if these fees exceed 55.00 for approval. Thanks, --- Rose Santos, co FOIA Group, Inc., P.O. Box 368, Depew, New York, 14043 Tel: 716 608-0800, ext 502.

THE PORT AUTHORITY OF NY & NJ

FOI Administrator

October 8, 2015

Ms. Rose Santos
FOIA Group, Inc.
P.O. Box 368
Depew, NY 14043

Re: Freedom of Information Reference No. 14495

Dear Ms. Santos:

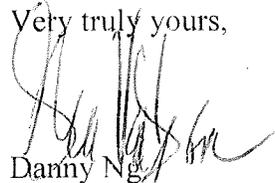
This is in response to your December 30, 2015 request, which has been processed under the Port Authority's Freedom of Information Code (the "Code", copy enclosed) for "a copy of the following documents identified to 30251: All documents related to the award and procurement of a Transparency Website for the Port Authority of New York New Jersey. This includes: a. Award information, b. Contract information, c. Board meeting minutes where the project was discussed, d. Any other documents that pertain to the establishment of a transparency website by a third party contractor or contract holder."

Material responsive to your request and available under the Code can be found on the Port Authority's website at <http://www.panynj.gov/corporate-information/foi/14495-C.pdf>. Paper copies of the available records are available upon request.

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

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

Very truly yours,



Danny Ng
FOI Administrator

Enclosure

4 World Trade Center, 18th Floor
150 Greenwich Street
New York, NY 10007
T: 212 435 7348 F: 212 435 7555

ImageWork Response to RFP 30251 Transparency Website



OFFICE OF THE COMPTROLLER *Transparency Website*

24 June 2013

James Summerville
The Port Authority of NY & NJ
Procurement Department
2 Montgomery Street, 3rd Floor
Jersey City, New Jersey 07302

201-395-3454

EMAIL TRANSMISSION: jsummerville@panynj.gov

Dear Mr. Summerville,

ImageWork is pleased to submit this response to RFP 30251 for services to digitize PANYNJ content and host it on a Transparency Website. ImageWork and our partner, the Arc of Westchester Document Management Company, eDocNY, will, customize the site; pick up, scan, return original documents; and host the digitized content on your behalf.

ImageWork is a Maryland corporation, authorized to do business in NY. There are two officers, the undersigned, residing at 39 Austin Hill Road, Pound Ridge New York, and Cecilia Bikkal, Vice President and secretary of the Board, residing at 94 Ralph Avenue, White Plains NY. Both are authorized to negotiate and execute a contract.

Questions pertaining to this response should be addressed to me directly or to Zubin Wadia, Chief Technology Officer (zwadia@imagework.com). Thank you for considering this proposal from ImageWork Technologies Corporation.

Sincerely,

Kevin C. Hansan
President, ImageWork Technologies Corporation
170 Main Street, Suite 301
White Plains, New York 10601
www.imagework.com
914-396-8613
914-801-2276 fax
khansen@imagework.com
FEIN: 52-1907539

ImageWork Response to RFP 30251 Transparency Website

EXECUTIVE SUMMARY

ImageWork and our partner, the Arc of Westchester Document Management Company, eDocNY, are pleased to submit this proposal to create and host the Transparency Website. ImageWork will serve as prime contractor and be responsible for designing the Transparency Website, ensuring the upload of digitized content, and hosting and maintaining the website. eDocNY will be responsible for coordinating the pickup of original source documents, scanning the paper, and indexing the digital files.

Some key highlights about ImageWork and our partner eDocNY:

- ImageWork has nearly twenty years experience building enterprise content management systems for New York City, State, and Local Governments. These systems host hundreds of millions of digital records that are both public facing and for internal use only.
- Selected by over 30 New York State Government Agencies in the past 20 years to provide high value project management, business process management analysis, records management, systems architecture and design, and systems integration services.
- Selected by the Fire Department of New York City to build and manage the City's first secured website (www.claimconnect.us) where vendors can submit medical bills for payment electronically to the Fire Department.
- ImageWork has been working with the Arc of Westchester for the past seven years to transform their existing document management business into a state-of-the-art social enterprise that utilizes adults with developmental disabilities as their primary workforce.
- Arc of Westchester (www.westchesterarc.org) is the largest organization in Westchester County servicing the needs of persons with developmental disabilities.
- Arc of Westchester is a member in good standing with the New York State Industries for the Disabled (www.nysid.org) for imaging services.
- eDocNY has grown into a million dollar a year enterprise with revenue projections to exceed \$2.0 million dollars this year.
- eDocNY has accumulated an impressive list of clients including the New York State Attorney General's Office, Long Island Power Authority, New York State Office of Courts Administration, Westchester County Government, and many others.
- Both eDocNY and ImageWork have outstanding references and offer reasonable pricing.

Our technical plan is to expand upon our existing "Connect" Framework for PANYNJ. This framework is used by other New York Government Agencies. The Transparency website will be seamlessly linked to the PANYNJ.GOV website. The core document and content management infrastructure will be deployed upon Alfresco ECM Enterprise 4.0. The user interfaces will leverage state-of-the-art HTML5, JavaScript, JSP and Java Web Services technologies.

ImageWork Response to RFP 30251 Transparency Website

Hosting services will be provided by high-availability dedicated cloud services through Rackspace.com. We will manage both a Staging and PROD environment at Rackspace. Through this two-step publishing method, only PANYNY approved documents will reside on the Transparency Website. All in-progress content will remain behind the ImageWork / eDocNY firewall and will be inaccessible until it is approved for publishing.

In the enclosed response we supplied additional background information about ImageWork, eDocNY, and how we will fulfill the requirements of PANYNJ.

ATTACHMENT A

ATTACHMENT A

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority accepts or discloses any information (including information restricted in any official, non-official, internal, or other matter) communicated or exhibited by letter or otherwise to the extent specifically permitted in such written agreement, if any, as may be entered into between the Port Authority and you. Any such information given to the Port Authority solely with respect to this Agreement on Terms of Discussion ("Agreement"), either orally or in writing, is not given in confidence, such information may be used, or otherwise 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 the Agreement, shall be void and of no effect. This Agreement may not be amended, modified, or varied in any way by the Port Authority or you. The subject of this Agreement is a confidential matter. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligations, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority Freedom of Information Code and Procedure (FOI Code) address by the Port Authority's Board of Commissioners on March 18, 2011, which may be found on the Port Authority website at <http://www.panynj.gov/foi/>, to disclose to any competitor of the contractor, information submitted which are trade secrets which, if disclosed, would cause injury to the competitive position of the contractor, and which information is identified by the Proposer as proprietary, as more fully set forth in the FOI Code, which may be accessed by the contractor to the Port Authority as part of or in connection with the submission of a proposal.

ImageWork Technology Corp.

(Company)

(Signature)

Vice President

(Title)

21 May 2013

(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT WRITE

12

ATTACHMENT B

ImageWork, by signing the Letter of Transmittal, makes the certifications in the "Contractor's Integrity Provisions," included as Section 36 of Attachment B to this Selection Process Document.

ImageWork Response to RFP 30251 Transparency Website

I, Cecilia G. Bikkal, Secretary of the Board, declare that the enclosed sealed copy of the Certificate of Incorporation issued to ImageWork Technologies Corp. by the Maryland Department of Finance is a true copy.

Sworn this 24th day of May 2013



Cecilia G. Bikkal
Secretary of the Board
ImageWork Technologies Corporation

ATTACHMENT D - NEW YORK STATE PREMIUMS

Govt. Entity Name and contract #	Description of Provided Services	Contract Commencement	Contract Expiration	Contract Information (name, phone number, email address)
FDNY - CT1 057 20080040517	Technical Support and Software Enhancement Services	6/30/2008	6/30/2013	Robert Scott 1-718-999-1221 scottrl@fdny.nyc.gov
DoH - CT1 816 20100019471	Information technology services and software maintenance	9/1/2009	8/31/2013	Anuraag Sharma 1-347-396-2260 asharma@health.nyc.gov
Bronx County Clerk	Technical Support and Software Enhancement Services	7/1/2012	6/30/2013	Mark Nusenbaum 1-718-618-3377 mnusenbaum@courts.state.ny.us
Sumitomo Mitsui Banking Corporation	Information technology services and software maintenance	4/1/2013	3/31/2014	Jason Best 1-212-224-4462 jbest@jri-america.com
Westchester ARC	Technical Support and Software Enhancement Services	3/31/2013	12/31/2014	Linda Warner 1-914-681-0656 lwarner@westchesterarc.org

A. Implementation

Government Contract used for pricing basis: NYC DoH&MH

Category	# of hours (if applicable)
Planning	# of Hours: 200 Price: \$25,000 (overall)

ImageWork Response to RFP 30251 Transparency Website

Implementation	# of Hours: 80 Price: \$10,000 (overall)
Conversion	# of Hours: 80 Price: \$10,000 (overall)
Training	\$ 125.00 per hour X 40 recommended # of classes = \$ 10,000 (overall)

B. Subscription / Hosting (including maintenance / support) \$ \$5,500 per month X 12 months = \$66,000

Government Contract used for pricing basis: FDNY

C. Scanning: \$.100 per 8.5x11 (black & white) x 25,000 pages = \$2,500
 \$ 0.115 per 8.5x11 (color)
 \$ 0.11 per 11x17
 \$ 3.00per full-size engineering chart

Government Contract used for pricing basis: NYSID

D. Data entry and indexing: \$ 0.075 per index X 12,500 indices = \$ 937

Note: this assumes 10 boxes with 10 pages per document and 5 indices per document

E. Hourly Rates for Optional Upgrades and Enhancements

	A. STANDARD PROPOSED RATE/HOUR	B. Estimated number of hours for the pilot project	C. Total Estimated Base Term (A X B = C)
Software Engineer	\$ 125	X 10	\$1,250
Program Manager	\$ 125	X 10	\$1,250
Programmer	\$ 125	X 10	\$1,250
TOTAL			\$3,750

ESTIMATED TOTAL COST

\$128,187

(Sum of Sections A through E)

F. Assumptions: Indicate all assumptions part of the proposed pricing for the Subscription-Based System.

A. Planning	The solicitation document and response form the baseline definition of functionality against which the system will be accepted. The precedence of this document and other planning deliverables is defined in the statement of work.
B. Implementation	Pricing based on projected size of the system. The client will provide ImageWork with appropriate and timely support from the project team to assist with preparation and execution of the implementation and acceptance test.
C. Conversion	The client will provide timely assistance to ImageWork with document preparation, pickup/delivery schedules, review and

ImageWork Response to RFP 30251 Transparency Website

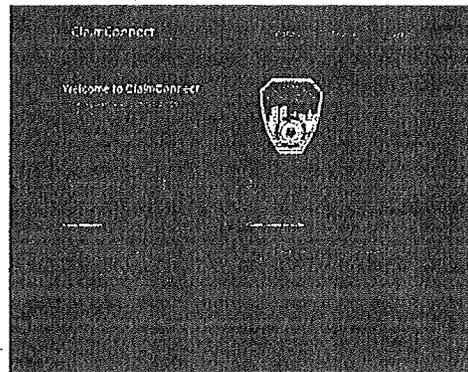
	exception handling.
D. Training	Pricing assumes delivery of up to 40 two-hour "Train The Trainer" sessions.
E Subscription / Hosting	Pricing based on projected size of the system.
F. Scanning	Pricing assumes an estimated 25,000 pages. ImageWork assumes the original document records are complete and reasonably legible.
Data Entry & Indexing	Pricing based on 10 boxes with 10 pages per document and 5 indices per document. ImageWork assumes the original document records are complete and reasonably legible.
Optional Enhancements	Pricing assumes an allocation of 30 hours for optional enhancements.
Additional Data	As configured, the system has the capability of storing and displaying 500,000 pages of Transparency data. The monthly rate will increase by \$250 for every additional 500,000 pages.

TECHNICAL RESPONSE

1. TECHNICAL REQUIREMENTS

In summary ImageWork is proposing to extend our existing cloud-based infrastructure, ImageWorkConnect Framework, to consolidate the electronic document management hosting needs of PANYNJ. ImageWorkConnect is built upon Alfresco ECM Enterprise 4.0 and is used today by the Fire Department of New York City (www.claimconnect.us), NYS Insurance Fund (www.claimcentral.com), NYC Department of Sanitation, and others.

ImageWork's "Connect" framework can be seen in action at www.claimconnect.us. It is used by the Fire Department of New York to facilitate the electronic acceptance of medical claims and reports from authorized medical vendors. It has completely eliminated the need for vendors to send paper claims to the Fire Department for payment processing. Our "Connect" framework is also being used as the Proof of Concept website for the new consolidated New York State criminal justice initiative under the direction of the New York State Division of Criminal Justice Services. Additionally, the New York State Insurance Fund has selected our "Connect" framework as the foundation for their new vendor outreach portal. In summary our "Connect" framework (built upon Alfresco) will allow us to easily integrate with www.panynj.gov, accept electronic records, control access levels, and publish redacted data and documents for public access.



ImageWork Response to RFP 30251 Transparency Website

Our "Connect" framework leverages state-of-the-art HTML5, Javascript, JSP and Java Web Services technologies. The resulting technology platform is "mobile capable", enabling key functionality to be operational on smartphones and tablets.

ImageWork has been operating on cloud-based and hosted platforms since 2003. We are extremely familiar with high-availability dedicated host setups on Rackspace and have deployed complex elastic load-balanced, content cached solutions on Amazon's EC2 cloud computing platform.

For PANYNJ, we intend to host the public components of the platform on Rackspace's dedicated hosting platform with Oracle Database 11gR2 standard edition as the secure backend. The public infrastructure will have QA and PROD environments, and will be hosted on servers with 32GB RAM and optimized for fast response to content requests. We have architected the system to be available on a 24x7 basis.

Our proposed system is an integrated software suite of applications that work together and provide the following:

- Consistent user interface;
- Access to a common data set that is current and accurate through a centralized database;
- Interface with external systems through an open systems architecture.

Only approved documents will reside on the Rackspace infrastructure. In-progress content will remain behind the ImageWork / eDocNY firewall and be inaccessible until it is approved for publishing. ImageWork will provide training for Authority staff to use, manage and maintain the content of the site.

ImageWork first embraced Alfresco in 2006. Alfresco is the leading open source alternative for enterprise content management (ECM). It couples the innovation of open source with the stability of a true enterprise-class platform. The open source model allows Alfresco and ImageWork to use best-of-breed open source technologies and contributions from the open source community in order to get higher quality software produced at a low cost. We envision PANYNJ will benefit from all the features Alfresco offers above and beyond standard document and records management capabilities.

For scanning services, ImageWork is recommending the Arc of Westchester document management business, eDocNY. This organization oversees a state of the art conversion center using adults with developmental disabilities as their primary workforce. Since they are a non-for-profit and a member of the New York State Industries for the Disabled, government agencies can procure their services without going out to competitive bid. Prices for eDocNY services are often subject to NYS Office of General Services review to make sure it's prices are within 15% of market value.

In addition to scanning services, eDocNY is prepared to provide record box storage services, secured paper shredding, advance data entry or indexing, and redaction services if specific parts of a document image should be redacted prior to publishing on the public website.

For the document, web content and record management core functionality, we built our ImageWorkConnect framework on top of Alfresco's Enterprise Content Management suite. Since 2007, Alfresco has rapidly grown to become the most valuable privately owned open source company in the world. ImageWork has leveraged the platform since version 0.3 in government and private sector solutions with great success.

ImageWork Response to RFP 30251 Transparency Website

Alfresco's open architecture, excellent scaling characteristics, cost efficiency, standards compliant integration (CMIS, XML, JSON, BPMN), and product support make it an ideal fit for the government projects.

Alfresco was founded in 2005 by John Newton, co-founder of Documentum; and John Powell, former COO of Business Objects. Its investors include leading investment firms Accel Partners, Mayfield Fund, and SAP Ventures.

Alfresco is the leading open source alternative for enterprise content management (ECM). It couples the innovation of open source with the stability of a true enterprise-class platform. The open source model allows Alfresco to use best-of-breed open source technologies and contributions from the open source community in order to get higher quality software produced at a low cost.

Alfresco's goal is not only to provide an open source offering, but also to surpass commercial ECM offerings in terms of features, functionality, and benefits to the user community. The track record of the Alfresco team has enabled Alfresco to rapidly become the leading open source enterprise content management system. This has allowed it to communicate with governments and corporations at a high level to shape open source strategies. Alfresco continues to drive industry innovation with the following milestones:

- Surpassed the 2 million software downloads mark
- Released the first Content Management Interoperability Services (CMIS) implementation
- Contributed Spring Surf, the largest Spring Extension to date, to the Spring community
- Released the first open source Records Management software to gain DoD 5015.02 certification
- Was the first to implement the SharePoint Protocol
- Recognized by the World Economic Forum as a Technology Pioneer

The Alfresco content platform uses flexible, open standards architecture to provide document management, web content management, records management, and collaboration software to 1,100 enterprise customers in 40 countries. Integrations exist for SAP, IBM Lotus, Microsoft Office, SharePoint, and Google Docs. Alfresco is built using the latest open source infrastructure components, including Spring, Hibernate, Lucene, and MyFaces, and is based on Aspect Oriented Programming.

Alfresco's low cost subscription model helps organizations make significant cost savings on recurring maintenance fees a reality, while enabling them to maintain 'business as usual' with their content services. Alfresco does not charge traditional license fees, and this scalable model allows companies of any size to deploy the solution. Like many open source vendors, Alfresco offers customers a support subscription, which provides users access to:

- Technical support services
- Maintenance fixes, patches, and updates
- Engineering support / Escalations
- Alfresco Network – End user support portal
- Certified stress-tested builds
- Access to the Alfresco Enterprise Edition software

Alfresco is the ECM platform of choice for companies looking for a solution that is easy to deploy, simple to use, and cost effective to maintain.

ImageWork Response to RFP 30251 Transparency Website

Document Storage

Documents stored within our Connect system will be managed in such a way that a document type can be easily identified and searched according to the appropriate document category outlined by the PANYNJ's requirements. ImageWork will customize our user interface so people will be able to easily find folders with the following content:

- Services for special projects, as requested by the Authority;
- FOI Requests / Responses;
- Contracts;
- Leases;
- Payroll information;
- Financial Information;
- Board Minutes;
- Board Presentations;
- Board Videos;
- Public Hearing and Audit Reports;
- Business Transactions;
- Annual Reports.
- Traffic and Volume Information.

The screenshot shows a document management interface with a tree view on the left and a table of documents on the right. The tree view includes folders for 'Board Minutes', 'Board Presentations', 'Board Videos', 'Public Hearing and Audit Reports', 'Business Transactions', and 'Annual Reports'. The table lists documents with columns for 'File Name', 'Member', 'Uploaded', and 'Version'.

File Name	Member	Uploaded	Version
Board Minutes - January	Jane Smith	01/20/2012 12:00	1.0
Board Minutes - February	Jane Smith	02/17/2012 12:00	1.0
Board Minutes - March	Jane Smith	03/16/2012 12:00	1.0
Board Minutes - April	Jane Smith	04/23/2012 12:00	1.0
Board Minutes - May	Jane Smith	05/18/2012 12:00	1.0
Board Minutes - June	Jane Smith	06/16/2012 12:00	1.0
Board Minutes - July	Jane Smith	07/26/2012 12:00	1.0
Board Minutes - August	Jane Smith	08/17/2012 12:00	1.0
Board Minutes - September	Jane Smith	09/14/2012 12:00	1.0
Board Minutes - October	Jane Smith	10/19/2012 12:00	1.0
Board Minutes - November	Jane Smith	11/16/2012 12:00	1.0
Board Minutes - December	Jane Smith	12/13/2012 12:00	1.0

Document Management

We will leverage Alfresco to meet the following Document Management functional objectives:

- Store PANYNJ content (PDFs, Office Documents, JPGs, Audio and Video)
- Bulk Import PANYNJ content from legacy data sources
- Setup a Content Taxonomy and Meta-model for discovery and sharing across the Authority

ImageWork Response to RFP 30251 Transparency Website

- CMIS-based API integration for querying and viewing content within Drupal
- Google Analytics Integration for User and Device Metrics
- Unified Site Search with Result-set Faceting powered by Apache Solr
- Website Review Workflow for Publishing Content from Staging to Final Sites

Alfresco and Drupal support the various browsers and operating systems in the market place today.

Browsers

- Internet Explorer, versions: IE 7 through IE 10 (or the most recent release)
- Firefox, versions: FF 16 through the most recent release
- Chrome, versions: C 22 through the most recent release
- Safari, versions: S 4 through the most recent release
- Opera, versions: the most recent release

Operating Systems

- Windows (Win8, Win7, Vista, WinXP)
- Mac
- Linux

Additional Features

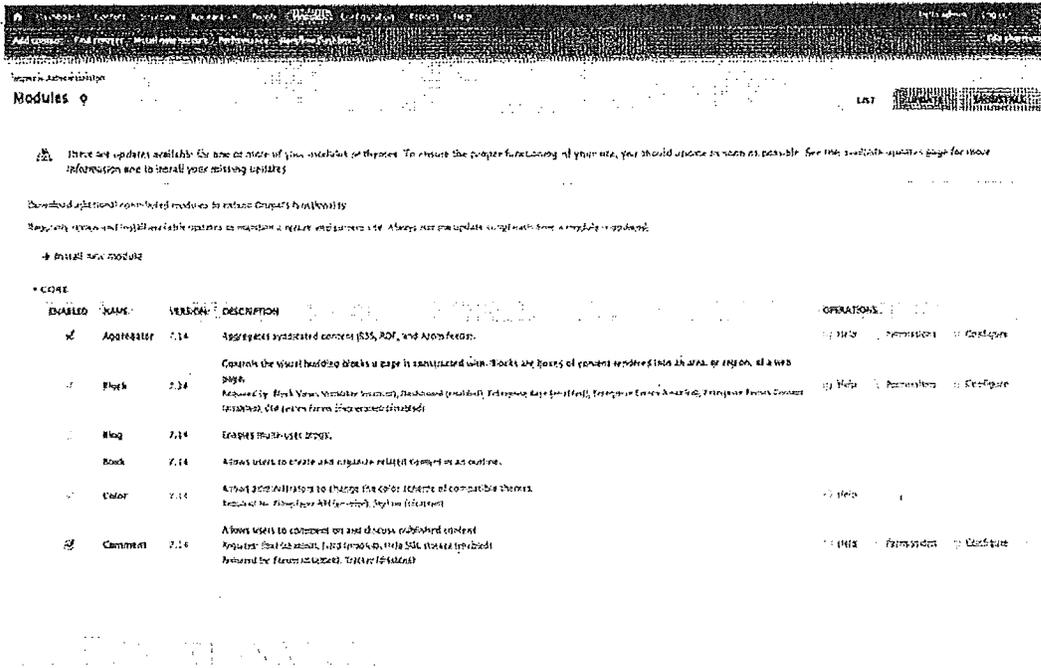
As part of the Document Management infrastructure, PANYNJ personnel will have the ability to replace expired contracts/agreements with successor contracts/agreements.

The system will easily support fifteen (15) concurrent, named Authority users ("Users" or "Power Users") to manage the content and by an unlimited amount of public users to access the Website. The system will support the capability for multiple users at different workstations to access it concurrently. Only authorized personnel will be able to access the publishing sections of the system through a secure web-enabled interface on normal Authority Desktops.

The software will restrict user access to specific features based on the user login procedure. Each user name/role shall be associated with a list of features in the System that the user has permission to access and the level of access permitted. Permissions will be initially configured during the setup process and approved by the Authority's Contract Administrator.

Authorized PANYNJ staff will be able to examine, modify and print the list of user access permissions. This capability will enable the Application and System Administrators to change the access permissions assigned to each user on-line, without requiring a compilation or regeneration of any of the applications software.

ImageWork Response to RFP 30251 Transparency Website



ImageWork will customize our "Connect" framework to meet the public access and power user functionality identified in this section of the RFP.

Specifically, public users will have the ability to perform the following on the Transparency Website:

1. Functionality for every feature of the Website, including:
 - a. Share/download content;
 - b. Print / previews;
 - c. Publication of responses to FOI requests.
2. Access to repository will include:
 - a. An initial migration of the current published information;
 - b. Ongoing contributions to include:
 - i. Services for special projects, as requested by the Authority;
 - ii. FOI Requests / Responses;
 - iii. Contracts;
 - iv. Leases;
 - v. Payroll information;
 - vi. Financial Information;
 - vii. Board Minutes;
 - viii. Board Presentations;

ImageWork Response to RFP 30251 Transparency Website

- ix. Board Videos;
 - x. Public Hearing and Audit Reports;
 - xi. Business Transactions;
 - xii. Annual Reports.
 - xiii. Traffic and Volume Information.
3. Search operations that include:
- a. Full text search (as determined by the Authority, on every word within a single document or across a database);
 - b. Metadata searches as identified in the Attachment H of the RFP
 - c. Full Text Search from Optical Character Recognition (OCR) search

Power PANYNJ Users will have the following:

1. Users:
- a. Up to 15 concurrent named users;
 - b. Assignment of user roles (e.g., administrator, author, editor, publisher, etc.) as recommended by the Contractor and approved by the Authority;
 - c. Access rights for user roles (e.g., control permissions, add content, view content, publish) to be configured as recommended by the Contractor and approved by the Authority;
 - d. Ability to publish new documentation on the Website;
 - e. Functionality for every feature (e.g., approve content, post content, manipulate page layout, create new tags, etc.) of the Website, as referenced herein;
 - f. Upload and download capabilities:
 - i. Batch uploads;
 - ii. Workflows with authorizations;
 - iii. Conversion of electronic data, including files of type .pdf;
 - iv. Bulk export capabilities (should have specific criteria, associated files with metadata, etc.).
2. Operations:
- a. Batch processes, scheduled processes;
 - b. Workflows;
 - c. Transformations;
 - d. Real-time.
3. Audit logs on the content management that include, minimally:
- a. System date;
 - b. User id;

ImageWork Response to RFP 30251 Transparency Website

- c. Record(s) accessed;
 - d. Related activity;
 - e. Sensitive transactions.
4. System logs that include:
- a. Database growth;
 - b. Net usage;
 - c. Volumes.
5. Web access activity logs that include:
- a. Number of hits;
 - b. Category of data;
 - c. Event times, etc.;
 - d. Response times (average, peak-times, etc.).
6. Access to repository will include:
- a. Ongoing contributions may include special projects, as requested by the Authority, FOI Request/Responses, contracts, leases, payroll information, financial information, board minutes, board presentations, board videos, public hearing and audit reports, business transactions, annual reports;
 - b. Identify categories of data;
 - c. Unique versions;
 - d. Replacement process.
7. Implement protocols as referenced in the attached Standards and Guidelines for Port Authority Technology (Attachment I).
8. Implement protocols as referenced in the attached Control Requirement Contract Checklist (Attachment F).
9. Implement protocols as referenced in the attached Maintenance Requirement for Hosted Systems (Attachment G).
10. Data attributes with indexing.

ImageWork's scanning partner, eDocNY will be responsible for the transportation and scanning of original documents the Port Authority would like digitized. eDocNY is prepared to pick up and returned boxes or records to 225 Park Avenue South, New York, NY 10003. eDocNY is prepared to perform the following:

- Pick up documents within 24 hours of notification by the Authority;
- Scan and post such documents within 3 business days of pick up from the Authority; and

ImageWork Response to RFP 30251 Transparency Website

- Return such documents to the Authority within 7 business days of pick up from the Authority.

Capture Process

Prior to our pick up of client records, a thorough conversion plan will be established and jointly agreed upon before we begin the conversion. This plan will address;

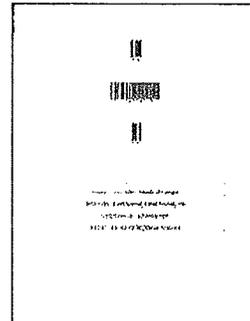
- How records are identified, sorted, packed and boxes labeled for conversion
- Pickup and delivery schedules
- How exceptions will be handled and reported back to PANYNJ
- Standards for classifying and indexing records
- Standards for image quality
- Procedures to request and return originals in the event of an unanticipated need for a record
- Procedures for the acceptance of digital images
- Procedures for the packaging and return of original records

While setting up the conversion operation for PANYNJ records, our programming team will be modifying our software to reflect the conversion requirements of this project.

Creation of Barcode Separator Sheets

Due to the size and scope of this conversion project, eDocNY intends to utilize barcoded separator sheets and labels as the preferred method to identify paper ready for scanning and automatically index the resultant electronic file. These sheets will be created by eDocNY staff, applied during the document prepping process, and scanned with the originals.

eDocNY utilizes a proprietary bar code generation program to create barcode separator sheets. Prior to the commencement of the conversion eDocNY programmers will load PANYNJ requirements for scanning and indexing and modify our production manager's user interface to request the creation of separator sheets on-demand. Barcoded separator sheets have both description areas and barcodes used to index the paper. At a minimum we anticipate the separator sheet to identify the type of record (contracts, leases, Freedom of Information requests, Board meeting presentations, and labor agreements.



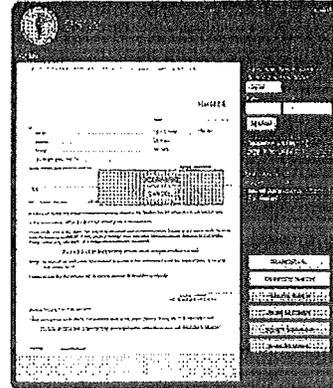
Document Prep

Once records have been selected for processing, the eDocNY production manager will deliver a box of original records and their associated stack of barcode separator sheets to our document prep team. Working in an inclusionary/sheltered environment, our document prep specialists will begin removing documents from folders/binding, remove staples/paperclips, tape torn paper, flatten folded paper, and insert the separator sheets where appropriate. They will do this for an entire box, putting the prepped batches of paper back into the original box. For every new job or team member, a WestchesterArc job coach will work with the developmentally disabled staff member to learn document preparation tasks. Our team members are familiar working with and identifying a wide variety of record types.

ImageWork Response to RFP 30251 Transparency Website

Document Scanning

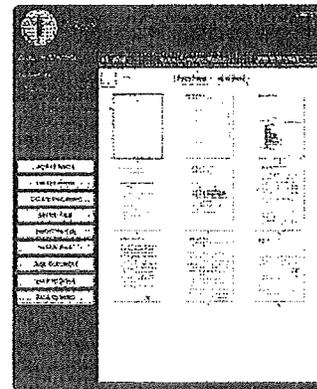
Our key objective from proper planning through document prepping is digitizing paper records as quickly and efficiently as possible. With properly prepped paper, eDocNY will be able batch scan PANYNJ records utilizing our high volume high speed Canon DR-X10C scanners. The batched and barcoded records will be placed into the feeder and scanning will commence. Our ImageWork conversion software will automatically build a “record tree” based on the barcode values and list page counts next to each thumbnail image. Where appropriate, our software will leverage barcode, Optical Character Recognition (OCR), Zonal OCR and Intelligent Character Recognition (ICR) technologies to classify information without human intervention. In the event the scan operator encounters a paper-jam, the software will not require a restart of the batch, they can simply resume from where they left off.



Quality Control

When scanning is complete, the quality control software will automatically present thumbnail sized images to QC staff for their review and approval. QC operators scroll the thumbnail images looking for obvious scanning and or barcode recognition errors. If an error or poor quality image is detected, the QC operators can reject the batch or the document, make immediate corrections, or send the papers back for re-scanning.

QC operators and Scan operators have the ability to manage batches in a variety of ways – with the ability to scan, pause, resume, replace page/batch, inset page/batch, delete page/batch depending on the use-cases they encounter. Once an operator completes scanning and quality assurance of a batch, it is uploaded to the server for Indexing, Validation and final approval to the repository.



Once the Quality Control operator or production supervisor approves the batch of documents, the batch is transferred to the server for additional indexing when required.

Indexing and Validation

Built within our conversion operation will be an indexing method to electronically classify documents at a more detailed level if needed.

The indexing and validation module is 100% web-based, giving our staff tremendous operational flexibility. Depending on the requirements, scanned records can be placed in one or more queues for indexing. At the indexing stage, the user is expected to Key from Form (KFF) any required metadata for that particular document type. The user is also required to review any master indexing information that must be captured for this document type.

The role of the Validator is equally as important as the Indexer because they represent the final ratification of the digital record prior to publishing of the content into the PANYNJ Transparency Website. The validator will be presented with a grid of items that have been Scanned, QCed and Indexed. The validator will select an

ImageWork Response to RFP 30251 Transparency Website

item and review all manually entered information in addition to any automatically indexed information through barcodes, OCR or ICR. The validator has the ability to correct any of this metadata. Once they have completed this process, the document is approved for transmission to the Transparency Website.

Retrieval of Client Records

As explained earlier, eDocNY understands that clients must have access to their records at all times during the conversion. eDocNY supervisors maintain detailed production logs that track the location and status of all records in our control. We accept requests for records at the box or folder level. Clients can reach us during our hours of operations by phone call, email, text messages, or instant message. Upon client request eDocNY supervisors will pull the folder, scan the materials requested, and attach the PDF document to an email within one hour. Additionally, the eDocNY supervisor will arrange with our transportation staff to return original source documents to PANYNJ within 24 hours.

Our proposed QA, and production infrastructure will be hosted on Rackspace (www.rackspace.com) servers. Rackspace is one of the industry leading providers of cloud computing technologies. Founded in 1998, Rackspace currently operates Nine (9) Data Centers: San Antonio, TX (2); Dallas, TX; Herndon, VA; Chicago, IL; Ashburn, VA; London, UK; Slough, UK; and Hong Kong. Rackspace is positioned as a leader in Gartner's Magic Quadrant for Cloud Infrastructure as a Service and Web Hosting. They provide industry leading service level agreements and unparalleled '24 x 7' support to partners like ImageWork.

Upon deployment of the system, ImageWork and the Port Authority will establish a Service Level Agreement that address all concerns for system availability, incident reporting, change orders, etc. In the meantime extensive sample SLA documentation is readily available at www.rackspace.com.

Below is our implementation plan. It follows the format outlined in the RFP.

ImageWork anticipates using six highly experienced and capable personnel for the duration of this project. We expect to conclude the project within a 13-week timeframe, inception to go-live.

Task 1	Planning
Description	<p>ImageWork will use this time to work with PANYNJ stakeholders to finalize the functional requirements of the Transparency Website. Joint planning sessions will be used to introduce Alfresco and our Connect infrastructure to key stakeholders; drive our content presentation requirements for the User Interface, content storage, and the publishing workflow; and outline a training and support plan. Specifically, our team will want to attain a deeper understanding of the content types, partner services, menu systems, security model, content endpoints and general look-n-feel of the production solution. This phase allows us to inventory the amount of work involved and what modules/themes/integration endpoints that will be required for execution.</p> <p>ImageWork will also establish an existing content conversion plan and formalize</p>

ImageWork Response to RFP 30251 Transparency Website

	procedures to pick up, scan, and upload new content.
Personnel	Zubin Wadia (Project Executive and Software Architect) Kelly Thompson (Information Designer) Jordan Greenlee (Content Conversion Analyst)
Deliverables	Feature and Function Description – Requirements Document Implementation Plan Installation Plan Conversion Plan Acceptance Test Plan
Estimated Schedule	6 Weeks

Task 2	Implementation
Description	<p>While the Planning task is underway, ImageWork will begin working with Rackspace to laying out the basic infrastructure that will host the Transparency Website. ImageWork will install the core Alfresco software components and will use those interfaces to help guide all parties finalizing the content publishing workflow on the basic features and functions of Alfresco's Content Manager. Once the Planning task is complete, ImageWork will customize Alfresco and our "Connect" framework to the requirements of the Port Authority.</p> <p>ImageWork will utilize the detail design from Task 1 to install requisite modules, configure extensions, establish any module hooks, setup key roles and enroll users. ImageWork will also proceed to customize an applicable Drupal theme if necessary to achieve the desired look-n-feel and navigation hierarchy. Short URLs and breadcrumbs will be enabled in this phase. ImageWork engineers will also setup requisite content types and PANYNJ-centric hierarchy for all agency content. At the end of this task we should have a core site experience reflecting the approved PANYNJ site design along with the ability to populate new content using the Drupal Administration interface.</p> <p>At the end of this task, PANYNJ will have a fully functional ECM repository capable of ingesting, transforming, versioning, searching and distributing content across public assets.</p> <p>ImageWork will assist PANYNJ with scheduling and executing the UAT process for Content Creators, Administrators and Publishers. ImageWork will also conduct training for key personnel nominated by PANYNJ.</p> <p>In parallel with UAT and Training, ImageWork will also verify non-functional aspects of the site infrastructure on a representative QA environment. Jmeter load testing will be performed to validate site behavior under low/medium/high visit load. Additional tests will be written to simulate a large amount of content submissions by content administrators. Results will be published for review and approval of PANYNJ. ImageWork will also validate site latency across major geographic locations across the</p>

ImageWork Response to RFP 30251 Transparency Website

United States	United States, in addition to verifying browser and device compatibility across iOS5+, iPad2+ and Android 2.3.3+ devices. On clearance of the verification process, we will proceed to deploy the site into the PROD environment and prepare it for launch.
Personnel	Zubin Wadia (Project Executive and Software Architect) Kelly Thompson (Information Designer) Jordan Greenlee (Content Conversion Analyst) Krishna Devineni (Programmer Lead) Srikanth Kotte (Alfresco Lead) Bhavin Joshi (Drupal Lead)
Deliverables	Rackspace Service Levels and Support Plan Detail Module Design Document for Review and Sign-off Training Plan Acceptance Test
Estimated Schedule	10 Weeks

Task 3	Support
Description	<p>Port Authority content populated by Site Administrators will be ported over from QA, along with any content that requires to be exposed. Users and Roles for key personnel will be configured along with any last-minute configuration or code updates. Connectivity to key partner web services, feeds and web forms will be verified as well.</p> <p>Upon go-live ImageWork personnel will remain in close coordination with PANYNJ personnel to assist with any critical issues that may arise on launch day.</p> <p>ImageWork will provide on-going support and maintenance of the transparency website. As part of this service, ImageWork will produce production reports and provide 8 am to 5 pm five days a week problem troubleshooting services.</p>
Personnel	Zubin Wadia (Project Executive and Software Architect) Kelly Thompson (Information Designer) Jordan Greenlee (Content Conversion Analyst) Srikanth Kotte (Alfresco Lead)
Deliverables	24 x 7 access to the transparency website Business Hour problem solving services
Estimated Schedule	On-going

ImageWork Response to RFP 30251 Transparency Website

ImageWork has over a half dozen yearly maintenance agreements in place with NYC agencies and private companies designed to maintain close to 100% uptime. After acceptance of the system, ImageWork will develop a Maintenance Plan specific for the Authority.

ImageWork has reviewed the maintenance requirements stated in Attachment G and agrees to provide maintenance for the new system per the requirements.

ImageWork will be available 24x7 for a period of one year after acceptance of the system.

Maintenance and support will include all expenses, including (parts, labor, tools, equipment, software, travel, shipping costs, etc., without additional cost to the Authority.

The system will be operational 99.9% of the time each calendar month.

ImageWork shall perform and complete scheduled preventive maintenance and on-call remedial maintenance so that the System meets the Operational Availability and may be operated twenty-four (24) hours a day, seven (7) days a week.

ImageWork shall perform maintenance and preventive maintenance to ensure optimal system operation. Such work shall be performed between 12:00 midnight and 5:00AM to minimize disruption of operations.

ImageWork shall perform any on-call remedial maintenance to maintain operational availability. ImageWork will provide NYNJPA all contact information to enable the Contract Manager or his/her designee to report errors and malfunctions to the System.

ImageWork will restore the use of the System for Authority within 1 business day of notification by the Authority; and will restore the access to Website for Public within 6 hours of notification by the Authority.

Upon notification of an error, ImageWork shall dispatch its personnel and complete performance of such error correction to diagnose, debug, repair, replace and correct all malfunctions required for the System to perform in accordance with the Contract requirements.

ImageWork shall respond to a call for maintenance by the Contract Manager or his/her designee, within four hours of the initial notification by the Authority.

ImageWork shall strive to return to full operation the System and all failed System components, services or operations in response to on-call remedial maintenance within one business day, and at most two business days.

ImageWork will assign Kelly Thompson, a seasoned and fully qualified project manager and longtime member of the ImageWork team, as the Account Manager for this project.

ImageWork Response to RFP 30251 Transparency Website

Prior to commencing work, Ms. Thompson will submit a project management methodology that addresses the Authority's requirements. This plan will address, at a minimum:

- Monthly Status Meetings
- Track the progress of development and implementation activities
- Review the deliverables
- Review invoices for services provided
- Resolve disputes
- Status meeting, a project status report

TRAINING PLAN

ImageWork will dedicate 80 hours in two-hour sessions to train users, administrators, and trainers.

NYNJPA can view information regarding Alfresco relationships and agreements at their site <http://www.alfresco.com/services/subscription>.

NYNJPA can view sample Rackspace Service Level Agreements at <http://www.rackspace.com/information/legal/cloud/sla#files>.

ImageWork acknowledges receipt of Addendum 1 dated May 14, 2013. Signed back page is included at end of response.

ImageWork accepts the general contract provisions.

ImageWork will use good faith effort to include participation by MWBE in the delivery of services if awarded a contract, including the following:

- a. Dividing the services and materials to be procured into small portions, were feasible.
- b. Giving reasonable advance notice of specific contracting, subcontracting and purchasing opportunities to such MBEs/WBEs as may be appropriate.

ImageWork Response to RFP 30251 Transparency Website

- c. Soliciting services and materials, to be procured, from the agency's online Directory of MBEs/WBEs, which can be accessed at <http://www.panynj.gov/business-opportunities/sd-mini-profile.html>, or seeking MBEs/WBEs from other sources.
- d. Insuring that provision is made to provide progress payments to MBEs/WBEs on a timely basis.

FINANCIAL INFORMATION

A. Enclosed are the financial statements for 2011 – 2012.

B. Currently ImageWork is working on the following projects:

Project	Description of work	Annual \$ Value	Location	% of Completion	Expected Date of Completion	Contact
FDNY	Technical support and software enhancement services	\$575,000	NYC	80%	6/30/13	Robert Scott 1-718-999-1221 scottrl@fdny.nyc.gov
NYC DoHMH	Information technology services and software maintenance	\$77,000	NYC	20%	8/31/2016	Anuraag Sharma 1-347-396-2260 asharma@health.nyc.gov
SMBC	Information technology services and software maintenance	\$60,000	NYC & London	25%	3/31/2014	Jason Best 1-212-224-4462 jbest@jri-america.com

C.

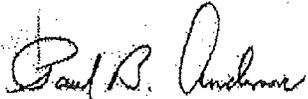
Bank	Chase 1 N. Lexington White Plains NY 10601 Arun Bhagirath, VP/Branch Manager
Tax ID	
DUNS #	87-927-9966

STATE OF MARYLAND
Department of Assessments and Taxation

I, PAUL ANDERSON OF THE STATE DEPARTMENT OF ASSESSMENTS AND TAXATION OF THE STATE OF MARYLAND, DO HEREBY CERTIFY THAT THE DEPARTMENT BY LAWS OF THE STATE, IS THE CUSTODIAN OF THE RECORDS OF THIS STATE RELATING TO THE FORFEITURE OR SUSPENSION OF CORPORATIONS, OR OF CORPORATIONS TO TRANSACT BUSINESS IN THIS STATE, AND THAT I AM THE PROPER OFFICER TO EXECUTE THIS CERTIFICATE.

I FURTHER CERTIFY THAT IMAGEWORK TECHNOLOGIES CORPORATION IS A CORPORATION DULY INCORPORATED AND EXISTING UNDER AND BY VIRTUE OF THE LAWS OF MARYLAND AND THE CORPORATION HAS FILED ALL ANNUAL REPORTS REQUIRED, HAS NO OUTSTANDING LATE FILING PENALTIES ON THOSE REPORTS, AND HAS A RESIDENT AGENT. THEREFORE, THE CORPORATION IS AT THE TIME OF THIS CERTIFICATE IN GOOD STANDING WITH THIS DEPARTMENT AND DULY AUTHORIZED TO EXERCISE ALL THE POWERS RECITED IN ITS CHARTER OR CERTIFICATE OF INCORPORATION, AND TO TRANSACT BUSINESS IN MARYLAND.

IN WITNESS WHEREOF, I HAVE HEREUNTO SUBSCRIBED MY SIGNATURE AND AFFIXED THE SEAL OF THE STATE DEPARTMENT OF ASSESSMENTS AND TAXATION OF MARYLAND AT BALTIMORE ON THIS DECEMBER 06, 1999.



Paul B. Anderson
Charter Division



301 West Preston Street, Baltimore, Maryland 21201
Telephone Balto. Metro (410) 767-1340 / Outside Balto. Metro (888) 246-5941 0000457040
MRS (Maryland Relay Service) (800) 735-2258 TTY/Voice
Fax (410) 333-7097

crblak

IMAGEWORK TECHNOLOGIES CORP.
FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2012 AND 2011



IMAGEWORK TECHNOLOGIES CORP.

DECEMBER 31, 2012

CONTENTS

	Page
INDEPENDENT ACCOUNTANTS' COMPILATION REPORT	1
FINANCIAL STATEMENTS	
Balance Sheets as of December 31, 2012 and 2011	2
Statements of Income and Retained Earnings for the years ended December 31, 2012 and 2011	3
Statements of Cash Flows for the years ended December 31, 2012 and 2011	4
SUPPLEMENTARY INFORMATION	
Schedules of General and Administrative Expenses	6





SHAPIRO GOLDSTEIN MOSES & ARTUSO, LLP

Certified Public Accountants & Consultants

7600 Jericho Turnpike, Suite 200 • Woodbury, NY 11797

(T) 516-932-0404 • (F) 516-932-7882

www.sgmacpa.com

INDEPENDENT ACCOUNTANTS' COMPILATION REPORT

To the Shareholders
ImageWork Technologies Corp.
White Plains, New York

We have compiled the accompanying balance sheets of ImageWork Technologies Corp. as of December 31, 2012 and 2011 and the related statements of income and retained earnings and cash flows for the years then ended. We have not audited or reviewed the accompanying financial statements and, accordingly, do not express an opinion or provide any assurance about whether the financial statements are in accordance with accounting principles generally accepted in the United States of America.

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America and for designing, implementing, and maintaining internal control relevant to the preparation and fair presentation of the financial statements.

Our responsibility is to conduct the compilation in accordance with Statements on Standards for Accounting and Review Services issued by the American Institute of Certified Public Accountants. The objective of a compilation is to assist management in presenting financial information in the form of financial statements without undertaking to obtain or provide any assurance that there are no material modifications that should be made to the financial statements.

The supplementary information contained on page 6 is presented for purposes of additional analysis and is not a required part of the basic financial statements. The supplementary information has been compiled from information that is the representation of management. We have not audited or reviewed the supplementary information and, accordingly, do not express an opinion or provide any assurance on such supplementary information.

Management has elected to omit substantially all of the disclosures required by accounting principles generally accepted in the United States of America. If the omitted disclosures were included in the financial statements, they might influence the user's conclusions about the Company's financial position and results of operations, and cash flows. Accordingly, the financial statements are not designed for those who are not informed about such matters.

Shapiro Goldstein Moses & Artuso, LLP
SHAPIRO GOLDSTEIN MOSES & ARTUSO, LLP

Woodbury, New York
May 17, 2013

IMAGEWORK TECHNOLOGIES CORP.

BALANCE SHEETS

DECEMBER 31, 2012 AND DECEMBER 31, 2011

ASSETS

	<u>2012</u>	<u>2011</u>
CURRENT ASSETS		
Cash and cash equivalents	\$ 29,694	\$ 48,411
Accounts receivable	352,769	309,311
Other receivable	780	6,450
Prepaid expenses	<u>-</u>	<u>50,150</u>
Total current assets	383,243	414,322
 OTHER ASSETS		
Capitalized software development costs, net of accumulated amortization of \$31,245 and \$179,540, respectively	<u>281,204</u>	<u>264,232</u>
 TOTAL ASSETS	 \$ <u>664,447</u>	 \$ <u>678,554</u>

LIABILITIES AND STOCKHOLDERS' EQUITY

CURRENT LIABILITIES		
Accounts payable and accrued expenses	\$ 361,602	\$ 118,157
Credit line	30,116	49,890
Current portion of loan payable	-	17,202
Officer's loans and advances	<u>70,722</u>	<u>75,722</u>
Total current liabilities	462,440	260,971
 LONG-TERM LIABILITIES		
Loan payable, net of current portion	<u>-</u>	<u>-</u>
Total liabilities	<u>462,440</u>	<u>260,971</u>
 STOCKHOLDERS' EQUITY		
Common stock, no par value, 100 shares issued and outstanding	10,000	10,000
Retained earnings	<u>192,007</u>	<u>407,583</u>
Total stockholders' equity	<u>202,007</u>	<u>417,583</u>
 TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	 \$ <u>664,447</u>	 \$ <u>678,554</u>

See independent accountants' compilation report.



IMAGEWORK TECHNOLOGIES CORP.
STATEMENTS OF INCOME AND RETAINED EARNINGS
YEARS ENDED DECEMBER 31, 2012 AND 2011

	<u>2012</u>	<u>2011</u>
REVENUE	\$ 2,129,997	\$ 2,090,587
COSTS OF REVENUES	<u>894,096</u>	<u>460,089</u>
NET REVENUES	1,235,901	1,630,498
OPERATING EXPENSES		
Salaries and related expenses	1,245,929	1,235,228
Marketing and selling expenses	4,000	8,496
Rent and occupancy costs	14,585	25,115
General and administrative expenses	<u>150,921</u>	<u>149,949</u>
Total operating expenses	<u>1,415,435</u>	<u>1,418,788</u>
OTHER INCOME/(EXPENSES)		
Interest income	95	7
Interest expense	(4,892)	(6,522)
Amortization expense	<u>(31,245)</u>	<u>-</u>
	<u>(36,042)</u>	<u>(6,515)</u>
NET INCOME (LOSS)	(215,576)	205,195
Retained earnings beginning of year	<u>407,583</u>	<u>202,388</u>
Retained earnings, end of year	<u>\$ 192,007</u>	<u>\$ 407,583</u>

See independent accountants' compilation report.



IMAGEWORK TECHNOLOGIES CORP.

STATEMENTS OF CASH FLOWS

YEARS ENDED DECEMBER 31, 2012 AND 2011

	<u>2012</u>	<u>2011</u>
CASH FLOWS FROM OPERATING ACTIVITIES		
Net income (loss)	\$ (215,576)	\$ 205,195
Adjustments to reconcile net income (loss) to net cash from operating activities:		
Amortization	31,245	-
Changes in operating assets and liabilities:		
(Increase) decrease in accounts receivable	(43,457)	63,585
(Increase) decrease in other receivables	5,670	(500)
(Increase) decrease in prepaid expenses	50,150	(50,150)
Increase (decrease) in accounts payable and accrued expenses	243,445	(152,312)
Increase (decrease) in officer loans and advances	(5,000)	-
Increase (decrease) in other liabilities	-	-
Net cash provided (used) by operating activities	<u>66,477</u>	<u>65,818</u>
CASH FLOWS FROM INVESTING ACTIVITIES		
Increase in capitalized software development costs	<u>(48,217)</u>	<u>(43,216)</u>
Net cash provided by (used) investing activities	<u>(48,217)</u>	<u>(43,216)</u>
CASH FLOWS FROM FINANCING ACTIVITIES		
Net repayments on line of credit	(19,774)	(311)
Repayments of loans payable	<u>(17,203)</u>	<u>(21,623)</u>
Net cash provided (used) by financing activities	<u>(36,977)</u>	<u>(21,934)</u>
Net increase (decrease) in cash and equivalents	(18,717)	668
Cash and cash equivalents, beginning of year	<u>48,411</u>	<u>47,743</u>
Cash and cash equivalents, end of year	<u>\$ 29,694</u>	<u>\$ 48,411</u>

See independent accountants' compilation report.



SUPPLEMENTARY INFORMATION



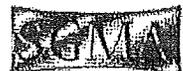
IMAGEWORK TECHNOLOGIES CORP.

SCHEDULES OF GENERAL AND ADMINISTRATIVE EXPENSES

YEARS ENDED DECEMBER 31, 2012 AND 2011

	<u>2012</u>	<u>2011</u>
GENERAL AND ADMINISTRATIVE EXPENSES		
Auto and truck	\$ 6,527	\$ 6,782
Bank charges	1,706	1,800
Computer	29,639	26,018
Contributions	1,000	1,500
Dues and subscriptions	2,706	3,000
Education	1,578	2,218
Entertainment	16,782	18,451
Insurance	21,018	9,982
Bad debt expense	5,200	-
Office	5,482	7,155
Other expenses	2,305	2,900
Payroll service	7,817	12,112
Professional services	15,963	7,198
State income taxes	3,286	1,522
Telephone	14,909	20,315
Travel	<u>15,003</u>	<u>28,996</u>
	<u>\$ 150,921</u>	<u>\$ 149,949</u>

See independent accountants' compilation report.



ImageWork Response to RFP 30251 Transparency Website

ATTACHED TO RFP 30251



ImageWork Technologies Corp.
170 Hamilton Ave - Suite 301
White Plains, New York 10601
O 914. 681.0700
F 914. 801.4515
www.imagework.com

Transparency Website

30 May 2013

James Summerville
The Port Authority of NY & NJ
Procurement Department
2 Montgomery Street, 3rd Floor
Jersey City, New Jersey 07302

Dear Mr. Summerville,

Thank you for the opportunity to respond to your concerns. Attached are ImageWork's responses to your preliminary questions.

Attached are also copies of invoices submitted to the NYC Department of Mental Health & Hygiene and the FDNY.

Finally, attached is an email from Mr. Robert Scott confirming the extension of the ImageWork contract for one year.

Thank you and we look forward to further questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "C. Bikkal".

Cecilia G. Bikkal

Attachment

ImageWork Responses to 1st set of Questions

1. Pages 4-5 (Cost Response): Unless I missed something, the cost items add up to \$143,187, not \$128,187. Please advise.

Yes, there is an error in the number of hours in the cost of implementation; the following chart corresponds to all the service fees and replaces the table under A. Implementation.

Government Contract used for pricing basis: NYC DoH&MH

Category	# of hours (if applicable)
Planning	# of Hours: 200 Price: \$25,000 (overall)
Implementation	# of Hours: 80 Price: \$10,000 (overall)
Conversion	# of Hours: 80 Price: \$10,000 (overall)
Training	\$ 125.00 per hour X 40 recommended # of classes = \$ 10,000 (overall)

2. Page 4-5 (Cost Response Assumptions, Items B and E): "Pricing based on projected size of the system." What is the size of the proposed system? How much is it capable of storing and displaying?

The pricing of the project is based on the assumption that this website and underlining infrastructure will only be used for the hosting of Transparency data. While the architecture can be extended to support other PANYNJ data, at this time the system has been sized to only support the hosting of Transparency data. As configured, the system has the capability of storing and displaying 500,000 pages of Transparency data.

3. Pg 6: "ImageWork assumes the client will provide timely support in the establishment of a hosted environment and on-going service level agreements with the service provider."

We're assuming that we'll issue one contract to one firm, which is responsible for adhering to the service levels and requirements stated in the solicitation and eventual contract. For example, if we issue the contract to ImageWork, you will be responsible for adhering to the service levels specified in the solicitation's scope of work, which you accepted on page 20 of your response: "ImageWork has reviewed the maintenance requirements stated in Attachment G and agrees to provide maintenance for the new system per the requirements."

Therefore, please clarify the above statement on page 6.

The referenced sentence should be deleted. It should read:

E. Subscription / Hosting	Pricing based on projected size of the system.
---------------------------	--

4. Pg. 17: *"Upon deployment of the system, ImageWork and the Port Authority will establish a Service Level Agreement that addresses all concerns for system availability, incident reporting, change orders, etc. in the meantime extensive sample SLA documentation is readily available at www.rackspace.com."*

See the preceding comment/observation (in item 4). Also, this statement on page 17 seemingly contrasts with the statement made on page 20, in which ImageWork expressly accepts the service levels included in the solicitation. Please clarify.

The sentence on page 17 was poorly worded. The objective was to inform the Port Authority that sample service agreements like the one ImageWork will have with Rackspace are available online at Rackspace for your inspection.

5. *General: As requested earlier, please provide the status of the FDNY contract, particularly whether it will be extended beyond 6/30. I'll need written proof—e.g. copy of the amendment letter between you and FDNY or a copy of the confirmation email cited in your email.*

Please see attached copy of email confirmation from Mr. Robert Scott, ACCO, FDNY.

6. *Per the Transparency Website Solicitation, "As a baseline, the proposed pricing shall not exceed the pricing provided under each of the contract(s) between the Respondent and the other governmental entity identified in the Price Forms" (pg 7).*

Per your response, it appears that you based your pricing on the NYC DoH&MH and the FDNY contracts. I'll need proof (and your help) in establishing that the proposed pricing does not exceed the pricing in the aforementioned contracts.

Please see attached copy of invoices for hosting service for FDNY and technical services for the NYC DoH&HM.



ImageWork Technologies Corporation

170 Hamilton Avenue, Suite 301
 White Plains, NY 10601
 Phone: 914-490-4537
 Fax: 914-801-2276

Tax ID #:

Invoice

Bill To:

Mr. Robert Scott
 New York City Fire Department ACCO
 Department Bureau of Fiscal Services
 9 Metrotech Center, 5th Floor
 Brooklyn, NY 11201-1221

Invoice # 100067
 Invoice Date 4/30/2013

Contract/P.O. #

DESCRIPTION	HOURS/QTY	RATE	AMOUNT
Vendor Service Portal Enhancement Monthly Support Charge April 2013		6,369.00	6,369.00
FDNY WCCS Technical Support & Software Enhancement Services Contract PIN: CT#: 057 20080040517 Vendor Service Portal Monthly Support Services			
I certify that the above services have been rendered and are due and payable upon receipt of invoice. Catherine M. Wilson, Contoller	Total		\$6,369.00
	Payments/Credits		\$0.00
	Balance Due		\$6,369.00



ImageWork Technologies Corporation

170 Hamilton Avenue, Suite 301
 White Plains, NY 10601
 Phone: 914-490-4537
 Fax: 914-801-2276

Tax ID #:

Invoice

Bill To:

Department of Health and Mental Hygiene
 42-09 28th Street CN#1
 Long Island City, NY 11101-4132

Invoice # 100065
 Invoice Date 4/5/2013

Contract/P.O. #

DESCRIPTION	HOURS/QTY	RATE	AMOUNT
Impact Analysis - review database keys and indexes set up by DIIT for correctness	5	125.00	625.00
VRMS Application Modification - Update C#.NET web service methods to leverage lowlevel SQL calls directly	40	125.00	5,000.00
Test Deployment & User Acceptance Testing • Deploy new web service to test environment at DOH. • Conduct on-site review sessions with users to verify all functionality of the VRMS application in the test environment. • Provide support as needed.	15	125.00	1,875.00
Production Environment Deployment & Support	15	125.00	1,875.00
VRMS Regression Testing	29	125.00	3,625.00
I certify that the above services have been rendered and are due and payable upon receipt of invoice. Catherine M. Wilson, Contoller	Total		\$13,000.00
	Payments/Credits		\$0.00
	Balance Due		\$13,000.00



Cecilia Bikkal <cbikkal@imagework.com>

Contract

4 messages

Cecilia Bikkal <cbikkal@imagework.com> Mon, May 20, 2013 at 6:03 PM
To: Robert Scott <scottrl@fdny.nyc.gov>

Bob, our contract is from 6/2008 to 6/2013, no extension.

Sissy

Cecilia G. Bikkal
Vice President
ImageWork Technologies Corp.
170 Hamilton Avenue - Suite 301
White Plains NY 10601
914.450.1249
914.801.4515 Fax

Scott, Robert (FDNY) <Scottrl@fdny.nyc.gov> Tue, May 21, 2013 at 9:46 AM
To: Cecilia Bikkal <cbikkal@imagework.com>
Cc: "Greenspan, Barry (FDNY)" <greensb@fdny.nyc.gov>

it will be extended a year

From: Cecilia Bikkal [mailto:cbikkal@imagework.com]
Sent: Monday, May 20, 2013 6:03 PM
To: Scott, Robert (FDNY)
Subject: Contract

[Quoted text hidden]

Cecilia Bikkal <cbikkal@imagework.com> Tue, May 21, 2013 at 9:50 AM
To: "Scott, Robert (FDNY)" <Scottrl@fdny.nyc.gov>
Cc: "Greenspan, Barry (FDNY)" <greensb@fdny.nyc.gov>

Thank you, Bob. I will keep you informed with our progress with MWBE and GSA.

Sissy
[Quoted text hidden]

Cecilia Bikkal <cbikkal@imagework.com> Fri, May 31, 2013 at 9:28 AM
Draft

[Quoted text hidden]



Cecilia Bikkal <cbikkal@imagework.com>

Contract

4 messages

Cecilia Bikkal <cbikkal@imagework.com>
To: Robert Scott <scottrl@fdny.nyc.gov>

Mon, May 20, 2013 at 6:03 PM

Bob, our contract is from 6/2008 to 6/2013, no extension.

Sissy

--

Cecilia G. Bikkal
Vice President
ImageWork Technologies Corp.
170 Hamilton Avenue - Suite 301
White Plains NY 10601
914.450.1249
914.801.4515 Fax

Scott, Robert (FDNY) <Scottrl@fdny.nyc.gov>
To: Cecilia Bikkal <cbikkal@imagework.com>
Cc: "Greenspan, Barry (FDNY)" <greensb@fdny.nyc.gov>

Tue, May 21, 2013 at 9:46 AM

it will be extended a year

From: Cecilia Bikkal [mailto:cbikkal@imagework.com]
Sent: Monday, May 20, 2013 6:03 PM
To: Scott, Robert (FDNY)
Subject: Contract

[Quoted text hidden]

Cecilia Bikkal <cbikkal@imagework.com>
To: "Scott, Robert (FDNY)" <Scottrl@fdny.nyc.gov>
Cc: "Greenspan, Barry (FDNY)" <greensb@fdny.nyc.gov>

Tue, May 21, 2013 at 9:50 AM

Thank you, Bob. I will keep you informed with our progress with MWBE and GSA.

Sissy

[Quoted text hidden]

Cecilia Bikkal <cbikkal@imagework.com>
Draft

Fri, May 31, 2013 at 9:28 AM

[Quoted text hidden]

ImageWork Response to RFP 30251 Transparency Website

QUESTIONS TO BE ADDRESSED DURING VENDOR PRESENTATION

1. *We felt that your proposal lacked some specificity – not so much on what you will do, but on how you will do 'it.' For example, how will ImageWork customize its Connect Framework to provide the required functionality? Describe your expertise and experience, esp. related to the FDNY and DoH initiatives. How can those systems, and the services provided to their owners, demonstrate ImageWork's capacity to design, implement and maintain a transparency website for the Port Authority? And so forth (along those lines).*

The Power Point presentation made on June 21st addressed the above concerns. A copy of the Power Point presentation is attached.

2. *We'd appreciate a "demo" on the FDNY system (or DoH's system, whichever is more applicable), especially their search function and capabilities, which would be important features of the PA's transparency website.*

The Power Point presentation made on June 21st included a demo of the FDNY's . A copy of the Power Point presentation is attached.

3. *Task 3 (Support, Deliverables) on page 19: What does "Business Hour problem solving services" mean? How does that conform to the requirement of 24-hour support under maintenance: "ImageWork will be available 24x7 for a period of one year after acceptance of the system" (page 20)?*

Transparency website is monitored 24 x 7. ImageWork will comply with the 4hr response time to issues and 24hr solution turnaround as specified in the SLA.

4. *If the PA accepts your proposal, how soon will ImageWork be available to begin the project? Will the proposed resources be dedicated to us and the project? What are your (resource) expectations of the Authority?*

Within 30 Days of Notice to Proceed and yes, ImageWork / eDocNY resources will be dedicated to this project.

Be available to define detailed requirements, validate prototypes, provide design direction and facilitate stakeholder sign-off.

5. *Can hosting be limited just to sites in the United States? If so, are there price or other implications related to hosting only in the U.S.?*

Yes. Site will be hosted within the US, specifically Dallas, TX.

ImageWork Response to RFP 30251 Transparency Website

6 *What are the implications (pricing, technical, etc.) if we need more capacity (greater than 500K pages)?*

The monthly rate will increase by \$250 for every additional 500,000 pages.

7. *Is your price all-inclusive? Does it include items such as staging, performance testing, etc.? Should we be aware of any other costs not specified and not requested in the PA's cost proposal form?*

The price is all-inclusive as proposed including a standalone staging environment and redundant production environment. Additional services such as redundant hosting site, state-site support, additional page capacity and box snap shot are menu driven fee items that can be added to the solution.

ISSUES RAISED AT THE JUNE 21ST PRESENTATION

1. USA Support Only Option
 - o US Support only will be \$425 per month.
2. Chicago Hosting Option
 - o Redundant hosting at the Chicago Center will be \$3,125 per month.
3. Box Snapshot support
 - o Complete support for Box Snapshot will be \$420 per month.



ImageWork®

Serving State and
Local Government
Since 1991

Transparency Website Power Authority of NY & NJ

June 21, 2013

Team:

Kevin Hansan
Cecilia Bikkal
Natalie Davis

Zubin Wadia
Kelly Thompson

Agenda

- Introduce the Project Team
- Review “How” the Transparency website will be deployed
- Demonstrate our capabilities
- Address specific questions

About ImageWork

- Boutique Systems Integrator with 20 years experience deploying content management systems for New York city, state, and local governments
- Leader in Business to Government (B2G) electronic claims transacting
- Clients include 30 different New York Government Agencies.
- Long-term support contracts including FDNY, NYC DOHMH, Queens DA's Office, Bronx County Clerk, NYC DDC, NYSIF
- Customer deployments in North America, Europe and Asia, requiring 24/7 support across 9 time zones
- Numerous awards and recognitions for our client solutions
- 55 employees distributed across New York, and Hyderabad, India

About Arc of Westchester / eDocNY

- Arc of Westchester (www.westchesterarc.org) is the largest organization in Westchester County servicing the needs of persons with developmental disabilities
- eDocNY is the Arc of Westchester Document Management Business
- eDocNY employs 85 people across 2 shifts
- 2013 revenue will exceed \$2 Million
- Clients include: the New York State Attorney General's Office, Long Island Power Authority, New York State Office of Courts Administration, Westchester County Government, and many others

Solution Overview

- Transparency Website will cater to three main constituents:
 - Content Creators (eDocNY)
 - Content Managers (PANYNJ personnel)
 - Content Consumers (the Public)
- Solution will be hosted on the Rackspace Cloud, located in Dallas, TX.
- Solution will leverage Alfresco ECM 4.0 as the Content Repository, and Drupal for Web Content Management (WCM) functions.
- Focus is on delivering a fast & friendly user experience that enables content discovery and sharing.

Key Use Cases

Creator	Manager	Consumer
<ul style="list-style-type: none">▪ Track Box Inventory	<ul style="list-style-type: none">▪ Review Box Inventory Status	<ul style="list-style-type: none">▪ Discover PANYNJ Content via Search
<ul style="list-style-type: none">▪ Prep, Scan & QA Content	<ul style="list-style-type: none">▪ Review & Manage Uploaded Content	<ul style="list-style-type: none">▪ Browse Content Library by Taxonomy
<ul style="list-style-type: none">▪ Upload Content to Transparency Platform	<ul style="list-style-type: none">▪ Manage User & Content Permissions	<ul style="list-style-type: none">▪ Save and Share Content

Solution Infrastructure

- Five Rackspace Cloud Servers
 - Content Replication using Alfresco FTR
 - Redundant Setup for ECM+WCM+Web Functions
 - 4 vCPUs | 8GB RAM | 320GB RAID 10 Storage
- Nightly Backed Up Images & Disk Snapshots
- Nightly Content Snapshotting to Box Secure Repository
- SSAE 16 SOC 2 & 3 Level Compliance
- ISO27001 Certified
- HTTPS (TLS 1.2 if support by client) with HSTS Enabled
- Two-step Authorization Available (SMS or Email)

Production Topology

Cloud Load Balancer – Static IP
(session persistence + SSL termination enabled)

Drupal 7+MemCache+AutoSlave 1
Alfresco ECM 4.2 + Apache Solr

Drupal7+MemCache+AutoSlave 2
Alfresco ECM 4.2 + Apache Solr

⋮

<private network>

⋮

NFS File Server + 750GB Block Storage Mount (Alfresco Content + Drupal Content)

⋮

<private network>

⋮

Postgres 9.2 Master DB

...

Postgres 9.2 Replica DB

Software Stack

- Alfresco ECM 4.2
 - Storage, Synchronization, Versioning and Management of Documents
 - Alfresco Javascript API and Web Services API
- Drupal 7.22
 - Web Content Management
 - Site Edits, Document Serving, Document Indexing (Solr)
 - Social Media Integration
 - Video Integration (Vimeo for Business)
- Box REST API for Nightly Snapshotting to Secure Box Portal
- Database: Postgres 9.2
- UI Customizations: HTML5, Javascript, CSS3

Q Search for documents...

ADVANCED SEARCH [BROWSE ARCHIVE](#)

2010 Proposed Operating Budget
Published 1/28/10

Board Minutes - 11/13/13
Published 12/13/13

Board Minutes - 9/26/13
Published 10/29/13

Board Minutes - 10/23/13
Published 10/29/13

Board Minutes - 11/13/14
Published 12/10/14

Board Meeting Video - 2/25/13
Published 02/27/13

Board Minutes - 2/15/14
Published 2/20/14

Board Meeting Video - 5/25/13
Published 5/29/13

Financial Statements and Supplemental Material for the Fiscal Year Ending December 31, 2012
Published 1/15/13

FOI Request - 20070-C
Published 11/15/12

Board Minutes - 11/20/13
Published 12/20/13

Board Minutes - 11/20/13
Published 11/26/13

Board Minutes - 11/20/13
Published 11/26/13

Board Minutes - 11/20/13
Published 12/20/13



"Diamond Apex Design"

ADVANCED SEARCH BROWSE ARCHIVE



3 matches found for "Diamond Apex Design"

Board Minutes - 5/29/13

Published 05/29/13

Filed in Board Meeting Information / Board Minutes & Contract Authorizations / Board Minutes

"In addition, it was anticipated originally that a portion of the work would be performed by Diamond Apex Design Inc. on..."

Board Minutes - 4/21/13

Published 04/21/13

Filed in Board Meeting Information / Board Minutes & Contract Authorizations / Board Minutes

"The Board authorized and approved the following resolution in Diamond Apex Design Inc. as a result of the Board's review of the..."

Board Minutes - 3/22/13

Published 3/22/13

Filed in Board Meeting Information / Board Minutes & Contract Authorizations / Board Minutes

"The Board authorized and approved the following resolution in Diamond Apex Design Inc. as a result of the Board's review of the..."



"Diamond Apex Design"

ADVANCED SEARCH | BROWSE ARCHIVE



8 matches found for "Diamond Apex Design"

2013 Proposed Operating Budget
Published: 06/12

2013 Proposed Operating Budget
Published: 06/12

Board Minutes - 7/13/13
Published: 07/13

Board Minutes - 9/09/13
Published: 09/13

Board Minutes - 10/13/13
Published: 10/13

Board Minutes - 1/15/14
Published: 01/15/14

Board Minutes - 2/19/14
Published: 2/19/14

Board Minutes - 2/19/14
Published: 2/19/14

2013 Proposed Operating Budget
Published: 06/12

Board Minutes - 7/13/13
Published: 07/13

Board Minutes - 9/09/13
Published: 09/13

Board Minutes - 10/13/13
Published: 10/13

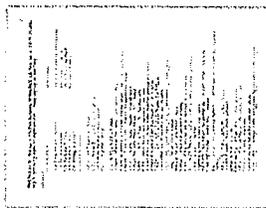
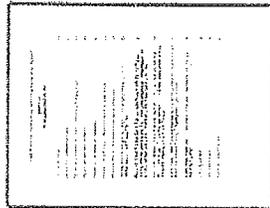
Board Minutes - 1/15/14
Published: 01/15/14

Board Minutes - 2/19/14
Published: 2/19/14

Board Minutes - 2/19/14
Published: 2/19/14

SEARCH BROWSE ARCHIVE

Board Meeting Information Board Minutes & Contract Authorizations Board Minutes



THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

MINUTES
Wednesday, May 29, 2013

Action on Minutes	122
Report of Committee on Finance	122
Report of Committee on Finance & Insurance Working Group	122
Report of Committee on Security	122
Report of Committee on Operations	123
Report of World Trade Center Redevelopment Subcommittee	123
Report of Special Meeting of Committee on Operations	123
Newark Liberty International Airport - United States General Services Administration - New Lease ANC-3B	124
Minor Boundary Modification of Foreign-Trade Zone No. 49 General-Purpose Zone to Include Approximately Two Acres at National Retail Transportation, Inc. in North Bergen, New Jersey, on Behalf of The Home Depot U.S.A., Inc.	126
New York Facilities - Agreement with the New York Power Authority for Turn-key Contracting and Project Management Services to Support Implementation of an Advanced Metering Infrastructure Program	128
World Trade Center Retail and Parking Pre-Tenant Fit-out Projects - Miscellaneous Metals Construction Contract - Supplemental Agreement No. 1	131
World Trade Center Site - Authorization of Property Management Services for Site-wide Facilities	133
Confidential Item	135

Download Print More

Document Category
 1- Board Meeting Information
 2- Board Minutes & Contract Authorizations
 3- Board Minutes

Document Name
 Board Minutes - 5/29/13

Year
 2013

Document Date
 05292013

Facility
 Operations

Pending Review Rejected Published

Doc ID	Document Name	Type	Status	Last Modified by	Last Modified
00000001	Board Minutes - 5/29/13	PDF	Approved by PA Level 1	Millic Johnston	1/14/14 12:00 PM
00000002	Board Minutes - 7/19/13	PDF	Approved by PA Level 1	Millic Johnston	1/14/14 12:00 PM
00000003	Board Minutes - 8/21/13	PDF	Approved by PA Level 1	Millic Johnston	1/14/14 12:00 PM
00000004	Board Meeting - 9/25/13	PDF	Approved by PA Level 1	Millic Johnston	1/14/14 12:00 PM
00000005	Board Meeting Video - 9/25/13	Video	Submitted for Approval	Allen Thomas	1/14/14 12:00 PM
00000006	Financial Statement - 2012	PDF	Released for Approval	Sean Facility	1/14/14 12:00 PM
00000007	EDI Request - 120/0-C	PDF	Released for Approval	Sean Facility	1/14/14 12:00 PM
00000008	Board Minutes - 11/20/13	PDF	Approved by PA Level 1	Millic Johnston	1/14/14 12:00 PM

Search

Board Meeting Information Board Minutes & Contract Authorizations Board Minutes

Document Name	Type	Version	Last Modified by	Last Modified	Actions
Board Minutes - 5/29/13	PDF	1.0	John Smith	5/30/13 12:00 PM	Actions
Board Minutes - 7/13/13	PDF	1.0	John Smith	7/30/13 12:00 PM	Actions
Board Minutes - 8/21/13	PDI	1.2	John Smith	8/30/13 12:00 PM	Actions
Board Meeting - 8/25/13	PDI	1.6	John Smith	9/30/13 12:00 PM	Actions
Board Minutes - 10/21/13	PDI	1.0	Millie Johnston	10/30/13 12:00 PM	Actions
Board Minutes - 11/20/13	PDF	1.0	John Smith	11/30/13 12:50 PM	Actions
Board Minutes - 12/18/13	PDI	1.0	Allen Thomas	12/20/13 12:00 PM	Actions
Board Minutes - 1/15/14	PDI	1.0	Allen Thomas	1/21/14 12:00 PM	Actions

Government

Financial Information

Board Meeting Information

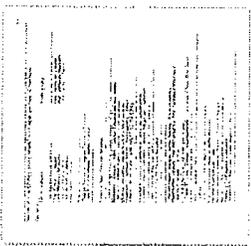
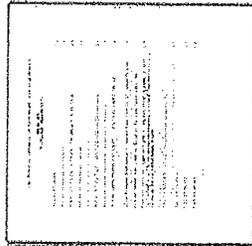
Board Minutes & Contract Authorizations

Board Minutes

Freedom of Information

Transparency

Pending Review > Board Minutes - 5/29/13



THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
MINUTES
Wednesday, May 29, 2013

Action on Minutes	122
Report of Committee on Finance	122
Report of Committee on Finance's Insurance Working Group	122
Report of Committee on Security	122
Report of Committee on Operations	123
Report of World Trade Center Redevelopment Subcommittees	123
Report of Special Meeting of Commission on Operations	123
Newark Liberty International Airport - United States General Services Administration - New Jersey AIA	124
Master Boundary Modification of Foreign-Trade Zones No. 54 (General Purpose Zone to Include Approximately 1.5 Acres at National Knott Transportation, Inc. in North Depter, New Jersey, on Behalf of The Home Depot U.S.A., Inc.)	126
New York Facilities - Agreement with the New York Power Authority for Term-ly Contracting and Project Management Services to Support Implementation of the Advanced Metering Infrastructure Program	128
World Trade Center Retail and Parking Pre-Firearm Fit-out Program - Miscellaneous Exhibit Construction Contract - Supplemental Agreement No. 3	131
World Trade Center Nine - Authorization of Property Management Services for Site-wide Facilities	133
Confidential Item	135
Candidate's Item	138
Tribute to James P. Rubin	140

Publish

Document Category
1- Board Meeting Information
2- Board Minutes & Contract Authorizations
3- Board Minutes

Document Name
Board Minutes - 5/29/13

Year
2013

Deployment Date
05292013

Facility
Operations

Document Category: **Select Category**

- 1- Board Meeting Information
- 2- Board Minutes & Contract Authorizations
- 3- Board Minutes

Document Name

Board Minutes - 5/29/13

Year

2013

DOC

05292013

Facility

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

MINUTES
Wednesday, May 29, 2013

Action on Minutes	122
Report of Committee on Finance	122
Report of Committee on Finance's Insurance Working Group	122
Report of Committee on Security	127
Report of Committee on Operations	123
Report of World Trade Center Redevelopment Subcommittee	123
Report of Special Meeting of Committee on Operations	123
Newark Liberty International Airport - United States Federal Services Administration - New Lease ANC-384	124
Minor Boundary Modification of Foreign-Trade Zone No. 49 General-Purpose Zone to Include Approximately Two Acres at National Rental Transportation Unit in North Bergen, New Jersey, on Behalf of The Home Depot U.S.A., Inc.	126
New York Facilities - Agreement with the New York Busset Authority for Joint Key Contracting and Project Management Services to Support Implementation of an Advanced Metrolink Infrastructure Program	128
World Trade Center Health and Parking Pre-Tender Fit-out Projects - Miscellaneous Memorandum Construction Supplement Agreement No. 1	131
World Trade Center Site - Authorization of Property Management Services for Site-wide Facilities	134
Confidential Item	135
Confidential Item	138
Memorandum to James P. Rosen	140

Approve Document

Projected Tasks + Duration

Phase	Description	Duration
Project Plan	Agree on Resources + Schedules + High Level Scope	2 Weeks
Solution Design	Design Specification for Transparency portal UI, Systems Architecture, Test Plan	3 Weeks
Infrastructure Setup	Setup Rackspace Cloud Instances: Staging + Production	3 Weeks
Solution Implementation	Customize Alfresco + Drupal per approved Specifications, Execute Unit and Integration Tests	6 Weeks
Content Ingestion (Staging)	Initial Batch of Content from eDocNY is ingested and populated into Content Management Interface	1 Week
Performance Testing	Meet & Exceed PANYNJ Performance Objectives by Conducting Load Tests with Realistic Use Cases	1 Week
Acceptance Testing	Schedule UAT with PANYNJ Stakeholders, Execute UAT scripts, Assess Feedback	2 Weeks
Go Live	Ingest Content into Production Repository, Approve "Launch Day" Content, Validate all Key Functionality, Health check System Environment	2 Weeks

THE PORT AUTHORITY OF NY & NJ

PROCUREMENT DEPARTMENT
2 MONTGOMERY STREET, 3RD FLOOR
JERSEY CITY, NJ 07302

REQUEST FOR INFORMATION

TITLE: TRANSPARENCY WEBSITE

NUMBER: 30251

SEND RESPONSES TO: REFER TO THE RFI FOR SUBMISSION INSTRUCTIONS

RESPONSE DUE DATE:

September 5, 2012

TIME: 2:00 PM

BUYER NAME:

**JAMES SUMMERVILLE
PHONE#: (201) 395-3454
FAX#: (201) 395-3925
EMAIL: jsummerville@panynj.gov**

1. OVERVIEW

The Port Authority of New York and New Jersey (the “Port Authority” or the “Authority”) intends to make available a variety of documents – including contracts, leases, Freedom of Information (“FOI”) requests, Board meeting presentations, and labor agreements – to the public via the internet as part of its transparency initiative. The available documents will vary in size. For example, contracts could range from 25 to 500 pages or responses to FOI requests could range from 2 to 300 pages in length. The universe of documents available as a result of this transparency initiative will grow on an ongoing basis as the Port Authority continues to conduct its business.

The Port Authority seeks to retain a firm to perform the storage, management, maintenance and publication of this collection of documents on a Transparency Website provided and hosted by the firm. Because the Port Authority does not currently know the precise number or volume of documents available for publication, it intends to initiate a one-year task order-oriented pilot project so that during this time it can determine such volume and gauge public usage of the dedicated website.

The pilot project will require that the firm retained by the Authority provide the following services, either by itself or in conjunction with a subcontractor:

- Retrieve, scan and return documents to the Authority; and
- Using a document management system, post the documents to a hosted, public-facing website (provided by the firm) with search capabilities.

The Port Authority expects that the firm will have in place a document management system to store, manage and maintain a library of documentation for publication to a public website that will be hosted and maintained by the firm. The Authority expects that the firm will ensure that the information on the website is indexed and searchable in such a way that potential users are able to easily access a particular document based on simple and transparent search criteria.

Under this Request for Information (“RFI”), the Port Authority is seeking to identify firms interested in providing the aforementioned services. The Authority may use the information submitted in response to this RFI to identify firms and solutions that satisfy the requirements stated herein and, thereafter, issue a solicitation to obtain the services of a firm to provide the aforementioned services for the pilot project.

2. REQUIREMENTS

I. FUNCTIONALITY

The document management system (the "System") utilized by the firm selected in response to the solicitation referenced in Section 1, above, which shall be used to post documents to a public-facing website hosted and maintained by such firm, should have the following functionality:

A. Document Storage

Documents should be stored and managed in such a way so that a document type can be easily identified according to the appropriate document category (e.g. "lease", "contract", "Board Presentation", etc.), Authority facility (when appropriate), and document date.

B. Document Management

In reference to the documents referenced above, the System should include the ability to manage the many, varying types of documents that will be stored and retrieved. The types of documents include, but are not limited to, pdf files, drawings, spreadsheets/Excel documents, videos, and the import of documents from other data sources such as Peoplesoft and/or SAP. It is anticipated that documents to be published/managed on this site would be for a three- to five-year rolling period, with some information archived indefinitely.

C. Website:

The System should provide a public facing, read-only web site that will publish the documents identified by the Authority for viewing by the public and be accessible via a link directly from the Authority's website (www.PANYNJ.gov); the link should provide a virtually unnoticeable transition to the end user, while including the appropriate disclaimers. The website should be easy to navigate and should provide full search capability across all document types (where possible), along with printer friendly options, and other user friendly, ease-of-use options to be determined. There should be no ability for the end user to alter or manipulate documents.

D. Additional Optional Features:

Management of the documents should also provide for the ability to replace expired contracts/agreements with successor contracts/agreements.

II. SCANNING SERVICES

The selected firm shall (by itself or via a subcontractor) retrieve, scan (for posting to the website), and return the documents to the Port Authority. For the pilot project, the majority of documents will be picked up from and returned to 225 Park Avenue South, New York, NY 10003.

III. INFORMATION TECHNOLOGY ENVIRONMENT:

- A. IT Control Checklist : The respondent firms should indicate whether their Systems conform to the requirements in Attachment B (IT Control Requirements).
- B. IT Standards: The respondent firms should indicate whether their Systems conform to the “Standards and Guidelines for Port Authority Technology”, attached hereto as Attachment C.
- C. Hosting and Security Standards: The respondent firms shall describe a System and security architecture for their remotely hosted system and shall document their security standards.

IV. SYSTEM IMPLEMENTATION

The respondent firms shall briefly address the following **expectations** for the implementation of the System with the public website component, addressing their capabilities to perform the tasks described below.

- A. Business analysis: The selected firm will develop and maintain a requirements tracking matrix and gap analysis.
- B. Software configuration: While the Port Authority expects to select a firm with a commercially off-the-shelf (hereinafter “COTS”) System, it also expects the selected firm to configure the System for optimized use with the particular qualities of the Port Authority.
- C. System Installation: The selected firm will install the System on its hosted server.
- D. Data Conversion: As applicable, the selected firm will transfer any existing electronic data (e.g., pdf documents) from the current Port Authority environment into its System.
- E. Data Integrity: For ongoing operation of the System, the selected firm will provide oversight, procedures, and protocols to ensure that the integrity and timeliness of the data are accurately maintained.
- F. System Test: The selected firm will develop and implement a formal System test plan for the System. The System should also pass a validation test performed by Port Authority staff.
- G. System Implementation: The selected firm will coordinate all activities for the System launch.
- H. System Final Approval and Sign Off: The System will be in production for a total of 30 business days without significant problems, errors and/or system interruptions before the Authority will sign off on final approval.

- I. Ongoing Support, Maintenance, and Trouble-Shooting: From the date of final approval of the System, the selected firm will provide ongoing support, maintenance, and trouble-shooting for the software, application and System for the duration of the pilot project.

In addition, the respondent firms shall submit to the Port Authority a high-level System Implementation Plan, illustrating the tasks and schedule (in number of weeks) anticipated to implement the System.

V. PRICING

Responses shall:

- a) Identify Authority-provided information necessary for the respondent firms to provide pricing for (a) the provision of a System with a public-facing web site component; (b) retrieving, scanning, posting, and returning documents to the Authority.
- b) Include tiered list pricing for the use of a document management system with a public website component (e.g., tiered by volume of documents and public usage/number of concurrent users);
- c) Include tiered list pricing for retrieving, scanning, posting, and returning documents to the Authority (e.g., tiered by volume of documents) at the address noted in Section II, above.

VI. PROJECT MANAGEMENT AND SERVICE LEVELS

The respondent firms shall describe their ability to manage the delivery of services described herein. Furthermore, the respondent firms shall identify typical service levels used for scanning and posting (within certain timeframes from document pick-up) and managing documents on a hosted public-facing website.

3. SUBMISSION OF INFORMATION

Each respondent firm shall email a pdf copy of its response to the buyer listed on the cover page of this RFI no later than the time and date listed on the cover page.

The response must follow the format and order of items, using the same paragraph identifiers, as set forth below:

- I. Letter of Transmittal
- II. Statement of Qualification
- III. Approach

I. Letter of Transmittal

Each response shall contain a Letter of Transmittal, identifying the Respondent.

The Letter of Transmittal shall contain:

- a) Name, address, URL and Federal Employer Identification Number of the Respondent executed by an authorized representative on behalf of the Respondent;
- b) Contact information (name, title, email, telephone and fax numbers) of the individual who shall act as the Respondent's contact with the Authority for further information requests and future solicitations. In addition, at any time after the opening of the RFI submittals, the Authority may request additional information relating to the prospective firm's or participant's qualifications and will use this individual as the point of contact for these queries.

II. Statement of Qualification

The respondent firm's statement of qualification is an opportunity for the Respondent to describe the distinctive characteristics of its System that would satisfy the requirements stated herein, and the firm's experience and industry expertise in providing such system.

A statement of the firm's capability and prior experience, with projects of similar magnitude and complexity, to perform the required services must be included.

The respondent firm shall provide a brief description of the company, its lines of business, organization, mission and objectives, the location and size of the local office that would support a future contract.

Such Statement shall include:

- a. Name and address of the response's preparer and the Respondent's joint venture participants, if any, and a company organization chart.
- b. A statement on how many years the Respondent has been in business under its present business name, and a list of previous business names used, if any.
- c. Information on whether the Respondent or any officer or partner thereof failed to complete a contract.
- d. Information on whether the Respondent has contractually provided or is contractually providing such system and services to other governmental entities. Indicate the name of the corporate or governmental entity, the contract number(s), and the applicable brand and numbers authorized under the award(s). Include the term of the contract and the date of the award.

III. Approach

Executive Overview:

Each respondent firm shall provide a narrative Executive Overview (“Overview”) of the overall approach that it would use to satisfy Authority requirements. The Overview shall specify the respondent firm’s solution to fulfilling the requirements stated herein. The Overview shall set forth main objectives, identify key success factors, performance measures, anticipated problem areas, if any, and how the respondent firm would address them.

Special attention should be paid to explaining:

- Relevant organizational background/history and pertinent work experience;
- What makes the Respondent and its solution, industry expertise and experience unique in the way it will approach this project.

Solution Description:

The Solution Description shall:

- Describe how the Respondent’s system satisfies the requirements specified herein.
- Provide information about the Respondent’s existing client base. Following the format of the table provided below, the Respondent shall describe **active (i.e. not expired)** contracts under which it provides a **COTS**, browser-based system with a public-facing web site component. The table shall include **all** active contracts with clients in the public sector.

Client name	Public Sector? Yes or no	Term of Contract	COTS without customization?	COTS with customization?	Contact Information (name, phone #, email address)
-------------	-----------------------------	------------------	-----------------------------	--------------------------	---

Note that the Port Authority presently anticipates awarding a contract to a firm that has proven experience in contractually providing similar System and related services to other governmental entities. It is expected that the contract between the Authority and the selected firm shall incorporate, at the very least, pricing provided in the agreement between the selected firm and the other governmental entity. While such pricing shall not exceed the prices offered under any firm’s government agreements, the Authority encourages the firms to provide additional discounts to the Authority.

4. COMPANY INFORMATION

Respondents are also encouraged to provide additional information beyond those requested above that may be beneficial to the Authority's effort to select a Transparency Website. Responses may include brochures, pamphlets or any pertinent literature that provide information on the Respondent's company profile as well as on the Respondent's proposed solution.

5. LIMITATION ON PAGES IN RESPONSE

Including all information requested herein, responses shall be no more than twenty (20) letter-size pages.

6. QUESTIONS

Any questions by prospective respondents concerning this request shall be addressed to the Contracts Specialist list on the cover page, no later than the time and date listed on the cover page.

7. CONFERENCE

At any time after the receipt of responses, the Respondent may be asked to attend an informal discussion conference with staff of the Authority for further clarification of the response and/or for additional information. To facilitate the free flow and exchange of ideas and information, the Authority intends to meet with Respondents separately. The Authority will communicate the date, time and place of any conference in due course.

8. GENERAL

- A. Respondents should note that this RFI might be a preliminary step towards the selection of a System. The Authority reserves the unqualified right to request further information from any Respondent, to conduct interviews, issue a solicitation for a bid or proposal, and seek product demonstrations or to perform none of the above.
- B. Neither the expression of your organization's interest, nor the submission of your organization's qualifications and any documents or other information, nor the acceptance thereof by the Port Authority, nor any correspondence, discussions, meetings or other communications between your organization and the Port Authority, nor a determination by the Port Authority that your organization is qualified hereunder shall impose any obligation on the Port Authority. Unless and until the Port Authority finally awards a contract covering the proposed services to your organization, the Port Authority shall have no obligation to Respondents. Costs of participation or information preparation are not compensable.

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 Freedom of Information Code and Procedure (FOI Code) adopted by the Port Authority's Board of Commissioners on March 29, 2012, which may be found on the Port Authority website at: <http://www.panynj.gov/corporate-information/pdf/foi-code.pdf>, not to disclose to any competitor of the undersigned, information submitted which are trade secrets which, if disclosed, would cause injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, as more fully set forth in the FOI Code, 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: IT CONTROL REQUIREMENTS

1. Application Controls Checklist.....page 10;
2. Control Security Requirements.....page 13;
3. Disaster Recovery Plan Checklist.....page 17;
4. Payment Card Industry (PCI) Data Security Standard...page 20;
5. Security Administration Function.....page 21;
6. Security Requirement.....page 23;
7. Systems Administration and Operation Manual
Requirements.....page 25;
8. Web Based Application Checklist.....page 29.

APPLICATIONS CONTROL CHECKLIST

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 (SLA) should be in place. The SLA should have provisions for uptime, performance monitoring, updates, etc.
- The application should have the Port Authority's (PA) 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.

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 the 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.

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.

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
 - Session time-out after 15 minutes of inactivity
 - 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.

Application Controls

Data Validation & Input Controls

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

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 numbers and social security numbers should be encrypted.

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.

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.

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.

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.

Management Reporting

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

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.

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".

CONTROL SECURITY REQUIREMENTS

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.
- 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.

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.

Backup

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

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 profiles 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).

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.

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.

CREDIT CARD PROCESSING CHECKLIST

1. PCI Standards should be enabled and be PCI compliant to PCI Data Security Standard v1-2 (PCI Security Standards Council, version 2.0, 10/28/10) . Ensure all vendors and consultants are required to be PCI compliant.
2. A segregated network and/or an approved Point of Sale terminal should be in place for the system or terminal used to process credit card transactions.
3. The credit card processor standard and requirements should be enabled. i.e. Maintain transaction data for two years.
4. Maintain the security of the customer information, including not storing credit card numbers, the cardholder CVC/CVV numbers or any of the data from the magnetic strip on the credit card.
5. Maintain the transaction data for contesting chargebacks, ensure that the processor fees are appropriate and do reconciliations of the transactions processed and the money deposited in the Port Authority bank accounts.
6. Make Treasury (Cash Mgmt) and Comptroller's (Revenue Accounting) aware of credit card processing. Have Comptroller's fill out the Merchant form to get a Merchant ID for MasterCard/Visa, Discover and American Express.
7. Have Procurement enter into an agreement for credit card processing.
8. Create a privacy policy and procedure for staff and consultants.
9. Perform quarterly vulnerability scans of the network that contains the credit card processing, annual PCI reviews according to the PCI DSS, and annual system penetration testing.

DISASTER RECOVERY PLAN CHECKLIST

Disaster recovery is a plan that 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 adhered 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.

Payment Card Industry (PCI), Data Security Standard

See Requirements and Security Assessment Procedures, Version 2.0 (PCI Security Standards Council
October 28, 2010)

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 Standards and Guidelines for Port Authority Technology.
- ◆ Restricting remote access and monitoring and reviewing the activity log. (Limit or no use of modems. Modems should be configured according to the Standards 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 Standards and Guidelines for Port Authority Technology.
- ◆ 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 Standards 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.

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

Systems Administration & Operation Manual Requirements

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

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

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

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)

Remote Access

- 14) Strategy/Approach
- 15) Approvals

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

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

Anti-Virus Management

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

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).

Patch Management

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

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

Problem & Incident Management

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

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.

WEB BASED APPLICATION CHECKLIST

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)

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 considered 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.

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 C: STANDARD AND GUIDELINES FOR PORT AUTHORITY TECHNOLOGY

See following pages

ImageWork Response to RFP 30251 Transparency Website

PROPOSAL

Transparency Website

RFP 30251

The Port Authority of NY & NJ

Procurement Department



Prepared by ImageWork Technologies Corp.

Kevin Hansan
170 Hamilton Avenue, Suite 301
White Plains, New York 10601
imagework.com
T: 914.681.0700
F: 914.801.2276
khansan@imagework.com

ImageWork Response to RFP 30251 Transparency Website

LETTER OF TRANSMITTAL

Transparency Website

September 5, 2012

James Summerville
The Port Authority of NY & NJ
Procurement Department
2 Montgomery Street, 3rd Floor
Jersey City, New Jersey 07302
201-395-3454
jsummerville@panynj.gov

Dear Mr. Summerville,

ImageWork is pleased to submit this response to RFP 30251 for services to digitize PANYNJ content and host it on a Transparency Website. ImageWork and our partner, the Arc of Westchester Document Management Company, eDocNY, is prepared to pick up, scan, return original documents, and host the digitized content on your behalf.

For this project, ImageWork will serve as prime contractor and be responsible for designing the Transparency Website, ensuring the upload of digitized content, and hosting and maintaining the website.

eDocNY will be responsible for coordinating the pickup of documents, scanning and indexing the digital files, and returning original records back to PANYNJ.

Some key highlights about ImageWork and our partner eDocNY:

- ImageWork has nearly twenty years experience building enterprise content management systems for New York city, state, and local governments. These systems host hundreds of millions of digital records that are both public facing and internal use only.
- Selected by over 30 New York State Government Agencies in the past 20 years to provide high value project management, business process management analysis, records management, systems architecture and design, and systems integration services.
- Selected by the Fire Department of New York City to build and manage the City's first secured website (www.claimconnect.us) where vendors can transact electronically with the Fire Department.
- ImageWork has been working with the Arc of Westchester for the past seven years to transform their existing micrographics business to a state-of-the-art

ImageWork Response to RFP 30251 Transparency Website

document management company that utilizes adults with developmental development as their primary workforce.

- Arc of Westchester (www.westchesterarc.org) is the largest organization in Westchester County servicing the needs of persons with developmental disabilities.
- Arc of Westchester is a member of good standing with the New York State Industries for the Disabled (www.nysid.org) for imaging services. NYSID could facilitate this contract with you on behalf of Westchester Arc / eDocNY.
- eDocNY has grown into a million dollar a year enterprise with revenue projects to exceed \$1.7 million dollars this year.
- eDocNY has accumulated an impressive client list including the New York State Attorney General's Office, Long Island Power Authority, New York State Office of Courts Administration, Westchester County Government, and many others.
- Both eDocNY and ImageWork have outstanding references and offer reasonable pricing.

In the enclosed response we supplied additional background information about ImageWork, eDocNY, and how we would fulfill the requirements of PANYNJ. Due to the confidential nature of the client records we handle, references are only available upon request.

After reviewing our proposal, we would welcome the opportunity to host you at our eDocNY facility so you can see firsthand the attention to detail we apply when handling client records.

Questions pertaining to this response should be addressed to me directly. Thank you for considering this proposal from ImageWork Technologies Corporation.

Sincerely,



Kevin C. Hansan
President, ImageWork Technologies Corporation
170 Main Street, Suite 301
White Plains, New York 10601
www.imagework.com
914-396-8613
914-801-2276 fax
khansan@imagework.com
FEIN: 52-1907539

ImageWork Response to RFP 30251 Transparency Website

TABLE OF CONTENTS

TABLE OF CONTENTS	4
STATEMENT OF QUALIFICATION	5
APPROACH.....	12
PRICE QUOTE.....	18

ImageWork Response to RFP 30251 Transparency Website

STATEMENT OF QUALIFICATION

About ImageWork

Based in White Plains, New York, ImageWork is a boutique government systems integrator specializing in unlocking the full value of a government agency's content for employees, affiliated agencies, vendors, and citizens. Clients engage ImageWork to tackle their most complex technology projects, whether this involves the conversion of massive repositories of digital content, automation of complicated business processes, migration of intricate database structures, platform modernization, or mobile enablement of the workforce. In return, ImageWork strives to deliver value, a positive impact on the organization, and technical excellence.

Founded in 1991, ImageWork has twenty years' experience building world-class vendor-independent computer systems on a global scale for government and the Fortune 500. ImageWork has grown from one employee to 55 employees. In order to provide our clients with cost-effective development services and 24/7 technical support, ImageWork offers remote technical services through our team in Hyderabad, India. ImageWork operates globally with solutions deployed across North America, Europe, Asia, and the Middle East. We can provide 24x7 premier support with a 1-hour response time to our customers. Standard support is 8 am to 6 pm EST, Monday to Saturday. Our systems have garnered numerous awards and much recognition for our clients.

As an early pioneer of the Gov 2.0 movement (social, transparent, and collaborative systems), ImageWork has integrated social media technologies with legacy government applications, written and deployed mobile applications, and transformed agencies to embrace open source solutions. Our customers appreciate that we maintain a vendor-independent approach when recommending technology.

The table below lists some of ImageWork's clients:

ImageWork Response to RFP 30251 Transparency Website

NEW YORK STATE	NEW YORK CITY	NEW YORK LOCAL
<ul style="list-style-type: none">• Dept of Correctional Services• Dept of Health• Dept of Labor• Education Department• Environmental Conservation• OGS Division of Financial Administration• State Police• SUNY Stony Brook• Teachers' Retirement System• Local Retirement Systems• Long Island Power Authority	<ul style="list-style-type: none">• Administration of Children Services• City Clerk• Dept of the Aging• Dept of Corrections• Dept of Design and Construction• Dept of Health• Dept of Probation• Fire Department• Police Department• Human Resources Administration• Office of the Comptroller• Office of the Mayor• Criminal Courts• Dept of Sanitation	<ul style="list-style-type: none">• City of Albany• Broome County Clerk• DA's Office, Queens County• Westchester County• City of Yonkers• City of New Rochelle• Town of Lewisboro

ImageWork has a successful history winning competitive procurements against larger government systems integrators. The following are what set us apart:

- Our key technical and business analysis staff members have 10 years' experience working together as a team
- We offer a proven software development framework and pre-developed functional components
- We use an aggressive client-centric project management methodology
- Seamless integration with partner systems (Process, Web Services, Facebook, Twitter, Email, SMS)
- We offer government-saving service and appliance pricing models.

The leaders of ImageWork are Kevin C. Hansan, CEO and President; Cecilia Bikkal, Chief Operating Officer; and Zubin R. Wadia, Chief Technology Officer. All have extensive experience presenting client solutions at industry conferences worldwide. Mr. Hansan has overseen the requirements definition and implementations of complex enterprise content management systems for other government agencies, including NYC Department of Design and Construction, NYC Department of Health & Mental Hygiene, NYC Department of Probation, FDNY, NYPD, Queens County District Attorney's Office, and the City of Yonkers; private sector companies, including Cartier, Inc., SMBC Bank, CUNA Mutual; and many other organizations.

Mr. Wadia brings a systems deployment background unmatched by anyone in New York. He has hands-on expertise with all major industry vendor products, including EMC Documentum, IBM Websphere/Tivoli/Process Manager, Alfresco ECM/WCM/RM, Activiti BPM, Fujitsu Interstage, Oracle BPM, and numerous others. His software architectural implementation expertise covers Java, Open Source, .NET, and mobile platforms. He is the author of three books on software development and architecture and a member of the Java Content Repository 2.0 expert group. Governments and other systems integrators often seek him for advice on the latest state-of-the-art

ImageWork Response to RFP 30251 Transparency Website

technologies. Zubin is a graduate of the highly selective Artificial Intelligence & Robotics graduate studies program at Singularity University. Sponsored by NASA and Google, this program is designed for future technology leaders.

About eDocNY

In 2005, the Arc of Westchester embraced an aggressive proposition: Create a new business where individuals with developmental disabilities could obtain the skills needed to enhance employment opportunities in the expanding digital world. We believed that people with disabilities could work “inclusively” with people without disabilities in a high tech environment.



Today eDocNY operates two shifts and employs 45 people with disabilities and 30 people without disabilities. Its business service offerings include: paper scanning, large format document scanning, data entry, record box storage and paper shredding. eDocNY's primary conversion center is located on Tarrytown Road, White Plains New York.

In seven short years, eDocNY has grown to a \$1.5 million a year document management business, serving high profile clients throughout the tri-state area such as the New York State Attorney General's Office, the Westchester County Clerk's office, the Westchester County Department of Social Services, King's County clerk's Office, New York City Transit Authority, SUNY Downstate Medical Center and many other government and commercial enterprises.

eDocNY's market can be defined as those businesses needing better control over the paper materials that fill desks, office file cabinets, company record rooms and storage warehouses where information is archived. These businesses realize that to be successful in the Internet Age, they must have computer access to information and data not traditionally stored in their computer systems. eDocNY's mission is to assist these businesses to fill their computer systems with easy-to-access, searchable content.

To enable people with disabilities to learn and master employment-related skills, eDocNY teaches them the latest techniques in alpha/numeric filing, scanning, sorting, word processing, and data entry. eDocNY is able to provide qualified, flexible-shift, skilled employees to both businesses and government agencies in Westchester. eDocNY employees with disabilities work side by side in offices all over Westchester County with non-disabled employees.



To date, any potential customer who has visited eDocNY at our 6000 square foot facility in White Plains, New York has awarded us a contract. We also provide services at a customer's place of business.

Growth in employees and increase in annual sales:

ImageWork Response to RFP 30251 Transparency Website

In 2004, the Arc of Westchester hired a Technology Consultant, Kevin Hansan, President, ImageWork Technologies, to guide us in developing the business plan.

In 2005, under the continuing guidance of Mr. Hansan as Acting Director, we began growing the business and creating our conversion operations contract by contract. With a generous donation, we purchased equipment and began training staff in the basics of document scanning. Additionally, we began to work with application programmers to develop custom scanning and indexing applications for each client contract.

In 2006, sales were \$76,000 with two employees, one with disabilities and one without disabilities.

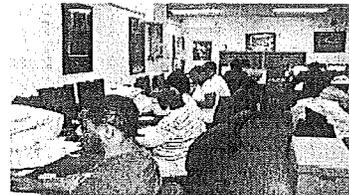
In 2007, we were awarded a contract to scan documents for the Office of Court Administration, our first multi-year contract. Our sales that year soared to \$310,945.

In 2008, our expanding workforce required a larger facility and we moved to our current worksite, 388 Tarrytown Road, White Plains. We finished 2008 with sales of \$327,648. We approached Tim Idoni, Westchester County Clerk, for an opportunity to present a proposal to scan all their legal files and we were awarded that contract.

In 2009, we began the one year contract with the Westchester County Clerk's Office. By then our workforce consisted of 20 associates with disabilities and 30 associates without disabilities. Our 2009 revenue was \$749,612. Additionally, "eDocNY" became a registered trademark with the United States Patent and Trademark Office.

In 2010, we were rewarded with a new three year contract with the Westchester County Clerk's Office and obtained a multiple year contract with the New York State Attorney General's Office. By the end of the year, eDocNY had become a million dollar business.

As the rest of the economy struggled in 2011, we were able to generate another million dollars a year in revenue and obtain a new 2012 contract with the Westchester County Department of Social Services. 2011 saw the end of the micrographics business that had served the Arc of Westchester for twenty years. eDocNY was able to migrate the micrographics staff into eDocNY. By the end of 2011, eDocNY employed 75 people.



Innovativeness of product or service provided:

The business model has grown technologically over the years from microfiche through the digital era. We are a flexible, learning environment, adjusting to changing technologies and needs.

We were fortunate to have staff eager for new challenges. Our Manager of Document Services, Natalie Davis, embraced the opportunity to be part of the leadership team in launching the document scanning program. Ms. Davis was critical to eDocNY finding and maintaining a balance between the demands to achieve productivity and profitability with the need to respect and understand individuals' skill levels.

ImageWork Response to RFP 30251 Transparency Website

The key inhibitor for business in managing business records electronically is the labor costs associated with the handling, sorting and managing of capturing digital images from paper. It is with these types of tasks that eDocNY technicians excel.

With the mission that people with disabilities could work inclusively with people without disabilities in a high tech environment without sacrificing quality, eDocNY has constructed a service model that rivals those of competing firms. Key to our service model is eDocNY's investment in technology and training. eDocNY invests heavily in computer technology to simplify the image and data capture processes, control quality, and monitor performance. By simplifying the operation of expensive high volume paper scanners, eDocNY can utilize staff with varying capabilities to perform these roles. Our focus on training has enabled us to hire staff with no experience in this field and train them to be effective participants in the scanning operation.

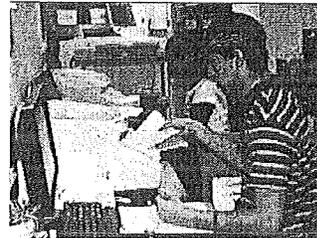
Parents of adult children with developmental disabilities love this program. Their adult children have thrived in this work environment due to the inclusiveness of the work, the variation in positions available, and the opportunity to work at their own speed. There is a high-tech feel to the office. Everyone dresses business casual and on specific days, they all wear logo sweater vests.

eDocNY is a business that will continue to grow, both in the number of people we train and the number of businesses we serve. We offer businesses in our community the following unique services and benefits:

- a focused workforce
- preferred federal and state government contracts
- exciting partnerships with over 250 for profit companies in the area
- existing relationships with local governments throughout the county
- a twenty mile proximity to New York City and its large number of businesses
- tax credits and wage reimbursements for our clients
- knowledge of HIPAA and its use by service companies and health care organizations.

Evidence of contribution and commitment to the community:

eDocNY is a social enterprise. It applies business strategies to achieving goals that benefit the community such as employing adults with developmental disabilities, helping community employers to achieve the benefits of diversifying their office workforce, and providing jobs and skills to workers who have previously been un-employed or under employed. Evidence of our contribution and commitment are seen in the following:



- Creating job opportunities for those un-employed and under employed in the community. To date, we have hired and trained over 100 persons in the basics of document scanning and data entry. 90% of those people came to eDocNY without prior experience.

ImageWork Response to RFP 30251 Transparency Website

- For a person with a disability, there is huge pride in receiving a paycheck and becoming a contributing member of the community.
- Our five Team Leaders/Supervisors have learned their skills on the job. They are now more marketable employees, having obtained the skills to manage people, oversee a document scanning operation, be responsible for staff productivity and support a complex computer system.
- We significantly increase the number and quality of employment opportunities in the information technology industry for people with developmental disabilities. The staff of Arc of Westchester is masterful at creating good job matches, successfully placing consumers in area companies, and selling their capabilities, not their disabilities. Starting with young people as they transition out of high school, Westchester Arc staff members work closely with students, their families and teachers to develop plans that will help these young adults realize satisfying careers and to become contributing members of their communities.
- Customers have enjoyed the “Social Return on Investment” this business provides them. In addition to matching the service level performance of competing firms, eDocNY enables our customers to give back to the community through the creation of employment opportunities for people who are often unemployed or under-employed.
- Our business partners are enthusiastic about the positive effects on the work environment resulting from a diversified workforce.
- We educate business owners and their employees about the environmental benefits of paperless systems and work environments. Helping businesses not only to reduce but to eliminate paperwork is one of the objectives of eDocNY.

Evidence of building a more sustainable business (green initiative):

eDocNY is a locally available and easily accessible document management service company. By being local, we can bring the products and services closer to the need. There is no reason to transport large containers of business records to upstate vendors or vendors in other states or countries.

eDocNY has also grown technologically over the years. By embracing digital imaging, eDocNY has been able to successfully migrate their clients from old photographic micrographics to digital imaging. Digital imaging is environmentally clean. Microfilming required the handling and disposal of toxic chemicals used to develop microfilm rolls. eDocNY accomplished the task of shutting down its micrographics business without disruption to its clients or reputation.

Increased awareness of the importance of conservation is causing business owners to take a second look at practices they can change to improve the environment. eDocNY plays a major role in Westchester, educating business owners and government officials on the benefits of paperless systems and office environments. In addition, eDocNY encourages the shredding of and recycling of paper.

eDocNY, enables businesses not only to convert large amounts of existing paperwork into electronic documents, but also to create systems that reduce and even eliminate the use of paper. The aspect of eDocNY that is growing most rapidly is the creation of tracking systems for the retrieval of digital

ImageWork Response to RFP 30251 Transparency Website

information. These systems enable optical character recognition searches, helping our customers to develop electronic filing systems without ever creating paper documents.

We educate our market on how to create paperless environments in several ways:

- Tours of the offices of our clients and prospects, where we study and recommend improvements in their systems, in order to reduce the amount of paper created.
- Tours by our business prospects to our office site where they can learn about best practices.
- Our annual Employers' Recognition Breakfast, where the services of eDocNY are highlighted to more than 300 business customers of Westchester Arc.
- Mentoring other businesses and agencies throughout our network across the state, such as our recent presentation at the New York Technology Forum
- Participating and presenting at Westchester County Business Council events and mixers

More information about the Arc of Westchester and eDocNY can be found at www.westchesterarc.org.

New Rochelle Mayor Applauds eDocNY



New Rochelle Mayor Noam Bramson congratulates eDocNY on a job well done. "I look forward to working with eDocNY again in the near future," he said.

Employees of eDocNY, Westchester Arc's newest document management service for businesses, recently scanned and digitized thousands of building department records for the town of New Rochelle. The job represented the second phase of a project that began with their converting assessors' records for computer storage. Three employees having developmental disabilities worked at City Hall, where they scanned over 14,000 identification cards, then downloaded the images to an external hard drive for eventual merging with town databases.

Their work was recognized with a special visit from New Rochelle Mayor Noam Bramson. "I can't thank you enough," he said. "This is such important work, and I don't know how we could have gotten it done without you."

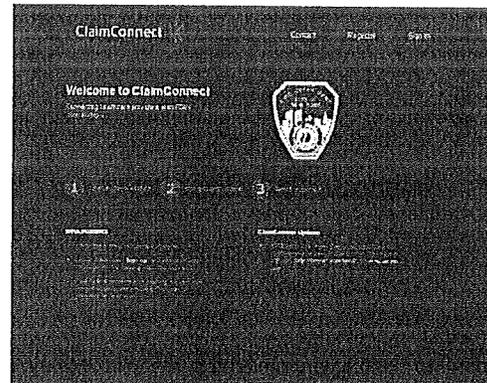
ImageWork Response to RFP 30251 Transparency Website

APPROACH

EXECUTIVE OVERVIEW

In summary ImageWork is proposing to extend our existing cloud-based infrastructure, ImageWorkConnect Framework, to consolidate the electronic document management hosting needs of PANYNJ. ImageWorkConnect is built upon Alfresco ECM Enterprise 4.0 and is used today by the Fire Department of New York City (www.claimconnect.us), NYC Department of Sanitation, and others.

ImageWork's "Connect" framework can be seen in action at www.claimconnect.us. It is used by the Fire Department of New York to facilitate the electronic acceptance of medical claims and reports from authorized medical vendors. It has completely eliminated the need for vendors to send paper claims to the Fire Department for processing. Our "Connect" framework is also being used as the Proof of Concept website for the new consolidated New York State criminal justice initiative under the direction of the New York State Division of Criminal



Justice Services. Additionally, the New York State Insurance Fund has selected our "Connect" framework as the foundation for their new vendor outreach portal. In summary our "Connect" framework (built upon Alfresco) will allow us to easily integrate with www.panynj.gov, accept electronic records, control access levels, and publish redacted data and documents for public access.

Our "Connect" framework leverages state-of-the-art HTML5, Javascript, JSP and Java Web Services technologies. The resulting technology platform is "mobile capable", enabling key functionality to be operational on smartphones and tablets.

ImageWork has been operating on cloud-based and hosted platforms since 2003. We are extremely familiar with high-availability dedicated host setups on Rackspace and have deployed complex elastic load-balanced, content cached solutions on Amazon's EC2 cloud computing platform.

For PANYNJ, we intend to host the public components of the platform on Rackspace's dedicated hosting platform with Oracle Database 11gR2 standard edition as the secure backend. The public infrastructure will have QA and PROD environments, and will be hosted on servers with 32GB RAM and optimized for fast response to content requests.

Only approved documents will reside on the Rackspace infrastructure. In-progress content will remain behind the ImageWork / eDocNY firewall and be inaccessible until it is approved for publishing.

ImageWork Response to RFP 30251 Transparency Website

ImageWork first embraced Alfresco in 2006. Alfresco is the leading open source alternative for enterprise content management (ECM). It couples the innovation of open source with the stability of a true enterprise-class platform. The open source model allows Alfresco and ImageWork to use best-of-breed open source technologies and contributions from the open source community in order to get higher quality software produced at a low cost. We envision PANYNJ will benefit from all the features Alfresco offers above and beyond standard document and records management capabilities.

For scanning services, ImageWork is recommending the Arc of Westchester document management business, eDocNY. This organization oversees a state of the art conversion center using adults with developmental disabilities as their primary workforce. Since they are a non-for-profit and a member of the New York State Industries for the Disabled, government agencies can procure their services without going out to competitive bid. Prices for eDocNY services are often subject to NYS Office of General Services review to make sure it's prices are within 15% of market value.

In addition to scanning services, eDocNY is prepared to provide record box storage services, secured paper shredding, advance data entry or indexing, and redaction services if specific parts of a document image should be redacted prior to publishing on the public website.

DOCUMENT AND RECORD MANAGEMENT

For the document, web content and record management core functionality, we built our ImageWorkConnect framework on top of Alfresco's Enterprise Content Management suite. Since 2007, Alfresco has rapidly grown to become the most valuable privately owned open source company in the world. ImageWork has leveraged the platform since version 0.3 in government and private sector solutions with great success. Alfresco's open architecture, excellent scaling characteristics, cost efficiency, standards compliant integration (CMIS, XML, JSON, BPMN), and product support make it an ideal fit for the government projects .

Alfresco was founded in 2005 by John Newton, co-founder of Documentum; and John Powell, former COO of Business Objects. Its investors include leading investment firms Accel Partners, Mayfield Fund, and SAP Ventures.

Alfresco is the leading open source alternative for enterprise content management (ECM). It couples the innovation of open source with the stability of a true enterprise-class platform. The open source model allows Alfresco to use best-of-breed open source technologies and contributions from the open source community in order to get higher quality software produced at a low cost.

Alfresco's goal is not only to provide an open source offering, but also to surpass commercial ECM offerings in terms of features, functionality, and benefits to the user community. The track record of the Alfresco team has enabled Alfresco to rapidly become the leading open source enterprise content management system. This has allowed it to communicate with governments and corporations at a high level to shape open source strategies. Alfresco continues to drive industry innovation with the following milestones:

ImageWork Response to RFP 30251 Transparency Website

- Surpassed the 2 million software downloads mark
- Released the first Content Management Interoperability Services (CMIS) implementation
- Contributed Spring Surf, the largest Spring Extension to date, to the Spring community
- Released the first open source Records Management software to gain DoD 5015.02 certification
- Was the first to implement the SharePoint Protocol
- Recognized by the World Economic Forum as a Technology Pioneer

The Alfresco content platform uses flexible, open standards architecture to provide document management, web content management, records management, and collaboration software to 1,100 enterprise customers in 40 countries. Integrations exist for SAP, IBM Lotus, Microsoft Office, SharePoint, and Google Docs. Alfresco is built using the latest open source infrastructure components, including Spring, Hibernate, Lucene, and MyFaces, and is based on Aspect Oriented Programming.

Alfresco's low cost subscription model helps organizations make significant cost savings on recurring maintenance fees a reality, while enabling them to maintain 'business as usual' with their content services. Alfresco does not charge traditional license fees, and this scalable model allows companies of any size to deploy the solution. Like many open source vendors, Alfresco offers customers a support subscription, which provides users access to:

- Technical support services
- Maintenance fixes, patches, and updates
- Engineering support / Escalations
- Alfresco Network – End user support portal
- Certified stress-tested builds
- Access to the Alfresco Enterprise Edition software

Alfresco is the ECM platform of choice for companies looking for a solution that is easy to deploy, simple to use, and cost effective to maintain.

Capture Process

Prior to our pick up of client records, a thorough conversion plan must be established and jointly agreed upon before we begin the conversion. This plan must address;

- How records are identified, sorted, packed and boxes labeled for conversion
- Pickup and delivery schedules
- How exceptions will be handled and reported back to PANYNJ
- Standards for classifying and indexing records
- Standards for image quality
- Procedures to request and return originals in the event of an unanticipated need for a record
- Procedures for the acceptance of digital images

ImageWork Response to RFP 30251 Transparency Website

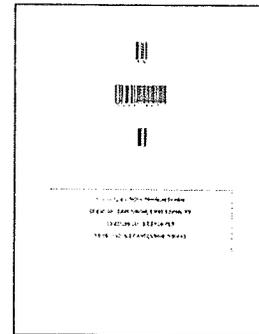
- Procedures for the packaging and return of original records

While setting up the conversion operation for PANYNJ records, our programming team will be modifying our software to reflect the conversion requirements of this project.

Creation of Barcode Separator Sheets

Due to the size and scope of this conversion project, eDocNY intends to utilize barcoded separator sheets and labels as the preferred method to identify paper ready for scanning and automatically index the resultant electronic file. These sheets will be created by eDocNY staff, applied during the document prepping process, and scanned with the originals.

eDocNY utilizes a proprietary bar code generation program to create barcode separator sheets. Prior to the commencement of the conversion eDocNY programmers will load PANYNJ requirements for scanning and indexing and modify our production manager's user interface to request the creation of separator sheets on-demand. Barcoded separator sheets have both description areas and barcodes used to index the paper. At a minimum we anticipate the separator sheet to identify the type of record (contracts, leases, Freedom of Information requests, Board meeting presentations, and labor agreements).

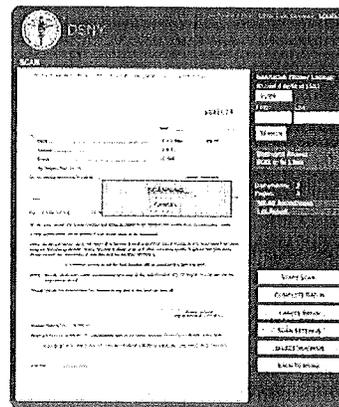


Document Prep

Once records have been selected for processing, the eDocNY production manager will deliver a box of original records and their associated stack of barcode separator sheets to our document prep team. Working in an inclusionary/sheltered environment, our document prep specialists will begin removing documents from folders/binding, remove staples/paperclips, tape torn paper, flatten folded paper, and insert the separator sheets where appropriate. They will do this for an entire box, putting the prepped batches of paper back into the original box. For every new job or team member, a WestchesterArc job coach will work with the developmentally disabled staff member to learn document preparation tasks. Our team members are familiar working with and identifying a wide variety of record types.

Document Scanning

Our key objective from proper planning through document prepping is digitizing paper records as quickly and efficiently as possible. With properly prepped paper, eDocNY will be able batch scan PANYNJ records utilizing our high volume high speed Canon DR-X10C scanners. The batched and barcoded records will be placed into the feeder and scanning will commence. Our ImageWork conversion software will automatically build a "record tree" based on the barcode values



ImageWork Response to RFP 30251 Transparency Website

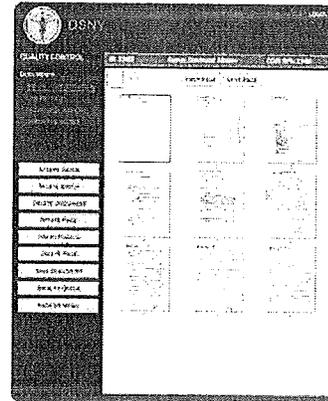
and list page counts next to each thumbnail image. Where appropriate, our software will leverage barcode, Optical Character Recognition (OCR), Zonal OCR and Intelligent Character Recognition (ICR) technologies to classify information without human intervention. In the event the scan operator encounters a paper-jam, the software will not require a restart of the batch, they can simply resume from where they left off.

Quality Control

When scanning is complete, the quality control software will automatically present thumbnail sized images to QC staff for their review and approval. QC operators scroll the thumbnail images looking for obvious scanning and or barcode recognition errors. If an error or poor quality image is detected, the QC operators can reject the batch or the document, make immediate corrections, or send the papers back for re-scanning.

QC operators and Scan operators have the ability to manage batches in a variety of ways – with the ability to scan, pause, resume, replace page/batch, inset page/batch, delete page/batch depending on the use-cases they encounter. Once an operator completes scanning and quality assurance of a batch, it is uploaded to the server for Indexing, Validation and final approval to the repository.

Once the Quality Control operator or production supervisor approves the batch of documents, the batch is transferred to the server for additional indexing when required.



Indexing and Validation

Built within our conversion operation will be an indexing method to electronically classify documents at a more detailed level if needed.

The indexing and validation module is 100% web-based, giving our staff tremendous operational flexibility. Depending on the requirements, scanned records can be placed in one or more queues for indexing. At the indexing stage, the user is expected to Key from Form (KFF) any required metadata for that particular document type. The user is also required to review any master indexing information that must be captured for this document type.

The role of the Validator is equally as important as the Indexer because they represent the final ratification of the digital record prior to publishing of the content into the PANYNJ Transparency Website. The validator will be presented with a grid of items that have been Scanned, QCed and Indexed. The validator will select an item and review all manually entered information in addition to any automatically indexed information through barcodes, OCR or ICR. The validator has the ability to correct any of this metadata. Once they have completed this process, the document is approved for transmission to the Transparency Website.

Retrieval of Client Records

ImageWork Response to RFP 30251 Transparency Website

As explained earlier, eDocNY understands that clients must have access to their records at all times during the conversion. eDocNY supervisors maintain detailed production logs that track the location and status of all records in our control. We accept requests for records at the box or folder level. Clients can reach us during our hours of operations by phone call, email, text messages, or instant message. Upon client request eDocNY supervisors will pull the folder, scan the materials requested, and attach the PDF document to an email within one hour. Additionally, the eDocNY supervisor will arrange with our transportation staff to return original source documents to PANYNJ within 24 hours.

Technical Support

Technical support for eDocNY's conversion environments are supplied exclusively through ImageWork. ImageWork provides all the business analysts, programming, and network support services needed to keep operations running smoothly. eDocNY staff have direct connection to the ImageWork technical support team through a Chat Network. All scan and quality control workstations are equipped with advance communications software so that operators can contact ImageWork's support team with questions in real time. Through these chat sessions, ImageWork programmers can provide instant feedback about problems / concerns, error messages, and discuss remedies to exceptions found during scanning or quality control. Additionally, ImageWork support team can take over workstations to troubleshoot and upgrade software remotely.

ImageWork Response to RFP 30251 Transparency Website

CONFIDENTIAL

SUMMARY OF DOCUMENT CONVERSION SERVICES COSTS

CONFIDENTIAL

<i>Service</i>	<i>Cost</i>
One Time Charge to Setup PANYNJConnect Website	\$35,000.00
One Time Charge to Customize Capture Software to PANYNJ requirements	\$15,000.00
Host of Transparency Website <ul style="list-style-type: none"> • 24 Hour Monitoring • Standard 8 am to 6 pm Support • Site Maintenance • Up to 500,000,000 images 	\$5,500 per Month
Basic Scanning Service <ul style="list-style-type: none"> • Pick up of Boxes • Creation of Bar Code Separator Sheets with 1 Index Value • Prepping of Documents for Scanning • Insert of Separator Sheet • Simplex Scanning of Paper to 300DPI Max. • Quality Control of digital images • Creation of image files at TIF or PDF • Formatting of Image Files as IndexValue.TIF or IndexValue.PDF • Transmission of image files to Transparency Website • Return delivery of box • List of exceptions uncovered during the conversion process. 	\$0.085 per Image
Basic PLUS <ul style="list-style-type: none"> • Same as Basic Scanning Service • Duplex Scanning and Automatic Deletion of Most Blank Pages • No Charge for Automatic Deletion 	\$0.09 per Image
Color Scanning Service	Add \$.015 per Image
Enhanced Quality Control <ul style="list-style-type: none"> • 100% Review of Every Page Image • 100% Removal of Blank Pages • Orientation of Page Images 	Add \$.045 per Image
Full Text Layer OCR for PDF	Add \$.015 per Image
Manual Data Entry of One Indexing Field	Add \$.015 per Image
Data Entry Services	\$0.005 per keystroke
Wide Format Scanning	\$3.00 per Drawing
Record Box Storage	\$0.50 per Box per Month
Shredding of Paper Records	\$6.00 per Box

THE PORT AUTHORITY OF NY & NJ

PROCUREMENT DEPARTMENT
2 MONTGOMERY STREET, 3RD FLOOR
JERSEY CITY, NJ 07302

REQUEST FOR INFORMATION

TITLE: TRANSPARENCY WEBSITE

NUMBER: 30251

SEND RESPONSES TO: REFER TO THE RFI FOR SUBMISSION INSTRUCTIONS

RESPONSE DUE DATE:

September 5, 2012

TIME: 2:00 PM

BUYER NAME:

JAMES SUMMERVILLE
PHONE#: (201) 395-3454
FAX#: (201) 395-3925
EMAIL: jsummerville@panynj.gov

1. OVERVIEW

The Port Authority of New York and New Jersey (the "Port Authority" or the "Authority") intends to make available a variety of documents – including contracts, leases, Freedom of Information ("FOI") requests, Board meeting presentations, and labor agreements – to the public via the internet as part of its transparency initiative. The available documents will vary in size. For example, contracts could range from 25 to 500 pages or responses to FOI requests could range from 2 to 300 pages in length. The universe of documents available as a result of this transparency initiative will grow on an ongoing basis as the Port Authority continues to conduct its business.

The Port Authority seeks to retain a firm to perform the storage, management, maintenance and publication of this collection of documents on a Transparency Website provided and hosted by the firm. Because the Port Authority does not currently know the precise number or volume of documents available for publication, it intends to initiate a one-year task order-oriented pilot project so that during this time it can determine such volume and gauge public usage of the dedicated website.

The pilot project will require that the firm retained by the Authority provide the following services, either by itself or in conjunction with a subcontractor:

- Retrieve, scan and return documents to the Authority; and
- Using a document management system, post the documents to a hosted, public-facing website (provided by the firm) with search capabilities.

The Port Authority expects that the firm will have in place a document management system to store, manage and maintain a library of documentation for publication to a public website that will be hosted and maintained by the firm. The Authority expects that the firm will ensure that the information on the website is indexed and searchable in such a way that potential users are able to easily access a particular document based on simple and transparent search criteria.

Under this Request for Information ("RFI"), the Port Authority is seeking to identify firms interested in providing the aforementioned services. The Authority may use the information submitted in response to this RFI to identify firms and solutions that satisfy the requirements stated herein and, thereafter, issue a solicitation to obtain the services of a firm to provide the aforementioned services for the pilot project.

2. REQUIREMENTS

I. FUNCTIONALITY

The document management system (the "System") utilized by the firm selected in response to the solicitation referenced in Section 1, above, which shall be used to post documents to a public-facing website hosted and maintained by such firm, should have the following functionality:

A. Document Storage

Documents should be stored and managed in such a way so that a document type can be easily identified according to the appropriate document category (e.g. "lease", "contract", "Board Presentation", etc.), Authority facility (when appropriate), and document date.

B. Document Management

In reference to the documents referenced above, the System should include the ability to manage the many, varying types of documents that will be stored and retrieved. The types of documents include, but are not limited to, pdf files, drawings, spreadsheets/Excel documents, videos, and the import of documents from other data sources such as Peoplesoft and/or SAP. It is anticipated that documents to be published/managed on this site would be for a three- to five-year rolling period, with some information archived indefinitely.

C. Website:

The System should provide a public facing, read-only web site that will publish the documents identified by the Authority for viewing by the public and be accessible via a link directly from the Authority's website (www.PANYNJ.gov); the link should provide a virtually unnoticeable transition to the end user, while including the appropriate disclaimers. The website should be easy to navigate and should provide full search capability across all document types (where possible), along with printer friendly options, and other user friendly, ease-of-use options to be determined. There should be no ability for the end user to alter or manipulate documents.

D. Additional Optional Features:

Management of the documents should also provide for the ability to replace expired contracts/agreements with successor contracts/agreements.

II. SCANNING SERVICES

The selected firm shall (by itself or via a subcontractor) retrieve, scan (for posting to the website), and return the documents to the Port Authority. For the pilot project, the majority of documents will be picked up from and returned to 225 Park Avenue South, New York, NY 10003.

III. INFORMATION TECHNOLOGY ENVIRONMENT:

- A. IT Control Checklist : The respondent firms should indicate whether their Systems conform to the requirements in Attachment B (IT Control Requirements).
- B. IT Standards: The respondent firms should indicate whether their Systems conform to the “Standards and Guidelines for Port Authority Technology”, attached hereto as Attachment C.
- C. Hosting and Security Standards: The respondent firms shall describe a System and security architecture for their remotely hosted system and shall document their security standards.

IV. SYSTEM IMPLEMENTATION

The respondent firms shall briefly address the following expectations for the implementation of the System with the public website component, addressing their capabilities to perform the tasks described below.

- A. Business analysis: The selected firm will develop and maintain a requirements tracking matrix and gap analysis.
- B. Software configuration: While the Port Authority expects to select a firm with a commercially off-the-shelf (hereinafter “COTS”) System, it also expects the selected firm to configure the System for optimized use with the particular qualities of the Port Authority.
- C. System Installation: The selected firm will install the System on its hosted server.
- D. Data Conversion: As applicable, the selected firm will transfer any existing electronic data (e.g., pdf documents) from the current Port Authority environment into its System.
- E. Data Integrity: For ongoing operation of the System, the selected firm will provide oversight, procedures, and protocols to ensure that the integrity and timeliness of the data are accurately maintained.
- F. System Test: The selected firm will develop and implement a formal System test plan for the System. The System should also pass a validation test performed by Port Authority staff.
- G. System Implementation: The selected firm will coordinate all activities for the System launch.
- H. System Final Approval and Sign Off: The System will be in production for a total of 30 business days without significant problems, errors and/or system interruptions before the Authority will sign off on final approval.

- I. Ongoing Support, Maintenance, and Trouble-Shooting: From the date of final approval of the System, the selected firm will provide ongoing support, maintenance, and trouble-shooting for the software, application and System for the duration of the pilot project.

In addition, the respondent firms shall submit to the Port Authority a high-level System Implementation Plan, illustrating the tasks and schedule (in number of weeks) anticipated to implement the System.

V. PRICING

Responses shall:

- a) Identify Authority-provided information necessary for the respondent firms to provide pricing for (a) the provision of a System with a public-facing web site component; (b) retrieving, scanning, posting, and returning documents to the Authority.
- b) Include tiered list pricing for the use of a document management system with a public website component (e.g., tiered by volume of documents and public usage/number of concurrent users);
- c) Include tiered list pricing for retrieving, scanning, posting, and returning documents to the Authority (e.g., tiered by volume of documents) at the address noted in Section II, above.

VI. PROJECT MANAGEMENT AND SERVICE LEVELS

The respondent firms shall describe their ability to manage the delivery of services described herein. Furthermore, the respondent firms shall identify typical service levels used for scanning and posting (within certain timeframes from document pick-up) and managing documents on a hosted public-facing website.

3. SUBMISSION OF INFORMATION

Each respondent firm shall email a pdf copy of its response to the buyer listed on the cover page of this RFI no later than the time and date listed on the cover page.

The response must follow the format and order of items, using the same paragraph identifiers, as set forth below:

- I. Letter of Transmittal
 - II. Statement of Qualification
 - III. Approach
-
- I. Letter of Transmittal

Each response shall contain a Letter of Transmittal, identifying the Respondent.

The Letter of Transmittal shall contain:

- a) Name, address, URL and Federal Employer Identification Number of the Respondent executed by an authorized representative on behalf of the Respondent;
- b) Contact information (name, title, email, telephone and fax numbers) of the individual who shall act as the Respondent's contact with the Authority for further information requests and future solicitations. In addition, at any time after the opening of the RFI submittals, the Authority may request additional information relating to the prospective firm's or participant's qualifications and will use this individual as the point of contact for these queries.

II. Statement of Qualification

The respondent firm's statement of qualification is an opportunity for the Respondent to describe the distinctive characteristics of its System that would satisfy the requirements stated herein, and the firm's experience and industry expertise in providing such system.

A statement of the firm's capability and prior experience, with projects of similar magnitude and complexity, to perform the required services must be included.

The respondent firm shall provide a brief description of the company, its lines of business, organization, mission and objectives, the location and size of the local office that would support a future contract.

Such Statement shall include:

- a. Name and address of the response's preparer and the Respondent's joint venture participants, if any, and a company organization chart.
- b. A statement on how many years the Respondent has been in business under its present business name, and a list of previous business names used, if any.
- c. Information on whether the Respondent or any officer or partner thereof failed to complete a contract.
- d. Information on whether the Respondent has contractually provided or is contractually providing such system and services to other governmental entities. Indicate the name of the corporate or governmental entity, the contract number(s), and the applicable brand and numbers authorized under the award(s). Include the term of the contract and the date of the award.

III. Approach

Executive Overview:

Each respondent firm shall provide a narrative Executive Overview (“Overview”) of the overall approach that it would use to satisfy Authority requirements. The Overview shall specify the respondent firm’s solution to fulfilling the requirements stated herein. The Overview shall set forth main objectives, identify key success factors, performance measures, anticipated problem areas, if any, and how the respondent firm would address them.

Special attention should be paid to explaining:

- Relevant organizational background/history and pertinent work experience;
- What makes the Respondent and its solution, industry expertise and experience unique in the way it will approach this project.

Solution Description:

The Solution Description shall:

- Describe how the Respondent’s system satisfies the requirements specified herein.
- Provide information about the Respondent’s existing client base. Following the format of the table provided below, the Respondent shall describe **active (i.e. not expired)** contracts under which it provides a **COTS**, browser-based system with a public-facing web site component. The table shall include **all** active contracts with clients in the public sector.

Client name	Public Sector? Yes or no	Term of Contract	COTS without customization?	COTS with customization?	Contact Information (name, phone #, email address)
-------------	-----------------------------	------------------	-----------------------------	--------------------------	---

Note that the Port Authority presently anticipates awarding a contract to a firm that has proven experience in contractually providing similar System and related services to other governmental entities. It is expected that the contract between the Authority and the selected firm shall incorporate, at the very least, pricing provided in the agreement between the selected firm and the other governmental entity. While such pricing shall not exceed the prices offered under any firm’s government agreements, the Authority encourages the firms to provide additional discounts to the Authority.

4. COMPANY INFORMATION

Respondents are also encouraged to provide additional information beyond those requested above that may be beneficial to the Authority's effort to select a Transparency Website. Responses may include brochures, pamphlets or any pertinent literature that provide information on the Respondent's company profile as well as on the Respondent's proposed solution.

5. LIMITATION ON PAGES IN RESPONSE

Including all information requested herein, responses shall be no more than twenty (20) letter-size pages.

6. QUESTIONS

Any questions by prospective respondents concerning this request shall be addressed to the Contracts Specialist list on the cover page, no later than the time and date listed on the cover page.

7. CONFERENCE

At any time after the receipt of responses, the Respondent may be asked to attend an informal discussion conference with staff of the Authority for further clarification of the response and/or for additional information. To facilitate the free flow and exchange of ideas and information, the Authority intends to meet with Respondents separately. The Authority will communicate the date, time and place of any conference in due course.

8. GENERAL

- A. Respondents should note that this RFI might be a preliminary step towards the selection of a System. The Authority reserves the unqualified right to request further information from any Respondent, to conduct interviews, issue a solicitation for a bid or proposal, and seek product demonstrations or to perform none of the above.
- B. Neither the expression of your organization's interest, nor the submission of your organization's qualifications and any documents or other information, nor the acceptance thereof by the Port Authority, nor any correspondence, discussions, meetings or other communications between your organization and the Port Authority, nor a determination by the Port Authority that your organization is qualified hereunder shall impose any obligation on the Port Authority. Unless and until the Port Authority finally awards a contract covering the proposed services to your organization, the Port Authority shall have no obligation to Respondents. Costs of participation or information preparation are not compensable.

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 Freedom of Information Code and Procedure (FOI Code) adopted by the Port Authority's Board of Commissioners on March 29, 2012, which may be found on the Port Authority website at: <http://www.panynj.gov/corporate-information/pdf/foi-code.pdf>, not to disclose to any competitor of the undersigned, information submitted which are trade secrets which, if disclosed, would cause injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, as more fully set forth in the FOI Code, 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: IT CONTROL REQUIREMENTS

1. Application Controls Checklist.....page 10;
2. Control Security Requirements.....page 13;
3. Disaster Recovery Plan Checklist.....page 17;
4. Payment Card Industry (PCI) Data Security Standard...page 20;
5. Security Administration Function.....page 21;
6. Security Requirement.....page 23;
7. Systems Administration and Operation Manual
Requirements.....page 25;
8. Web Based Application Checklist.....page 29.

APPLICATIONS CONTROL CHECKLIST

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 (SLA) should be in place. The SLA should have provisions for uptime, performance monitoring, updates, etc.
- The application should have the Port Authority's (PA) 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.

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 the 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.

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.

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
 - Session time-out after 15 minutes of inactivity
 - 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 user!D.
- Should have a segregation of duties/roles.
 - Roles are setup with least access required to perform job responsibilities.

Application Controls

Data Validation & Input Controls

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

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 numbers and social security numbers should be encrypted.

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.

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.

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.

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.

Management Reporting

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

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.

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”.

CONTROL SECURITY REQUIREMENTS

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.
- 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.

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.

Backup

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

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 profiles 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).

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.

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.

CREDIT CARD PROCESSING CHECKLIST

1. PCI Standards should be enabled and be PCI compliant to PCI Data Security Standard v1-2 (PCI Security Standards Council, version 2.0, 10/28/10) . Ensure all vendors and consultants are required to be PCI compliant.
2. A segregated network and/or an approved Point of Sale terminal should be in place for the system or terminal used to process credit card transactions.
3. The credit card processor standard and requirements should be enabled. i.e. Maintain transaction data for two years.
4. Maintain the security of the customer information, including not storing credit card numbers, the cardholder CVC/CVV numbers or any of the data from the magnetic strip on the credit card.
5. Maintain the transaction data for contesting chargebacks, ensure that the processor fees are appropriate and do reconciliations of the transactions processed and the money deposited in the Port Authority bank accounts.
6. Make Treasury (Cash Mgmt) and Comptroller's (Revenue Accounting) aware of credit card processing. Have Comptroller's fill out the Merchant form to get a Merchant ID for MasterCard/Visa, Discover and American Express.
7. Have Procurement enter into an agreement for credit card processing.
8. Create a privacy policy and procedure for staff and consultants.
9. Perform quarterly vulnerability scans of the network that contains the credit card processing, annual PCI reviews according to the PCI DSS, and annual system penetration testing.

DISASTER RECOVERY PLAN CHECKLIST

Disaster recovery is a plan that 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 adhered 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.

Payment Card Industry (PCI), Data Security Standard

See Requirements and Security Assessment Procedures, Version 2.0 (PCI Security Standards Council
October 28, 2010)

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 Standards and Guidelines for Port Authority Technology.
- ◆ Restricting remote access and monitoring and reviewing the activity log. (Limit or no use of modems. Modems should be configured according to the Standards 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 Standards and Guidelines for Port Authority Technology.
- ◆ 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 Standards 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.

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

Systems Administration & Operation Manual Requirements

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

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

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

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)

Remote Access

- 14) Strategy/Approach
- 15) Approvals

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

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

Anti-Virus Management

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

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).

Patch Management

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

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

Problem & Incident Management

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

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.

WEB BASED APPLICATION CHECKLIST

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)

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 considered 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.

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 C: STANDARD AND GUIDELINES FOR PORT AUTHORITY TECHNOLOGY

See following pages



THE PORT AUTHORITY OF NY & NJ

Standards & Guidelines

for Port Authority Technology

(for distribution in RFP's)

Technology Services Department

Version 7.2
March 25, 2010

Introduction	5
1.0 The Port Authority Wide Area Network (PAWANET)	5
1.1 PAWANET Overview	5
1.2 PAWANET Circuit Diagram (Note: IGXs are no longer in the network)	6
1.3 Inter-site Services Providers	7
1.4 PAWANET Functions	7
1.5 Features of PAWANET	7
1.6 Supported Protocols	7
1.7 PAWANET Switches and Routers	8
1.8 Approved Servers	8
1.9 Enterprise Addressing Scheme (including IP addressing)	8
1.10 Enterprise Network Monitoring Software	8
2.0 Network Resources	9
2.1 Network Overview	9
2.2 Enterprise Network Architecture	9
2.2.1 Operating System and Software	10
2.2.2 Configuration	10
2.2.3 Network Resources Security	12
2.2.4 Network Access and User Account Security	13
2.2.5 Remote Access System	15
2.2.6 Network Resources Hardware Standards	16
2.3 Network Naming Conventions	16
2.3.1 Server Names	16
2.4 Directory Services and Structure	16
2.5 System Backup and Recovery	16
2.5.1 Backup Logs	17
2.5.2 Backup Scheduling	17
2.6 Business Resumption Plan	17
2.7 Telecommunications Standards for Enterprise Network Resources	18
2.7.1 Closet and Telecommunications Room Access	18
2.7.2 Telecommunications Installation Contractor's Responsibilities	18
2.7.3 Electrical Requirements	19
2.7.4 Telephone Company Interface	20
2.8 Documentation	20
3.0 Virus Scanning & Management	21
3.1 Overview	21
3.2 Standards	21
3.3 Acquisition and Installation	21
4.0 Electronic Mail	22
4.1 E-Mail Overview	22
4.2 E-Mail System Architecture	22
4.3 E-Mail Environment: Design Considerations and Infrastructure	22

4.4	Integrating Applications Server with Port Authority Email System	23
4.4.1	Requesting SMTP Services	23
4.4.2	Email Restrictions	23
6.0	Workstation and Workstation Operating System	24
6.1	Overview	24
6.2	Workstation Operating System Standard	24
6.3	Workstation Configuration	24
6.3.1	Workstation Naming Conventions	24
6.3.2	Workstation User Accounts	24
6.3.3	Remote Workstation Management	24
6.3.4	Drive Mappings	24
6.3.5	Standard Workstation Hardware Configurations	25
6.4	Physical Security	25
6.5	Logical Security	25
6.6	Printers	26
7.0	Distributed Systems Environment	26
7.1	Overview	26
7.2	Microsoft Windows Servers	26
7.2.1	Virtual Environment	26
7.2.2	Windows Data Encryption	26
7.3	Unix	27
7.3.1	Unix Security	27
7.3.2	Backup	27
7.4	Databases	27
7.5	Application Security	27
7.6	Server Physical Security	27
7.7	Load Balancing – Failover Architecture	28
8.0	Vendor Provided Dedicated Systems	28
Overview		28
Appendices		29
Appendix 1	-- Business Resumption Plan Document Format	29
Appendix 2	-- Communication Rooms/Closets Standards	31
Appendix 3	-- Cabling	32
Appendix 4	-- Port Authority Unified Wiring Plan	32
Appendix 5	-- Telephone Closet / IDF Termination Blocks	34
Appendix 6	-- Workstation Jacks	34
Appendix 7	-- Standard Switches Inside the Department	34
Appendix 8	-- Desktop and Lateral Cable Identification Management	34
Appendix 9	-- PA Telephone Network 5/08	36
Appendix 10	-- Fiber Optic Specification for Network Services - PAWANET	37
Appendix 11	-- Public Telephone Ordering Guidelines	38
Appendix 12	-- Standard Printers	39
Appendix 13	-- Load Balancing/Failover Diagram	40

Introduction

The purpose of this document is to communicate the standards established by the Technology Services Department (TSD) and provide guidance in proposing IT solutions for the Port Authority of New York & New Jersey (PANYNJ), the Agency.

To that end, these guidelines are intended to help RFP Submitters do the following:

- Implement computing and networking solutions that ensure the utmost reliability, availability and security.
- Procure hardware and software that advances current and mandated business needs and enables departments to work with other departments/offices more effectively.
- Easily and efficiently communicate and exchange information throughout the agency.
- Achieve greater systems integration through leveraging and building upon standardized infrastructure and facilitating systems management.
- Adherence to these standards ensures that IT investments achieve Enterprise connectivity, interoperability, consistency, and will enhance performance in a cost-effective way.

1.0 The Port Authority Wide Area Network (PAWANET)

1.1 PAWANET Overview

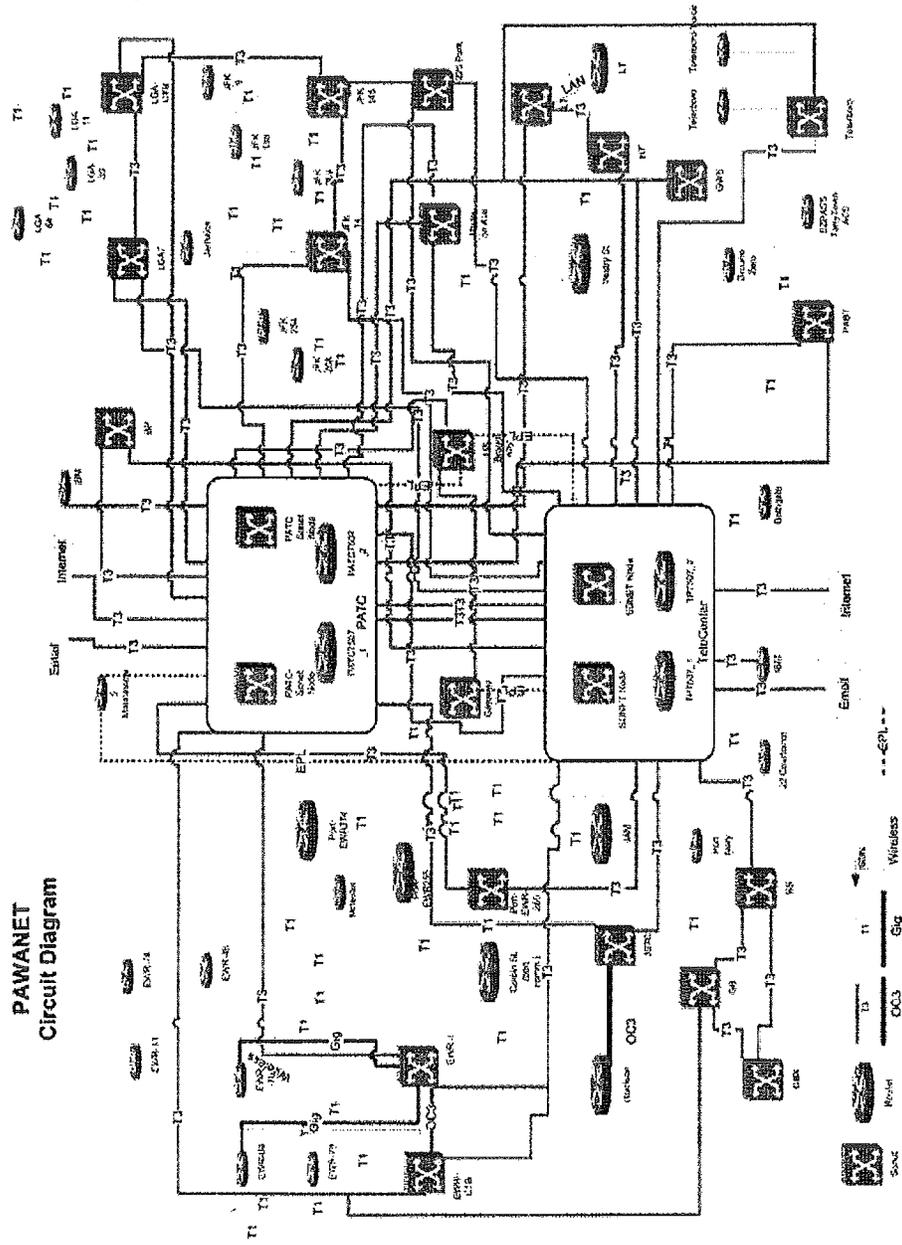
The Port Authority has a modern distributed computing network, called the Port Authority Wide Area Network (PAWANET), which is managed as an Enterprise resource. It connects all the various Port Authority facilities and transportation systems using high-speed voice, data, and video lines or links.

This network is crucial to all Port Authority businesses because it provides the connections for applications such as e-Mail, Internet and Intranet access, SAP, PeopleSoft, Electronic Toll Collection, CADD, Lease Image, Closed Circuit Television (CCTV) surveillance systems, and in the future, videoconferencing, and more.

PAWANET consist of a Managed Fiber Optic SONET network, provided by Verizon Select Services. This network consists of two dual OC48 SONET Rings that connects key Port Authority facilities, and intersects the Port Authority's two Data Centers. High-speed DS1, DS3, and Resilience Packet Ring (RPR) links are allocated on this network to form PAWANET's Wide Area Network (WAN) topology. Additional high-speed Ethernet Private Lines (EPL) has been deployed to support Key Port Authority's off-ring facilities. Remote nodes are linked using high-speed dedicated communication lines. Alternate high speed dedicated communications lines and high-speed dial up communication links (ISDN Lines), provide back up paths should the primary links fail.

The network consists of state-of-the-art Cisco Systems equipment and services, such as, high performance Cisco Catalyst switches and routers. The Port Authority use Cisco Systems SMARTnet hardware/software maintenance services, and Cisco's Technical Assistance Center (TAC) to support and maintain the network.

1.2 PAWANET Circuit Diagram (Note: IGXs are no longer in the network)



Remote nodes are linked using high-speed dedicated communication lines. Alternate high speed dedicated communications lines and high-speed dial up communication links (ISDN Lines), provide back up paths should the primary links fail.

1.3 Inter-site Services Providers

The Technology Services Department (TSD) has contracted with a variety of companies to provide inter-site services. Companies providing communications services for the Wide Area Network are listed below.

- AT&T Local Services
- Verizon

1.4 PAWANET Functions

Currently PAWANET provides the following functions:

Data	Supports the low and high volume transfer of data used for applications, such as SAP and PeopleSoft, and for network communications, such as e-Mail. Provides a data path for off-site, data backup of file, print and application servers. Enables the use of Storage Attached Network (SAN) for network storage of user files and routing jobs to shared network printers.
CCTV	The transfer of Closed Circuit TV (CCTV) data is supported across the entire network to provide security for the Port Authority's key facilities.
Voice	The network provides the hardware capabilities for voice transmission for future implementation.
Videoconferencing	The network switches and transmission lines are capable of handling videoconferencing to support the agency's future needs.

1.5 Features of PAWANET

PAWANET provides a high performance and reliable fail-safe communications network. These are its key features:

- Alternate paths of communication
- Support of high volume traffic such as CADD, CCTV and others
- Catalyst 3000, 4000 and 6500 switches at all the major sites, and at the Teleport.
- Cisco high performance 2000, 7200 and 7507 router family products with redundant power supplies.

1.6 Supported Protocols

The network supports the following network protocols, allowing dissimilar platforms to communicate within PAWANET:

TCP/IP:	TCP/IP is the universal protocol that allows communications between all systems within the Port Authority's network, as well as other networks.
IPX/SPX:	This protocol allows communications between all Novell platforms.

SNA/SDLC: This protocol allows communications between all IBM systems and other systems that support SNA.

1.7 PAWANET Switches and Routers

The current standard switches and routers used on PAWANET are:

- Dual SONET OC48 Rings that connects key Port Authority facilities and data centers.
- Cisco 7200 high performance routers
Provide high-speed connectivity and routing capabilities across the ATM network in support of TCP/IP, IPX/SPX and bridging functions and provides routing capabilities for Port Authority Internet access.
- Cisco 7500 series high-capacity redundant routers
Serve as the -network backbone core router that provides high speed routing functions between the, Teleport, Port Authority Technical Center and all PAWANET connected facilities as well as the IBM mainframe. Also provide high-speed connection and routing capabilities to the disaster site for data recovery in the event of a catastrophe.
- Cisco 2000 series medium capacity routers
Provide high-speed connectivity and routing capabilities to the Port Authority's remote locations.

1.8 Approved Servers

IBM File/ Print/Application and NEC Express 5800 series servers may be connected to PAWANET. The use of VMware's ESXi virtual infrastructure is also an approved configuration, Specialized servers (e.g., appliances) to support a specific line department application will be reviewed on a 'case-by-case' basis.

Replacement server must conform to the category listed above. Deviation from this policy will not be allowed without prior approval of the Chief Technology Officer or her/his designee.

1.9 Enterprise Addressing Scheme (including IP addressing)

The Port Authority's Enterprise network is a TCP/IP Class B network allowing for a maximum of 255 subnet assignments. Subnets are assigned on a geographical basis according to the number of resources required. Workstations are configured for dynamic assignment of IP addresses via Dynamic Host Configuration Protocol (DHCP).

1.10 Enterprise Network Monitoring Software

The Port Authority continually monitors its WAN and the availability of its links. To provide for real time monitoring, the following software utilities are used:

- HP Open View Network Management software
- Cisco Works for Switched Internetworks

2.0 Network Resources

2.1 Network Overview

The Port Authority has a modern distributed computing network, which is managed as an Enterprise resource. The network connects all individual PCs, servers, printers, and other devices in a unified computing infrastructure that makes it possible for the Port Authority to conduct its business.

The Enterprise Network consists of the PAWANET (see Section 1.1) and connected Local Area Networks (LAN's). The line of demarcation between the cable and wiring which is the responsibility of the carrier and the Port Authority's area of responsibility is usually a wiring closet. The Port Authority's Enterprise Network consists of the following components on the Port Authority side of demarcation:

- Enterprise Devices
 - Cabling
 - Routers
 - Switches
 - Wiring Closets
 - Communications Equipment Racks
 - Server Racks
 - File and Print Servers
 - Application Servers
 - Storage Area Networks (SAN)
 - Network Printers
- LAN Devices
 - Desktop PCs
 - Workstations
 - Laptops
 - Local Printers
 - Scanners
 - Copiers
 - PC Peripherals

2.2 Enterprise Network Architecture

The Port Authority operates an extensive network of Enterprise file, print and application servers. These devices are linked to an Enterprise Wide Area Network. The

flexibility provided by the use of multiple servers, server clusters and Storage Area Networks (SAN) offers users improved network response, greater reliability, increased data security and reduced operating cost. Adherence to the standards outlined in this section allows the Port Authority to manage their systems, applications and data in a way that best meets our business needs while maintaining interoperability and safeguarding Port Authority's information assets.

2.2.1 Operating System and Software

All Enterprise File & Print services in the Port Authority are currently based on the Novell Netware 6.5 operating system (the agency will be migrating to Microsoft networking services during Y2010). Microsoft Windows 2003 and 2008 servers (Standard and Enterprise) are the primary operating system in use. Sun Solaris is also supported as application servers and only when required for functionality. In addition to the base operating system, all servers must include the following components:

- Virus Protection (minimum: McAfee Engine 8.5.0i, with current DAT files)
- Network Security
- Remote Monitoring and Management
- Intrusion Detection
- Systems Backup (minimum: Upstream 3.5.0c)
- Uninterrupted Power Supply (If central UPS is not installed at the location)
- Current Service Packs and security patches (minimum: SP1)

Note: All operating system and server software will be provided by the Technology Services Department.

2.2.2 Configuration

All network devices--including servers, workstations, network printers, and network faxes--must use IP addresses which conform to the standards outlined in sections, 1.9 *Enterprise Addressing Scheme*, and 2.3.1, *Server Names*. All servers will be configured using the following parameters:

Base Configuration:

- C: (OS Drive) Minimum 25 GB
- D: (Application Drive) Minimum Based on Application's space requirements
- IP Protocol

2.2.2.1 Drive Mapping Conventions and Organization

Mapping of workstation drive pointers to SAN or server disk volumes or folders is currently accomplished through a Novell NetWare Login Script or the Microsoft equivalent. The following drive letters are reserved for Novell installations:

Pointer	Volume or Folder
---------	------------------

H:	Novell login (first network drive)
M:	Reserved
P:	Public Applications
Q:	Installation and Upgrade Utilities
S:	Departmental shared directories and files
T:	Reserved
U:	Users Private Home Directory
Z:	Novell system files (Search mapping)

- Public (Shared) application software installed on file and print servers, or server cluster must reside on a separate volume named "APPS".
Example: P:\APPS
- Each software application installed on file and print servers, or server cluster, must have its own sub-folder.
Examples: P:\APPS\EXCEL
P:\APPS\LOTUS
- SYS volume must be used for operating system and support software only.
- Shared Data stored on file and print servers, or server cluster, shall reside in a volume named Data, and shall be mapped to the "S:" drive pointer.
Example <Server_name>:\DATA\SHARE on a single server
<Cluster_name>:\DATA\<Department_NAME>\SHARE on a server cluster
- Each Department's SHARE folder will contain at least three sub-folders titled Org, Everyone and Projects.
- The Projects folder is provided for storage of project related files. All departmental projects will be kept in a sub-folder under the Projects folder and the folder will be named using the same name as the project. User rights will be assigned by a group having the same name as the project folder. Only colleagues requiring access to the project files should be granted rights to that project folder.
- Under the Projects folder will be two additional folders, one called "Active" and one called "Completed". Active projects reside in the "Active" folder.
- When staff identify a project as being completed, the project folder will be moved to the "Completed" folder and all rights, except for "Read" and "FileScan" will be removed from the folder. This will ensure that the final project documents remain unchanged, while still allowing authorized staff to review the old documents and use them as templates for new documents if desired. The "Completed" folder will be set to archive its data.
- Under the "ORG" folder will be subfolders with names corresponding to the various divisions within the department. By default, only staff within a division will have access to a division's folder. These folders are intended to hold data for a specific division that would not normally be shared departmentally. Staff from other divisions would not have access to these folders unless the division manager of the

owning division gives their approval. Having folders setup by divisions will simplify the process of identifying who is responsible for the contents of a folder.

- The "S" and "U" drives should only be used to store business related files.
- The Systems Administrator, at the direction of the Director, may from time to time remove any data deemed to be non-business related.
- A folder called "Everyone" will be created in the Share folder. All staff in the department will have full access to this folder to store and retrieve files that are not related to a project or a division's day-to-day operations.
- Additional shared folders, with access restricted to only specific users, if required, will be created in the Share folder. Access will be restricted through the use of Inherited Rights and access will be granted through the use of groups. These groups will be named using the same name as the folder name.
- In general, rights to any folder will be granted through the use of a group having the same name as the folder. The group would have trustee rights to the folder, and users would be added to or removed from the group as needed. All rights would be granted or revoked through an internal workflow approval process.
- A user "U" drive will be assigned to each standard network account for use by each individual user to store business related data on the network. Access to the "U" drive is restricted to the account owner only. Users receive all rights to this folder except for "Access Control" and "Supervisory". Users cannot share data on their "U" drive. Files should be shared only by using the Share, ("S") drive.
- Access to a user's home directory, by anyone other than the owning user is prohibited and will be removed after notifying the end-user.
- Installation files used in the installation of desktop software must reside in a sub-folder under the "APPS" volume

Example P:\APPS\Psoft

2.2.2.2 Connecting LAN Devices to the Enterprise Network

The Technology Services Department (TSD) is responsible for connecting all LAN devices to the Enterprise Network (PAWANET) provided they meet the Port Authority's standards.

2.2.3 Network Resources Security

2.2.3.1 Server Physical Security

All network equipment must be physically secured in a locked room.

2.2.3.2 Server Logical Security

To safeguard the Port Authority's Information Technology (IT) systems and data, TSD has implemented a number of processes and procedures, including the requirement that all users accessing the Port Authority's networks authenticate to a Directory Service

(using either Novell Netware e-Directory or Microsoft Active Directory (AD). Both Directory Services contain descriptions of all network devices including servers, printers, shared drives and user accounts.

TSD is responsible for providing all Enterprise servers with the following protection of their logical resources:

- Guard against unauthorized access by making sure that servers cannot be booted from a floppy.
- Scan all workstations for viruses daily.
- Scan all laptops for viruses at log-in.
- Scan all incoming data from users, server peripherals, diskette, CD-ROM, tape drives, other servers, and the Internet for viruses
- Perform regularly (daily and/or weekly) backups as defined by the Technology Services Department. (see section 2.5 - System Backup and Recovery)
- Test recovery procedures annually.
- Use system and application passwords that conform to the Technology Services Department standards.
- Configurations must conform to security parameters identified by NetVision Suite software.
- Perform deleted file purges immediately or no later than 6 days after file deletion.
- Control all remote access using the Port Authority's Remote Access System.

2.2.4 Network Access and User Account Security

2.2.4.1 Account Creation

User and Application accounts are unique and provisioned and managed in our Directory Service for both the Novell and Windows network resources. Documentation for the creation of user accounts and authority for access is maintained by the System Administrator.

2.2.4.2 Time Restrictions

Due to the fact that The Port Authority serves its clients 24 hours a day, we do not have Login Time Restrictions on network resources. All staff may access their Novell account 24 X 7.

2.2.4.3 Concurrent Logins

Login sessions will be limited to one connection per user. User accounts should not have the ability to login to multiple workstations after establishing one active connection to the network.

2.2.4.4 Intruder Detection

These system-monitoring features must be active:

- Restrict the count of incorrect login attempts to three before the account is locked out.
- The time for which unsuccessful login attempts are retained to determine a possible intruder attack should be a minimum of 30 minutes before the counter is reset to zero.
- The time for which a user account remains disabled before the account can be used again should be a minimum of 30 minutes.

2.2.4.5 Passwords

All user accounts must have passwords conforming to the following standards:

- Minimum length is six (6) characters.
- Should not be easily guessed. It should not be related to one's job and should not be a word in the dictionary or a proper name.
- Should be set to expire at least every 90 days and 30 days for accounts with system or application administrator access.
- Grace Logins should be activated and limited to three.
- Users should be notified several days in advance of password expiration.
- Users should be forced to change their password on initial login and once it expires.
- Unique passwords should be required when changed. Users should be prevented from reusing a previous password for a minimum of one-year.
- Users should not be permitted to change their passwords more than once a day.
- Passwords should be encrypted in storage.
- Passwords must be entered in a non-display field with a re-enter verify function for new passwords.
- Passwords must not be available on hard copy.
- Passwords used in system startup files and login scripts must be encrypted.
- If an application uses a default password, change it on installation.
- Do not use cyclical passwords, such as the word, February, during the month of February.
- Do not reveal your password to anyone except authorized persons.
- Use both upper and lower case characters and special characters where possible.
- Change password if it has been disclosed or compromised.
- Protect by using a screen saver password with a recommended 15-minute time-out period.
- Passwords should not be the same as the user ID

Passwords are considered confidential data. They protect the Port Authority's network resources and grant system privileges and access. Disclosure may result in unauthorized access to data, system files and transactions. Passwords are also your signature and identify you as the individual who is responsible for the system activity.

2.2.4.6 Modems

Staff are prohibited from connecting dial-up modems to workstations that are simultaneously connected to PAWANET or another internal communication network unless approved by the Technology Services Department (TSD).

Where modems have been approved, users must not leave modems connected to personal computers in autoanswer mode, such that they are able to receive in-coming dial-up calls.

2.2.5 Remote Access System

The use of local modems to establish direct dial connections to devices on the Port Authority's network is prohibited. Exceptions to this policy require the approval of the Technology Services Department (TSD).

The approved mechanism for remote access to the Port Authority network is through the Remote Access System (RAS). The Remote Access System utilizes an Internet-based Virtual Private Network (VPN) tunnel established over the Internet linking remote users to the Port Authority Wide Area Network (PAWANET) (remote client to PA site). It is designed to provide authorized Port Authority users with secure access to corporate applications and to files available on their departmental file servers. This access to applications and resources is delivered through a thin-client environment consisting of a farm of Citrix MetaFrame/Microsoft Terminal Services servers capable of supporting 200 or more simultaneous users each. There is no provided access to the user's office PC desktop. The system also provides access to IBM enterprise server ("mainframe") applications. Port Authority offices without direct connection to the Port Authority Wide Area Network (PAWANET) can use this system to establish remote access to corporate applications located on PAWANET.

RAS provides multiple security mechanisms to ensure that only authorized users gain access to the Port Authority's computing resources and systems. Through multiple security steps, the user must respond to security challenges. After successful authentication verification, authorized users are provided with access to corporate applications and their departmental network resources through the thin-client environment.

The Port Authority also supports corporate site-to-site VPN connections and utilizes Cisco equipment for these connections.

2.2.6 Network Resources Hardware Standards

2.2.6.1 Standard Servers

A representative sample of standard servers is as follows:

PORT AUTHORITY SERVER STANDARDS

Server Description	IBM Model
WEB Server, Small applications server	xSeries 3550M2
Medium applications server	xSeries 3650M2
Database Server, Multiple and Large application server	xSeries 3850M2

Each server shall have at least 3 network interface ports to support a production, management and backup network, and redundant power supplies.

The Port Authority manages servers models via a lifecycle process with a minimum 'in service' life of three (3) years.

2.3 Network Naming Conventions

2.3.1 Server Names

The Port Authority employs a naming convention for all servers within PAWANET. That convention will be discussed during a solution implementation phase, Static IP addresses for servers, printers and faxes will be assigned by Technology Services Department (TSD).

2.4 Directory Services and Structure

The Port Authority uses Novell e-Directory and Microsoft Active Directory to manage network resources and user access. Port Authority departments are designated as organizational units (OU) and servers are network objects contained within the OU. All network printers should be created as e-Directory objects. NDPS should be utilized. Applications are distributed using Novell's ZENworks. Applications are distributed based on the type of workstation and user definitions. Scheduling of distributions is done in conjunction with client departments.

2.5 System Backup and Recovery

The Port Authority, for distributed servers, has standardized on FDR Upstream software for data backups.

- The System Administrator is responsible for verifying that system backups, both local and remote can be used to restore the data. Tests of the ability to successfully restore from the backup system will be performed annually. It is recommended that the test data restore be performed on a single non-critical directory only, not the entire server. Tests of the ability to restore system and application files will be

performed on a non-production server in a controlled environment. When incremental or differential backups are routinely used, the test restore procedure should incorporate both.

- Immediately prior to performing the test restore procedure, do a special full backup on the directories being tested.
- Testing a full restore should only be performed on a non-production server.

Depending on the criticality of the data and the redundancy needs, other products are in use within the Port Authority. Double-Take software is used for 'file-level' copies across distributed servers. IBM's SAN-to-SAN replication (block level copy) for database protection. All backup media and records must be treated with the same level of security and confidentiality as the original data.

2.5.1 Backup Logs

The System Administrator will maintain the following logs for a period of two years:

- Back-up activity
- Rotation of back-ups,
- Usage/rotation of back-up media
- Off-site data storage.

2.5.2 Backup Scheduling

The System Administrator is responsible for performing back ups of data, application and system files. This must be as follows:

- Weekly full back up of each server. A full back up is a back up of all files on the server.
- Daily differential, incremental or full back up of each server or server cluster. The type of back up performed is dependent on time constraints and the amount of data to be backed up. Incremental back ups are back ups of all files changed since the last back up. Differential back ups are back ups of all files changed since the last full back up.
- A Grandfather, Father, Son (GFS) scheme based on a 33 tape rotation should be used to ensure complete back up and recovery..
- Store daily and weekly back-up media in a locked fire proof cabinet outside of the server room. Monthly media must be stored outside the immediate building at a location defined by the Port Authority.

2.6 Business Resumption Plan

The Vendors will work with the Technology Services Department (TSD) to develop a disaster recovery and contingency plan. The System Administrator will participate in the planning, design, implementation, testing, updating and documentation of the plan. Appendix 1 shows a recommended outline for such a plan. The Business Resumption Plan will be reviewed quarterly and tested at least annually.

2.7 Telecommunications Standards for Enterprise Network Resources

To see the standards and guidelines for the following telecommunications components, please see the Appendix.

Appendix 2 -- Standards for Setting up Closets & Communication Rooms

Appendix 3 -- Standard Cabling Schemes

Appendix 4 -- Unified Wiring Specifications

Appendix 5 -- Telephone Closet / IDF Termination Blocks

Appendix 6 -- Workstation Jacks

Appendix 7 -- Standard Switches

Appendix 8 -- Workstation and Lateral Cable Identification Management

Appendix 9 -- Fiber Optics Specifications for Network Services - PAWANET

2.7.1 Closet and Telecommunications Room Access

The following standards must be followed regarding access to closets and communication rooms.

- All telecommunications rooms must be physically secured. Remote locations which are not secured by a guard or within line of sight of personnel must be secured by a card access system and/or video cameras.
- The Network Connections (NC) group is responsible for installing routers, switches (along with Cisco Staff when applied) and station drops. They also patch connections and troubleshoot LAN cabling.

System Administrators requiring routine maintenance of data communications equipment should call the Customer Support Desk when new devices or reconfigurations are required.

2.7.2 Telecommunications Installation Contractor's Responsibilities

1. Adherence to all of the above specifications.
2. Assurance of labor harmony by providing installation technicians whom currently maintains appropriate union membership.

3. The contractor must supply all cable, blocks, brackets, connectors, jacks, housings, face plates, special tools, etc., as necessary to perform an installation which is satisfactory to the Port Authority.
4. The contractor must label every workstation (jack faceplate) and the corresponding cross connect point (punch down block or patch panel) in accordance with the cable identification management plan, as previously described.
5. Install all Category 5e cabling in the proper manner, with the appropriate number of twists, so as to maintain Category 5e integrity and capabilities, as outlined in the TIA/EIA 568-B.2 standard.
6. The contractor must ensure that cable connections are in accordance with standard telecommunications practices and that all cabling maintains normal connectivity and continuity.
7. All materials must be agreed upon by PA Network Services prior to the start of installation.
8. All computer or network communication rooms and closets are to be isolated, locked, and secured. No other equipment, storage area, or smoking area are to be located in this room. This room must provide appropriate cooling and ventilation. Access to this room will be reserved to TSD staff and an agreed upon member of the site where the PAWANET equipment is located. This procedure is to ensure the security and the integrity of the Port Authority's computer network and its users.

2.7.3 Electrical Requirements

The following power and receptacles should be installed to support different equipment requirements such as:

- Standard 110/120 volt power receptacles
- Standard and/or NEMA L6-30P 208/220 volt power receptacles
- Dedicated circuit breaker per AC feed, with alternate power source.
- Server rack electrical requirements are specified in the appropriate design document.

Currently, services obtained through the PA's contract are required to have the APC (American Power Conversion) UPS included in the delivered service if central UPS is not installed at the equipment location.

2.7.4 Telephone Company Interface

The following items are needed for the telephone company interface, if needed for a specific vendor solution::

- a) Install a dedicated wallboard for Telco demarcs (if none available for implementation)
- b) Standard Telco Demarcs:
 - P66 Block
 - Network Termination Unit (Rj48 interface) Smartjacks
 - Network Termination Unit (DB15-pin female interface)
 - Network Termination Unit (V.35/V.36 female interface)
 - Digital Signal X-connect (DSX)
 - Basic T1 CSU/DSU
 - Basic DS3 handoff coax/HSSI unit
 - High-speed dialup modems for network trouble-shooting when needed

2.8 Documentation

It is the responsibility of the System Administrator to establish and maintain a library of all documentation designated as standard by the Port Authority. These include archived system files and system backups. Vendors will be provided our "Guide to Systems Administration" during the implementation phase of a project. The "Guide to Systems Administration" covers the provisioning and setup of computing & networking resources to successfully implement a project within the Port Authority.

3.0 Virus Scanning & Management

3.1 Overview

This section describes the standards and guidelines for the prevention, detection and removal of computer viruses, (malware). Its purpose is to minimize the risk and negative impact of computer virus infections in the work environment by establishing clearly defined roles, responsibilities and procedures for the effective management of computer viruses.

3.2 Standards

Standard virus protection software must be installed on all network servers and personal computers, and updated on a regular basis. To that end, the Technology Services Department (TSD) has designated McAfee VirusScan Enterprise + AntiSpyware Enterprise 8.5.0i (at the time of this writing) as the standard for virus management on both Windows desktops and servers.

3.3 Acquisition and Installation

The Technology Services Department (TSD) maintains current versions of standard virus protection software and virus detection files, (DATs), including configuration-specific instructions for downloading and installing the software on network servers and desktops.

4.0 Electronic Mail

4.1 E-Mail Overview

The Port Authority's Electronic Mail System (E-Mail) is designed to facilitate business communication among employees, job shoppers, contractors, consultants, and outside business associates. This E-Mail system is comprised of Microsoft Outlook desktop software accessing e-mail stored on Microsoft Exchange servers. This solution also includes group calendaring and workgroup collaboration.

4.2 E-Mail System Architecture

The Port Authority's E-Mail system is hosted by AT&T Corp. who acquired USinternetworking, a managed application service provider, and consists of Microsoft Exchange servers connected to the Port Authority's enterprise network. Authorized Port Authority staff access their corporate e-mail through Microsoft Outlook desktop software on the network. The system has multiple Exchange servers containing mailboxes and Public Folders. Additional servers host Outlook Web Access, Blackberry services, and perform Internet-based e-mail services including anti-spam and anti-virus e-mail checking.

The hosted Exchange site is on a Windows resource domain with a one-way trust to the Port Authority's corporate user account Windows domain located on the Port Authority network. This Port Authority Windows domain is used for Windows authentication services when the Outlook client is opened. In addition, the Port Authority hosts DNS servers to satisfy requests from the Outlook client as needed.

High-speed, secure, and redundant network connections connect the AT&T's data center and network to the Port Authority network.

4.3 E-Mail Environment: Design Considerations and Infrastructure

The E-mail environment is further described below:

- The E-Mail system is comprised of Microsoft Outlook 2007 desktop software accessing e-mail (via MAPI mail protocol) stored on several Microsoft Exchange 2007 servers
- The servers are currently configured for the following messaging protocols:
 - MAPI (Microsoft's Messaging Mail protocol)
 - Internally for X.400 mail protocol (which Exchange servers use)
- IMAP4 and POP3 mail protocols, NNTP news protocol, and LDAP directory protocol are disabled.
- RIM's Blackberry Enterprise Server software for Exchange provides wireless e-mail and calendar access to Blackberry wireless handheld device users.
- The two supported forms of SMTP addresses are:

- Primary form: Flastname@panynj.gov
Flastname where F is the first initial of the user's first name and Lastname is the last name, and Flastname conforms to the corporate standards for a unique Novell user's username (also known as Novell ID). Flastname is also used as the Alias for a user in the Global Address List. Note that an earlier format with truncating the above to a maximum of eight characters is still in use for accounts created prior to Sept. 2001 (example: Flastnam@panynj.gov).
- Secondary form: Firstname.Lastname@panynj.gov
- Exceptions are governed by Novell directory structure and user account requirements.

4.4 Integrating Applications Server with Port Authority Email System

4.4.1 Requesting SMTP Services

The vendor will request SMTP services from and coordinate its work with the Technology Services Department

If the server is Windows-based and has an antivirus program installed, its settings will need to be changed if port 25 is blocked.

4.4.2 Email Restrictions

The following restrictions are in place to protect the SMTP system and the "credibility" of Agency mail servers on the Net:

- Forged email headers are **STRONGLY discouraged**, but applications for circumvention will be entertained, and valid business justifications must be included. The "From" and "Reply-to" fields should be valid users on the system sending email.
- Settings: The maximum number of recipients per email is currently 30. This includes "To", "cc", and "bcc"; maximum size with attachments is 5MB. Emails that do not conform to these restrictions will be rejected by the SMTP servers.
- Mail will be relayed only if your server has an entry in the SMTP access database.

Note: SMTP logs are checked periodically for policy violations. Repeated violations and failure to correct them will result in SMTP services being disabled for the offending system.

6.0 Workstation and Workstation Operating System

6.1 Overview

The Port Authority makes extensive use of workstations networked into an Enterprise Wide Area Network to accomplish its business objectives. In order to ensure compatibility with the agency's Enterprise network and to make optimal use of its resources, this section defines the standards governing workstations and their configuration and use.

6.2 Workstation Operating System Standard

The Port Authority's standard operating systems for workstations is Microsoft's Windows XP Professional (32-bit), Service Pack 2.

In limited circumstances, where business objectives warrant, alternative operating systems may be deployed with the approval of the department director and concurrence with the Chief Technology Officer.

6.3 Workstation Configuration

6.3.1 Workstation Naming Conventions

All departmental workstations must contain a unique computer name which is the machine's serial number.

Example: Workstation name: 23AAH86

System Administrators are responsible for naming workstations and maintaining an up-to-date inventory of equipment and names used.

6.3.2 Workstation User Accounts

Windows workstations must have user accounts that correspond to the user's network user identification.

6.3.3 Remote Workstation Management

The Port Authority also distributes software applications and upgrades via Novell's ZENworks. Each workstation should have Novell's Workstation Management module installed as part of the NetWare workstation client. This will enable remote distribution and updates of software, hardware inventory and workstation troubleshooting.

6.3.4 Drive Mappings

Drive mappings for workstations should be accomplished only through a Novell login script and should conform to the standard outlined.

6.3.5 Standard Workstation Hardware Configurations

There are standard configurations established for workstations and laptops. The current configurations are managed via a 'lifecycle' process within the Technology Services Department (TSD).

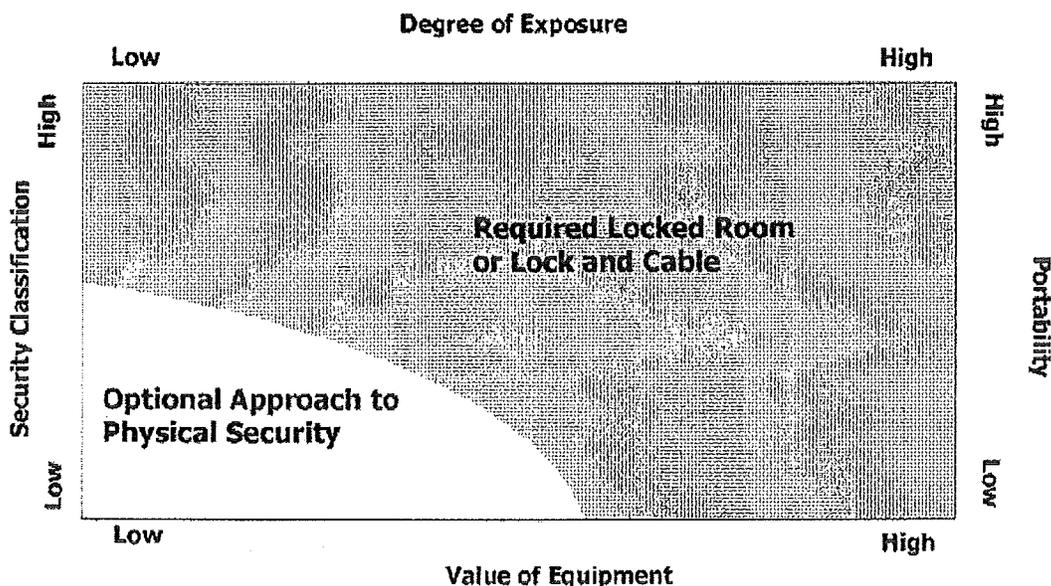
The standard for Workstations include the following Lenovo models (Computer models are subject to change):

- Lenovo ThinkCentre M57 or M58 for a desktop personal computer
- Lenovo Thinkstation D10 for CAD workstations
- Lenovo ThinkPad T400, ThinkPad X200 for laptop computers

6.4 Physical Security

The method of control should be based on the value of the equipment, the sensitivity of the data, its portability and the degree of exposure to theft. The department's Business Manager should make the appropriate determination of physical security required based on their best business judgment.

The graph below provides general guidance to Business Managers in determining the level of physical security required.



In all cases, laptops must be secured with a Lock/Cable product (e.g., Kensington).

6.5 Logical Security

The Technology Services Department (TSD) is responsible for providing for the security of computer resources and devices:

- Workstations are protected with Novell and Microsoft directory security mechanisms..
- Screen saver passwords are implemented with a maximum of a fifteen (15) minute time-out.
- All critical data are backed up nightly onto either external media or a network drive.

6.6 Printers

The Port Authority's Standard for printers is Hewlett Packard, and the following models are currently available. Contact the Procurement Department for acquisition.

7.0 Distributed Systems Environment

7.1 Overview

A number of department and enterprise servers provide critical application and system services. This section provides information on the standards and guidelines for supported systems within the Port Authority. Solutions requiring different operating system environments must have approval from the Chief Technology Officer.

7.2 Microsoft Windows Servers

The standard for general purpose application servers and File and Print Computing is IBM servers. Microsoft Windows 2003 & 2008 Server (Standard and Enterprise) are supported Operating Systems for application servers.

7.2.1 Virtual Environment

The standard for Virtualization Computing is both IBM and NEC FT host servers. The Port Authority will provide a VMware ESX-based Guest Virtual Machine (VM) to operate all Contractor-provided applications software on one of the above host computing platforms depending on the critical nature of the application.

All applications software shall be capable of operating in a virtual environment under VMware ESX server and shall operate in a VMware ESX-based Guest Virtual Machine (VM) on a 'shared' host computing platform for Contractor application, unless performance requirements mandate a dedicated server as described in Section 7.2 above.

7.2.2 Windows Data Encryption

For those applications that require additional data security measures, TSD offers additional tools that provide encryption services to protect "data at rest" (e.g. file

system storage and database). Prior to implementation, the Business System Manager should consult with the Technology Services Department to implement the Encrypting File System feature on Windows XP, 2003 and 2008 Servers (See <http://technet.microsoft.com/en-us/library/cc700811.aspx>).

7.3 *Unix*

Sun's Solaris is a supported UNIX operating system for infrastructure (e.g., SMTP services) and corporate servers (e.g., SAP, Peoplesoft).

7.3.1 *Unix Security*

Unix servers must be physically and logically secured from unauthorized access. Operating system logical security is defined by the Technology Services Department (TSD).

7.3.2 *Backup*

Critical system backup must be performed regularly (daily and/or weekly) utilizing our centralized backup strategy and associated tools as defined by the Technology Services Department. (see prior section on backup software standards)

7.4 *Databases*

Oracle 10.2.0.4 or higher and MS/SQL 2005 Server or higher are the supported database platforms for Port Authority systems. Auditing trail shall be enabled for all database accounts with administrator privileges.

7.5 *Application Security*

Depending on the application, security may be administered at the application, database, module, screen, data field, and/or transaction level in addition to network authentication. Prior to implementation, the Business System Manager should review the capabilities of the application and consult with Technology Services Department (TSD) staff to ensure implementation of the appropriate security levels. When in production, the administrator responsible for day-to-day administration of the application (Application Administrator) is responsible for maintaining the selected security profiles. At a minimum, all applications must require authentication to Microsoft Active Directory by way of a network login.

7.6 *Server Physical Security*

All servers and communication equipment must be located in the Port Authority's centralized data centers. On occasion, and with Chief Technology Officer approval, local (e.g., in facility) computing resources may be required. For those occasions, servers must be located in an environmentally controlled and locked rooms or secured with a cable and lock with the keyboard secured to prevent tampering and unauthorized usage. Technology Services Department (TSD) staff must be consulted during the implementation phase of a project.

7.7 Load Balancing – Failover Architecture

Depending on the requirements of the application, load balancing and failover architectures are supported. Appendix 13 contains a typical diagram of the load balancing/failover architecture.

8.0 Vendor Provided Dedicated Systems

Overview

Vendor provided dedicated systems refers to the Information Technology software, hardware and infrastructure furnished and installed through a contract with an external provider. Generally, this refers to systems that are designed to support a large Capital Project, multi-year engagements, requiring specialized technical and management staff, as well as, Systems Integration support. These projects normally have significant construction components and require the coordination, design and support from many diverse Engineering and Technology disciplines

A representative from the Technology Services Department (TSD) provides a single point of contact for technology oversight, accountability, adhering to Standards and systems integration, which is required under the Roles and Responsibilities of the Chief Technology Officer (CTO) and is expected by our client departments.

To ensure a successful project, and honor our responsibility to our customers and the Port Authority, one of the steps undertaken by TSD, is to provide guidance with, and focus attention on, adherence to and compliance with our Technology Standards and Guidelines (as described in this document). Deployment, integration and testing will be monitored by TSD to ensure that equipment or infrastructure is not duplicated, that the integration and migration plan will not adversely impact existing systems, and to integrate new systems under existing maintenance contracts where applicable.

In cases where a specific vendor or system is so specialized that it normally does not adhere to the hardware, software, infrastructure and operations guidelines of this document, the vendor will be directed to work with TSD in exploring all options, and if an exception is deemed required, the vendor will work with TSD to prepare the necessary Business Case to receive written concurrence from the Chief Technology Officer for this deviation from the Port Authority Technology standards.

Appendices

Appendix 1 -- Business Resumption Plan Document Format

I. PURPOSE

Goals and objectives of plan

Benefits obtained if plan properly implemented

II. SCOPE OF PLAN

Planning assumptions

Facilities and resources included in plan

III. NOMENCLATURE

Recovery terms

Definitions and acronyms

IV. DISASTER SEVERITY DEFINITION

Define level of potential disaster based on impact to critical functions. Explain what degree of operational disruption would constitute each level of disaster:

catastrophic

serious

major

limited

V. OPERATIONS RECOVERY PROCEDURES (Procedures for recovering services)

1. Indicate time frames in which essential operational/business functions must be resumed.
2. Specify sequence of operations recovery events and individuals responsible for activity. Note any specific activities required for particular levels of disaster severity. For example:

Notifications

Preliminary evaluation

Activate operations recovery personnel

Coordinate with emergency personnel

Evaluate recovery options and issue directive which details:

Assigned tasks

Project schedule/time frame

Coordination required

Identify relocation activities, if required

External/internal status updates

3. Identify items required for backup of critical functions. For example:

alternate work site

hardware/software

Personal computers

Necessary software packages

Documentation

Peripherals (printers, modems, etc.)

Databases

Emergency equipment

Communications

Transportation

Supplies

Security

Operations and procedures manuals

VI. OFFICE/FACILITY BUSINESS SITE RESTORATION PROCEDURES
(Procedures for restoring physical facilities)

identify restoration responsibilities

assess damage

develop restoration plan/time frames

VII. BRP UPDATE PROCEDURES

responsibility for updating and communicating BRP changes

frequency of review/update

Appendix 2 -- Communication Rooms/Closets Standards

SPACE

All data communication rooms must be designed with required and estimated space to meet immediate requirements, as well as, future growth..

ENVIRONMENTAL

The following conditions must be met:

- a) Doorways/Entrances must be designed to support at least the minimum space requirements of 90"Hx72" Wx60" D.
- b) The room's cooling capabilities must be sufficient to support the heat dissipation requirements for the equipment. This requirement will be measured in minimum and maximum BTUs powered by AC-powered systems. Equipment specs will be supplied by TSD upon request.
- c) Backup UPS systems are necessary to avoid equipment damage in case of site power failure. Vendors must consult with the Technology Services Department (TSD) for the approved UPS systems.
- d) Telco demarcs must be located in a central location with sufficient space to house Telco termination equipment.
- e) The room should be designed with the appropriate fire safety regulations such as a FM200.
- f) Cables trays must also be installed in the communications room ceiling where appropriate, to support the routing of data communications and Telco cables.
- g) Basic 19" W/72" H cabinets or racks must be installed to house communications equipment such as: routers, switches, hubs, DSUs/CSUs and monitors.
- h) To create more wall space the use of wall mount racks can be installed. Appropriate sized plywood must be installed prior to mounting racks.
- i) Category 5e cable must be terminated in wall/rack mounted patch panel.
- j) Fiber patch panel must be installed in fiber IDF panel with SC female interface.
- k) The fiber must be neatly tie wrapped and enclosed in flexible inner-duct.
- l) Telephone access must be installed in the appropriate location to provide for basic trouble-shooting and vendor support.
- m) All communications equipment and cabinets must have ample room for easy access and proper ventilation.

Appendix 3 -- Cabling

- a) Teflon-coated cables will be installed per fire code regulations.
- b) Overhead cable trays and drop post must be installed for cable routing.
- c) Cabling scheme must be used to label and identify all cables. All cables must be neatly tie-wrapped.

Appendix 4 -- Port Authority Unified Wiring Plan

Original: 01/90

8th Revision: 03/02

To satisfy existing and future voice and data communications requirements, while minimizing the need for wiring changes and additions, the Port Authority has adopted the following lateral wiring specifications for all workstations being constructed. This plan is applicable to all PA locations, except when specifically noted.

LATERAL CABLE:

Voice and data telecommunications requirements for each workstation will be provided by a combination of three individual cables, installed between the workstation and the serving telephone closet / intermediate distribution frame (IDF), in a "home run" configuration. All cabling installed will be of plenum type, fire retardant (FEP) rated.

Cable specifications:

- (3) Cables capable of supporting Category 5e capabilities as outlined in the TIA/EIA-568-B.2 standard. Specifically:

Gauge: 24 AWG

Pair Size: 4

Insulation: Plenum, fire code rating (FEP)

Cable allocations will be as following:

Cable #1: Voice**

Cable #2: Data

Cable #3: Data

- *100.0MHz is the speed the PA wants to deliver to the desktop.
- **Cable #1 is to be split in the workstation to support 2 telephones.

Technical specs for the Cat 5e cable is as follows.

TECHNICAL DATA--ELECTRICAL				
	Horizontal		Patch	
Frequency MHz	Attenuation dB/100 m max.	Next dB min.	Attenuation dB/100 m max.	Next dB min.

1	2	62.3	2.4	62.3
4	4.1	53.2	4.9	53.2
10	6.5	47.3	7.8	47.3
16	8.2	44.2	9.8	44.2
20	9.3	42.7	11.1	42.7
31.25	11.7	39.8	14.1	39.8
62.5	17	34.3	20.4	34.3
100	22	32.3	26.4	32.3

TECHNICAL DATA--PHYSICAL			
	CMR	CMP	CM (Patch)*
Conductor diameter-in. (mm)	.020 (0.52)	020 (0.52)	024 (0.61)
Cable diameter-in. (mm)	.195 (5.0)	165 (4.2)	215 (5.5)
Nominal cable weight-lb./kft. (kg/km)	21 (31)	21 (31)	23 (34.2)
Max. installation tension-lb. (N)	25 (110)	25 (110)	25 (110)
Min. bend radius-in. (mm)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)

* Patch cables utilize stranded tinned copper conductors

PARAMETRIC MEASUREMENTS		
	Horizontal	Patch
Mutual Capacitance	4.6 nF/100 m nom.	5.6 nF/100 m nom.
DC resistance	9.38 Ohms/100 m Max.	9.09 Ohms/100 m max.
Skew	45 ns/100 m max.	45 ns/100 m max.
Velocity of Propagation	72% nom. Non Plenum	72% nom.
	72% nom. Plenum	
Input Impedance	100 + 15% 0.7772-100 MHz	100 + 15% 0.772-100MHz
	ISO/IEC 11801	

COLOR CODE			TEMPERATURE RATING	
Pair 1	White/Blue	Blue	Installation	0 degrees C to +50 degrees C
Pair 2	White/Orange	Orange	Operation	-10 degrees C to +60 degrees C
Pair 3	White/Green	Green		
Pair 4	White/Brown	Brown		

Appendix 5 -- Telephone Closet / IDF Termination Blocks

Lateral Data cabling serving each workstation will be terminated on a CAT5e patch panel (RJ45 face, 110 punch rear) in the telephone closet. For phone service, termination is to be on 110 blocks in telephone closet, allowing access to the telephone riser. For data, a patch cord is installed between patch panel and IT device. The patch panel can be mounted on the wall with a wall mount kit or in a rack if one is needed and should be appropriately numbered with the workstation number. The patch panel must be capable of supporting Category 5e the TIA/EIA-568-B.2 standard. The patch panel shall have a swing away faceplate or rack mountable.

NOTE: The Category 5e patch panel should be equivalent to the AMP SL series 110Connect Category 5e patch panel. The number of ports may vary.

Each workstation will be assigned a unique station identification number.

Appendix 6 -- Workstation Jacks

Workstations will be equipped with various components of the AMP Communications Outlet system (AMP equivalent can be used with TSD approval). Each workstation will be installed with (1) double-gang jack housing box and matching face plate, capable of securely mounting three Category 5e cables and four modular data connectors, maintaining the integrity of category 5e capabilities as outlined in the the TIA/EIA-568-B.2 standard. All workstation jacks will be wired in accordance with the the TIA/EIA-568-B.2 standard. All modular jacks are to be appropriately labeled.

Appendix 7 -- Standard Switches Inside the Department

Any switches in the following Cisco series are acceptable (Vendors will consult with the Technology Services Department (TSD) to determine the appropriate switch configuration at the time of proposal submission):

- Cisco 5500
- Cisco 3500 series – low capacity
- Cisco 4000 series – medium capacity
- Cisco 6000 series – high capacity
- Cisco 4507 series – high capacity – New

Appendix 8 -- Desktop and Lateral Cable Identification Management

WORKSTATION AND LATERAL CABLE IDENTIFICATION/MANAGEMENT (Facility)

All lateral cabling installed to workstations at the Port Authority Facilities must be designated in accordance with the Port Authority's workstation and lateral cable identification code: This code consists of two elements, as follows:

- 1 - Room number or department name (acronyms are acceptable).

2 - Workstations (3 numeric digits)

The cable identification code for Workstation 10 in room 3801 at LGA CTB is 3801-010.

The cable identification code for Workstation 15 in PA Automotive shop is Auto-015

Appendix 10 – Fiber Optic Specification for Network Services - PAWANET

General Scope of Work

1. Conduct a walk thru based on the specific Scope of Work for the job in question.
2. Note that all diagrams and or sketches that may be provided are approximates and not to scale.
3. All fiber optic cable is to be installed in rigid conduit or, where applicable, in plenum rated flexible inner duct.
4. Contractor shall furnish and install fiber optic cable as designated in the specific Scope of Work.
5. Fiber optic cable type will be loose tube, gel filled, with aramid yarn water block:
 - a. Multimode Fiber – 50/125* micron diameter. Manufacturer of cable TBD
6. Fiber optic cable attenuation from the factory, before installation, shall not exceed:
 - a. For multimode – 3.5 db per km @ 850nm / 1.0 db per km @ 1300nm
7. All fiber optic cable is to be labeled on each end and at any junction or patch panel with, 28 gauge, 2" wide embossed with ¼" high letters. The labels are to be fastened to the fiber optic cable using sealed wrap around labels or pliable Velcro ties.
8. Fiber optic cable shall be installed in accordance with the manufacturer's specifications. Any portion of the cable damaged during installation will be repaired or replace by the contractor without any additional cost to the Port Authority of New York New Jersey.

Fiber Optic Terminations

1. Fiber optic terminations will use SC** connectors unless otherwise specified in the Scope of Work.
2. Fiber optic terminations shall not yield more than 1db per mated (at the bulkhead) connector.

Fiber Optic Testing

1. Fiber optic testing shall be performed by the contractor and certified fiber optic technicians.

Fiber optic technicians will be prepared to complete test procedures with the following equipment:

- Source and power meter testing to provide optical loss measurements.

- Reference test cables and mating adapters that match the cables to be tested.
 - Cleaning materials – lint free cleaning wipes and pure alcohol.
 - OTDR test set with the proper launch cables and adapter types.
2. Fiber optic technicians will perform OTDR test on all terminated fibers unless otherwise noted in the Scope of Work.
 3. Fiber optic test results shall be recorded, and reports provided to the PA in hardcopy and via a readable txt file (PDF or RTF is acceptable).
- *50/125 micron fiber has been chosen over 62.5/125 micron fiber by Network Services:
1. Greater speeds achieved. 62.5/125 fiber will deliver 1 gigabit per second (Gbps). 50/125 fiber will deliver up to 10 Gbps. This allows for equipment upgradeability.
 2. Greater distances. 62.5/125 fiber will go up to 275 meters from source. 50/125 will achieve up to 550 meters from source. We can cover greater distances in an installation without having to go to the more expensive single mode fiber installation.

**SC connectors have been chosen over ST connectors by Network Services due to the fact that we utilize Cisco equipment, which come furnished with SC connectors on their fiber interface blades. It is more cost effective to use the standard SC-SC patch cable with Cisco equipment than to add the additional cost of having hybrid SC-ST cables made. SC connectors are also easier to work with and use less space in an installation.

Appendix 11 -- Public Telephone Ordering Guidelines

Technology Services (TSD) staff is responsible for the management of the permit for public telephone service are available to answer any questions and provide direction for any matter relating to public telephones. The names and contact numbers are listed below

General Guidelines

All public telephone requests – that is both coin and non coin in any Port Authority space or any area of the tenant space – both “public” and “club” locations will be coordinated by the Port Authority to cover both New York and New Jersey.

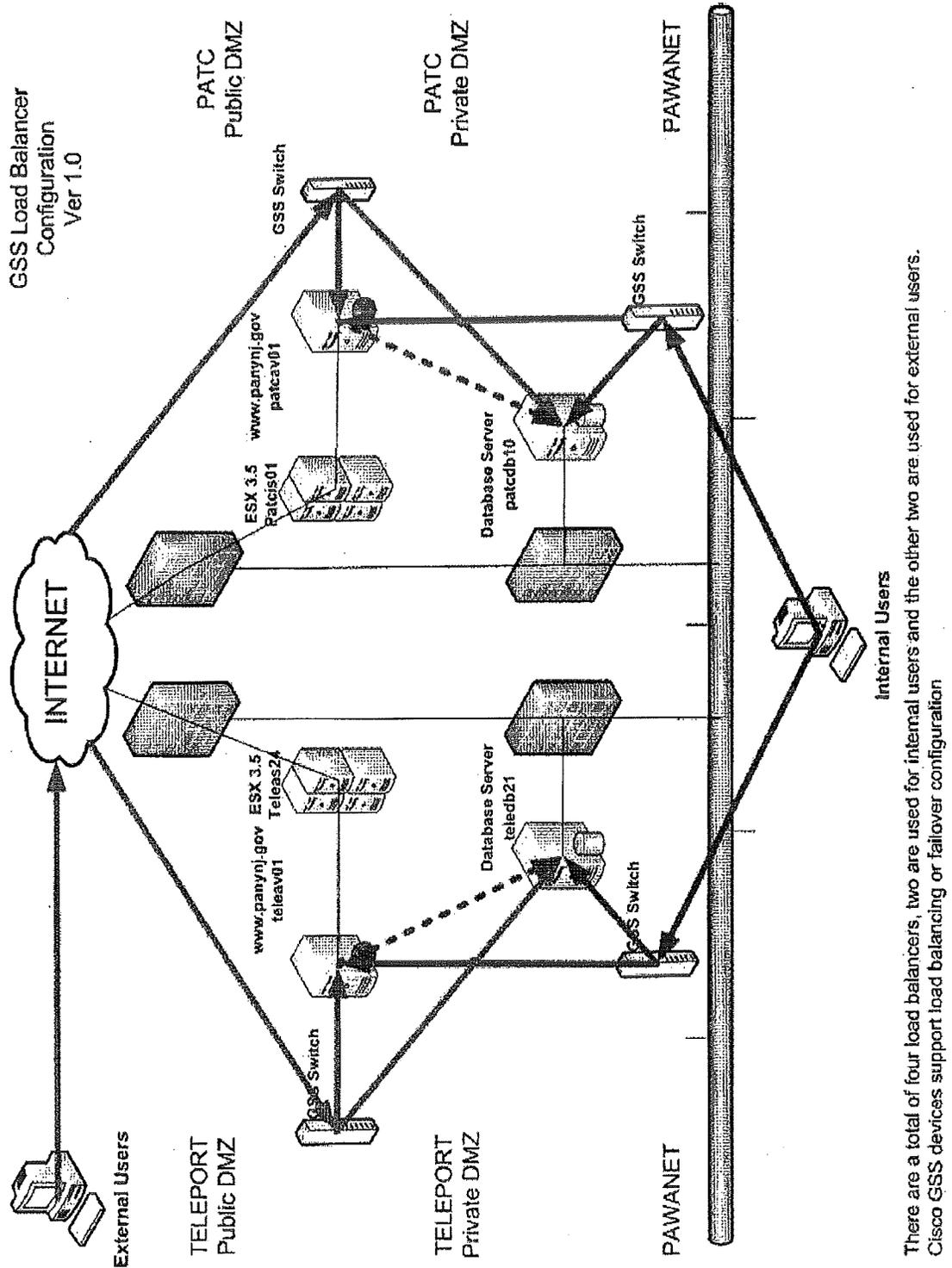
Process

When the Facility, Property Manager, tenant or their representative (e.g. designer, architect, general contractor) has a public telephone requirement, they will contact the Technology Services Department (TSD) whom will review the request and provide coordination with the appropriate service provider.

Appendix 12 – Standard Printers

HP LaserJet P1006 Stand Alone Laser Printer	17 ppm Black resolution 1200 dpi/Memory 8Mb	CB411A#ABA
HP LaserJet 5200dtn - Network Printer	35 ppm Black resolution - 1200 x 1200 dpi Memory - 128Mb Duplex	Q7546A
HP Color LaserJet 4700dn Network Printer	31ppm black, 31ppm color Black/Color Resolution 600X600 dpi Memory 288 Mb Auto Duplex	Q7493A
HP LaserJet P4014n - Org Unit Network Printer	45 ppm Black resolution - 1200 x 1200 dpi/Memory - 128 Mb	CB507A#ABA
HP Automatic two-sided printing module	Optional for LaserJet 4014n printer	CB519A
HP LaserJet 5550dtn Color Printer	27 ppm black/color Processor speed 533 Mhz Media 11x17	Q3716A
HP OfficeJet Pro K5400 Stand Alone Color Printer	36 ppm black, 35 ppm color Color resolution 4800 x 1200 dpi Memory 32 Mb	C8184A
HP Automatic two-sided printing accessory	Optional for HP OfficeJet Pro K5400	C9278A

Appendix 13 - Load Balancing/Failover Diagram



There are a total of four load balancers, two are used for internal users and the other two are used for external users. Cisco GSS devices support load balancing or failover configuration

General Index

- Administrator, 19
- Administrator, 15, 16
- Administrator, 19
- Administrator, 19
- Administrator, 20
- Administrator, 23
- Administrator, 31
- AT&T, 5, 8
- ATMs, 5, 9
- Business Resumption Plan, 20, 33
 - Document Format, 33
- Cabling, 10, 20, 36
- Cisco, 5, 8, 9, 10, 18, 38, 39
- Cisco Works, 10
- Closed Circuit TV, 5, 8
- Communication Room, 20, 35
- Databases, 30, 34
- Drive Mappings, 12, 28
- Electrical Requirements
 - Telecommunications, 22
- Email, 25
 - Public Folders, 25
 - Remote Access, 15, 17
- Hardware Configuration
 - Workstations, 28
- HP Open View Network Management, 10
- IDF Termination Blocks, 20, 38
- Intranet, 5
- Intruder Detection, 12, 16
- IP Addresses, 9, 10, 12
- IPX/SPX, 9
- Jacks, 20, 38
- LAN Devices, 11, 14
- Laptops, 11
- Local Service, 8
- Logins, 12, 16
 - Concurrent, 16
- MAPI, 25
- Modems, 17
- MS/SQL, 30
- Naming Conventions, 18, 27
- Netware, 11
- Networks, 5, 6, 8, 10, 11, 12, 14, 15, 17, 18, 20, 21, 22, 27
 - Access, 15
 - Connecting LAN Devices, 14
 - Enterprise Network, 10, 11, 14, 20
 - Intruder Detection, 16
 - Logins, 16
 - Monitoring Software, 10
 - Naming Conventions, 18
 - Security, 12
- Nortel SL100, 40
- Operating Systems, 11, 27
- Oracle, 30
- Passwords, 16, 17
- PeopleSoft, 5, 8
- Port Authority Wide Area Network (PAWANET), 5, 6, 8, 9, 10, 14, 17, 22
 - ATM Node Assignments, 5, 9
 - Diagram, 6
 - Functions, 8
 - Network Monitoring Software, 10
 - Protocols, 9
 - Supported Protocols, 8
 - Switches and Routers, 9, 11, 20, 38
- Printers, 11
- Protocols, 8, 10
- Public Folder, 25
- Public Folders, 25
- Remote Access, 27
- Routers, 9, 11
- SANs, 8, 11, 12
- SAP, 5, 8
- Scanners, 11
- Security, 12, 14, 15, 28, 29, 30, 31, 34
 - Applications, 30
 - Physical Security, 14, 28, 31
- Servers, 11, 12, 13, 14, 18, 22, 25, 30, 31
 - Application, 11
 - Logical Security, 14
 - Names, 12, 18

- Physical Security, 14, 31
- Racks, 11
- Standard Hardware, 18
- SNA/SDLC, 9
- Sun Solaris, 11, 30
- Support Desk, 21
- Switches, 9, 11, 20, 38
- System Backup and Recovery, 19, 33
 - Logs, 19
 - Scheduling, 19
- System Management, 15, 16, 19, 21, 23, 27, 30
- TCP/IP, 9, 10
- Telecommunications
 - Electrical Requirements, 22
 - Standards, 20
- Telecommunications Room, 21
- Telephone Closets, 20, 38
- Telephone Company Interface, 22
- Telephone Network
 - Cabling, 10, 20, 36
- Time Restrictions, 15
- Unified Wiring Plan, 36
- Uninterrupted Power Supply, 12, 22, 35
- Unix, 30
- Logical Security, 30**
- User Accounts, 15, 27
 - Creation, 15
 - Security, 15
- Verizon, 8
- Videoconferencing, 8
- Virus
 - Protection, 12
 - Scanning, 24
- Wide Area Network, 5, 10, 11, 17, 27
- Windows NT, 15, 25
- Windows Server, 30
- Wiring Closets, 11
- Workstation
 - User Accounts, 27
- Workstations, 10, 11, 20, 21, 27, 28, 38, 39
 - Drive Mapping, 12, 28
 - Hardware Configuration, 28
 - Jacks, 20, 38
 - Naming Conventions, 27
 - Remote Access, 27
 - Security, 14, 28, 31
 - User Accounts, 27

THE PORT AUTHORITY OF NY & NJ
PROCUREMENT DEPARTMENT
TWO MONTGOMERY STREET, 3RD FLOOR
JERSEY CITY, NJ 07302

Date: 5/14/13

ADDENDUM #1

To prospective respondents on the Selection Process Document for a Transparency Website

Responses due May 24, 2013, no later than 2:00 PM

CHANGES:

1. Section 1.g (Pg. 1): Delete the word "and" from the end of section.
2. Section 2.C (Service Levels, Pg. 58), second paragraph: At the end of this paragraph, replace the words "shall be liquidated" with "may be liquidated."
3. Section 2.C (Service Levels, Pg. 59), third paragraph: Replace this paragraph (in its entirety) with the following: "The service level requirements refer specifically to the work described hereunder, which is the Contractor's responsibility. The Authority will actively monitor the Contractor's performance. However, the Authority will not assess liquidated damages if the Authority determines that non-compliance and non-performance result from events or activities for which the Contractor is not responsible."
4. Section 2.C (Service Levels, Pg. 59): Add the following as the final paragraph of this section: "Failure of the Authority to impose liquidated damages shall not be deemed Port Authority acceptance of unsatisfactory performance or a failure to perform on the part of the Contractor or a waiver of its remedies hereunder."

QUESTIONS AND ANSWERS

The following information is made available in response to questions submitted by prospective Respondents to the Port Authority of New York and New Jersey's (the "Port Authority" or "Authority") Selection Process Document for a Transparency Website. It addresses only those questions that the Port Authority has deemed to require additional information and/or clarification. The fact that information has not been supplied with respect to any questions asked by a Respondent does not mean or imply anything (nor should it be deemed to have any meaning, construction or implication) with respect to the terms and provisions of the Selection Process Document, which will be construed without reference to such questions.

The Port Authority makes no representations, warranties or guarantees that the information contained herein 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 Respondent, by submitting its response, 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 Commissioners, officers, agents, representatives, or employees, orally or in writing, shall impair or limit the effect of the

warranties of the Respondent required by this Selection Process Document and any resulting contract and the Respondent agrees that it shall not hold the Port Authority liable or responsible therefor in any manner whatsoever.

	Section	Page	Topic	Question	Answer
1.	9	59-60	Payment Schedule	The Schedule indicates a fixed-fee, milestone-payment based schedule for implementation. Is a time-and-material-type contract allowable for implementation?	The Payment Schedule for Implementation shall remain as conveyed in the Selection Process Document.
2.	2.C	47	Style Guide	Can the Authority provide the referenced Visual Style Guide?	The Authority will provide the Visual Style Guide to the Contractor (selected Respondent) after contract execution.
3.	General	N/A	Support	Will the Authority provide tier 1 support for content workers' product questions/issues or is this a service that the respondent should provide in the proposal?	See section 7.i (page 51) of the Attachment C (Scope of Work) of the solicitation.
4	4.3	49	Functionality	Is it the intention that scanned documents will be full-text searchable?	Yes.
5	5	50-51	Scanning	What is the frequency of pick-ups?	Scanning services will be requested as needed; it is impossible right now to predict such frequency.
6	5	50-51	Scanning	On average, how many boxes are in a pick-up?	Scanning services will be requested as needed; it is impossible right now to predict the average number of boxes of documents to be scanned per request.
7	5	50-51	Scanning	Will there be a pickup and drop-off Coordinator.	The Authority will provide staff that will coordinate the retrieval and return of boxes with the Contractor.
8	5	50-51	Scanning	Will the Authority call or email to request pick-ups?	At this time, the Authority anticipates emailing such requests to the Contractor.
9	5	50-51	Scanning	Is there an easily accessible loading bay?	Yes.
10	5	50-51	Scanning	Will the boxes be brought to the loading bay or does the Contractor need to go where the boxes are?	The Authority does not anticipate bringing boxes to the loading bay. The Contractor should retrieve the boxes from the appropriate building/floor.
11	5	50-51	Scanning	If the boxes are not brought by the Authority to the loading bay, will you have a central pick-up point or a department pick-up point?	Yes.

12	5	50-51	Scanning	Will the boxes of documents to be scanned be separated from all other boxes of documents and clearly labeled as those that are going for scanning?	Yes.
13	5	50-51	Scanning	Will the Contractor retrieve documents from file cabinets?	No.
14	5	50-51	Scanning	Will the Authority pack the boxes for pickup?	Yes.
15	5	50-51	Scanning	If provided the utility to do so, will the Authority create separator sheets that are placed with the documents to be scanned?	The Authority may consider placing separator sheets between unique documents.
16	5	50-51	Scanning	3-day turnaround: how many boxes is the Contractor expected to turn around in three days?	The contents of all boxes provided for a particular (special) project shall be scanned and posted within three days of pick-up from the Authority. Exceptions may be made only with pre-approval, in writing, by the Authority's Contract Manager.
17	5	50-51	Scanning	Does the Authority want pdfs or TIFFS or both?	PDFs.
18	5	50-51	Scanning	Does the Authority want the documents OCR'd?	Section 4 (Functionality) on page 49 of the Selection Process Document states the System shall be able to provide Optical Character Recognition.
19	5	50-51	Scanning	At what dpi does the Authority want the documents scanned? 200 dpi or 300 dpi?	300 dpi.
20	5	50-51	Scanning	For text-based documents, does the Authority want black/white, grayscale, or color scans?	Black and White.
21	5	50-51	Scanning	For photos, does the Authority want black/white, grayscale or color scans?	Grayscale; color only upon request.
22	5	50-51	Scanning	Are there blueprints, maps and other large format documents to be scanned?	The Authority does not anticipate providing blueprints. Maps may be provided for scanning and posting on the transparency website.
23	5	50-51	Scanning	We have two large format types: ones that fit on high-speed scanner (11x17) and others that must be scanned on large format scanner (36xwhatever length). What is	As stated in the answer to question 16, all documents provided to the Contractor shall be scanned and posted by the Contractor within 3 days of its pick-up of documents from the Authority. Exceptions to this

				the prevalence of these? Do these also fall under the 3-day turnaround?	<p>requirement may be made only with the Authority Contract Manager's written preapproval.</p> <p>The Contractor shall use its own discretion in selecting the proper equipment to make scans.</p>
24	5	50-51	Scanning	Will these scans become your legal originals and replace the paper documents?	No.
25	5	50-51	Scanning	Does the Authority want the original documents returned in the exact manner they were provided to the Contractor, including stapled?	Yes.
26	5	50-51	Scanning	Does the Authority want the Contractor to outsource the scanning operation to a firm certified by the States of New York or New Jersey or a firm that can comply with any New York State Archives regulations?	Respondents shall use their own discretion in proposing subcontractors, including firms that provide scanning services.
27	5	50-51	Scanning	Picking "up documents within 24 hours of notification by the Authority" – does that mean one business day?	From Monday through Friday, excluding Port Authority-defined holidays, the Contractor shall pick up the documents no later than 24 hours from notification by the Authority to the Contractor. However, if the Authority request is made on a Friday or on the day preceding a holiday, the Contractor shall pick up the boxes during the next business day.
28	5	50-51	Scanning	Do the time stipulations allow for natural disasters and other impediments that would be out of the Contractor's control?	See Change #3 on page 1 of this Addendum.
29	General	NA	Database mapping	Does the Authority have a database to which the Contractor can map the records?	The Contractor shall provide a fully hosted, stand-alone, independent system.
30	4.I, 4.II of the SOW	49-50	Metadata	<ol style="list-style-type: none"> Can these be zonally assigned or do they need to be manually entered? On the metadata, there is no specification for document type. Do you 	<ol style="list-style-type: none"> It cannot be assumed that each document will contain the necessary index information so that it can be collected via OCR. The document type should be indicated.

				<p>want document-type indicated, i.e., Board Minutes, By Laws, Employee Payroll Records etc.? Or are you going to organize the scanned information by document type within the system and therefore no document type is necessary?</p> <p>3. On the metadata for scanning you did not indicate record or series numbers. Did you want those also indicated on each of the records for record retention management purposes?</p>	<p>3. The service referenced in the question is not necessary since records management is handled separately within the Authority.</p>
31	4.I, 4.II of the SOW	49-50	Metadata	<p>Is there ever a case when a document has more than one set of metadata (e.g. response to an FOI))?</p>	<p>It is anticipated that a single document may need to be classified as more than one different document type. In the event of this situation, separate documents (with each document indexed according to document type) would be added to the system.</p>
32	5	50	Scanning	<p>"At the time of the request, the Authority will convey instructions regarding the scanning and posting of these documents."</p> <p>Are there standardized instructions and therefore these are 'special' instructions that may deviate from the standard instructions.</p>	<p>Generally, the requirements and service levels contained in the Selection Process Document pertaining to picking up, scanning, posting, and returning documents shall pertain to all documents provided to the Contractor for scanning. However, due to their unique nature, some scanning projects may require special instructions, which will be conveyed at the time by the Authority to the Contractor. In those instances, the Authority will determine if the special projects necessitate exceptions to the contractual requirements and service levels.</p>
33	1	1	Summary of Scope of Work	<p>1. Under 1.g. (Board Day Videos), no individual or aggregate file size information is provided. Is this content going to be served from the website directly or will the website</p>	<p>1. The Authority anticipates that video will be served from the website via a link from a source outside of the Contractor's system.</p> <p>2. See Change 1 on page 1 of this Addendum.</p>

				<p>merely link to videos served from a system that is itself out of scope?</p> <p>2. Line item 1.g. ends with the word "and" – was something inadvertently omitted there?</p>	
34	1	2	Summary of Scope of Work	<p>"Because the Authority does not currently know the precise number or volume of documents available for publication, it intends to initiate a one-year, task order-oriented pilot project so that during this time it can determine such volume and gauge public usage of the dedicated Website."</p> <p>Clarify the exact meaning of "task order-oriented" in this context?</p>	<p>Because the "universe of documents available as a result of this transparency initiative will grow on an ongoing basis as the Port Authority continues to conduct its business," the Authority may ask the Contractor to perform certain tasks (e.g. special scanning projects, enhancements to functionality, etc.) to accommodate the growth of the transparency initiative.</p>
35	12	5	Evaluation Criteria and Ranking	<p>"The degree to which it uses open standards": Are there specific standards by which the Authority will evaluate the functionality of the proposed Transparency Website.</p>	<p>Attachments F, G, and I of the Selection Process Document convey implementation standards and protocols.</p>
36	14.F.3	8	Software License Agreement	<p>For any third-party commercial software that the Authority must procure separately from the respondent's own services and pricing, what content should we provide to satisfy this requirement?</p>	<p>In its Technical Response, the Respondent shall identify third-party software (in addition to the software inherent in the proposed hosted solution) necessary for its solution and justify its necessity.</p> <p>Respondents recommending third party software shall include copies of all software license agreements to ensure license-compliance for hosted solutions, and convey the software's exact name, package, release, and version.</p> <p>Costs related to the acquisition of third-party software should be disclosed and itemized in an appendix to the Respondent's Cost Response (Attachment E) and included in the</p>

					"Total Estimated Cost" field of Attachment E.
37	15.H	9	References	Out of respect for our customers' time and priorities, will the Authority permit the respondent to coordinate the scheduling of any such reference calls that may be required, so that they may be held at our customers' convenience?	No.
38	8	17	Intellectual Property	<p>"Third party software not specially prepared for the purpose of this contract but utilized by the Contractor hereunder in the performance of its services hereunder shall be licensed to the Contractor and the Authority for the duration and purposes of this contract but shall remain the property of said third party."</p> <p>Does this mean that with respect to commercially available 3rd party software that is required for the solution, but which cannot be resold/licensed to the Authority directly by the Contractor and therefore the Authority must purchase directly from the 3rd party, the respondent should provide estimated software licensing costs as part of the proposal's total costs to the Authority? Otherwise, how would the Authority like to see such software licensing costs noted in the proposal?</p>	See the response to question 37.
39	2.C	47	Website, Browser and OS Support	1. For managing content on the website, confirm that content <u>authors and administrators</u> may be reasonably required to use a preferred browser and/or operating system as required by the 3 rd party	All software proposed for this solution is subject to review and final approval by the Authority.

			<p>vendor that provides the commercial software used in the proposed solution, while the standards listed must be met for readers and users (non-authors) of the public website.</p> <p>2. Confirm that in the case of commercially available software provided by a 3rd party, the 3rd party's own stated support for browsers listed is considered acceptable, provided it reasonably achieves the goal of full functionality across all of the listed browser formats. It is not feasible for the Contractor to alter the COTS software to provide support for additional browsers and Operating systems.</p> <p>3. Confirm that at such time as the Authority wishes to implement specific functionality not supported by the capabilities of certain legacy browsers and/or operating systems, the Authority will reasonably amend this list of supported browsers and operating systems, to remove those which are no longer supported.</p> <p>4. Confirm that "the most recent release" as it pertains to browser versions is applicable only at the time of contract signature and that the Authority acknowledges that subsequent browsers not yet released shall be</p>	
--	--	--	---	--

				<p>addressed as they are released and may require some additional software development or refinement, for which the Contractor may reasonably charge normal hourly fees.</p> <p>5. Confirm that it is acceptable for the Contractor's solution to support only those operating system versions that are compatible with the supported browsers. (For example, if the most recent release of Internet Explorer does not support Windows Vista, then it is acceptable that the solution does not support Windows Vista.)</p>	
40	4.II.2	50	Operations	Clarify what is envisioned for "Transformations" and "Real-time."	<p>Transformations: The ability or need to transform documents from one data format into another.</p> <p>Real-time: Operations are expected to be conducted in real-time. Processes will occur and respond immediately (as opposed to batch, off line processes).</p>
41	4.II.3	50	Audit Logs	<p>Regarding "sensitive transactions (to be determined during implementation phase)":</p> <p>Confirm that sensitive transactions will be defined as transactions that may be audited within the content management system which the Authority deems sensitive, which is to say, custom functionality will not have to be created specifically for the purpose of auditing sensitive transactions not otherwise logged by the commercial software.</p>	<p>The Authority will identify, during the design implementation phase, the sensitive transactions requiring an audit trail in place in the event an investigation needs to be performed.</p> <p>Required fields for such sensitive transactions may be custom functionality or may be part of the original system design. Audit trails should capture time, date, action, user and before/after images. View access should also be tracked by an audit trail, with typical actions such as create, copy, change, and delete.</p>
42	7.h	51	System Final Approval	"The Transparency Website must be in production for a	It is anticipated that the first 30 days of full production operation in which both

			<p>total of 30 business days without significant problems, errors and/or system interruptions before the Authority will sign off on final approval.”</p> <p>Will live users (neither Contractor nor Authority personnel) be actively using the system during this 30-day period?</p>	<p>Port Authority Content Managers and public consumers will be utilizing the Transparency Solution will comprise the System Final Approval period.</p>
--	--	--	--	---

This communication should be initialed by you and annexed to your response upon submission. In case any Respondent fails to conform to these instructions, its response will nevertheless be construed as though this communication had been so physically annexed and initialed.

THE PORT AUTHORITY OF NY & NJ

CARMEN REIN
GENERAL MANAGER

RESPONDENT'S NAME: _____
INITIALED: _____
DATE: _____

QUESTIONS CONCERNING THIS ADDENDUM MAY BE ADDRESSED TO JAMES SUMMERVILLE:
JSUMMERVILLE@PANYNJ.GOV, 201-395-3454

THE PORT AUTHORITY OF NY & NJ

PROCUREMENT DEPARTMENT
2 MONTGOMERY STREET, 3RD FLOOR
JERSEY CITY, NJ 07302

May 1, 2013

RE: Transparency Website

To whom it may concern:

Thank you for your response to the Port Authority of New York and New Jersey's (the "Port Authority" or the "Authority") Request for Information for a Transparency Website. The Authority is hereby requesting a response from your firm to further help us in the selection of a firm to provide, implement, and maintain the Transparency Website.

1. BRIEF SUMMARY OF THE SCOPE OF WORK

The Authority intends to make available a variety of documents – including contracts, leases, Freedom of Information ("FOI") requests, Board meeting presentations, and labor agreements – to the public via the internet as part of its transparency initiative. The available documents will vary in size. For example, contracts could range from 25 to 500 pages or responses to FOI requests could range from 2 to 1,000 pages in length.

Currently, the Authority posts several documents online. A profile of such information:

- a. Since the initial posting in March 2012 of FOI information, the Authority estimates having 200,000 pages of documents available to the public on the CORPORATE INFORMATION section of the Authority's website. These documents consist of FOI Fulfilled Requests, Board Presentations, Board Minutes, Leases, Public Hearing and Audit Reports, Business Transactions, and Annual Reports and Financial Information;
- b. Of the 200,000 pages, about ten percent (10%) are color documents, mainly Board Presentations and Annual Reports;
- c. FOI Fulfilled Requests range from 2KB to 50MB – about 750 responses online (PDF files);
- d. Annual Reports range from 5MB to 75MB – 90 years online (PDF files);
- e. Board/Committee Presentations all under 20MB – 150 presentations (representing 2 years) (PDF files);
- f. Board/Committee Minutes all under 1MB – about 400 documents (representing 10 years) (PDF files);
- g. Board Day Videos: about 50 video files available (representing about a half year); and
- h. Payroll Information.
- i. Traffic and Volume Information.

In addition to the foregoing information, the Authority intends to:

- j. Provide another 200,000 pages of information over the next year or two;
- k. Increase the availability of Board Day Videos;
- l. Increase the portfolio on information cited above to include contracts.

The universe of documents available as a result of this transparency initiative will grow on an ongoing basis as the Port Authority continues to conduct its business.

The Authority seeks to retain a firm to store, manage, maintain, upload and publish this collection of documents, current and anticipated, on a Transparency Website ("Transparency Website" or "Website") provided and hosted (in its entirety) by the firm. Because the Authority does not currently know the precise number or volume of documents available for publication, it intends to initiate a one-year, task order-oriented pilot project so that during this time it can determine such volume and gauge public usage of the dedicated Website.

The pilot project will require that the firm retained by the Authority provide the following services, either by itself or in conjunction with an approved subcontractor:

- Using a document management system, post the documents to a hosted, public-facing Website (provided and hosted entirely by the firm) with search capabilities; and
- For special projects, retrieve, scan and return documents (in the original format) to the Authority.

The Authority expects that the firm will have in place a document management system to store, manage and maintain a library of documentation for publication to a public Website that will be hosted and maintained (in its entirety) by the firm. The firm will ensure that the information on the Website is indexed and searchable in such a way that potential users are able to easily access a particular document based on simple and transparent search criteria.

2. SUBMISSION OF RESPONSES

Firms shall email responses to James Summerville, Pr. Contracts Specialist, at jsummerville@panynj.gov on or before 2:00 PM on May 24, 2013.

3. COMMUNICATIONS

All communications should be directed to Pr. Contracts Specialist James Summerville (jsummerville@panynj.gov). All questions should be submitted in writing (by email) no later than 5:00 p.m. (EST) on May 6, 2013.

The Contracts Specialist is authorized only to direct the attention of prospective Respondents to various portions of this document 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 document or give additional information as to its requirements. If interpretation or other information is required, it will be communicated to Respondents by written-addenda and such writing shall form a part of this Selection Process Document.

4. RESPONSE ACCEPTANCE OR REJECTION

Acceptance shall be only by mailing to or delivering at the office designated by the Respondent in its response, a notice in writing signed by an authorized representative on behalf of the Port Authority specifically stating that the response is accepted or by execution of an agreement covering the subject matter of this Selection Process Document signed by authorized representatives of the Port Authority and the Respondent. No other act of the Port Authority, its Commissioners, officers, agents, representatives, or employees shall constitute acceptance of a response. Rejection of a response shall be only by either (a) a notice in writing specifically stating that the response is not accepted, signed by an authorized representative of the Port Authority and mailed to or delivered to the respondent at the office designated in the response, or (b) omission of the Port

Authority to accept the response within 180 days after the Response Due Date. No other act of the Port Authority, its Commissioners, officers, agents, representatives or employees shall constitute rejection of a response.

5. UNION JURISDICTION

Respondents are advised to ascertain whether any union now represented or not represented at any facility will claim jurisdiction over any aspect of the operations to be performed hereunder and their attention is directed to the Section of this Selection Process Document entitled "Harmony" included in the "General Contract Provisions" (Attachment B, Section 44) hereunder

6. CITY PAYROLL TAX

Respondents 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.
- d. City of Newburgh, New York for services performed in Newburgh, New York and Town of New Windsor, New York for services performed in New Windsor, New York.
- e. County of Bergen, New Jersey for services performed in Teterboro, and Moonachie New Jersey.

These taxes, if applicable, are the sole responsibility of the Contractor. Respondents 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 "Tax Exemptions" in the "General Contract Provisions" (Attachment B, Section 21) does not apply to these taxes.

7. ADDITIONAL RESPONDENT INFORMATION

Prospective Respondents are advised that additional vendor information, including, but not limited to forms, documents and other information, including M/WBE Participation Plan Submission Forms and protest procedures, may be found on the Port Authority website at:

<http://www.panynj.gov/business-opportunities/become-vendor.html>

8. CONTRACTOR STAFF BACKGROUND SCREENING

The Contractor awarded this Contract may be required to have its staff, and any subcontractor's staff working under this Contract, authorize the Authority or its designee to perform background checks. Such authorization shall be in a form acceptable to the Authority. The Contractor (and subcontractor) may also be required to use an organization designated by the Authority to perform the background checks. The cost for said background checks for staff that pass and are granted a credential shall be reimbursable to the Contractor (and its subcontractors) as an out-of-pocket expense as provided herein. Staff that are rejected a credential, for any reason, are not reimbursable.

As of January 29, 2007, the Secure Worker Access Consortium (S.W.A.C.) is the only Port Authority approved provider to be used to conduct background screening, except as otherwise required by federal law and/or regulation. Information about S.W.A.C., instructions, corporate enrollment, online applications, and location of processing centers can be found at <http://www.secureworker.com>, or S.W.A.C. may be contacted directly at (877) 522-7922.

9. SCOPE OF WORK

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

10. RESPONDENT PREREQUISITE

Only Respondents that can demonstrate that they comply with the following prerequisite should submit responses, as only responses from such Respondents will be considered:

1. The Respondent shall have had at least two (2) years of continuous experience immediately prior to the date of the submission of its response as a business actually engaged in providing similar systems and/or services to commercial and industrial accounts under contract, **including** at least one other governmental entity in the United States. Examples of governmental entities include the State of New York, the State of New Jersey, New York City, and the U.S. General Services Administration (GSA), as well as other State, Local, and Public municipalities and agencies. The contract between the Respondent and the other governmental entity must be active (i.e. not expired).

The Respondent may fulfill this prerequisite if it can demonstrate that the person(s) or entity(ies) owning and controlling the Respondent have had a cumulative total of at least the same number of years of experience in the provision of similar services immediately prior to the submission of its response or has owned and controlled other entities that meet the requirement;

Respondents shall use Attachment D (Reference Information for Respondent Prerequisites), which requests reference information, to demonstrate satisfaction of this prerequisite.

11. FINANCIAL INFORMATION

The Respondent will be required to demonstrate that it is financially capable of performing the contract resulting from this Selection Process Document ("Contract"). The determination of the Respondent's financial qualifications and ability to perform this Contract will be in the sole discretion of the Port Authority. The Respondent shall submit, with its response, the following:

- A. (1) Certified financial statements, including applicable notes, reflecting the Respondent's assets, liabilities, net worth, revenues, expenses, profit or loss and cash flow for the most recent year or the Respondent'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.
- B. A statement of work which the Respondent has on hand, including any work on which a bid and/or response 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 Respondent's work on these jobs.
- C. The name and address of the Respondent's banking institution, chief banking representative handling the Respondent's account, the Respondent's Federal Employer Identification Number (i.e., the number assigned to firms by the Federal Government for tax purposes), the Respondent's Dun and Bradstreet number, if any, the name of any credit service to which the Respondent furnished information and the number, if any, assigned by such service to the Respondent's account.

12. EVALUATION CRITERIA AND RANKING

All responses will be reviewed by the Port Authority to determine if they adhere to the format required in this Selection Process Document, if they contain all required submissions and if the Respondent satisfies the prerequisite required for submission of a Response. For Responses meeting such requirements, the Authority will evaluate them according to the following criteria:

- A. The overall cost provided by the Respondent in the Price Forms (Attachment E).
- B. The Respondent's Technical Response, and the functionality of the proposed Transparency Website (and the underlying System), including:
 - Its ability to meet the requirements of the Scope of Work;
 - Its ease of use;
 - The degree to which it uses open standards, is in general release on the recommended technology platform at clients of comparable size to the Authority and the degree to which the Respondent maintains effective partnerships with technology vendors.
- C. The Respondent's management and project plan, including:
 - The demonstrated understanding of the Authority's requirements and objectives;
 - The proposed project schedule to implement the Transparency Website;
 - Quality of response and supporting materials;
 - Respondent profile, financial strength and stability;
 - Experience and qualifications of the project team to be assigned to implement, configure (if necessary) and maintain the System and to train the users;
 - Experience in providing ongoing maintenance support.

13. M/WBE SUBCONTRACTING PROVISIONS

The Contractor shall use every good-faith effort to provide for meaningful participation by certified Minority Business Enterprises (MBEs) and Women-owned Business Enterprises (WBEs), as defined in Section 43 in Attachment B (General Contract Provision), in all purchasing, subcontracting and ancillary service opportunities associated with the Contract. Good-faith efforts to include participation by MBEs/WBEs shall include the following:

- a. Dividing the services and materials to be procured into small portions, were feasible.
- b. Giving reasonable advance notice of specific contracting, subcontracting and purchasing opportunities to such MBEs/WBEs as may be appropriate.
- c. Soliciting services and materials, to be procured, from the agency's online Directory of MBEs/WBEs, which can be accessed at <http://www.panynj.gov/business-opportunities/sd-mini-profile.html>, or seeking MBEs/WBEs from other sources.
- d. Insuring that provision is made to provide progress payments to MBEs/WBEs on a timely basis.

14. RESPONSE SUBMISSION REQUIREMENTS

In order to expedite the evaluation of responses, the Respondent's response to this Selection Process Document shall follow the format and order of items, using the same paragraph identifiers, as set forth below:

A. Letter of Transmittal

The Respondent shall submit a letter on its letterhead, signed by an authorized representative, stating its experience and qualifications in meeting the requirements of this Selection Process Document. This letter shall include a statement on whether the Respondent is submitting a response 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:

- Name, physical address, and URL address of the Respondent and an original signature on the Letter of Transmittal by an authorized representative on behalf of the Respondent;
- Name(s), title(s), email addresses and telephone number(s) of the individual(s) who are authorized to negotiate and execute the Contract;
- 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 Selection Process Document;
- Name and address of proposed subcontractors, if any;
- 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 Responses;
- 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 Respondent shall submit a summary presenting the major features of its response and how the response satisfies the requirements contained in this Selection Process Document, as well as the special competencies and expertise of the Respondent to meet the requirements of this Selection Process Document. Such summary shall not exceed two (2) 8.5 x 11 pages.

C. Agreement on Terms of Discussion

The Respondent shall submit a copy of the "Agreement on Terms of Discussion," signed by an authorized representative of the Respondent, which is included as Attachment A and shall be submitted by the Respondent without any alterations or deviations. Any Respondent who fails to sign the Port Authority's "Agreement on Terms of Discussion" will not have its response reviewed. If the Respondent 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 Respondent, by signing the Letter of Transmittal, makes the certifications in the "Contractor's Integrity Provisions," included as Section 36 of Attachment B to this Selection Process Document. If the Respondent cannot make any such certifications, it shall enclose an explanation of that inability ("Certification Statement").

E. Documentation of Respondent Prerequisite

Using Attachment D, the Respondent shall submit documentation to demonstrate that it meets all prerequisites included herein.

F. Response:

NOTE: EXCLUDING THE FINANCIAL STATEMENTS (SECTION 11), THE LETTER OF TRANSMITTAL SECTION 14.A), THE SIGNED AGREEMENT ON TERMS OF DISCUSSION (SECTION 14.C, ATTACHMENT A), AND THE SOFTWARE LICENSE AGREEMENT REQUIRED BELOW, RESPONSES SHALL NOT EXCEED 20 LETTER-SIZE PAGES.

1. **Cost Response:** Using Attachment E hereof, the Respondent shall submit a cost response responding to the Scope of Work (Attachment C). As a baseline, the proposed pricing shall not exceed the pricing provided under each of the contract(s) between the Respondent and the other governmental entity identified in the Price Forms. **While the proposed pricing shall not exceed the prices offered in the identified government contract, the Authority encourages the Respondent to provide additional discounts to the Authority.**

2. **Technical Response:** Using the Paragraph Identifiers listed in Attachment C (Scope of Work or "SOW"), the Respondent shall describe in detail the functionality of the proposed Transparency Website (and the underlying System) and its approach to satisfying the requirements of the Scope of Work. In addition to describing how the proposed Transparency Website (and underlying System) satisfies the requirements of the SOW, the technical response shall also include:
 - A. **A System Implementation Plan:** The Response shall include a detailed implementation plan for the tasks described in the the SOW, with each task itemized in number of hours and weeks it will take for completion.

 - B. **Confirmation that the System complies with the Control Requirement Contract Checklist (Attachment F), Standards & Guidelines for Port Authority Technology (Attachment I), and the Port Authority Information Security Handbook (<http://www.panynj.gov/business-opportunities/pdf/Corporate-Information-Security-Handbook.pdf>); and**

 - C. **Confirmation that the Proposer is able and willing to satisfy the service levels identified in the SOW, and a description on how it will monitor and report on the performance metrics listed in such service levels.**

Maintenance Plan: The Respondent shall include its plan to maintain according to the requirements in Attachment G (Maintenance Requirements for Hosted Systems) hereof.

Management Plan: The Respondent shall describe in detail its experience in delivering similar services and systems and the proposed technology, and its approach to the Management of the Work described in SOW. The Respondent shall describe its management structure and proposed staffing for fulfilling the requirements of the SOW, and include resumes (of the project/engagement manager and key technical staff) and other supporting documentation demonstrating its ability to perform and manage the work.

Training Plan: The Respondent shall describe its plan to provide training according to the requirements specified in the SOW.

3. Software License Agreement: The Respondent shall provide copies of all software license agreement for the proposed Transparency Website.
4. Security Plan and Policies: The Respondent shall provide its plan and policies covering how system security and data are maintained, with details on items such as firewalls, remote access, virus controls, alerting, monitoring, physical security, host intrusion detection, network intrusion detection. The Response shall include policies and procedures, as well as a description of the methods to ensure these controls are in place.

Your response shall not include brochures and/or similar marketing material in response to this solicitation.

G. Acknowledgment of Addenda

If any Addenda are posted or sent as part of this Selection Process Document, the Respondent shall complete, sign and include with its Response the addenda form(s). In the event any Respondent fails to conform to these instructions, its response will nevertheless be construed as though the Addenda had been acknowledged.

H. Acceptance of General Contract Provisions

The Port Authority has attached to this Selection Process Document as **Attachment B, "General Contract Provisions"** governing the Contract. **The Respondent is expected to agree with these General Contract Provisions.** However, if the Respondent has any specific exceptions, such exceptions should be set forth in a separate letter included with its response to this Selection Process Document. After the Response Due Date, the Respondent 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 Respondent and the Port Authority.

I. M/WBE Plan

The Respondent shall submit an M/WBE Plan in accordance with the M/WBE Subcontracting Provisions hereunder

15. CONDITIONS FOR THE SUBMISSION OF A RESPONSE

In addition to all other requirements of this Selection Process Document, the Respondent agrees to the following conditions for the submission of its response.

A. Changes to this Selection Process Document

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

B. Response Preparation Costs

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

performance of services signed by an authorized representative of the Port Authority and the Respondent.

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

Response information is not generally considered confidential or proprietary. All information contained in the response 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 Selection Process Document shall become the property of the Port Authority. Selection or rejection of a Response shall not affect this right.

E. Subcontractors

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

F. Conflict of Interest

If the Respondent or any employee, agent or subcontractor of the Respondent may have a possible conflict of interest, or may give the appearance of a possible conflict of interest, the Respondent shall include in its response a statement indicating the nature of the conflict. The Port Authority reserves the right to disqualify the Respondent 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

Responses must be signed by an authorized corporate officer (e.g., President or Vice President), General Partner, or such other individual authorized to bind the Respondent to the provisions of its response and this Selection Process Document.

H. References

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

I. Evaluation Procedures and Negotiation

Only Respondents that meet the prerequisites may have their responses evaluated based on the evaluation criteria set forth in this Selection Process Document. The Port Authority may use such procedures that it deems appropriate to evaluate such responses. The Port Authority may elect to initiate contract negotiations with one or more Respondents including negotiation of costs/price(s) and any other term or condition, including modifying any requirement of this Selection Process Document. 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 Response/No Obligation to Award

The Port Authority reserves the right to award the Contract to a Respondent other than the Respondent proposing the lowest price. The Contract will be awarded to the Respondent whose response the Port Authority believes, in its sole discretion, will be the most advantageous to the Port Authority. Neither the release of this Selection Process Document nor the acceptance of any response thereto shall compel the Port Authority to accept any response. The Port Authority shall not be obligated in any manner whatsoever to any Respondent until a response is accepted by the Port Authority in the manner provided in the Section of this Selection Process Document entitled "Response 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 Selection Process Document and Respondents 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 response 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 Respondent.

N. Rights of the Port Authority

The Port Authority reserves all its rights at law and equity with respect to this Selection Process Document including, but not limited to, the unqualified right, at any time and in its sole discretion, to change or modify this Selection Process Document, to reject any and all responses, to waive defects or irregularities in responses received, to seek clarification of responses, to request additional information, to request any or all Respondents to make a presentation, to undertake discussions and modifications with one or more Respondents, or to negotiate an agreement with any Respondent or third person who, at any time, subsequent to the deadline for submissions to this Selection Process Document, may express an interest in the subject matter hereof, to terminate further participation in the response process by a Respondent or to proceed with any response or modified response, 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 responses or to request or accept additional material or information. The holding of any discussions with any Respondent shall not constitute acceptance of a response, and a response may be accepted with or without discussions.

No Respondent shall have any rights against the Port Authority arising from the contents of this Selection Process Document, the receipt of responses, or the incorporation in or rejection of information contained in any response 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 Respondent, by submitting its response, 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 Respondent required by this Selection Process Document or Contract and the Respondent agrees that it shall not hold the Port Authority liable or responsible therefor in any manner whatsoever.

At any time and from time to time after the opening of the responses, the Port Authority may give oral or written notice to one or more Respondents to furnish additional information relating to its response and/or qualifications to perform the services contained in this Selection Process Document, or to meet with designated representatives of the Port Authority. The giving of such notice shall not be construed as an acceptance of a response. 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 Respondent or another or held liable to a Respondent or another under any term or provision of this Selection Process Document or any statements made herein or because of the submission or attempted submission of a response 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 Freedom of Information Code and Procedure (FOI Code) adopted by the Port Authority's Board of Commissioners on March 29, 2012, which may be found on the Port Authority website at: <http://www.panynj.gov/corporate-information/pdf/foi-code.pdf>, not to disclose to any competitor of the undersigned, information submitted which are trade secrets which, if disclosed, would cause injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, as more fully set forth in the FOI Code, 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: GENERAL CONTRACT PROVISIONS

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" or the "Port Authority") agrees to accept the Contractor's response for a Transparency Website, as more fully set forth in the Scope of Work (Attachment C) 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.

Subject only to the provisions of the clause herein entitled "Optional Enhancements", the Contractor's sole compensation in full consideration for the performance of all the Contractor's obligations under this Contract is provided in the Cost Proposal, as accepted by the Port Authority.

2. DEFINITIONS

As used herein, "Director" shall mean the Board Secretary acting either personally or through her duly authorized representatives acting within the scope of the particular authority vested in them unless specifically stated to mean acting personally. For the purpose of administering this Contract, the Board Secretary has designated the Executive Business Manager of the Port Authority's Office of the Secretary to act as her duly authorized representative and as Contract Manager.

For the purposes of this Contract, the Contract Manager (sometimes referred to herein as the "Manager") shall be the individual with day-to-day responsibility for managing the services on behalf of the Port Authority. The Director may modify this designation in a writing forwarded to the Contractor at the address designated for delivery of notice herein.

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

"Facility" shall mean Port Authority Facilities within the Port District.

"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, and Holidays excluded.

As used herein the term "Specifications" shall mean all requirements of this Selection Process Document, technical and otherwise, for the performance of the Scope of Work and services hereunder.

Holidays: The following legal holidays will be observed at Port Authority offices and facilities:

New Year's Day	Columbus Day
Martin Luther King, Jr. Day	Veterans Day
Presidents' Day	Thanksgiving Day
Memorial Day	Day after Thanksgiving
Independence Day	Christmas Day
Labor Day	

As used herein, the terms "Port Authority" or "Authority" shall mean The Port Authority of New York and New Jersey.

Minority Business Enterprise (MBE) - shall mean a business entity which is at least 51% owned and controlled by one or more members of one or more minority groups, or, in the case of a publicly held corporation, at least 51% of the stock of which is owned by one or more members of one or more minority groups, and whose management and daily business operations are controlled by one or more such individuals who are citizens or permanent resident aliens.

"Minority Group" means any of the following racial or ethnic groups:

- Black persons having origins in any of the Black African racial groups not of Hispanic origin;
- Hispanic persons of Mexican, Puerto Rican, Dominican, Cuban, Central or South American culture or origin, regardless of race;
- Asian and Pacific Islander persons having origins in any of the original peoples of the Far East, Southeast Asia, The Indian Subcontinent, or the Pacific Islands;
- Native American or Alaskan native persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification.

Small Business Enterprise (SBE) - The criteria for a Small Business Enterprise are:

- The principal place of business must be located in New York or New Jersey;
- The firm must have been in business for at least three years with activity; and
- Average gross income limitations by industry as established by the Port Authority.

Women-Owned Business Enterprise (WBE) - shall mean a business enterprise which is at least 51% owned by one or more women, or, in the case of a publicly held corporation, at least 51% of the stock of which is owned by one or more women and whose management and daily business operations are controlled by one or more women who are citizens or permanent resident aliens.

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 its own personal labor or its 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.

3. 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 Contract (unless referable to another expressly written, duly executed contract 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 Contract.
- 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.

4. DURATION

This Contract shall commence upon complete execution of an award letter issued by the Authority and shall remain in effect for a period of one year (hereinafter the "Base Term") after operational acceptance by the Authority of the Transparency Website, unless otherwise terminated in accordance with the provisions hereof.

The Authority shall also have the right to extend this Contract for an additional 120 day period, from the date originally fixed for expiration of the Base Term or any option period then in effect upon the same terms and conditions except as set forth elsewhere in this Contract, to be effected by written notice to the Contractor received no later than thirty (30) days prior to the expiration date of the Base Term or the expiration date of the option period, if applicable.

The amounts payable to the Contractor during any 120-day Extension Period shall be the same as the amounts payable in the immediately preceding period.

5. OPTIONAL ENHANCEMENTS

If requested by the Authority, the Contractor shall provide "Enhancements" for modified or additional products and services, including, application enhancements, reporting modifications or creation, or any other such application services ("Enhancements"). Agreement by the parties, if such is forthcoming, for such Optional Enhancements shall be in writing. The execution of the aforementioned written agreement regarding performance of such Enhancements, shall be a condition precedent to payment of any compensation for such Enhancements, with such compensation to be no greater than that set forth in the Hourly Rates for Optional Enhancements, Section E of Attachment E (Cost Response), as accepted by the Authority.

6. PERFORMANCE OF ENHANCEMENTS

The provisions of this Contract relating generally to the Services shall apply without exception to any Enhancements agreed upon by the parties and to the performance thereof, except to the extent that a

written agreement in connection with any particular item of Enhancements may expressly provide otherwise.

7. 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, a compensation calculated from the services performed and the respective unit prices inserted by the Contractor in the Cost Response Form in Attachment E (as accepted by the Authority), forming a part of this Contract.

The manner of submission of all bills for payment to the Contractor by the Authority for Services rendered under this Contract shall be subject to the approval of the Contract 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:

- A. Payment shall be made in accordance with the prices for the applicable service as they appear on Attachment E ("Cost Response"), as accepted by the Authority, as same may have been adjusted hereunder minus any deductions for services not performed and/or any applicable liquidated damages. All Services must be completed within the time frames specified or as designated by the Contract Manager. Contractor shall submit to the Contract 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 Contract Manager for verification. The invoice must show the Contractor's Federal Tax Identification Number. Payment will be made within thirty (30) days of Authority verification of the invoice. No certificate, payment, acceptance of any Services or any other act or omission of any representative of the Authority shall operate to release the Contractor from any obligation under or upon this Contract, or to stop the Authority from showing at any time that such certificate, payment, acceptance, act or omission was incorrect or to preclude the Authority from recovering any monies paid in excess of those lawfully due and any damage sustained by the Authority.
- B. 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 Authority, the Contractor shall pay to the Authority the difference promptly upon receipt of the Authority's statement thereof. The 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 any payment, including Final Payment, shall act as a full and complete release to the 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 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.

8. INTELLECTUAL PROPERTY

- A) Except as provided below: as between the Port Authority and the Contractor all process flows, codes including, but not limited to machine code, 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 Contract, 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 Contract 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 Contract 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 its services hereunder shall be deemed licensed to the Authority for the duration and purposes of this Contract, but shall remain the property of the Contractor.
- C) When in the performance of the Contract the Contractor utilizes passwords or codes for any purpose, the Contractor, upon written request by the Authority, made at any time during or after the performance of such services, shall promptly make available to the designated Authority representative all such passwords and codes.
- D) Third party software not specially prepared for the purpose of this contract but utilized by the Contractor hereunder in the performance of its services hereunder shall be licensed to the Contractor and the Authority for the duration and purposes of this contract but shall remain the property of said third party.
- E) The above-described software shall be furnished by the Contractor without additional compensation.

9. 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 the clause hereof 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 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.

10. 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 two immediately preceding clauses of any 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 components of the System 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, components of the System 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.

If so directed, the Contractor shall at its own expense defend any suit based upon any 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.

11. 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, and as directed by the Director or Manager, are of the essence of this Contract.

12. 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 Contract. Within thirty (30) 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 Contract 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 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.

13. DEFAULT, REVOCATION OR SUSPENSION OF CONTRACT

- A. If one or more of the following events shall occur:
1. Fire or other event which destroys all or a substantial part of the Facility, asset or infrastructure necessary to perform the Scope of Work;

2. 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, joint-venture, or similar arrangement (referred to herein for convenience as the "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 contract 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 contract with the Port Authority) or (2) any claim (just or unjust) which arises out of or in connection with this Contract or any other contract between the Port Authority and the Contractor is made against the Port Authority or (3) any subcontractor under this Contract or any other contract 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 contract 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, as a result of or with respect to anything contained in this subsection, 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. Until actual payment to the Contractor, its 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.
- L. The Port Authority shall also have the rights set forth above in the event the Contractor shall become insolvent or bankrupt or if its affairs are placed in the hands of a receiver, trustee or assignee for the benefit of creditors.

14. 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.

15. 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.

16. NOTIFICATION OF SECURITY REQUIREMENTS

The Authority has the responsibility of ensuring safe, reliable and secure transportation facilities, systems, and projects to maintain the well-being and economic competitiveness of the region. Therefore, the Authority reserves the right to deny access to certain documents, sensitive security construction sites and facilities (including rental spaces) to any person that declines to abide by Port Authority security procedures and protocols, any person with a criminal record with respect to certain crimes or who may otherwise poses a threat to the construction site or facility security. The Authority reserves the right to impose multiple layers of security requirements on the Contractor, its staff and subcontractors and their staffs depending upon the level of security required, or may make any amendments with respect to such requirements as determined by the Authority.

These security requirements may include but are not limited to the following:

- Execution of NDAs Confidentiality Agreements & Acknowledgements
- Contractor/ Subcontractor identity checks and background screening

The Port Authority's designated background screening provider may require 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; screening federal, state, and/or local criminal justice agency information databases and files; screening of any terrorist identification files; access identification to include some form of biometric security methodology such as fingerprint, facial or iris scanning, or the like.

The Contractor may be required to have its staff, and any subcontractor's staff, material-men, visitors or others over whom the Contractor/subcontractor has control, authorize the Authority or its designee to perform background checks, and a personal identity verification check. Such authorization shall be in a form acceptable to the Authority. The Contractor and subcontractors may also be required to use an organization designated by the Authority to perform the background checks.

As of January 29, 2007, the Secure Worker Access Consortium (S.W.A.C.) is the only Port Authority approved provider to be used to conduct background screening and personal identity verification, except as otherwise required by federal law and/or regulation (such as the Transportation Worker Identification Credential for personnel performing in secure areas at Maritime facilities). Information about S.W.A.C., instructions, corporate enrollment, online applications, and location of processing centers can be found at <http://www.secureworker.com>, or S.W.A.C. may be contacted directly at (877) 522-7922 for more information and the latest pricing. The cost for said background checks for staff that pass and are granted a credential shall be reimbursable to the Contractor (and its subcontractors) as an out-of-pocket expense as provided herein. Staff that are rejected for a credential for any reason are not reimbursable.

- Issuance of Photo Identification Credential

No person will be permitted on or about the Authority construction site or facility (including rental spaces) without a facility-specific photo identification credential approved by the Authority. If the authority requires facility-specific identification credential for the Contractor's and the subcontractor's staff, the Authority will supply such identification at no cost to the Contractor or its subcontractors. Such facility-specific identification credential shall remain the property of the Authority and shall be returned to the Authority at the completion or upon request prior to completion of the individual's assignment at the specific facility. It is the responsibility of the appropriate Contractor or subcontractor to immediately report to the Authority the loss of any staff member's individual facility-specific identification credential. The Contractor or subcontractor shall be billed for the cost of the replacement identification credential. Contractor's and subcontractor's staff shall display Identification badges in a conspicuous and clearly visible manner, when entering, working or leaving an Authority construction site or facility.

Employees may be required to produce not less than two forms of valid/current government issued identification having an official photograph and an original, unlaminated social security card for identify and SSN verification. Where applicable, for sensitive security construction sites or facilities, successful completion of the application, screening and identity verification for all employees of the Contractor and subcontractors shall be completed prior to being provided a S.W.A.C. ID Photo Identification credential.

- Access control, inspection, and monitoring by security guards

The Authority may provide for Authority construction site or facility (including rental spaces) access control, inspection and monitoring by Port Authority Police or Authority retained contractor security guards.

However, this provision shall not relieve the Contractor of its responsibility to secure its equipment and work and that of its subconsultant/subcontractor's and service suppliers at the Authority construction site or facility (including rental spaces). In addition, the Contractor, subcontractor or service provider is not permitted to take photographs, digital images, electronic copying and/or electronic transmission or video recordings or make sketches on any other medium at the Authority construction sites or facilities (including rental spaces), except when necessary to perform the Work under this Contract, without prior written permission from the Authority. Upon request, any photograph, digital images, video recording or sketches made of the Authority construction site or facility shall be submitted to the Authority to determine compliance with this paragraph, which submission shall be conclusive and binding on the submitting entity.

17. 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 - \$ 2 million combined single limit per occurrence for bodily injury and property damage liability.

Automobile Liability Insurance - \$ 2 million combined single limit per accident for bodily injury and property damage liability.

Valuable Papers and Records Insurance - \$ 2 million combined single limit per incident.

In addition, the liability policy (ies) shall name "The Port Authority of New York and New Jersey and its related entities, their commissioners, directors, officers, partners, employees and agents as additional insureds", 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 maintenance/warranty/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 an endorsement 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), including but not limited to the cancellation notice endorsement and 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. CITS#4212N

18. ASSIGNMENTS AND SUBCONTRACTS

Any assignment or other transfer by the Contractor of this Contract or any part hereof or of any of its rights hereunder or of any monies due or to become due hereunder and any delegation of any of its 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 its 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.

19. CERTAIN CONTRACTOR'S WARRANTIES

The Contractor represents and warrants:

- a. That it is financially responsible and experienced in, and competent to perform this Contract; that no representation, promise or statement, oral or in writing, has induced it to submit its Response, 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 its Response are true; and, if the Contractor be a corporation, that it is authorized to perform this Contract;
- b. That it has carefully examined and analyzed the provisions and requirements of this Contract, that from its own investigations it has satisfied itself 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 it 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 it 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.
- g. Moreover, the Contractor accepts the conditions at the sites of work as they may eventually be found to exist and warrants and represents that it 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 its own cost and expense, anything in this Contract to the contrary notwithstanding. The Authority is responsible for all facility power.
- h. 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.
- i. The Contractor further represents and warrants that it 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 it might request inclusion in this Contract of any statement, representation, promise or provision which it desired or on which it wished to place reliance; that it 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 it 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.
- j. 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.

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 it 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 Contract (including claims in the nature of breach of contract or fraud or misrepresentation before or subsequent to execution of this Contract and claims of a type which are barred by the provisions of this Contract) for damages, payment or compensation of any nature or for performance of any part of this Contract.

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

- A. In the case of any claims for which requirements are set forth elsewhere in this Contract 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.
- C. 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 Contract and are in addition to any notice required by statute with respect to suits against the Authority.

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

No, act, omission or statement of any kind shall be regarded as a waiver of any of the provisions of this 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 Contract.

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 its office, or its delivery to its 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 its Response. 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 Contract is intended for the benefit of third persons, except to the extent that the Contract specifically provides otherwise by use of the words "benefit" or "direct right of action".

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 responses 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:

- 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.

- 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.
- 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.
- 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 the approval by 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. SUBMISSION TO JURISDICTION

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 Response, 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 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 Response 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 he 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 he participated therein, or by any prior decision of him 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 his satisfaction at such times and places, by such methods and such manner and sequence as he may require, and the Contract shall at all stages be subject to his inspection. The Contractor shall employ no equipment, materials, methods or men to which

he objects, and shall remove no materials, equipment or other facilities from the Authority site without permission. Upon request, he 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 his satisfaction or subject to his inspection, shall not imply that only the matters of a nature similar to those enumerated shall be so governed and performed, but without exception the entire Contract shall be so governed and 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 its 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

At no cost to the Authority, the Contractor, and any subcontractors, shall provide prompt system access and reasonable assistance to the Authority's External and Internal Audit staff or its consultants in their performance of work under the contract, including producing specific requested information, extraction of data and reports. The Contractor, and any subcontractors, shall promptly support requests related to audits of the contract and administration tasks and functions covered by this Contract. The Authority will require access to the Contractor's Network and/or data center on a periodic basis; the hours to be determined, at the convenience of the authority.

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 information "owned" by the Port Authority.

31. STATEMENT ON STANDARDS FOR ATTESTATION ENGAGEMENTS (SSAe) NO. 16 Audit

At no cost to the Authority and to the extent applicable to the Services, the Contractor shall conduct SSAE 16 or its successor on an annual basis and provide such report to the Authority.

32. AUTHORITY ACCESS TO RECORDS

At no cost to the Authority, the Authority shall have access during normal business hours to all records and documents of the Contractor relating to any service provided under this Contract, amounts for which it has been compensated, or claims the Contractor should be compensated, by the Authority above those included in the compensation set forth elsewhere herein. All Contractor records shall be kept in the Port District (as defined in McKinney's Unconsolidated Laws §6403). 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 one year period the Authority has notified the Contractor in writing of a pending claim by the Authority under or in connection with this Contract to which any of the aforesaid records and documents of the Contractor or of its 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 that 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 three (3) years 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 that the Authority would have in the absence of such provision.

33. CONTRACT RECORDS & DECOMMISSION CLAUSE

The Authority will own and have all right, title and interest in all data, regardless of media used, including but not limited to all notations, electronic copy of documents and hard copy documents in Contractor's possession, even if such data was obtained by the Contractor on behalf of the Authority prior to the Effective Date of this Agreement (the "Work Product") and, to the extent possible all Work Product shall be considered a work made for hire for the Authority within the meaning of Title 17 of the United States Code (the Copyright Act). Contractor hereby grants, transfers and assigns any and all right, title, interest in and to the Work Product and all materials contained therein or prepared therefore. In addition, Contractor shall assign and hereby so assigns to the Authority all of its interest in the Work Product. Each party shall retain ownership of its pre-existing material used in accordance with this Agreement. While this Agreement is in force, Contractor grants to the Authority an irrevocable, non-exclusive, worldwide, royalty-free license to use, execute, and copy for its internal purpose any pre-existing materials contained in the Work Product. Contractor and all of its personnel shall cooperate fully with the Authority and shall execute such further documentation as the Authority may request in order to establish, secure, maintain, or protect the Authority's, or its assignee's, ownership of the Work Product and of all its rights therein. Furthermore, Contractor agrees that it shall never transfer or assign the Work Product or any rights therein to any third party.

Contractor hereby (i) waives any so-called 'moral rights' with respect to the Work Product; (ii) agrees never to use the Work Product without the prior express written consent of the Authority; (iii) agrees never to contest Authority or its assignee's exclusive, complete, unrestricted ownership in and to the Work Product (including all copyright rights therein), or to claim adverse rights therein; and (iv) acknowledges that it shall not be entitled to any compensation beyond that specifically provided herein for any of the Work Product.

When in the performance of the Agreement services the Contractor utilizes passwords or codes for any purpose, at any time or after the performance of such services, upon written request by the Authority, and restricted to data and systems used by the Authority related to this Agreement, the Contractor shall make available to the designated Authority representative all such passwords and codes.

Upon Agreement expiration or termination, two complete copies of all Authority Work Products shall be returned to the Authority at no additional cost, within 30 days of such termination or expiration and via a methodology and format defined herein or agreed upon by the parties.

One copy of the Agency's work product will be provided in the form of current system backups of any and all relevant databases and docstores utilized by the Transparency Website solution (front-end, back end, middleware, etc.) that constitutes a complete back-up of the entire solution.

A second full copy of the Agency's work products must be provided in a non-proprietary fully referenced data export format that meets the following criteria:

- Contains all relevant system metadata (save date, modify date, file name, etc.).
- Contains all custom metadata assigned by the Agency (year, facility, document type, etc.).
- Where appropriate, contains full reference to the file name and path of the exported electronic document file to which the metadata refers. No path or filename is required for non-document records.
- Be in a well formed XML, CSV, or comparable format that contains one full element/record relating to each electronic file.
- Exported document files shall be in a folder structure compatible with Microsoft operating systems.
- Exported documents shall be in the same format or formats that were available to the public via the Transparency Website.
- Does not require the use of any proprietary or third party software beyond an industry standard Text Editor to access metadata file(s).

Furthermore, the Contractor shall provide to the Authority's Contract Manager, within 30 days of Agreement termination or expiration, written confirmation that all electronic instances of Authority data, including but not limited to production data, test data, backups, disaster recovery data, has been purged, permanently removed or destroyed in a manner consistent with Contractor company policy related to such data.

34. CLAIMS OF THIRD PERSONS

The Contractor undertakes to pay all claims lawfully made against it by subcontractors, materialmen and workmen, and all claims lawfully made against it 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.

35. 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.

36. CONTRACTOR'S INTEGRITY PROVISIONS

1. 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 Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that the Bidder and each parent and/or affiliate of the Bidder has not

- a. been indicted or convicted in any jurisdiction;
 - b. been suspended, debarred, found not responsible or otherwise disqualified from entering into any contract with any governmental agency or been denied a government contract for failure to meet standards related to the integrity of the Bidder;
 - c. 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;
 - d. ever used a name, trade name or abbreviated name, or an Employer Identification Number different from those inserted in the Bid;
 - e. 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 fifty thousand dollars (\$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;
 - f. 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
 - g. 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.
2. 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 Bidder and each person signing on behalf of any Bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, that

- a. the prices in its bid have been arrived at independently without collusion, consultation, communication or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
- b. the prices quoted in its bid have not been and will not be knowingly disclosed directly or indirectly by the Bidder prior to the official opening of such bid to any other bidder or to any competitor;
- c. no attempt has been made and none will be made by the Bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition;
- d. this organization has not made any offers or agreements or 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) nor does this organization have any knowledge of any act on the part of an Authority employee or former Authority employee relating either directly or indirectly to this organization which constitutes a breach of the ethical standards set forth in said Code;

- e. no person or selling agency other than a bona fide employee or bona fide established commercial or selling agency maintained by the Bidder for the purpose of securing business, has been employed or retained by the Bidder to solicit or secure this Contract on the understanding that a commission, percentage, brokerage, contingent, or other fee would be paid to such person or selling agency;
- f. the bidder 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.
- g. no person or organization has been retained, employed or designated on behalf of the Bidder to impact any Port Authority determination, where the solicitation is a Request for Proposals, 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 Bidder as follows:

- if the Bidder is a corporation, such certification shall be deemed to have been made not only with respect to the Bidder itself, but also with respect to each parent, affiliate, director, and officer of the Bidder, as well as, to the best of the certifier's knowledge and belief, each stockholder of the Bidder with an ownership interest in excess of 10%;
- if the Bidder is a partnership, such certification shall be deemed to have been made not only with respect to the Bidder itself, but also with respect to each partner.

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

In any case where the Bidder cannot make the foregoing certifications, the Bidder shall so state and shall furnish with the signed bid a signed statement which sets forth in detail the reasons therefor. If the Bidder is uncertain as to whether it can make the foregoing 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 "2g", 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 Bidder may be able to make the foregoing certifications at the time the bid is submitted, the Bidder shall immediately notify the Authority in writing during the period of irrevocability of bids and the term of the Contract, if Bidder is awarded the Contract, of any change of circumstances which might under this clause make it unable to make the foregoing certifications, might render any portion of the certifications previously made invalid, or require disclosure. The foregoing certifications or signed statement shall be deemed to have been made by the Bidder 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 and continuing this Contract. In the event that the Authority should determine at any time prior or subsequent to the award of this Contract that the Bidder has falsely certified as to any material item in the foregoing certifications, has failed to immediately notify the Port Authority of any change in circumstances which might make it unable to make the foregoing certifications, might render any portion of the certifications previously made invalid, or require disclosure, 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 Bidder is not a responsible Bidder 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, Bidders are advised that knowingly providing a false certification or statement pursuant hereto may be the basis for prosecution for offering a false instrument for filing (see e.g. New York Penal Law, Section 175.30 et seq.). Bidders are also advised that the inability to make such certification will not in and of itself disqualify a Bidder, and that in each instance the Authority will evaluate the reasons therefor provided by the Bidder. Under certain circumstances the Bidder 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 Bidder to determine whether its business practices and relationships indicate a level of integrity sufficient to permit it to continue business with the Port Authority.

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

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

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

4. Contractor Responsibility, Suspension of Work and Termination

During the term of this Contract, the Contractor shall at all times during the Contract term remain responsible. The Contractor agrees, if requested by the Port Authority to present evidence of its continuing legal authority to do business in the States of New Jersey or New York, integrity, experience, ability, prior performance, and organizational and financial capacity.

The Port Authority, in its sole discretion, reserves the right to suspend any or all activities under this Contract, at any time, when it discovers information that calls into question the responsibility of the Contractor. In the event of such suspension, the Contractor will be given written notice outlining the particulars of such suspension. Upon issuance of such notice, the Contractor must comply with the terms of the suspension order. Contract activity may resume at such time as the Port Authority issues a written notice authorizing a resumption of performance under the Contract.

Upon written notice to the Contractor, and an opportunity to be heard with appropriate Port Authority officials or staff, the Contract may be terminated by Port Authority at the Contractor's expense where the Contractor is determined by the Port Authority to be non-responsible. In such event, the Port Authority or its designee may complete the contractual requirements in any manner he or she may deem advisable and pursue available legal or equitable remedies for breach, including recovery of costs from Contractor associated with such termination.

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

At all times, the Contractor 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 Contractor 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 Contractor, and (b) gift, gratuity, money, goods, equipment, services, lodging, discounts not available to the general public, offers or promises of employment, loans or the cancellation thereof, preferential treatment or business opportunity. Such term shall not include compensation contemplated by this Contract or any other Port Authority contract. Where used herein, the term "Port Authority" shall be deemed to include all subsidiaries of the Port Authority.

The Contractor 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 the event that the Contractor becomes aware of the occurrence of any conduct that is prohibited by this clause, it shall report such occurrence to the Port Authority's Office of Inspector General within three (3) business days of obtaining such knowledge. (See "<http://www.panynj.gov/inspector-general>")

for information about to report information to the Office of Inspector General). Failing to report such conduct shall be grounds for a finding of non-responsibility.

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

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

6. Conflict of Interest

During the term of this Contract, the Contractor shall not participate in any way in the preparation, negotiation or award of any contract (other than a contract for its own services to the Authority) to which it is contemplated the Port 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 the Contractor has a substantial financial interest in the contractor or potential contractor of the Port Authority or if the Contractor has an arrangement for future employment or for any other business relationship with said contractor or potential contractor, nor shall the Contractor at any time take any other action which might be viewed as or give the appearance of conflict of interest on its 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 the Contractor has reason to believe such an arrangement may be the subject of future discussion, or if the Contractor has any financial interest, substantial or not, in a contractor or potential contractor of the Authority, and the Contractor's 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 the Contractor has reason to believe that any other situation exists which might be viewed as or give the appearance of a conflict of interest, the Contractor shall immediately inform the Director in writing of such situation giving the full details thereof. Unless the Contractor receives the specific written approval of the Director, the Contractor shall not take the contemplated action which might be viewed as or give the appearance of a conflict of interest. The Director may require the Contractor to submit a mitigation plan addressing and mitigating any disclosed or undisclosed conflict, which is subject to the approval of the Director and shall become a requirement, as though fully set forth in this Contract. In the event the Director shall determine that the performance by the Contractor of a portion of its Services under this Agreement is precluded by the provisions of this numbered paragraph, or a portion of the Contractor's said Services 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 the Contractor's Services not be performed by the Contractor, reserving the right, however, to have the Services performed by others and any lump sum compensation payable hereunder which is applicable to the deleted work shall be equitably adjusted by the parties. The Contractor's execution of this document shall constitute a representation by the Contractor that at the time of such execution the Contractor knows 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 the Contractor's part. The Contractor acknowledges that the Authority may preclude it from involvement in certain disposition/privatization initiatives or transactions that result from the findings of its evaluations hereunder or from participation in any contract, which results, directly or indirectly, from the Services provided by the Contractor hereunder. The Port Authority's determination regarding any questions of conflict of interest shall be final.

7. 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; except and until the Contract has been awarded, then it shall mean Contractor
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.

37. CONFIDENTIAL INFORMATION/NON-PUBLICATION

- A. As used herein, confidential information ("CI") 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.

The Handbook and its requirements are hereby incorporated into this agreement and will govern the possession, distribution and use of CI if at any point during the lifecycle of the project or solicitation it becomes necessary for the Contractor to have access to CI. Protecting sensitive information requires the application of uniform safeguarding measures to prevent unauthorized disclosure and to control any authorized disclosure of this information within the Port Authority or when released by the Port Authority to outside entities. The following is an outline of some of the procedures, obligations and directives contained in the Handbook:

- (1) require that the Contractor and subcontractors, when appropriate, 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 Handbook;
- (2) require that individuals needing access to CI be required to undergo a background check, pursuant to the process and requirements noted in § 3.2 of the Information Security Handbook.
- (3) require Contractors and commercial enterprises to attend training to ensure security awareness regarding Port Authority information;
- (4) specific guidelines and requirements for the handling of CI to ensure that the storage and protection of CI;
- (5) restrictions on the transfer, shipping, and mailing of CI information;
- (6) prohibitions on the publication, posting, modifying, copying, reproducing, republishing, uploading, transmitting, or distributing CI on websites or web pages. This may also include restricting persons, who either have not passed a pre-screening background check, or who have not been granted access to CI, from viewing such information;
- (7) require that CI be destroyed using certain methods, measures or technology pursuant to the requirements set forth in the Handbook;
- (8) require the Contractor to mandate that each of its subcontractors maintain the same levels of security required of the Contractor under any Port Authority awarded contract.
- (9) prohibit the publication, exchange or dissemination of CI developed from the project or contained in reports, except between Contractors and subcontractors, without prior approval of the Port Authority;
- (10) require that CI only be reproduced or copied pursuant to the requirements set forth in the Handbook.

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.

D. Audits for Compliance with Security Requirements

The Port Authority may conduct random or scheduled examinations of business practices under this section entitled "CONFIDENTIAL INFORMATION/NON-PUBLICATION" and the Handbook in order to assess the extent of compliance with security requirements, Confidential Information procedures, protocols and practices, which may include, but not be limited to, verification of background check status, confirmation of completion of specified training, and/or a site visit to view material storage locations and protocols.

E. 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 Contract, 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.

38. 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.

39. 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.

40. 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 its part to comply strictly with this Contract, and any monies which may be paid to it or for its account in excess of those to which it is lawfully entitled.

41. 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.

42. 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 both parties 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.

43. M/WBE GOOD FAITH PARTICIPATION

The Contractor shall use every good-faith effort to meet the goals set forth in the clause of the Selection Process Document entitled "M/WBE Subcontracting Provisions" for participation by Port Authority certified M/WBEs as defined in this document, in the purchasing and subcontracting opportunities associated with this contract, including purchase of equipment, supplies and labor services.

Good Faith efforts to include participation by MBEs/WBEs shall include the following:

- a. Dividing the services and materials to be procured into small portions, where feasible.
- b. Giving reasonable advance notice of specific contracting, subcontracting and purchasing opportunities to such MBEs/WBEs as may be appropriate.
- c. Soliciting services and materials, to be procured, from the Directory of MBEs/WBEs. The Authority has a list of certified MBE/WBE service firms which is available to you at <http://www.panynj.gov/business-opportunities/supplier-diversity.html>.
- d. Ensuring that provision is made to provide progress payments to MBEs/WBEs on a timely basis.
- e. Observance of reasonable commercial standards of fair dealing in the respective trade or business.

Either prior or subsequent to Contract award, the Contractor may request a full or partial waiver of the M/WBE participation goals set forth in this Contract by providing documentation demonstrating to the Manager, for approval by the Port Authority's Office of Business Diversity and Civil Rights, that its good faith efforts did not result in compliance with the goals set forth above because participation by eligible M/WBEs could not be obtained at a reasonable price or that such M/WBEs were not available to adequately perform as subcontractors. The Contractor shall provide written documentation in support of its request to the Manager. The documentation shall include, but not be limited to, documentation demonstrating good faith efforts as described above, which may include, proof that the Authority's directory does not contain M/WBEs in this specific field of work, a list of organizations contacted to obtain M/WBEs, and/or a list of M/WBEs contacted and their price quotes. If approved by the Authority's Office of Business Diversity and Civil Rights, the Manager will provide written approval of the modified or waived M/WBE Participation Plan.

Subsequent to Contract award, all changes to the M/WBE Participation Plan must be submitted via a modified M/WBE Participation Plan to the Manager for review and approval by the Authority's Office of Business Diversity and Civil Rights. For submittal of modifications to the M/WBE Plan, Contractors are directed to use form PA3749C, which may be downloaded at <http://www.panynj.gov/business-opportunities/become-vendor.html>. The Contractor shall not make changes to its approved M/WBE Participation Plan or substitute M/WBE subcontractors or suppliers for those named in their approved plan

without the Manager's prior written approval. Unauthorized changes or substitutions, including performing the work designated for a subcontractor with the Contractor's own forces, shall be a violation of this section. Progress toward attainment of M/WBE participation goals set forth herein will be monitored throughout the duration of this Contract.

The Contractor shall also submit to the Manager, along with invoices, the Statement of Subcontractor Payments as the M/WBE Participation Report, form PA3968, which may be downloaded at <http://www.panynj.gov/business-opportunities/become-vendor.html>. The Statement must include the name and business address of each M/WBE subcontractor and supplier actually involved in the Contract, a description of the work performed and/or product or service supplied by each such subcontractor or supplier, the date and amount of each expenditure, and such other information that may assist the Manager in determining the Contractor's compliance with the foregoing provisions.

If, during the performance of this Contract, the Contractor fails to demonstrate good faith efforts in carrying out its M/WBE Participation Plan and the Contractor has not requested and been granted a full or partial waiver of the M/WBE participation goals set forth in this Contract, the Authority will take into consideration the Contractor's failure to carry out its M/WBE Participation Plan in its evaluation for award of future Authority contracts.

44. HARMONY

- A. The Contractor shall not employ any persons or use any labor, or use or have any equipment, or permit any condition to exist which shall or may cause or be conducive to any labor complaints, troubles, disputes or controversies at the Facility which interfere or are likely to interfere with the operation of the Port Authority or with the operations of lessees, licensees or other users of the Facility or with the operations of the Contractor under this Contract.

The Contractor shall immediately give notice to the Port Authority (to be followed by written notices and reports) of any and all impending or existing labor complaints, troubles, disputes or controversies and the progress thereof. The Contractor shall use its best efforts to resolve any such complaint, trouble, dispute or controversy. If any type of strike, boycott, picketing, work stoppage, slowdown or other labor activity is directed against the Contractor at the Facility or against any operations of the Contractor under this Contract, whether or not caused by the employees of the Contractor, and if any of the foregoing, in the opinion of the Port Authority, results or is likely to result in any curtailment or diminution of the services to be performed hereunder or to interfere with or affect the operations of the Port Authority, or to interfere with or affect the operations of lessees, licensees, or other users of the Facility or in the event of any other cessation or stoppage of operations by the Contractor hereunder for any reason whatsoever, the Port Authority shall have the right at any time during the continuance thereof to suspend the operations of the Contractor under this Contract, and during the period of the suspension the Contractor shall not perform its services hereunder and the Port Authority shall have the right during said period to itself or by any third person or persons selected by it to perform said services of the Contractor using the equipment which is used by the Contractor in its operations hereunder as the Port Authority deems necessary and without cost to the Port Authority. During such time of suspension, the Contractor shall not be entitled to any compensation. Any flat fees, including management fees, shall be prorated. Prior to the exercise of such right by the Port Authority, it shall give the Contractor notice thereof, which notice may be oral. No exercise by the Port Authority of the rights granted to it in the above subparagraph shall be or be deemed to be a waiver of any rights of termination or revocation contained in this Contract or a waiver of any rights or remedies which may be available to the Port Authority under this Contract or otherwise.

- B. During the time that the Contractor is performing the Contract, other persons may be engaged in other operations on or about the worksite including Facility operations, pedestrian, bus and vehicular traffic and other Contractors performing at the worksite, all of which shall remain uninterrupted.

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

45. Increase and Decrease in Areas or Frequencies

The Director shall have the right, at any time and from time to time in his sole discretion, to increase and/or decrease the frequencies of all or any part of the services required hereunder or to add areas not described herein in the Specifications or remove areas or parts of areas which are hereunder so described. In the event the Superintendent/Manager decides to change any frequencies or areas such change shall be by written notice not less than 24 hours, said changes to be effective upon the date specified in said notice.

In the event of an increase or decrease in services, areas or frequencies, the Contractor's compensation will be adjusted to reflect such change in areas or frequencies utilizing the applicable hourly rates for such services (for the applicable Contract year) as set forth on the Authority-accepted Pricing Sheet(s).

Where no specific Unit Price has been quoted for the type of services to be increased or decreased, the Manager shall have the right to negotiate the compensation to reflect such change, whether an increase or decrease in areas or frequencies, which, in the opinion of the Manager, are necessary to complete the work, by multiplying the increased or decreased amount by the negotiated rate.

In the event of a decrease, the Contractor shall not be entitled to compensation for Work not performed.

No such changes in areas or frequencies will be implemented which results in a total increase or decrease in compensation that is greater than 50% of the Total Estimated Contract Price for the Base Term or, if changes are to be implemented during an Option Period, 50% for that Option Period.

ATTACHMENT C: SCOPE OF WORK

1. General Requirements:

The Contractor shall provide, implement, host and maintain a public website (the "Transparency Website" or the "Website") that will feature a variety of documents – including contracts, leases, Freedom of Information ("FOI") requests, Board meeting presentations, and labor agreements – available for public viewing. The Contractor shall use a document management system to store, manage and maintain a library of documentation for publication to the Transparency Website. The information on the Transparency Website will be indexed and searchable in such a way that potential users are able to easily access a particular document based on simple and transparent search criteria.

2. Document Management System:

The Contractor shall use a document management system (the "System") to post documents to the Transparency Website. The Authority expects the System to have the following functionality:

a. Document Storage

Documents should be stored and managed in such a way so that a document type can be easily identified and searched according to the appropriate document category (including but not limited to "lease", "contract", "contract number", "date", "Board Presentation", "description"), Authority Facility (when appropriate), and document date.

b. Document Management

In reference to the documents referenced above, the System should include the ability to manage the many, varying types of documents that will be stored and retrieved, and the ability to capture and index data attributes. The types of documents include but are not limited to pdf files, images, drawings, spreadsheets/Excel documents, videos, and the import of documents or data from other sources such as Peoplesoft and/or SAP. It is anticipated that documents to be published/managed on this site would be for a three- to five-year rolling retention period to be provided to the Contractor, with some information archived indefinitely.

c. Website:

Design:

The Website shall adhere precisely to the PA's Visual Style Guide, Versions 1.0, which will be provided. The Port Authority will provide all coding, style sheets and assets needed to achieve full adherence to the Visual Style Guide. The PA website design is tailored to screen resolutions of 1024x768 and higher

Accessibility:

The Website shall attain, at minimum, Accessibility Conformance Level A, as defined by the W3C "Web Content Accessibility Guidelines (WCAG) 2.0."

Browser and OS Support:

The Website must achieve full functionality and proper appearance (as per the Visual Style Guide) in all the following environments.

Browsers:

- Internet Explorer, versions: IE 7 through IE 10 (or the most recent release)
- Firefox, versions: FF 16 through the most recent release
- Chrome, versions: C 22 through the most recent release
- Safari, versions: S 4 through the most recent release
- Opera, versions: the most recent release

Operating Systems

- Windows (Win8, Win7, Vista, WinXP)
- Mac
- Linux

d. Additional Features:

Management of the documents should also provide for the ability to replace expired contracts/agreements with successor contracts/agreements.

The System will be used (on a 24x7 basis) as a readily accessible, comprehensive data source for all documents provided by the Authority for the transparency initiative. Moreover, with respect to managing and maintaining the content of the site, the Contractor shall provide training to the Authority on the use of the System.

The Contractor shall provide the System either as an integrated software suite of applications or as stand-alone applications that work together and provide the following:

- Consistent user interface;
- Access to a common data set that is current and accurate through a centralized database;
- Interface with external systems through an open systems architecture.

3. User Population, Volumes, and Access:

The System will be used by up to fifteen (15) concurrent, named Authority users ("Users" or "Power Users") to manage the content and by an unlimited amount of public users to access the Website. The System shall provide the capability for multiple users at different workstations to access it concurrently. Only authorized personnel shall access the System through a secure web-enabled interface on normal Authority Desktops.

Users shall access all applications from workstations that are remotely located from the servers. The operational capabilities provided in all workstations shall be identical. The System shall provide the capability for multiple users at different workstations to access the same applications concurrently.

The software shall provide the capability to restrict user access to specific features based on the user login procedure. Each user name/role shall be associated with a list of features in the System that the user has permission to access and the level of access permitted.

Permissions shall be initially configured by the Contractor as part of the setup process and approved by the Authority's Contract Administrator.

The software shall provide the capability to allow the Port Authority to examine, modify and print the list of user access permissions. This capability will enable the Application and System Administrators to change the

access permissions assigned to each user on-line, without requiring a compilation or regeneration of any of the applications software.

4. FUNCTIONALITY

I. The public-accessible Website shall include but is not limited to the following:

1. Functionality for every feature of the Website, including :
 - a. Share/download content;
 - b. Print / previews;
 - c. Publication of responses to FOI requests.
2. Access to repository will include:
 - a. An initial migration of information (as noted in Section 1, Brief Summary of the Scope of Work) from the Public Website;
 - b. Ongoing contributions to include:
 - i. Services for special projects, as requested by the Authority;
 - ii. FOI Requests / Responses;
 - iii. Contracts;
 - iv. Leases;
 - v. Payroll information;
 - vi. Financial Information;
 - vii. Board Minutes;
 - viii. Board Presentations;
 - ix. Board Videos;
 - x. Public Hearing and Audit Reports;
 - xi. Business Transactions;
 - xii. Annual Reports.
 - xiii. Traffic and Volume Information.
3. Search operations that include:
 - a. Full text search (as determined by the Authority, on every word within a single document or across a database);
 - b. Metadata searches
 - i. Identified categories of data (see list in Attachment H).
 - c. Optical Character Recognition (OCR) search

II. Power User System shall include but is not limited to the following:

1. Users:
 - a. Up to 15 concurrent named users;
 - b. Assignment of user roles (e.g., administrator, author, editor, publisher, etc.) as recommended by the Contractor and approved by the Authority;
 - c. Access rights for user roles (e.g., control permissions, add content, view content, publish) to be configured as recommended by the Contractor and approved by the Authority;
 - d. Ability to publish new documentation on the Website;
 - e. Functionality for every feature (e.g., approve content, post content, manipulate page layout, create new tags, etc.) of the Website, as referenced herein;
 - f. Upload and download capabilities:
 - i. Batch uploads;
 - ii. Workflows with authorizations;
 - iii. Conversion of electronic data, including files of type .pdf;

- iv. Bulk export capabilities (should have specific criteria, associated files with metadata, etc.).
2. Operations:
 - a. Batch processes, scheduled processes;
 - b. Workflows;
 - c. Transformations;
 - d. Real-time.
 3. Audit logs on the content management that include, minimally:
 - a. System date;
 - b. User id;
 - c. Record(s) accessed;
 - d. Related activity;
 - e. Sensitive transactions (to be determined during implementation phase).
 4. System logs that include:
 - a. Database growth;
 - b. Net usage;
 - c. Volumes.
 5. Web access activity logs that include:
 - a. Number of hits;
 - b. Category of data;
 - c. Event times, etc.;
 - d. Response times (average, peak-times, etc.).
 6. Access to repository will include:
 - a. Ongoing contributions may include special projects, as requested by the Authority, FOI Request/Responses, contracts, leases, payroll information, financial information, board minutes, board presentations, board videos, public hearing and audit reports, business transactions, annual reports;
 - b. Identify categories of data;
 - c. Unique versions;
 - d. Replacement process.
 7. Implement protocols as referenced in the attached Standards and Guidelines for Port Authority Technology (Attachment I).
 8. Implement protocols as referenced in the attached Control Requirement Contract Checklist (Attachment F).
 9. Implement protocols as referenced in the attached Maintenance Requirement for Hosted Systems (Attachment G).
 10. Data attributes with indexing.

5. SCANNING SERVICES

The Authority may occasionally request the Contractor to retrieve, scan (for posting to the Website), and return documents (in their original format) to the Port Authority. For the pilot project, the majority of documents will be picked up from and returned to 225 Park Avenue South, New York, NY 10003. At the time of the request, the Authority will convey instructions regarding the scanning and posting of these documents.

The Contractor shall:

- Pick up documents within 24 hours of notification by the Authority;

- Scan and post such documents within 3 business days of pick up from the Authority; and
- Return such documents to the Authority within 7 business days of pick up from the Authority.

6. Hosting

The Contractor will host the Website according to the requirements listed in Attachment G (Maintenance Requirements for Hosted Systems) hereto.

7. SYSTEM IMPLEMENTATION

The Contractor shall perform the following tasks related to implementation of the Transparency Website:

- a. Business analysis: The Contractor will develop and maintain a requirements tracking matrix and gap analysis.
- b. Software configuration: While the Port Authority expects the Contractor to provide a commercially off-the-shelf (hereinafter "COTS") System, it also expects that the Contractor to configure the System for optimized use with the particular qualities of the Port Authority.
- c. System Installation: The Contractor will install the Transparency Website on its hosted server.
- d. Data Conversion: As applicable, the Contractor will transfer any existing electronic data (e.g., pdf documents) from the current Port Authority environment into its System.
- e. Data Integrity: For ongoing operation of the System, the Contractor will provide oversight, procedures, and protocols to ensure that the integrity and timeliness of the data are accurately maintained.
- f. System Test: The Contractor will develop and implement a formal System test plan for the System. The System should also pass a validation test performed by Port Authority staff.
- g. System Implementation: The Contractor will coordinate all activities for the System launch once Port Authority staff approves the implementation plan.
- h. System Final Approval and Sign Off: The Transparency Website must be in production for a total of 30 business days without significant problems, errors and/or system interruptions before the Authority will sign off on final approval.
- i. Ongoing Support, Maintenance, and Trouble-Shooting: From the date of final approval of the Transparency Website, the Contractor will provide ongoing support, maintenance, and trouble-shooting for the software, application and System for the duration of the pilot project.
- j. Access Permissions for Individual Applications: Access permission shall be determined by the Authority during the design and implementation phases of the Transparency Website. During the implementation phase and based on the functionality and features available to the Authority, user access to application roles shall be configured by the Contractor and approved

by the Authority. The application software shall provide the capability to allow the Contract Administrator to examine, modify and print the list of user functions associated with each access level. This capability will enable the Contract Administrator to change the user functions assigned to each access level on-line, without requiring a compilation or regeneration of the application software.

8. Deliverables

The scope of work under Deliverables covers three Stages: Planning, Implementation, and Support. Generally, the requirements for each stage are:

- Planning: Identification of features and functions the Authority requires that are (and are not) included in the standard configuration of the Contractor's system; development and execution of the modifications required to implement new or special features; identification of all hardware requirements, if applicable; development of the conversion process and requirements from the existing system used by the Authority to the new System from the Contractor; and such other planning activities as may be required to ensure a smooth implementation stage.
- Implementation: System installation, System configuration, conversion of existing data into the new System, training.
- Support: On-going support, maintenance, reporting, and problem solving

Specific deliverables and their requirements are described below.

1) PLANNING STAGE

Prior to the Feature and Function Description mentioned below, the Contractor shall identify the features and functions the Authority requires that are and are not included in the standard configuration of the Contractor's System. This effort shall result in the development (and maintenance) of a business requirements tracking matrix and gap analysis, otherwise known herein as a Feature and Function Description, which is described below.

a. Feature and Function Description

The Contractor shall prepare, for Authority approval, a document ("Feature and Function Description", "FFD") that lists the features and functions required by this SOW (a) that are available as standard capabilities in the Contractor's System, (b) that will require modification of the standard application, and (c) that cannot be provided. The FFD also shall list any features or capabilities of the standard application that have not been described or requested in this SOW, describing the advantage(s) such features could provide Authority.

Within the FFD, the Contractor shall confirm the applicability and use of all application functions to the Authority operating environment. Any discrepancies of the operation of an Authority business function as presently practiced compared with the operation of the business function as performed using the Contractor's application solution shall be highlighted in the FFD. Prior to preparing the FFD, the Contractor shall describe the method and tasks that will be performed in order to prepare this documentation and shall obtain Authority concurrence with the approach and format of the deliverable.

The FDD must include a comprehensive list of Use Cases to define the major functionality of the Public User, Power User, and System Administrative Users of the Transparency Website. Each Use Case must be fully defined to include Start conditions, End conditions, and a detailed User Story.

Any development work for features selected by the Authority shall be performed in accordance with industry-standard development methodologies acceptable to the Authority. For such work, therefore, the Contractor shall provide all analytical and design documentation in a timely manner for the Authority's approval prior to the initiation of development. The Contractor shall be responsible for all aspects of development including unit, System and user acceptance testing, and any capabilities developed for the Authority shall be fully integrated into the Contractor's baseline software application.

b. Implementation Plan

The Implementation Stage includes System implementation, System configuration, conversion and training. The Contractor shall prepare a detailed set of tasks ("Implementation Plan") that will be performed. All aspects of the transition from the present system to the new System shall be presented, including a projected timetable, preferably in the form of a Gantt Chart. Tasks shall be identified, described, and shown with start and ending dates and dependencies. Each task shall identify and describe all resources that are required by the Contractor Team as well as the necessary reviews, approvals, and actions of Authority Staff.

The Contractor shall ensure that the operating environment is successfully and efficiently supported by its application, and that the implementation strategy does not result in personnel being confronted with unreasonable workloads (with respect to the Contractor's application).

In presenting this information, the Contractor shall emphasize the means by which progress will be measured by the Authority, in a quantifiable, predictable and unambiguous manner. Each task shall describe how the Authority will accept that the task is complete, using intermediate, specific checkpoints to validate progress toward successful completion for tasks of durations greater than two (2) months.

The principle of describing the validation method for the Authority to accept the successful completion of each discrete element of this work shall be present in all aspects of the Implementation Plan, including the training of the Authority personnel. The Contractor shall describe how customized training for the Authority and other Authority personnel will be organized and planned, how that training will be performed, and how the Authority can validate that its personnel have been adequately trained to operate the system.

Custom documentation emphasizing the use of hands-on training and actual manuals and reference materials shall be provided by the Contractor. Such documentation shall identify roles to be performed by Authority personnel, and shall present for each role a collection of operational steps to take in use of the System to perform the business functions applicable to such role. The proposed means to prepare custom documentation that accurately reflects the Authority's business practices shall be described in the Implementation Plan.

c. Installation Plan of Technology Components

Within a mutually agreed time after receipt by the Contractor of the acceptance of its Response, the Contractor shall prepare and submit for approval, a detailed Installation Plan of Technology Components. The Installation Plan of Technology Components shall be coordinated with the Port Authority Technology Services Department and describe all the activities and tasks associated with the development, installation, integration, configuration and preparation of the System and all subsystem components. The Installation Plan shall also detail the stages of the System setup and configuration including the estimated time of completion for each stage. This plan shall be submitted for the Authority's Contract Manager's review, and only upon the Authority's Contract Manager's approval of the Installation Plan shall the Contractor commence the required Work.

The Installation Plan shall identify and describe all activities related to development of custom software features and the loading of all software (with emphasis on what precautions shall be taken to minimize disruption of current operations); plans for the loading of the initial database; training; and, responsibilities for application administration during installation.

d. Conversion Plan:

The Contractor shall provide, as part of the Implementation Plan, a parallel processing schedule for these applications. The schedule shall include, at a minimum, each step to be performed and the duration of recommended parallel processing to ensure 100% accuracy and completeness in migrating/converting from the Authority's existing website to the Contractor's new application.

The Contractor shall establish a sound, structured methodology for the conversion effort. As a foundation, the Contractor shall prepare a document that describes the mapping of existing transparency content on the Port Authority website to the new Transparency Website.

The Contractor shall provide a detailed plan to be used for managing and monitoring the conversion process. This plan shall describe all deliverables and intermediate deliverables that will be part of the conversion process for all data sources and will present a timeline for their delivery. The plan shall include a set of activities and deliverables that shall, to the Authority's satisfaction, provide validation of successful conversion of data to the new system.

e. Acceptance Test Plan

Testing activities shall be performed at multiple points during implementation per an Acceptance Test Plan developed by the Contractor and approved by the Authority. During installation, testing shall be performed as a means to validate the state of the System, and will be performed by a team consisting of personnel both from the Authority and from the Contractor. Any problems detected during testing must be corrected by the Contractor.

The Test Plan shall describe testing to validate that the System has been successfully installed, that data has been successfully converted, that the System has been properly configured to meet the Authority's operational model, and that System response times are suitable for support of the Authority's workloads.

During performance testing, the System will be evaluated and metrics collected to record its performance under normal, projected workloads and will be examined under extreme loads in order

to establish loads and load conditions that would produce System performance levels below that considered acceptable to the Authority. The Contractor shall indicate the remedial action that would be required should the extreme load conditions be achieved and provide an analysis projecting when the Authority might expect to experience such conditions.

Submittal Requirements for Testing:

- a) An Acceptance Test Plan shall be submitted to the Authority's Contract Manager for approval not less than 30 days prior to the proposed start of an acceptance test. The request shall include the estimated length of time required to complete the testing and shall include an agenda that identifies when each of the tests are scheduled to be conducted. The Acceptance Test Plan shall include, at a minimum, the following details:
 - A summary statement of the purpose and goal of each portion of the test plan;
 - Draft copies of all user manuals to enable test participants to become familiar with the System's operation.

- b) The Contractor shall submit detailed test procedures that demonstrate that every feature and function to be provided in the furnished hardware and software conforms to the requirements of the Contract. Identify the:
 - Steps for each test to be performed
 - Test purpose
 - Conditions which exist at the start of each test procedure
 - Conditions/results expected at the conclusion of each test procedure
 - The specification requirement that will be demonstrated by the test procedure.
Include space for recording the following:
 - the actual test results,
 - check boxes for the test outcome (pass or fail),

- c) The Contractor shall describe the documents to be provided to the Authority's Contract Manager to validate the test results (reports, database listings, statistical analyses, message displays, etc.).

- d) A test report shall be submitted to the Authority's Contract Manager after the completion of the Inspection and Test of the application. The report shall include two copies of the signed Acceptance Test document, including all annotations and notes from the actual tests and all failed test reports. The test report shall also state the test results and indicate the nature of any failure(s), the reasons for the failure(s), what corrective actions were taken and on which units the corrections were made, and a list of any outstanding items.

f. Service Support Plan

The Contractor shall prepare, subject to the Authority's approval, a Service Support Plan (SSP) that adheres to the requirements listed in Section 3 (Support Stage), below, and that describes the duties, obligations, and responsibilities of all parties during this Stage, in accordance with the following requirements:

- All components of the application solution provided by the Contractor, both proprietary and third party components, shall be included.

- The Contractor shall describe how it will provide System updates, enhancements, fixes, and all similar maintenance support activities to assure that the System remains in a current, updated state with respect to versions and releases, temporary fixes and on-going technical support.
- The Contractor shall describe how it will implement major releases or modifications that may occur during the Authority's project. Any such major releases or modifications shall be furnished to the Authority without charge throughout the duration of the Work.
- The Contractor shall describe how it will provide each of the Post-Implementation and Support service offerings, presenting not only the service offering but an operational perspective that illustrates the interaction of the Authority and the Contractor during service use, including (but not limited to) service activation, actions taken and resources supplied by the Contractor under the service, requirements and responsibilities of the Authority when using the service, and the means by which satisfactory completion of the service is measured.
- The Contractor shall describe how it will provide the Authority with a reporting, tracking and escalation process to be used for identification and resolution of operational problems encountered during the duration of the Support Stage. Reported problems may be either System defects or operational queries by users, but in either case, the Contractor shall resolve reported problems in a timely manner and to Authority's satisfaction. The Contractor shall permanently correct reported problems. Where some time is required to determine a suitable permanent solution, the Contractor shall provide effective temporary "work-arounds" that permit a reasonable circumvention of an operational problem. In the event of an emergency condition, the Authority may require dedicated assignment of Contractor personnel to establishing problem resolution; including having such personnel perform functions, including data recovery.
- The Contractor shall describe how it shall include updates to the System.

g. Training Plan

The Contractor shall provide, for the Port Authority's review and approval, a Training Plan that shall address all user training requirements in accordance with the requirements of the section entitled "Training".

After receipt of the draft Training Plan, the Authority will provide comments. The Contractor shall make appropriate changes to the Training Plan and resubmit it for Authority review, until Authority approval is received.

The Contractor shall submit to the Authority Contract Manager a copy of the approved Training Plan, not less than 30 days prior to the intended start date for training, which includes but is not limited to the following for each training class:

- The dates, times and exact locations for the training courses. The training courses shall be held at an Authority Facility, in a specific location designated by the Contract Manager. The dates and times shall be coordinated with and approved by the Contract Manager;
- Post-training and or on-the-job technical reference guides.

After completion of all Training Courses, the Contractor shall submit the following:

- One unbound, reproducible master set of all manuals and a copy of each manual in a digital format that may be edited using the Microsoft Office Suite 2007 or later. These master sets shall include a written non-disclosure and copyright waiver allowing the Authority to make unlimited copies, for its own use, of any copyrighted material within, royalty free, for a period of 99 years.

2) IMPLEMENTATION STAGE:

The Implementation Stage involves activities that are necessary to make fully operational the application base, and any enhancements operational, and includes populating any application definitions required for the Authority environment and any data required for support of the Authority environment.

The Contractor shall provide all proprietary and third party software, and database software that is included in the System. Moreover, the Contractor shall supply all technical and operations personnel to install, configure and make fully operational the System represented by the aforementioned software components. Installation of the software components shall occur according to the approved Implementation Plan.

A. Application Implementation:

The Contractor shall deliver a Transparency Website to the Authority that meets or exceeds the requirements set forth in this document. The System should utilize Commercial-Off-The-Shelf software to the maximum practical extent possible.

The Contractor will install all hardware and software required for the successful implementation and on-going use of the Contractor's System on its servers. The Contractor shall install the specified hardware, all application and other software required for the operation of the System on its servers.

The Contractor shall perform all activities to make fully operational the System to the satisfaction of the Authority: the application base, and any enhancements, using platforms specified by Contractor and provided by the Authority, and including populating any application definitions and any data required for the Authority's environment.

All services and deliverables in this SOW pertain to the implementation of the Contractor's application and shall be provided in accordance with the Contractor's Implementation Plan that has been approved by the Authority.

B. Testing

Testing activities shall be performed at multiple points during implementation per the approved Test Plan. During installation, testing shall be performed as a means to validate the state of the system, and will be performed by a team consisting of personnel both from the Authority and from the Contractor. Any problems detected during testing shall be corrected promptly by the Contractor.

Parallel Testing shall validate that the System has been successfully installed, that data has been successfully converted, that the System has been properly configured to meet the Authority's operational model, and that system response times are suitable for support of the Authority's workloads. During testing, the System will be evaluated and metrics collected to record its

performance under normal, projected workloads and will also be examined under extreme loads in order to establish loads and load conditions that would produce system performance levels below that considered acceptable to the Authority. The Contractor shall indicate the remedial action that would be required should the extreme load conditions be achieved and provide an analysis projecting when the Authority might expect to experience such conditions.

C. Service Levels

The Contractor's obligations for the performance of all Work at the service levels, as described herein, specified in this Contract are of the essence. The Contractor guarantees that it can and will complete performance under this Contract at the service levels stipulated herein.

The Contractor's obligations for the performance and completion of the work within the time or times provided for in this contract are of the essence of this contract. In the event that the Contractor fails to satisfactorily perform all or any part of the work required hereunder in accordance with the requirements set forth herein or in applicable Contract Documents (as such term is defined in the Base Contract) then, inasmuch as the damage and loss to the Port Authority for such failure to perform includes items of loss whose amount will be incapable or very difficult of accurate estimation, the damages to Port Authority shall be liquidated in the following amounts:

Service	Liquidated Damages
Section 4 of Attachment G: Operational Availability	5% deduction on the calculated total monthly payment if the availability falls below 99.9% Additional 5% deduction on the calculated total monthly payments for every 1% loss of availability below 99.9% average availability.
Section 7 of Attachment G: Loss of Service	\$500 per hour or part thereof if the System and/or Website is not restored according to the requirements.
Section 9 of Attachment G: Time to Respond	2% of total monthly payment for services if the 90% requirement is not fully met.
Section 10.A of Attachment G: On-call Remedial Maintenance	2% of the total monthly subscription payment if the 90% requirement is not met. \$100 per hour for each business hour (or part thereof) in excess of required two-business day service call resolution.
Section 10.B of Attachment G: Application Patches	5% of the total monthly payment for all patches not installed/applied within the specified timeframe
Section 10.C of Attachment G: Error Correction	2% of the total monthly payment for all errors not corrected within the specified timeframe.
Attachment F (Control Requirement Contract Checklist): Data Integrity and Security	\$1,000 per each breach of data integrity.
Section 5 (Scanning Services) of Attachment C (Scope of Work)	<u>Picking up documents:</u> 2% of the total monthly payment for scanning services for every hour after the required timeframe that the Contractor has not picked up the documents from the Authority. <u>Scanning and posting documents:</u> 2% of the total monthly payment

	<p>of subscription services if such documents are not posted within the required timeframe.</p> <p><u>Returning documents:</u> 2% of the total monthly payment of subscription services if such documents are not returned within the required timeframe.</p>
--	---

Regular scheduled maintenance approved by the Authority is excluded from these calculations. Emergency maintenance which affects service availability (such as to correct problems in service) are considered unscheduled maintenance and therefore, measured as part of service availability, unless otherwise agreed to by the Authority.

Total liquidated damages for non-performance for the month shall not exceed the Contractor's compensation for that month.

Computation of online availability and resolution of service calls refer specifically to work covered in this Contract that is the Contractor's responsibility. For example, time spent by other contractors to repair hardware would not be included in the calculation of the Contractor's performance.

The Authority may consider continued failure to meet performance under this Contract at the levels stipulated as a material breach of this Contract regardless of the existence of liquidated damages provisions. In the event the Contractor is declared in breach of Contract, the Port Authority shall be entitled to collect liquidated damages up to the time of the declaration of breach, and actual damages arising from the breach suffered by the Port Authority after the declaration of breach.

D. Interaction with Third-Party Contractors and Service Contractors

The Contractor shall work in harmony with the Authority's third party Contractors and service providers. These services include but are not limited to the following:

- Working with Authority staff in contracting with third-party Contractors for application enhancements; and
- Any coordination activities related to implementation of new releases or other associated maintenance fixes or releases.

3) SUPPORT STAGE

See Attachment G (Support Requirements for Hosted Systems) for the Support Requirements.

9. Payment Schedule

Payment to the Contractor shall be as follows:

<u>Milestone:</u>	<u>% of Overall Implementation Amount</u>
• Authority Notice to Proceed	10%
• Authority approval of deliverables under the Planning Stage (Section 6)	15%
• Completion of System Installation	20%
• Completion of Conversion of Existing Data into new System	20%

- Completion of Training and submission of all associated project documentation 35%

Note – As used above, “Completion” is defined as the Authority’s acceptance and approval of related deliverables.

The above percentages shall apply toward the total cost for Implementation, as defined in Section A of the Contractor’s Price Sheet, as accepted by the Authority.

Subscription fees shall be paid monthly, in accordance with the General Contract Provisions (Attachment B).

10. Management of the Work

The Contractor shall manage its efforts in accordance to the following requirements:

A. Organization

The Contractor shall establish and maintain an organizational and operational structure appropriate to the work to be performed under this Contract. This shall include but not be limited to:

- Assign a single point of contact for each major phase of the Contract Implementation and Operations.
- Assigning an appropriate number of staff with requisite skills, acceptable to the Authority, for the tasks to be performed.
- Supplying direct supervision of the staff assigned to carry out the work as defined herein.
- Providing qualified persons, acceptable to the Authority, for relief of the assigned staff in the event of illness, personal business or any other unanticipated absence of the assigned staff.

B. Labor Force

The Contractor shall furnish sufficiently trained management, supervisory, and technical personnel to perform the services required, with all such personnel subject to review and approval by the Authority. If any offered person is deemed unsatisfactory or does not perform the services to be furnished hereunder in a proper manner and satisfactory to the Authority, or in the sole determination of Authority, may have taken any action which constitutes a conflict of interest or which is inconsistent with the highest level of honesty, ethical conduct or public trust or which Authority determines is adverse to the public interest or to the best interest of the Authority, the Contractor shall remove any such personnel immediately, and replace them by personnel satisfactory to the Authority within two weeks, upon notice from the Authority.

The Authority has the right to approve or disapprove, at the Authority’s sole discretion, with or without cause, any potential Contractor employee who would directly service the Authority account.

The Authority has the right to require the Contractor to replace any Contractor employee, assigned to the Authority Account.

C. Program Management - Appointment of Staff

The Contractor shall appoint member(s) of its organization to oversee the management of the work.

The Contractor shall assign a full time, technically proficient, English speaking, experienced and fully qualified account manager (hereinafter referred to as the 'Engagement Manager'). The Authority requires, prior to approving the proposed person, the following:

- Notice of the proposed person for the assignment.
- Information (resume, background, history with the Contractor, etc.) regarding the proposed Engagement Manager
- The Contractor shall arrange for the individual(s) to be available for Authority interview(s) at no cost to the Authority.
- The Engagement Manager is subject to approval by the Authority and subject to removal at the Authority's sole discretion.

The Authority requires no less than sixty days prior notice of change of Engagement Manager and turnover of the position shall be limited to no more than once.

D. Project Management Methodology

The Contractor shall put a project management methodology in place that addresses the Authority's requirements.

E. Status Meetings

The Contractor shall schedule and conduct regular status meetings with the Authority at an Authority selected site at least monthly until the Implementation Stage, at which point the meetings will occur at least weekly. At the sole discretion of the Authority, the frequency of meetings may be adjusted. The purpose of these meetings is generally but not exclusively limited to the following:

- Track the progress of development and implementation activities;
- Review the Contractor's deliverables;
- Review Contractor's invoices for services provided; and
- Resolve disputes.

The Contractor shall produce and deliver to the Authority, at least 24 hours prior to each status meeting, a project status report.

11. General System Requirements

Application Logging

The System shall provide complete logging for the following types of System activity:

- Setup Log – This feature shall record all log in and log out activity by User, time and date and shall record event descriptions for each, including changes made to the System setup or configuration, retaining before and after values.
- System Activity Log – This feature shall record all events in the System. It shall include the user name, type of activity, time and date, requested changes and impacted equipment.
- Fault Log – This feature shall log all System faults. It shall include type and location of fault, time and date of fault, time and date of restoration and any applicable information related to the repair.

Redundancy

The application server, and separate database server if used, shall be redundant and configured to provide for continuous operation of the System even in the event of the failure of any single System component. Redundant operation shall include, but not be limited to all central computer system components that are used to fulfill the requirements of the Contract.

Fault Tolerance

A fault tolerant computing solution shall be provided so that the System will continue to run upon detection of any type of failure. It is expected that the hardware and application will be able to continue to operate if one server, the software or any single System component fails.

In the event that any failure occurs in the primary application server (or database server if used), the System shall switchover either automatically or manually, without operator intervention, from their primary central components to the backup/redundant components upon detection of a hardware or software failure in any primary component without any loss of data or user control. The System shall instantaneously switchover the software processing to maintain continuous System operation. The operation of the System shall be transparent to the operator during and after the switchover. The System shall send an email alert to each of the relevant Port Authority Users as notification of the failover event. Once the primary server or component is repaired to full operation, all data shall be recovered on the primary server without any loss of data during the outage. Restoration of the primary server(s) into the fault tolerant configuration shall be performed without any loss of data.

General System Performance Requirements:

The System shall consist of readily available, proven hardware and software elements, which are fully consistent with the System's design and operation as specified. It shall have the throughput, capacity, and availability, as specified herein, to provide the required functionality. It shall meet the performance requirements identified herein and under the maximum loading when all System devices are engaged and performing their specified functions, with no loss of data or user control.

General Design Requirements

The Contractor shall provide the latest version of the software and applicable software patches and updates. The System shall be compliant with the most current Standards and Guidelines for Port Authority Technology and industry best practices and Port Authority Audit Department's IT Control Checklist Guidelines at the time of the Acceptance Test.

State of Common Usage

Software, database and communications protocols shall be in a "state of common usage," or industry-standard, and shall be an open architecture. Computer software shall consist of all System, application, and utility software required to meet the requirements of this Contract. All off-the-shelf software shall be industry standard. The Contractor shall submit the latest commercially available release/version of all software products in general use prior to System acceptance.

Graphical User Interface

A user-friendly graphical user interface (GUI) shall be furnished that is ergonomically designed to facilitate User operation in an intuitive manner and to minimize operator actions for information retrieval and system operation. The User shall be able to invoke any action or command with no more than three mouse clicks and any additional required data.

The user interface shall be designed with streamlined business display screens to facilitate easy data entry and general viewing. Navigation tools/menus/keys shall be prominently displayed and provide consistent, easy movement within and between screens.

All control and reporting features shall have a logical hierarchical arrangement to engage the user through such features as pull-down menus, interactive graphics, dialog boxes, or other user-friendly means. The user interface shall prompt the operator with instructions or for additional information when user entry is required. The user interface shall not require the operator to memorize command sequences to perform operator controls. Context sensitive help or another form of on-line documentation for all functions and operations shall be provided.

All screen layouts shall be submitted for approval by the Authority's Contract Manager. The Contractor may request in writing for the Authority to provide any drawings or graphics of the project area reasonably required for use in developing system graphics.

Change Management

The application must be secured and all revision changes shall require prior Port Authority approval. All changes shall be tracked and implemented in accordance with the Authority's approved change management procedure or a comparable plan proposed by the Contractor and accepted in advance by the Authority.

12. Security

Physical Access

The Contractor shall maintain a list of Contractor employees authorized to enter secured areas.

System Access

The Contractor shall maintain a list of Contractor employees authorized by the Authority Contract Manager to access the System.

The Authority will issue appropriate logon IDs for those persons authorized by the Authority Contract Manager to have access (and only such persons), and will periodically reconcile the list of logon IDs to the authorized list.

The Contractor shall immediately notify the Authority's Contract Manager whenever authorized Contractor or vendor employees leave the firms or change responsibilities that remove them from active participation on the Project Team.

13. Quality Assurance

The Contractor shall establish and maintain a quality assurance program, which it shall utilize to assure that all work is performed in accordance with the Contract, including compliance with Information Services Standards, and at a level consistent with acceptable industry practices.

14. Training

The Contractor shall maintain the appropriate knowledge, skills and abilities of their staff assigned to provide ongoing support for the Authority's System.

ATTACHMENT D: REFERENCE INFORMATION FOR RESPONDENT PREREQUISITES

General Note – All customer references must be current employees of that organization

The Respondent shall have had at least two (2) years of continuous experience immediately prior to the date of the submission of its response as a business actually engaged in providing similar systems and/or services to commercial and industrial accounts under contract, **including** at least one other governmental entity in the United States. Examples of governmental entities include the State of New York, the State of New Jersey, New York City, and the U.S. General Services Administration (GSA), as well as other State, Local, and Public municipalities and agencies. The contract between the Respondent and the other governmental entity must be active (i.e. not expired)

Govt. Entity Name and contract #	Description of Provided Services	Contract Commencement	Contract Expiration	Contact Information (name, phone number, email address)

Respondents are encouraged to provide at least three additional references from firms (public or private) that use their systems:

Client	Description of Provided Services	Contract Commencement	Contract Expiration	Contact Information (name, phone number, email address)

ATTACHMENT E: COST RESPONSE

Entry of Prices

1. All Respondents are asked to ensure that all charges quoted for similar operations in the Contract are consistent.
2. Prices must be submitted for each Item required on the Pricing Sheet(s).
3. All Respondents are asked to ensure that all figures are inserted as required, and that all computations made have been verified for accuracy. The Respondent is advised that the Port Authority may verify only that Response or those Responses that it deems appropriate and may not check each and every Response submitted for computational errors. In the event that errors in computation are made by the Respondent, 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 Respondent, which amount shall govern in all cases.
4. In the event that a Respondent quotes an amount in the Total Estimated column but omits to quote a Hourly Rate for that amount in the space provided, the Port Authority reserves the right to compute and insert the appropriate Unit Price.
5. The Total Estimated Contract Prices are solely for the purpose of facilitating the comparisons of Responses. Compensation shall be in accordance with the section of this Contract entitled "Payment".
6. Estimated yearly hours are provided solely to enable computation of Total Estimated Costs. The Port Authority does not guarantee that the estimates are accurate

* All Respondents are to define the job titles, job responsibilities, and work associated with each description for this Selection Process Document.

PRICE FORMS

Note: The proposed prices should not exceed the pricing provided in each of the government contracts cited in response to Section 10 (Respondent Prerequisites) of the Selection Process Document

A. Implementation

Govt. Contract used for pricing basis: _____

Category	# of hours (if applicable) and price
Planning	# of hours _____ Price: \$_____ (overall)
Implementation	# of hours _____ Price: \$_____ (overall)
Conversion	# of hours _____ Price: \$_____ (overall)
Training	\$ _____ per class x ____ recommended # of classes = \$_____ (overall)

B. **Subscription/Hosting (including maintenance/support):** \$_____ per month x 12 months =
\$_____

Govt. Contract used for pricing basis: _____

Note: For comparison purposes only, the cost of software subscription/hosting assumes a single monthly price for a site capable of storing an unlimited amount of images.

C. **Scanning:** \$_____ per 8.5x11 (black & white) x 25,000 pages = \$_____ (see note 1 & 2)
\$_____ per 8.5x11 (color)
\$_____ per 11x17

\$ _____ per full-size engineering sheet

Govt. Contract (name, no., term) used for pricing basis: _____

Note: this assumes:

1. For comparison purposes only, the Authority will use the total price inserted for the 8.5x11 black & white field.
2. This assumes 10 boxes at approximately 2,500 pages per box.
3. Scanning and posting documents within three business days of pick up from the Authority, and returning them within seven business days of pick up from the Authority.
4. Pick-up and return boxes

D. Data entry and indexing: \$ _____ per index x 12,500 indices = \$ _____

Note: This assumes 10 boxes, with 10 pages per document and 5 indices per document.

E. Hourly Rates for Optional Upgrades and Enhancements (Section 11, Attachment G) and Supplemental Work (Section 12, Attachment G)

	<u>A.</u> STANDARD Proposed Rate/ Hour	<u>B.</u> Estimated number of hours for the pilot project	<u>C.</u> <i>Total Estimated</i> <i>Base Term</i> (A x B = C)
Software Engineer	\$ _____	X 10	\$ _____
Program Manager	\$ _____	X 10	\$ _____
Programmer	\$ _____	X 10	\$ _____
Total			\$ _____

TOTAL ESTIMATED COST \$ _____

(Sum of Sections A through E)

F. Assumptions: Indicate all assumptions part of the proposed pricing for the Subscription-Based System. Attach additional sheets if necessary

A. Planning	
-------------	--

B. Implementation	
C. Conversion	
D. Training	
E. Subscription/Hosting	
F. Scanning	
G. Data Entry and Indexing	
H. Optional Enhancements	

ATTACHMENT F: Controls Requirement Contract Checklist

General

- Documented procedures, flowcharts and process maps for the application.
- Conduct regular audits, vulnerability testing, security scanners.
- SSAE 16 SOC 2 (previously known as SAS 70 Level 2)
- ISO27001 Certification
- Physical access to the application hardware should be appropriately restricted.
- The application should have a warning banner, terms of use, and/or privacy statement that was approved by the PA Law Department on the login screen.
- Remote access should be restricted and documented in accordance with PA policy.
- Background check should be performed on all personnel.

System/Security Administration

- Administrative personnel should receive adequate training.
- System and security administration procedures should be documented and distributed.
- Administrator(s) roles and responsibilities should be documented.
- Developers and/or programmers should not have access to the production server.
- Operating system administrators should not have access to the production database and application.

Hardening of operating system/database that supports the application:

- Disable and/or remove unnecessary ports/services.
- Remove all sample from the box.
- Default, public, and guest accounts should be secured/locked/removed.
- Change all passwords; delete all default content and login scripts.
- Limit administrative and user account privilege and 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 or better (90-day expiration, lockout after 3 incorrect password attempts, no concurrent logins, 6 alphanumeric characters)
- Set "automatic session timeout" to 15 minutes of inactivity and require user to log back in with valid ID and password.
- Implement access control at the database level (i.e. user roles and permissions, passwords, secure links)
- 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.
- At login, last user login should not display.
- Inventory listing of hardware and software should be current and maintained.

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.

Logical Access Controls

- Procedures to grant/modify/delete access should be documented.
 - Access request forms for adding/modifying/deleting users should be used.
 - Account expiration for contractors and consultants.
 - Accounts adequately identify the user – no generic accounts
- 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
 - Inactive accounts should be removed.
- Each user has a unique user ID as described in the Port Authority Standard and Guidelines.
 - All user accounts profile should include Employee ID# and full user name.
- Roles should have a segregation of duties/roles.
 - Roles are setup with least access required to perform job responsibilities.
- Access Control List (ACL) should include:
 - Current list of ACL
 - Creation and updates to ACL
 - Testing and approvals of ACL
- The application should have the PA's warning banner on the login screen.
- Remote access should be approved, secured, and documented in accordance with PA policy.
- Encryptions level at a minimum should be AES 256bit when encryption is used.

Password Controls

- 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
 - Accounts should be locked after a three logon failures
 - Passwords should not be the same account name
 - No concurrent login capabilities
- 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.
- Maintain a password dictionary and password history should be set to 5.

Application Controls:

Data Validation & Input Controls

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

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.

Data Integrity and Security

- Sensitive data, such as credit card #s and social security #s, should be encrypted.
- Data should be restricted and audit trails should be available to identify all user activity include view access to sensitive data.
- Data should be stored in the database encrypted and blocked from user views in the application unless it is authorized.

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.

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.

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.
 - Specific timetable/schedule should be documented.
- Emergency procedures should be documented and distributed.

Application Logging, Audit Trails and Record Retention

- Audit trails for operating, application, and database systems should exist and reviewed.
- 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.

Management Reporting

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

- Access reports by user and privilege should be produced and reviewed periodically including access violation reports and exception transaction reporting.

Contingency Planning, Disaster Recovery and Backup Management

- A business contingency plan and a disaster recovery plan for the application should be documented and stored off-site, including escalation plan and current call tree.
- Plans should be tested and the outcomes of the tests (success/failure) should be documented.
- 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.
- Full system backup should be encrypted.
- Backup procedures should be documented.
- Tape maintenance should include:
 - Periodically testing integrity of tape
 - Procedures for tape destruction due to faulty or scratched hardware.

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).
 - 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.
- Baseline tools or security products should be used and checked on a quarterly basis.

Patch Management

- Patch management procedures and documentation
 - Procedures should include testing, approvals, and distribution.
 - Documentation should include emergency procedures.
- Apply all new patches and fixes to operating system and application software for security.

Physical Protection

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

Anti-virus Management

- Virus patch management procedures should be documented, including emergency update procedures.
- Virus software should be implemented and up-to-date.
- An engine and definition management should be in place.
- A remote distribution server should be implemented

- Documentation on remote distribution should be current and maintained.
- Intrusion detection system should be in place, including incident response procedures.
- Firewalls should be implemented
 - Firewall rules documentation should be up-to-date.

Wireless Device

- Devices should be using WPA/WPA2 and AES encryption or better.
- Devices should disallow broadcasting of the SSID.
- All default parameters should be changed.
- Devices should have MAC address filtering enable or some type of authentication mechanism in place.

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
- Perform data validation & integrity checks for field values and ensure the HTML special characters are stripped for all HTML request.
- Do not allow site pages to be cached by user browsers.
- All sensitive, personal or confidential data (including SSN, passwords, session IDs for sensitive applications, confidential or sensitive business transactions, etc.) should be transmitted between browser and server within an SSL-encrypted session (or other encrypted transmission) and are encrypted in the database at rest.
- All sensitive and personal data should be masked and encrypted where possible.
- Legal Issues:
 - The site should have a privacy statement and term of usage.
 - American Disability Act – Section 508 should be considered 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.
- Password Reset:
 - For internal applications, reset passwords via the helpdesk or security administrator of the site
 - For external applications, send temporary password to known e-mail address, that must be changed upon login and/or
 - Have customer service reset after the user has been validated.
 - If possible, use two factor authentication like Secure ID fobs.

Credit Card Processing Checklist

- PCI Standards should be enabled and be PCI compliant. Ensure all vendors and consultants are required to be PCI compliant. Attachment - PCI DSS v2
- A segregated network and/or an approved Point of Sale terminal should be in place for the system or terminal used to process credit card transactions.
- The credit card processor standard and requirements should be enabled, i.e. maintain transaction data for two years.
- Maintain the security of the customer information, including not storing credit numbers, the cardholder CVC/CVV numbers or any of the data from the magnetic strip on the credit card.
- Maintain the transaction data for contesting chargebacks, ensure that the processor fees are appropriate and do reconciliations of the transactions processed and the money deposited in the Port Authority bank accounts.
- Make Treasury (Cash Mgmt) and Comptroller's (Revenue Accounting) aware credit card processing. Have Treasury fill out the Merchant form to get a Merchant ID for MasterCard/Visa, Discover and American Express.
- Have Treasury and Procurement enter into an agreement for credit card processing.
- Create a privacy policy and procedure for staff and consultants.
- Perform quarterly vulnerability scans of the network that contains the credit card processing, annual PCI reviews according to the PCI DSS, and annual system penetration testing.

Disaster Recovery Plan 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.

ATTACHMENT G: MAINTENANCE REQUIREMENTS FOR HOSTED SYSTEMS

ATTACHMENT G: MAINTENANCE REQUIREMENTS FOR HOSTED SYSTEMS

1. Maintenance Requirements:

Upon certification by the Authority that the System has satisfactorily completed the User Acceptance Phase/Stage/Test and that the Contractor has completed all work as specified in the Implementation Plan, the Contractor shall then provide the maintenance -- in accordance with the requirements hereof and with the Maintenance Plan submitted in the Contractor's Response to the Solicitation, as accepted by the Authority -- required for the System to perform in accordance with, but not limited to, the following requirements:

2. Maintenance Period

The maintenance & support tasks identified in this Section must be performed under the maintenance provisions, which start after the completion of the User Acceptance Test and Signoff and Implementation of the System and shall end one year after operational acceptance of the System.

3. Maintenance and support tasks

Maintenance and support tasks include all expenses (parts, labor, tools, equipment, software, travel, shipping costs, etc.), without additional cost to the Authority, required to perform (but not limited to) the following:

- Host, operate and maintain the System in a secure and protected environment in order to meet the functional, performance and availability requirements as defined herein;
- On-call remedial and scheduled preventive maintenance in order to meet the availability requirements stated herein;
- Correct any defects in the furnished applications software;
- Validate and correct (when necessary) the applications software furnished by the application provider to ensure that it performs in accordance with the specifications of the Contract within ten (10) days after software providers release patches and updates to the operating system, database and other third-party software that is furnished or used in the System;
- User support to administer the application;
- System Administration (See Exhibit 1 of this Attachment for the System Administration requirements);
- On-Call-Help Desk Support by telephone during twenty-four (24) hours per day, seven (7) days per week is required. Note: Help Desk Support is intended to be used by Authority Staff to report usage and application problems;
- Update and Test disaster recovery in accordance with the requirements of Attachment F (Control Requirements Contract Checklist); and

- Software Licensing - the Contractor should maintain the software license for all software in good standing.

4. Operational Availability

The Operational Availability of the System and Services shall meet the percentages stipulated below each calendar month for the term of this Contract:

System Hardware and Software:	99.9%
Applications software:	99.9%
User Services provided through the Worldwide Web:	99.9%

As used herein "Operational Availability" means the time during any twenty-four (24) hour period the System and communications network is Available to Users for operations. "Available" means that during any twenty-four (24) hour period, the furnished and installed software applications and website perform according to the Contract's specifications.

5. Maintenance Work

The Contractor shall perform and complete scheduled preventive maintenance and on-call remedial maintenance so that the System meets the Operational Availability and may be operated twenty-four (24) hours a day, seven (7) days a week. The maintenance program shall be performed with all reasonable care to keep the System in a proper and efficient operating condition capable of correct operation and reporting. The Contractor shall furnish all labor, travel, materials, supplies, parts, equipment, and all other things necessary or proper for, or incidental to, such maintenance.

The Contractor, at its option, shall repair or replace System components maintaining all original specified performance requirements, within the time(s) stipulated in this Attachment entitled "Time to Repair", for any component, software or firmware of the System that become unsuitable for continued use

The maintenance performed by the Contractor shall include, but not be limited to, scheduled preventive maintenance, on-call remedial maintenance, error correction, software and firmware diagnostics and corrections, validation that the application(s)' software continues to work (in accordance with the Contract requirements) with manufacturer-released patches to third-party software. Upon request by the Authority, the Contractor shall submit to the Port Authority's Contract Manager for review a schedule of preventive maintenance activities and a description of preventive maintenance procedures.

In order to make replacements and repairs as expeditiously as possible, the Contractor shall stock, keep and maintain a sufficient supply of parts and materials, tools or other equipment as may be necessary to make such replacements and repairs.

In order to meet the service levels stipulated herein, the Contractor shall maintain an adequate number of qualified staff to provide the required technical support.

6. Maintenance Description

All maintenance shall be performed in accordance with the software component manufacturers' recommendations. The maintenance performed by the Contractor shall include, but not be limited to, scheduled preventive maintenance, on-call remedial maintenance, error correction, and software and firmware diagnostics and corrections of the System as described herein.

a. Scheduled preventive maintenance

Scheduled preventive maintenance shall consist of all actions necessary to inspect, test, diagnose, repair equipment failures, correct System malfunctions and restore System operation to perform in accordance with the manufacturer's stated specification, performance and tolerances. Scheduled preventive maintenance shall include, but not be limited to, adjustment, repairs, and all actions necessary to prevent System failures and extend the System's useful life, verifying adequate empty disk space available for program usage (i.e., temporary files, logs, etc.), verifying log files are saved to removable media and log files are purged according

to Port Authority-approved record retention schedules, reviewing reports on communications throughput and errors and perform communications diagnostics on each communications channel to identify equipment or cabling problems.

b. Hours of Scheduled Maintenance

Scheduled preventive maintenance of System components shall be conducted between the hours of midnight and 0500 EST.

c. On-call remedial maintenance

On-call remedial maintenance shall consist of all unscheduled actions necessary to obtain the Operational Availability, diagnose and correct all System malfunctions and failures and restore the equipment and System in accordance with the manufacturers' stated specification, performance and tolerances and enable the System to perform in accordance with the Contract requirements. The Contractor shall provide a specified telephone number and FAX number and email address at no additional cost to the Authority, which shall be staffed 24 hours a day, 7 days a week, to enable the Contract Manager or his/her designee to report errors and malfunctions to the System.

Within twenty-four (24) hours of each reported on-call remedial maintenance problem, the Contractor shall provide written documentation of the reported problem and all actions performed related to the maintenance call in a computer-readable format to the Contract Manager.

7. Loss of Service

The Contract Manager or his/her designee will notify the Contractor via the 24-hour telephone or fax number or email, described above, when the System does not perform in accordance with the Contract requirements due to a loss of service. The Contractor shall dispatch Trained Personnel and complete performance of such error correction to diagnose, debug, repair, replace and correct all malfunctions or restore lost services required for the System to perform in accordance with the service level requirements:

- Restoration of System for Authority Use: Within 1 business day of notification by the Authority;
- Restoration of Website for Public Access: Within 6 hours of notification by the Authority.

8. Error Correction

The Contract Manager or his/her designee will notify the Contractor via the 24-hour telephone, fax number or email, described above, when the System does not perform in accordance with the Specifications stipulated in the Contract due to error in the applications software (including firmware) or any modifications thereto. Hardcopy documentation of the error condition will be mailed, faxed or emailed to the Contractor. The Contractor shall correct any such error in the System as identified by the Authority or through the Contractor's investigation of the reported error(s). Errors shall include, but not be limited to, flaws in operations and errors due to flaws in the design and coding of the System.

The Contractor shall dispatch its personnel and complete performance of such error correction to diagnose, debug, repair, replace and correct all malfunctions required for the System to perform in accordance with the Contract requirements within the time(s) stipulated in the Section of this Attachment entitled "Time to Repair". The Contractor shall provide documentation in machine-readable format, if any, relating to the error correction. The Contractor in an off-line test environment shall test the corrected software. The Contractor

shall then prepare a test report and submit it to the Authority for review and approval before the corrected software is installed into the System. Such corrections to the software shall be provided at no additional cost to the Authority.

The Contractor shall repair all software malfunctions maintaining all original specified performance requirements, within the time(s) stipulated in the Section of this Attachment entitled "Time to Repair".

9. Time to Respond

In response to a call for maintenance by the Contract Manager or his/her designee, the Contractor shall contact the Contract Manager within four hours of the initial notification by the Authority to the Contractor's designated telephone or Fax number, or email address for remedial maintenance, in order to document the need for service.

A minimum of 90% of calls by the Authority shall be responded to by the Contractor within four hours of notification by the Authority.

10. Time to Repair

A. On-Call Remedial Maintenance

The Contractor's personnel shall return to full operation the System and all failed System components, services or operations in response to on-call remedial maintenance within the period stipulated below after notification to the Contractor.

- The "Repair Time" includes the four-hour response time.
- The Contractor shall respond, repair and return to full operation the System and all failed System components and services in response to on-call remedial maintenance within 1 business day of notification by the Authority

A minimum of 90% of all on-call remedial maintenance incidents shall be resolved within one business day notification by the Authority. Furthermore, in no case shall resolution of any on-call remedial maintenance incident take more than two business days from notification by the Authority.

B. Validate and Correct Applications Software with Patches and Updates to Third Party Software

The Contractor shall complete performance of such testing, validation and correction to ensure that the software furnished by the Contractor performs in accordance with the Contract requirements with the released patches and updates within seven business days from the date that software providers used in the System release patches and updates to fix software defects or security vulnerabilities to the operating system, database and other third-party software that are furnished or used in the System. The Contractor shall apply all critical security/operating patches within 24 hours of their approval by the Authority.

C. Error Correction

The Contractor shall dispatch Trained Personnel and complete performance of such error correction to diagnose, debug, test, repair, replace and correct all malfunctions required for the System to perform in accordance with the Specifications stipulated in the Contract within seven days from the date of notification of System malfunction.

11. Upgrades and Enhancements

The Contractor shall notify the Port Authority's Contract Manager whenever upgrades and/or enhancements to operating system, the software provided under the Contract or third party software become available and provide a proposal for the proposed enhancement and upgrade. The proposal shall describe the work to be performed, contain a detailed estimate of the labor involved by labor category, price indexed to the rates proposed in the Contractor's Price Sheets (Section E. – Hourly Rates for Optional Enhancements – of Attachment E, as accepted by the Authority) and a proposed schedule for the work. The Contractor shall also provide the Port Authority's Contract Manager with an analysis of the potential effects of such upgrades/enhancements on the System. This analysis shall include, at a minimum, the following:

- Compatibility of the application software with the new operating system or third-party software
- Potential increases or decreases in operating System performance
- The availability of product support for the current (older) version of the operating system or third party software
- The testing required ensuring that the upgrade will perform as expected
- The cost of the software upgrade, including testing and any other tasks which may be associated with the upgrade

The Port Authority's Contract Manager will then determine whether to install the upgrade. If the Port Authority's Contract Manager selects the upgrade, the Contractor shall perform the recommended testing, prepare the test report, and perform the upgrade on the System. Software version upgrades are to be deployed within 6 months of general release.

12. Supplemental Work

The Port Authority's Contract Manager will notify the Contractor whenever Supplemental Work is requested. In response to the request, the Contract Manager shall submit a proposal that describes the work to be performed, contain a detailed estimate of the labor involved by labor category, a lump sum price and a proposed schedule for the work. The Contractor shall also provide the Port Authority's Contract Manager with an analysis of the potential effects of the requested supplemental work on the System.

Supplemental work includes but not limited to the following categories:

- Refresher training classes as part of the on-going maintenance contract
- Design, development and implementation of custom reports
- Staffing to support irregular operations.

Supplemental Work ordered and approved by the Authority shall be paid according to the rates specified by the Contractor in Section E – Hourly Rates for Optional Enhancements – of Attachment E.

The Work expended to prepare proposals is not a reimbursable expense. Prior to performance of any Supplemental Work, the Port Authority's Contract Manager shall approve any such Work in writing prior to execution.

13. System Administration

The Contractor shall perform all System and application administration functions in accordance with the requirements stated in Exhibit 2.

14. Disaster Recovery Plan

The Contractor shall create, review and test the disaster recovery plan in accordance with the requirements stated in Attachment F (Control Requirement Contract Checklist) of the solicitation.

EXHIBIT 1
SYSTEM ADMINISTRATION REQUIREMENTS

Standard System Administration:

The Contractor shall perform all system administration tasks and functions in accordance with the Contract, including all of its attachments, and best industry Information Technology IT Standards, Guidelines and practices. The Contractor shall be responsible for routine operation of the System, management of the hardware configuration, files and data, diagnosing and effecting correction of all problems that impact System operations, including, but not limited to, the tasks listed below in this Exhibit. The Contractor shall perform all tasks necessary to assure functioning of the System at the required standards of performance and availability defined herein and in the SOW.

In addition to the support it shall provide for the hardware, operating system software, database, utilities, and communications facilities, the Contractor shall be thoroughly familiar with, and provide comprehensive support for the applications software. The Contractor shall also provide direct support to end Users in the use of the applications furnished as part of this Contract.

Support for the systems shall include providing end-user access to such applications, routine monitoring and System maintenance, System backup, data replication, file retention and archiving services, security, performing operating system upgrades and maintenance of databases, which conform to the Contract and best industry IT Standards, Guidelines and practices.

A. System Monitoring

At least twice per day, the Contractor shall monitor the operating system, database, application, and error logs, and check the hardware and software components of the System to ensure that all components are present and operating within specified parameters. Based on these reviews the Contractor shall perform needed System activities (e.g., de-fragmenting disk files, purging obsolete files from directories, etc.) to ensure uninterrupted operation of the System. The Contractor shall check System monitoring devices and programs, run-time system utilization parameters, and other diagnostic tools (e.g., disk usage, file size and allocations, processor loading, page faults, response times, etc.) to ensure that all aspects of the System are operating properly and the System is meeting all specified performance criteria.

The Contractor shall monitor the state of the System's operating environment(s), including, but not limited to: temperature, humidity control, power conditioning/supply (e.g., uninterruptible power supplies), lighting, etc., to ensure appropriate and continuous environmental support for the System.

The Contractor shall review System databases (tables, indexes, views/queries, etc.) to ensure that all databases are properly updated, and appropriate integrity and synchronization of all System databases is maintained. The Contractor shall maintain logs or other appropriate records of all monitoring and System upkeep activities and logs of all anomalies found during any monitoring activities and measures taken to correct those anomalies. The Contractor shall provide monthly, quarterly and semiannual reports of System performance.

The Contractor shall report all deficiencies and anomalies to the Contract Manager within 24 hours of observation through normal System monitoring.

B. Operational Requests

1. Critical Requests

The Contractor shall respond to critical requests (e.g., resetting a user password, unlocking intruder detection lockouts, etc.) in a timely fashion.

2. Routine operational requests

The Contractor shall perform work to satisfy all routine operational requests (e.g., adding a new user; granting a user access to an existing application, modifying approved access permission changes, etc.) System and Application/Database Back-ups and Archiving.

The Contractor shall perform scheduled data, application, and System backups to ensure that back-up media are properly stored and rotated on schedule, and replaced appropriately.

a. Maintaining off-site back-ups

The Contractor shall perform scheduled back-ups for off-site storage or rotate back-up media to and from the off-site storage location as appropriate. The Contractor shall ensure that viable and complete back-ups are delivered to the off-site storage location when scheduled and that media to be rotated is returned from off-site storage location and returned to usage on the System as appropriate.

b. Maintaining records of back-up

The Contractor shall maintain logs of all back-up activity, rotation of back-ups, and usage/rotation of back-up media and records of all off-site data storage.

c. Testing backup/restore procedures

The Contractor shall perform tests to verify that the backup tapes can be used for restoring data/files. These tests shall be conducted at least twice annually. The backup solution should work at a speed that ensures that backups or restores do not impact the bandwidth during the workday.

3. Database Administration

The Contractor shall be responsible for monitoring and maintaining the database(s) that are used to support the applications, and other tasks (e.g. indexing the database, etc.) as necessary.

4. Fault Detection, Diagnosis, Alarms and Correction Diagnosing System faults:

a. Diagnosing System faults

The Contractor shall be responsible for the following with respect to diagnosing System faults:

- Reacting to System faults detected through either monitoring and observation, or by reports from Users;
- Log fault and capture pertinent data (e.g., record state of System components, take appropriate System dumps, record observations of Users, etc.);
- Make necessary and appropriate notifications (e.g., Authority Contract Manager, affected Users, etc.);
- Diagnose the nature/cause of problem(s); and
- Determine responsibility for correction of fault.

b. Alarms

The Contractor shall be configure the System to issue alarms that notify the system administration staff of any condition that would adversely impact System operation, including, but not limited to the following:

- Hardware faults
- Applications software faults
- CPU, Memory or utilization exceeding stated threshold value
- Environmental conditions

c. Correction of System faults:

The Contractor shall correct faults or follow procedures to contact the appropriate service provider and initiate response from/resolution by that provider. The Contractor shall then monitor and log response of service provider to trouble call.

d. Following up on corrective action:

The Contractor shall verify that the fault has been appropriately and completely corrected and that there are no uncorrected collateral problems either from the original fault or from the measures taken to correct the fault.

e. Maintaining records of System faults:

The Contractor shall log return to proper operation and record all pertinent data regarding fault including:

- Fault description and symptoms;
- How fault was detected;
- Impact on System operation;
- How fault was diagnosed;
- Diagnosis and response times;
- How fault was corrected; and
- Elapsed time to restored System operation.

f. Production of operations reports

The Contractor shall provide System-generated and/or manual log reports as required; and collect, maintain, and provide regular reports on computer room and system administration activities, etc., which are necessary for auditable reports of Contractor performance on the Contract.

5. Monitor inventory of consumables

The Contractor shall monitor the inventory of consumables used by the Contractor, e.g. , backup tapes, and order additional consumables as needed.

6. Capacity Management and Performance Monitoring

The Contractor shall be responsible for and shall provide non-intrusive System and database monitoring to ensure that the System's performance and responsiveness meets the operational needs of the Users. All measures shall be taken to ensure the continued effective operations of the System through the accepted industry capacity management and performance monitoring procedures and techniques, including recommending corrective actions to correct capacity or performance inadequacies.

The scope of the capacity management and performance monitoring portion of the System Administration services furnished shall include, but not be limited to, the activities identified below in this section, and shall comply with the best industry IT Standards and Guidelines.

a. Maintaining records:

The Contractor shall maintain records on System performance and resource usage, message queuing, System and User response times, etc., adequate to project needed upgrades to hardware and software based on current performance and expected growth.

The Contractor shall maintain communication with the Contract Manager and user community concerning plans for System expansion or modification that will affect System capacity or performance. The Contractor shall show monthly reports of growth or decline of System usage and predict trend should more user or equipment be added or removed.

b. Tracking resource usage:

The Contractor shall track such items as database/file sizes, network traffic, volume and simultaneous connections to ensure adequate resources will be available for the foreseeable future. The Contractor shall present the status of these findings monthly.

c. Tracking licenses:

The Contractor shall track and report to the Systems Manager(s) the need to purchase additional licenses before user limits are exceeded.

d. Performance Monitoring

The Contractor shall maintain the proper allocation of resources, alter file distribution on direct access storage devices and reconfigure the System as needed to maintain adequate System performance.

e. Troubleshooting:

The Contractor shall investigate and diagnose System problems resulting in unsatisfactory System performance and take all steps to remedy the problem.

f. Maintaining data structures:

The Contractor shall de-fragment files and purge, reorganize, and optimize databases on a scheduled and as needed basis.

7. Coordinate with Hardware/Software Service Providers

a. Hardware Maintenance

The Contractor shall schedule regular preventive maintenance service with its hardware vendor in accordance with service contracts and in coordination with the Contract Manager so as to limit disruption of operations, and maintain records of service visits to ensure that vendors' contractual obligations are met.

b. Notifying vendors and other Agencies of System faults

The Contractor shall reassign/forward service calls to the appropriate application provider when System faults or failures require such correction within one hour of the fault or failure.

c. Software Upgrades

Contractor shall perform the installation of operating System upgrades and/or patches on host processors and servers, ensuring software is maintained at a release level supported by the vendor and as appropriate within two release levels of the most current release for both the operating System and third-party products.

d. Maintaining currency of application software

The Contractor shall perform the installation of application software, upgrades and/or patches on host processors and servers, including packaged software products, as well as new releases of custom software in order to maintain the application at a current release level.

e. Software Maintenance/Support

The Contractor shall report required fixes to correct software deficiencies, maintain records and track the status of all reported problems and requests for enhancements, maintain contact with vendors and Agencies to keep current on the latest releases of and fixes to software and keep the Authority's Contract Manager aware of the status of all such releases, fixes and requests.

f. Change Management Administration

The Contractor will be responsible for ensuring that all changes to hardware and/or software occur in a controlled manner. The Contractor shall be responsible for determining that all hardware and software changes are properly authorized, tested and documented prior to implementation in the production environment, and shall describe the testing environment. Testing would be in reference to new versions of applications, operating systems, or other relevant changes.

The scope of the change management portion of the System Administration services furnished shall include but not be limited to the activities identified as bullets below in this section:

- **Hardware Configuration Changes**

The Contractor shall make provisions for the orderly implementation of hardware changes and upgrades minimizing the disruption of System services to Users. The Contractor shall oversee and control changes to the hardware configuration and supervise the area during installation.

- **Testing new hardware**

The Contractor shall ensure that all hardware configuration changes "are tested prior to use" in the production environment. Where possible and appropriate, the Contractor shall arrange for factory testing prior to acceptance of new hardware for the System.

- **Establish a segregated test environment**

The Contractor shall maintain a segregated test environment insulated from the production environment for testing of all changes to software prior to introduction to the production environment. The Contractor shall

provide a description of the planned testing environment to support testing of new versions of applications, operating systems, etc.

- **Controlling software migrations:**

The Contractor shall establish and enforce procedures to ensure only approved changes are implemented by ensuring the following:

- modification request forms have been received for all changes to be made to software
- software version/revision level is identified
- new application and System software versions are tested prior to use on the production System
- new application and System software versions are documented

- **Maintaining prior versions of software**

The Contractor shall exercise control over software versions, ensuring the proper version of software is migrated and that prior versions are available for roll back in the event of an emergency.

- **Testing new software**

The Contractor shall maintain a set of test transactions and known results to verify the integrity of the System along with new software releases. The test transactions shall be updated to include test data for all new conditions arising out of maintenance or enhancement of the System.

8. Security Administration - User Accounts

The Contractor shall be responsible for creating and maintaining a secure System environment in a manner consistent with the terms of this Contract. The scope of the security administration portion of the System Administration services furnished shall include but not be limited to the activities identified below in this section.

a. Maintaining lists of authorized Users

The Contractor shall establish a listing of Users authorized by the Contract Manager to access the System and the System functions that user is authorized to exercise. The Contractor shall also provide a means for immediate communication with the Contract Manager, or other designated person, when changes in employment status occur, which may require updating of said list.

b. Limiting access to the System

The Contractor shall create log-on privileges for only those persons authorized by the Contract Manager and periodically reconcile the list of Users to the authorized list. The Contractor shall institute a policy of password assignment, expiration and change to limit the exposure to unauthorized access and limit access by individuals to the functions authorized through user profiles or other such means as are available through the application or operating system. The Contractor shall institute controls over super-passwords or other special passwords so that their use is documented and approved by the Contract Manager. The Contractor shall research sign-on violations to determine if a pattern is evident and report any findings to the Contract Manager.

The Contractor shall review and monitor the security configurations, user accounts, passwords, and user security permissions established for all components of the System the Contractor is responsible. These include

the operating system, database, application, file system rights, Web services and applicable middleware software.

The Contractor shall review and monitor the security associated with information transfers between the System managed by the Contractor, other systems and with outside entities such as file transfers (outgoing and incoming), monitoring actions, and traffic that is allowed to reach the servers the Contractor is managing. The Contractor shall provide reports on how these configurations have been set and controls have been performed following the Contract and best business practices. The Contractor shall use the best monitoring, auditing and reporting tools available. The Authority reserves the right to request any additional security and System software be used to evaluate the level of security and vulnerabilities in all systems under this contract. The Contractor shall develop an acceptable procedure to notify Users and correct unsatisfactory conditions, e.g., email notification of login lockouts, password expirations, etc.

1. Security Measures for Contractor's Staff

This section is intended for the creation of security controls relative to the Contractor's own staff. The Contractor shall be responsible for maintaining secure environment and supplying personnel who satisfy Authority and/or regulatory requirements.

a. Limiting access to the System

The Authority shall issue appropriate log-on IDs for only those persons authorized by the Authority's Contract Manager to have access, and periodically reconcile the list of logon IDs to the authorized list. The Contractor shall institute controls over super- user passwords or other special passwords so that their use is documented and approved by the Authority's Contract Manager. Any request by the Contractor to increase access shall be documented in writing, with full backup information to document the need for the increased access.

b. Data Security

As applicable, all data shall be handled according to the Contract provisions and the Port Authority Information Security Handbook (<http://www.panynj.gov/business-opportunities/pdf/Corporate-Information-Security-Handbook.pdf>).

9. User Assistance:

The Contractor shall:

- Provide assistance to Users on the use of the application;
- Provide technical assistance to Users on the setup, if any, of the application on the Users' personal computer to make the application operational for the User;
- Research and take corrective action on hardware/software malfunctions;
- Conduct User training;
- Provide a 24-hr/7 day per week toll-free telephone number, in North America, for placing service calls, requesting assistance and responding to questions;
- Add and delete Users from the System;

- Setup/Change User Access Permissions; and
- Reset User Passwords.

ATTACHMENT H: TRANSPARENCY METADATA

AGENCY TRANSPARENCY

L 1 2 3 4 5 6 7 8

L1	L2	L3	L4	L5	L6	L7	L8
Transparency Home Page							
<input type="checkbox"/>	Governance						
<input type="checkbox"/>	Board of Commissioners						
<input type="checkbox"/>	PA Leadership						
<input type="checkbox"/>	By-Laws						
<input type="checkbox"/>	Transparency in Governance						
<input type="checkbox"/>	Board Committee Charters						
<input type="checkbox"/>	Financial Information						
<input type="checkbox"/>	Budget & Capital Plan						
<input type="checkbox"/>	2013 Operating Budget						
<input type="checkbox"/>	Consolidated Bonds & Notes						
<input type="checkbox"/>	Financial Statements						
<input type="checkbox"/>	Annual Reports						
<input type="checkbox"/>	Board Meeting Information						
<input type="checkbox"/>	Schedule of Upcoming Board Meetings						
<input type="checkbox"/>	Board Day Information						

YEAR

MMDDYYYY

DOCUMENT NAME

FACILITY

FOI Number

FOI DESCRIPTION

FOI CATEGORY

COMMITTEE

QUARTER ENDING

FIELD NAME

ATTACHMENT I: STANDARD AND GUIDELINES FOR PORT AUTHORITY TECHNOLOGY

See following pages