

Washington State Digital Archive

# **Quality Assurance Plan**

v1.0

**Presented to:** 

Office of the Secretary of State Archives and Records Management Division

Submitted by:

GlassHouse Technologies, Inc.



## **Table of Contents**

1.	Intro	oduction2
	1.1	Purpose
	1.2	Duration of QA Evaluation2
	1.3	Project Definition
	1.4	Definition of success
2.	Role	es and Responsibilities4
	2.1	GlassHouse Technologies4
	2.2	State of Washington
3.	Rep	orting deliverables
4.	QA	Process
	4.1	Information Collection
	4.1	Information Collection
	4.1 4.2	Information Collection
	4.1 4.2 4.3	Information Collection
5.	4.1 4.2 4.3 4.4 4.5	Information Collection
5.	4.1 4.2 4.3 4.4 4.5	Information Collection
5.	4.1 4.2 4.3 4.4 4.5 QA	Information Collection       .8         Review and feedback       .10         Issue Escalation       .10         Communication and Report Submission       .10         QA reporting periods       .11         Event Measurements       .11
	4.1 4.2 4.3 4.4 4.5 QA 5.1 5.2	Information Collection       .8         Review and feedback       .10         Issue Escalation       .10         Communication and Report Submission       .10         QA reporting periods       .11         Event Measurements       .11         Measurements and metrics       .11



## 1. Introduction

This Quality Assurance Plan ("QA Plan") is created for the Office of the Secretary of State, Archives and Records Management Division ("Agency") by GlassHouse Technologies, Inc. ("QA provider") as required by legislation. The intention is to ensure that the project identified within this QA Plan is completed with success factors including accomplishment of the functionality, meeting the anticipated schedule and budget parameters.

The QA plan will address technical factors related to the successful completion of a project and its integration with the agency and state information technology infrastructure along with the roles and responsibilities of the Agency and QA provider.

#### 1.1 Purpose

QA serves the wider public interest of assuring accountability for taxpayer funded information technology projects and provides a common source of reliable information to those charged with the oversight of projects. It is also required by State law that the Agency obtains external, vendor and product neutral Quality Assurance review and consulting for the Digital Archives project. To that end, the Agency and the QA Provider agree to adopt the principles of Responsibilities and Obligations for Quality Assurance document and its related policies.

## 1.2 Duration of QA Evaluation

The QA evaluation period will be from April 2<sup>nd</sup>, 2004 through December 31, 2004. The Agency reserves the right to extend the contract through written amendment to the contract with the QA Provider if mutually agreed that additional Quality Assurance work is needed.

## 1.3 Project Definition

It is important to understand the objectives of the project that this QA Plan supports. The following background information is provided to help articulate the overall vision of the Digital Archives project and put context around the specifics of the QA Plan.

The Office of the Secretary of State, Division of Archives and Records Management, is mandated by statute to insure the proper management and safeguarding of public records and facilitating citizen and government access to those records. Technology and the "electronic revolution" are having substantial impact on the way governments conduct business as public records are increasingly moving from paper based to digital documents. The primary purpose of the Digital Archives is to preserve and provide access to digital documents and records of enduring legal and historical significance.

The agency began strategic planning for the Digital Archives in March of 2000, when the project first appeared in the agency's Information Technology Portfolio. Planning for the physical design and

technical infrastructure of the facility occurred between December 2001 and July 2002. From March 2003 to June 2003, the technical feasibility, proof-of-concept testing, system requirements and system architecture cost estimates were completed. A Digital Archives Feasibility Study and Digital Archives Investment Plan were developed by the agency and approved by the state's Information Services Board in September 2003.

The physical "hub" for the Digital Archives will be the new facility currently being constructed in Cheney, Washington. Construction is scheduled for completion in May 2004. This two-story facility will house both the Eastern Washington Regional Archives (traditional paper archives) as well as the Digital Archives serving both state and local government agencies.

The Digital Archives project is planned in four staged phases, each phase building on the knowledge and experience of the previous one, while increasing the robustness and capacity of the system architecture over time. The duration of this QA evaluation will focus only on Phase I described below:

#### 1.3.1 Phase I

This phase will consist of initial rollout of the SAN Architecture and content management system at the Digital Archives. During the initial phase, the goal is to accession one local government records series (i.e. marriage records) into the Digital Archives from all 39 counties; an initial beta test will be done with three volunteer counties. Additionally, the Office of the Secretary of State (OSOS) will be the pilot agency to test the remote accession capability of the content management system. As the OSOS will be connected to the Digital Archives content management application, many of the records processes will be automated. Appropriate policy makers in the agency will be identified and their emails will be archived at the server side and automatically sent to the Digital Archives. The agency web page will be spidered by the Digital Archives on a periodic basis. Based on the results of this three pronged approach (content management, email archive and web spidering) the best practices manual will be developed and expanded to serve as the electronic archiving guide for future partner agencies.

#### 1.4 Definition of success

The following four key factors, when accomplished, will indicate the successful completion of Phase I and II of the Digital Archives project as managed by this QA Plan:

- 1. At the end of Phase I the budget for the initial technology investment for the Digital Archives Project does not exceed \$2,600,000 as defined in the Digital Archives Investment Plan
- 2. An official demonstration of the archival software application occurs on October 4<sup>th</sup>, 2004 at the operational facility in Cheney, Washington and includes a single record series from 3 participating counties including historical records, voter registration database, spidering the



OSOS web site and establishing some web pages for public search and retrieval of digitally archives documents

3. A successfully implemented accession of one local government records series (i.e. marriage records) into the Digital Archives from at least 70% of the remaining 36 counties by December 31<sup>st</sup>, 2004 including ingesting the emails into the Digital Archives from 10 executive staff at the agency and ingesting legislative policy documents via a secured web site.

## 2. Roles and Responsibilities

## 2.1 GlassHouse Technologies

GlassHouse Technologies was selected as the QA Provider by demonstrating the qualifications to perform quality assurance with appropriate professional credentials. In addition, GlassHouse provided a special knowledge of the Digital Archives project. This was due to recent involvement assisting the agency with assessing the technical feasibility and proof-of-concept testing, determining system requirements, designing the system architecture and working with the agency to develop cost estimates. That work was completed in June 2003.

GlassHouse Technologies, Inc. is the leading provider of a full range of storage and backup consulting and services to Fortune 1000 organizations seeking to maximize investments in enterprise storage. From strategy through implementation, operations and support, GlassHouse partners with clients to achieve predictability and manageability in their storage and IT infrastructure environments. GlassHouse is vendor and technology independent and does not sell or endorse any hardware or software product.

In a difficult market, GlassHouse has achieved impressive growth by providing its clients with guidance and technical expertise, establishing a reputation for leadership by bringing clarity to the challenging process of implementing comprehensive storage and data management strategies. Our global customer base of large and medium-sized enterprises in the financial services, health care, bio-pharm, life sciences and technology sectors depend on GlassHouse's vendor-independent service offerings to match the value of data to the cost of the systems storing the information.

As the QA Provider, GlassHouse will supply ongoing advice, counsel and recommendations to the Agency's project team ("OSOS Team") and executive sponsor while refraining from the performance of implementation activities or advocacy on behalf of projects to external stakeholders. The first loyalty of the QA Provider is to achieving the business objective being addressed through the IT project – not individual stakeholders, preferred solutions, methodologies or other interests.



#### 2.1.1 QA Project Manager: Quality Assurance Tracking

The QA Project Manager will be the QA Provider's primary point of contact for the Agency and will direct the work effort of the Senior Technical Consultant. The role of the QA Project Manager will be to review the identified milestones and project events at regular intervals against pre-determined metrics. These periodic reviews will result in the creation of reports that will indicate the project progress against schedule and budget as well as risk identification relative to the defined QA Events.

#### 2.1.2 Senior Technical Consultant: Risk assessment and consultation

The Senior Technical Consultant's Quality Assurance review will be limited to the storage component of the project implementation. This role will be identified as the Storage Subject Matter Expert or "Storage SME" throughout the remainder of this QA Plan.

Where appropriate, the Contractor will provide advice, counsel and recommendations to the Agency Project Team and executive sponsor on how to mitigate identified risks. The Agency, not the Contractor, will be responsible for solving the problems associated with the risks noted, and all troubleshooting and debugging activities associated with installation of the technology solution.

#### 2.2 State of Washington

The actual OSOS Team is comprised of many individuals several of whom provide multiple functions for this project. Two of the main roles are defined first followed by the various teams that will provide guidance in designated areas. These teams will work from the QA Events list and will identify a list of sub-tasks, assignments and milestone dates that will drive the measurement and tracking of the QA Events. The team members are listed after the team leader.

#### 2.2.1 OSOS Executive Sponsor

The OSOS Executive Sponsor is the Assistant Secretary of State. The Executive Sponsor will preside over the weekly team meetings; establishes overall policy and direction; reviews and approves contracts related to the project and has final approval on project deliverables. In addition, this person will resolve any disputes related to risk levels or provide final decisions required to move the project forward.

#### 2.2.2 OSOS Project Managers

The OSOS will utilize two co-Project Managers for the project. Cathy Turk, the Financial and Support Services Manager for the agency, will serve as one of the project managers, and will be the primary point of contact with the GlassHouse QA Project Manager. This involves collecting, aggregating and forwarding information for inclusion in the QA reports, and managing the review, edit and change management of all documentation created for the Agency by the QA Provider. In addition, Ms. Turk will serve as the acting contract manager for reports and billings. The Deputy State Archivist, Diana

Rae Bradrick, will serve as the other project manager and will be primarily responsible for monitoring and facilitating the forward progress among members of the Agency team to carry out this responsibility, she is a member of most of the work teams described below. She will also work with the Digital Archivist on vendor management.

The Digital Archivist will serve as the on-site manager for the Digital Archives in Cheney and coordinate the acquisition, installation, integration and testing of the technology solution.

#### 2.2.3 Technology HW/off-the-shelf SW team

Team: Paul Longwell (L), Adam Jansen, Mike Huntley, Linda Powell, Diana Rae Bradrick

This team will identify, purchase, install and test all server and operating system hardware and software including all network hardware and software.

#### 2.2.4 Application Development team

Team: Patti Prouty (L), Harold Stoehr, Adam Jansen, Matthew Edwards, Samreth Sam, Steve Excell, Diana Rae Bradrick

This team is responsible for defining the specifications for the Microsoft provided and internally developed applications, conversion of accessioned records, and serving as the technology interface group for the external agencies participating in Phase I.

#### 2.2.5 Archiving requirements and county MOUs team

Team: Diana Rae Bradrick (L), Jerry Handfield, Sherry Bays, Dave Hastings, Tony Kurtz, Marlys Rudeen, Adam Jansen, Andrea Watts, Patti Prouty

This team is developing the Memorandum of Understanding forms that will be used to document the technical specifications (e.g. file structure, metadata fields, means of transmission) of records transmitted to the Digital Archives.

#### 2.2.6 Recruitment and hiring team

Team: Adam Jansen (L), Terry Wilson, Terri Parker, Diana Rae Bradrick, Jerry Handfield, Steve Excell

This team is responsible for creating job descriptions, recruitment, hiring and training of the Digital Archives staff.

#### 2.2.7 Procurement and Contracting team

Team: Cathy Turk (L), Steve Lyle, Linda Powell, Adam Jansen, Diana Rae Bradrick, Steve Excell

This team is responsible for managing the procurement and payment of equipment and contracted services, including competitive solicitation when needed.



#### 2.2.8 Fibre Optic team

Team: Adam Jansen (L), Paul Longwell, Mike Huntley, Harold Stoehr, Diana Rae Bradrick

This team will ensure connectivity to and within the facility.

#### 2.2.9 Voice over IP team

Team: Adam Jansen (L), Steve Excell, Harold Stoehr, Paul Longwell, Sherry Bays, Diana Rae Bradrick

This team will ensure phone service and security monitoring within the facility.

#### 2.2.10 Security team

Team: Mike Huntley(L), Jerry Handfield, Larry Gratton, Adam Jansen, Sherry Bays, Paul Longwell, Diana Rae Bradrick, Harold Stoehr

This team will ensure facility security including key card access, video surveillance and emergency response to security breaches.

#### 2.2.11 Audio / Visual team

Team: Paul Longwell (L), Adam Jansen, Mike Huntley, Diana Rae Bradrick

This team will acquire, set up and test all audio visual equipment for the digital classroom and conference rooms.

#### 2.2.12 Budget/financing/revenue team

Team: Cathy Turk (L), Dan Speigle, Dalene Conant, Linda Shea, Diana Rae Bradrick, Patti Prouty

This team will manage the acquisition and identification of the funds needed to support the project, entering into and managing financing contracts, identifying and developing modifications to the agency's revenue system, and developing or modifying fee structures associated with the sale of certified or official copies of records through the Digital Archives.

#### 2.2.13 Quality Assurance, ISB relationships and reporting team

Team: Dan Speigle (L), Cathy Turk, Patti Prouty, Adam Jansen, Steve Excell, Mike Huntley

This team is responsible for coordinating activities with agencies providing oversight for the project and ensuring compliance with ISB requirements.

#### 2.2.14 Communications team

#### Team: Cathy Turk (L) and Diana Rae Bradrick

This team is responsible for assuring communication about the project within the agency team and between the agency and the Quality Assurance contractor.



## 3. Reporting deliverables

Period reports will address whether sufficient progress is being made to meet milestones, if milestones are met on schedule, and the agency's level of preparedness for meeting subsequent milestones. The reports will be generated at specific periods defined in Section 4.5. The reports will monitor the QA Events described within this QA Plan and use the template outline contained in Appendix A of this document.

## 4. QA Process

The QA Process for the technical aspects of the Digital Archives will follow two paths. One path will be a tactical, on-going and interactive discussion between the OSOS Team and Storage SME. These discussions may range from detailed questions on data center cabling to more strategic inquiries about hardware vendors or training direction.

The issues and discussions will be captured in a spreadsheet document (see Appendix B) and used as a decision support tool for the OSOS team. This spreadsheet will be internal to the OSOS team and not included in the periodic progress reports to the ISB. However, outcomes and decisions as a result of this interaction will be included as appropriate in the overall project progress reporting.

The second path in the QA Process will be a defined, periodic monitoring and reporting function that will drive the creation of the progress reporting to the ISB. The QA Project Manager will collect information at regular intervals, perform site inspections, review and grade the information, identify risks and offer advice during report period intervals and consolidate the measurements into the required progress reports for submission to the ISB.

The sections below define these various segments of the QA Process.

## 4.1 Information Collection

The various members of the project team will collect data relative to the QA Events defined within this Plan. The QA Project Manager is responsible for ensuring that the collection of the data occurs in accordance with the information collection process.

Input will be collected, reviewed and approved in a collaborative manner using the OSOS Team's weekly status meetings as the main collection vehicle.

The Agency will be responsible for providing any internal data required for inclusion in the reports and will be collected from the Agency at regular and irregular intervals. In addition to information provided by the Agency, the QA Project Manager will conduct on-site visits to validate some of the more important QA Event information provided by the Agency. The following constitutes the chief methods for information collection in the QA Process.



- 1. Weekly staff meetings
  - The expectation for the weekly staff meeting is to collect inputs and updates on all QA activities from the various owners of the information and pass that information to the QA Provider.
  - For example, QA Event #8, SAN Hardware & Software, will be owned by the Technology HW/off-the-shelf SW team and will provide the measurement and status information on a weekly basis during this meeting.
  - Weekly e-mail updates will be aggregated via Cathy Turk and sent to the QA Project Manager to ensure a manageable conduit of information flow to the QA Provider.
- 2. Vendor communication and information collection
  - The Agency will be solely responsible for managing, directing and coordinating with external vendors. Direct discussions with vendor representatives will take place as required or defined by the QA Events.
  - To the extent that participation in vendor meetings may assist the QA Provider in fulfilling their Quality Assurance review function, the Agency will invite and facilitate the QA Provider's participation.
  - Copies of all vendor purchase commitments and discussions; and all vendor installation, implementation, documentation and training schedules will be provided as appropriate for the defined QA Events and Storage SME discussions.
- 3. On site validation

Periodic visits to the data center and to the main OSOS facility in Olympia will be conducted at defined intervals.

Date	Location	Objective
May 24 <sup>th</sup>	Cheney, WA	Review of pre-installed data center
On or about June 25 <sup>th</sup>	Cheney, WA	Audit installed data center
End of August / Sept	Cheney, WA	Review implementation testing prior to Grand Opening: Application/Data/SAN
October 4th	Cheney, WA	Grand opening Event
Mid December	Olympia, WA	Project finalization and review- Assess QA involvement

The QA Provider will also communicate back observations or concerns regarding the QA Event status in a proactive attempt to provide mitigation suggestions prior to the defined progress report due dates. In this manner, the QA Provider will act as a trusted advisor and true Quality Assurance monitor, rather than a simple risk and checkpoint monitoring auditor.



#### 4.2 Review and feedback

The QA Project Manager is responsible for providing feedback to the OSOS team on any QA Event that the QA Provider deems risky or delinquent in meeting the agreed event milestone. The OSOS team may then respond and attenuate the issue, monitor the issue for future action or allow the issue to exist with approval from the OSOS Executive Sponsor.

Reviews of QA Events will be conducted at the OSOS team meetings described in the Sec 4.1.

#### 4.3 Issue Escalation

There are two issue escalation processes, the first, related to the Storage SME interaction, is outlined in Appendix B along with the template used to collected various storage related issues. The second process is related to issues uncovered during the quality review of QA conducted by the QA Project Manager.

Issues resulting from the QA Event reporting will be brought to the attention of the OSOS Project Managers and OSOS team at the weekly meetings. If attenuation is not determined, then the issue along with associated risks and alternatives will be directed to the OSOS Executive Sponsor for resolution. The Project Managers will keep the unresolved issue on the list for continued discussion at our weekly meetings. If the issue is not resolved, it will be recorded in the progress report to ISB.

#### 4.4 Communication and Report Submission

Communication will be both formal and informal and is encouraged to occur as frequently as possible and for any reason. The follow are communication guidelines:

- Both OSOS Project Managers will be copied on all informal communication in between reports
- OSOS Project Manager Cathy Turk will be the point of contact for the periodic progress reports
- QA Project Manager and OSOS Project Manager Cathy Turk will be copied on or generate all communication related to this QA Process.
- OSOS Project Manager Cathy Turk will distribute reports to the Agency's executive sponsor, project team, the Department of Information Services liaison providing project oversight, the Information Services Board and the Office of Financial Management.



The following individuals will receive the periodic progress reports

Office of Financial Management (OFM)	Department of Information Services (DIS)
Tristan Wise, Budget Analyst	David Koch
Office of Financial Management - Budget Division	Department of Information Services
300 Insurance Building	1110 Jefferson Street SE
PO Box 43113	PO Box 42445
Olympia, WA 98504-3113	Olympia WA 98504-2445

• The reports are also required to go to the Information Services Board (ISB). The DIS representative listed above will act as a liaison with the OSB and will be responsible for forwarding a copy of the reports to the appropriate ISB representative.

#### 4.5 QA reporting periods

At the end of each reporting period, a project report will be created and issued to the OSOS Project Manager. This report will document the current disposition of each QA Event and highlight any known risks with their current attenuation status. (See Appendix A for the report template)

The formal progress reports will be generated at approximately 60 day intervals. The expected release schedule below indicates the dates the reports are due for OSOS team review and not ISB submission:

- May 31
- July 30
- September 30
- October 29
- Dec 31

## 5. QA Event Measurements

This QA plan defines both the process for collecting information for QA review as well as the various project functions and tasks, known as "QA Events", against which progress can be measured and reported.

#### 5.1 Measurements and metrics

Measuring the technical aspects of the Digital Archives project will require devising and recording the initial project estimates (dates, costs and expected results) and comparing them to actual measurements for each of the QA Events defined within this plan. Please refer to Sec 5.2, for the QA Events and their associated activities, milestones and measurement criteria.

All of the QA Events listed in the table will be measured using one or both of the following types of criteria:



- 1. Scheduled dates (actual versus estimated)
- 2. Expected outcomes
  - Staffing levels (actual versus estimated)
  - o OSOS satisfaction or acceptance based on agreed vendor commitment or results
  - Functionality or deliverable acceptance

Tracking the project budget will be done separately from the other QA Events and will be the only *estimate to actual* cost comparison of all QA Events. The project budget is an aggregate of components that were defined in the Digital Archives Investment Plan.

The table below illustrates the budget tracking method that will be provided in each progress report.

BUDGET CATEGORY	Investment Plan Estimate	Current Estimate (as of X)	Current Estimate: Expended/Obligated to Date		Current Estimate: Un-obligated Balance	
			\$	%	\$	%
Personal Services Contracts	\$332,750					
Hardware	\$13,044					
Maintenance						
Software	\$247,889					
Maintenance/upgrade						
Goods and Services	\$75,000					
Hardware Purchase	\$1,238,472					
Software Purchase	\$670,413					
TOTAL	\$2,577,568					

#### Digital Archives: Expenditures vs. Budget

## 5.2 QA Events

The major project functions and tasks will be treated as "QA Events" and will be the focal point of the QA review and reporting. These QA Events are listed in the table below and will form the basis for all future QA reporting references.

The milestones and supporting activities for each of the major QA Events will be measured using the criteria defined in a corresponding column. All dates referenced in the table are for the calendar year of 2004; therefore, no year will appear in milestone dates. Also, any dates or outcomes listed as a measurement criteria are considered target dates or the expected outcomes and not reflective of *"actuals"*. Actual dates or outcomes will be recorded in the period progress reports.



	Major QA Events	Definition	Milestone / supporting activity	Measurement Criteria
1.	Program / Project management	Building on the Feasibility Study and Investment Plan already developed (which identified the	<ul> <li>Working sub groups and sub group leaders are identified.</li> </ul>	April 9
		overall goals and objectives for the project), this area involves the identification of key tasks, milestones, deliverables and resources needed to	<ul> <li>Sub groups develop task lists and due dates for integration into overall project plan and timeline.</li> </ul>	April 16
		implement the technical aspects of the project, and will provide a mechanism for tracking progress. Also includes identification of staff roles	<ul> <li>Sub groups are assigned partial or full responsibility for completing the work associated with each major QA event.</li> </ul>	April 16
		and responsibilities.	<ul> <li>An overall project timeline is established that will be used to track progress.</li> </ul>	May 7
2.	Communication plan	Identify and document the process that will be	<ul> <li>Documentation of communication process</li> </ul>	April 16
		used to ensure that lines of communication are	<ul> <li>Weekly reviews of project status</li> </ul>	Record of regular occurrence
		established that will facilitate the coordination within the agency and between the agency and all its partners as the project is implemented.	<ul> <li>Regular communication to participating agencies</li> </ul>	<ul> <li>Evidence of participation in the process by other agencies (e.g. completion of MOU)</li> <li>Positive or negative perception in the process by other agencies.</li> </ul>
3.	Facility preparation	Completing construction of the data center facility, located on the second floor of the new Digital Archives/Eastern Washington Regional Archives	<ul> <li>Facility build out completed &amp; agency approval</li> </ul>	<ul> <li>June 1</li> <li>Evidence of acceptance by agency</li> </ul>
		building in Cheney, WA. This task includes	<ul> <li>Facility ready to receive equipment</li> </ul>	May 25
		ensuring an appropriate and workable configuration of the control, network and tape library rooms. Also includes the planning for and installation of all data cabling, power connections and redundancy.	Cable connection plan completed	May 7
			<ul> <li>Control, network and tape library rooms configured</li> </ul>	<ul> <li>May 7</li> <li>Evidence of acceptance by agency</li> </ul>
			<ul> <li>Generator and UPS in place and load tested</li> </ul>	<ul> <li>May 25</li> <li>Evidence of acceptance by agency</li> </ul>
			<ul> <li>Load test network</li> </ul>	<ul> <li>Record outcome or result</li> <li>Evidence of acceptance by agency</li> </ul>
			<ul> <li>Data center completed, including cabling</li> </ul>	<ul> <li>May 25</li> <li>Evidence of acceptance by agency</li> </ul>

0

4. Front end Servers (including network and infrastructure)       Configure and install file servers and network operating systems         5. B/U & X-platform software       Backs up all critical data and applications for disaster recovery and long term archival storage         6. Fiber Optics       Provides fiber optic Internet connectivity for the facility and provides for VoIP.         7. Phones and VoIP       Ensures that the facility has phone service to support day-to-day operations as well as long distance service at a reduced rate and provide for security system monitoring.	<ul> <li>Purchase of routers, switches, file servers and racks</li> <li>Delivery of same</li> <li>Network access rights determined</li> <li>Installation</li> <li>Connectivity testing</li> <li>Purchase software</li> <li>Delivery of same</li> <li>Installation</li> <li>Testing</li> <li>Vendor selection for facility connection</li> <li>Negotiate and finalize contract</li> <li>Test connections</li> </ul>	May 19 May 25 May 4 June 24 • June 25 • Record outcome or result April 14 April 20 June 24 • Meets or exceeds back up and recovery windows (i.e. 8 hours for BU and 2 hours for recover) • Evidence of recovery • April 12 • Normal vendor selection process followed Contract in place 100% connection validated by
5. B/U & X-platform software       Backs up all critical data and applications for disaster recovery and long term archival storage         6. Fiber Optics       Provides fiber optic Internet connectivity for the facility and provides for VoIP.         7. Phones and VoIP       Ensures that the facility has phone service to support day-to-day operations as well as long distance service at a reduced rate and provide for	Network access rights determined     Installation     Connectivity testing      Purchase software     Delivery of same     Installation     Testing      Vendor selection for facility connection      Negotiate and finalize contract	May 4 June 24 • June 25 • Record outcome or result April 14 April 20 June 24 • Meets or exceeds back up and recovery windows (i.e. 8 hours for BU and 2 hours for recover) • Evidence of recovery • April 12 • Normal vendor selection process followed Contract in place
software       disaster recovery and long term archival storage         6. Fiber Optics       Provides fiber optic Internet connectivity for the facility and provides for VoIP.         7. Phones and VoIP       Ensures that the facility has phone service to support day-to-day operations as well as long distance service at a reduced rate and provide for	Installation     Connectivity testing     Purchase software     Delivery of same     Installation     Testing      Vendor selection for facility connection      Negotiate and finalize contract	June 24 • June 25 • Record outcome or result April 14 April 20 June 24 • Meets or exceeds back up and recovery windows (i.e. 8 hours for BU and 2 hours for recover) • Evidence of recovery • April 12 • Normal vendor selection process followed Contract in place
software       disaster recovery and long term archival storage         6. Fiber Optics       Provides fiber optic Internet connectivity for the facility and provides for VoIP.         7. Phones and VoIP       Ensures that the facility has phone service to support day-to-day operations as well as long distance service at a reduced rate and provide for	<ul> <li>Connectivity testing</li> <li>Purchase software</li> <li>Delivery of same</li> <li>Installation</li> <li>Testing</li> <li>Vendor selection for facility connection</li> <li>Negotiate and finalize contract</li> </ul>	<ul> <li>June 25</li> <li>Record outcome or result</li> <li>April 14</li> <li>April 20</li> <li>June 24</li> <li>Meets or exceeds back up and recovery windows (i.e. 8 hours for BU and 2 hours for recover)</li> <li>Evidence of recovery</li> <li>April 12</li> <li>Normal vendor selection process followed</li> <li>Contract in place</li> </ul>
software       disaster recovery and long term archival storage         6. Fiber Optics       Provides fiber optic Internet connectivity for the facility and provides for VoIP.         7. Phones and VoIP       Ensures that the facility has phone service to support day-to-day operations as well as long distance service at a reduced rate and provide for	Purchase software     Delivery of same     Installation     Testing      Vendor selection for facility connection      Negotiate and finalize contract	<ul> <li>Record outcome or result April 14</li> <li>April 20</li> <li>June 24</li> <li>Meets or exceeds back up and recovery windows (i.e. 8 hours for BU and 2 hours for recover)</li> <li>Evidence of recovery</li> <li>April 12</li> <li>Normal vendor selection process followed</li> <li>Contract in place</li> </ul>
software       disaster recovery and long term archival storage         6. Fiber Optics       Provides fiber optic Internet connectivity for the facility and provides for VoIP.         7. Phones and VoIP       Ensures that the facility has phone service to support day-to-day operations as well as long distance service at a reduced rate and provide for	Delivery of same     Installation     Testing      Vendor selection for facility connection      Negotiate and finalize contract	<ul> <li>April 14</li> <li>April 20</li> <li>June 24</li> <li>Meets or exceeds back up and recovery windows (i.e. 8 hours for BU and 2 hours for recover)</li> <li>Evidence of recovery</li> <li>April 12</li> <li>Normal vendor selection process followed</li> <li>Contract in place</li> </ul>
software       disaster recovery and long term archival storage         6. Fiber Optics       Provides fiber optic Internet connectivity for the facility and provides for VoIP.         7. Phones and VoIP       Ensures that the facility has phone service to support day-to-day operations as well as long distance service at a reduced rate and provide for	Delivery of same     Installation     Testing      Vendor selection for facility connection      Negotiate and finalize contract	April 20 June 24 • Meets or exceeds back up and recovery windows (i.e. 8 hours for BU and 2 hours for recover) • Evidence of recovery • April 12 • Normal vendor selection process followed Contract in place
6. Fiber Optics       Provides fiber optic Internet connectivity for the facility and provides for VoIP.         7. Phones and VoIP       Ensures that the facility has phone service to support day-to-day operations as well as long distance service at a reduced rate and provide for	Installation     Testing     Vendor selection for facility connection     Negotiate and finalize contract	June 24      Meets or exceeds back up     and recovery windows (i.e. 8     hours for BU and 2 hours for     recover)      Evidence of recovery      April 12      Normal vendor selection     process followed      Contract in place
facility and provides for VoIP.         7. Phones and VoIP         Ensures that the facility has phone service to support day-to-day operations as well as long distance service at a reduced rate and provide for	<ul> <li>Testing</li> <li>Vendor selection for facility connection</li> <li>Negotiate and finalize contract</li> </ul>	<ul> <li>Meets or exceeds back up and recovery windows (i.e. 8 hours for BU and 2 hours for recover)</li> <li>Evidence of recovery</li> <li>April 12</li> <li>Normal vendor selection process followed</li> <li>Contract in place</li> </ul>
facility and provides for VoIP.         7. Phones and VoIP         Ensures that the facility has phone service to support day-to-day operations as well as long distance service at a reduced rate and provide for	<ul> <li>Vendor selection for facility connection</li> <li>Negotiate and finalize contract</li> </ul>	<ul> <li>and recovery windows (i.e. 8 hours for BU and 2 hours for recover)</li> <li>Evidence of recovery</li> <li>April 12</li> <li>Normal vendor selection process followed</li> <li>Contract in place</li> </ul>
facility and provides for VoIP.         7. Phones and VoIP         Ensures that the facility has phone service to support day-to-day operations as well as long distance service at a reduced rate and provide for	Negotiate and finalize contract	Normal vendor selection process followed Contract in place
support day-to-day operations as well as long distance service at a reduced rate and provide for		
support day-to-day operations as well as long distance service at a reduced rate and provide for	Test connections	100% connection validated by
support day-to-day operations as well as long distance service at a reduced rate and provide for		vendor
distance service at a reduced rate and provide for	<ul> <li>DSL install for temporary phones</li> </ul>	April 20
	Vendor selection for VoIP/fiber optic	• May 12
	connection	<ul> <li>Normal vendor selection process followed</li> </ul>
	Negotiate & finalize contract	Contract in place
	Equipment delivered/phones installed and tested	June 25     Record outcome or result
	Service available	<ul><li>July 2</li><li>Record outcome or result</li></ul>
8. SAN Hardware & Installation of the Storage Area Network hardware and software to store and manage the data in the Digital Archives.	<ul> <li>Vendor and product selection</li> </ul>	<ul> <li>April 23</li> <li>Normal vendor selection process followed</li> </ul>
	Purchase	April 27
		June 7
	Delivery	June /

Major QA Events	Definition	Milestone / supporting activity	Measurement Criteria
		<ul> <li>Integration and testing</li> </ul>	<ul> <li>Disk proof of concept test developed including accepted benchmark criteria (i.e. performance).</li> <li>Pass proof of concept testing. (assumes simulation)</li> </ul>
9. Tape Library	Provides backup to critical information and	<ul> <li>Issue competitive solicitation</li> </ul>	May 7
	applications for disaster recovery and long term retrieval of electronic archival documents that are infrequently used and not stored on the SAN.	Select vendor and product	<ul> <li>May 17</li> <li>Normal vendor selection process followed</li> </ul>
		<ul> <li>Negotiate and finalize contract</li> </ul>	Contract in place
		Purchase	May 20
		Installation	June 24
		<ul> <li>Integration and testing</li> </ul>	<ul> <li>Tape proof of concept test developed including accepted benchmark criteria (i.e. performance).</li> <li>Pass proof of concept testing. (assumes simulation)</li> </ul>
10. Microsoft/EDS (BizTalk 2004& Application)	Development of archival software application, per agency specifications, that will accept specified digital assets into the Digital Archives, and provide	<ul> <li>Vendor selected through competitive solicitation process</li> </ul>	<ul> <li>April 1</li> <li>Normal vendor selection process followed</li> </ul>
	for the search and retrieval of these assets via the web. Phase I assets include one record series from all 39 counties; OSOS voter registration database, online historical records, web site spidering of OSOS web site and emails of ten executive level staff members; legislative policy documents.	<ul> <li>Negotiate and finalize contract</li> </ul>	Contract in place
		<ul> <li>Collection of test records and metadata from 3 counties and OSOS</li> </ul>	<ul> <li>May 30</li> <li>Evidence of acceptance by agency</li> </ul>
		Data input policy and procedure completed	<ul> <li>May 3</li> <li>Document meets requirements</li> <li>Evidence of acceptance by agency</li> </ul>
		<ul> <li>Shopping basket functionality and integration with revenue system completed</li> </ul>	<ul> <li>June 30</li> <li>Functionality meets requirements - Evidence of acceptance by agency</li> </ul>



Major QA Events	Definition	Milestone / supporting activity	Measurement Criteria
		<ul> <li>Beta version from EDS installed and tested</li> <li>Final application from EDS</li> </ul>	<ul> <li>July 6th</li> <li>Functionality meets requirements - Evidence of acceptance by agency</li> <li>August 16th</li> </ul>
11. Technical Staff	Hiring and training of the Digital Archives technical staff to be located in Cheney, WA	Network administrator position filled	<ul> <li>Agust rotif</li> <li>April 20</li> <li>Meets requirements for staff skill level or is temporary contractor</li> </ul>
		<ul> <li>Database manager position filled</li> </ul>	<ul> <li>July 1</li> <li>Meets requirements for staff skill level or is temporary contractor</li> </ul>
		<ul> <li>Web master position filled</li> </ul>	<ul> <li>July 1</li> <li>Meets requirements for staff skill level or is temporary contractor</li> </ul>
		<ul> <li>Archives Assistant position filled</li> </ul>	<ul> <li>July 1</li> <li>Meets requirements for staff skill level or is temporary contractor</li> </ul>
		<ul> <li>Electronic Records Manger position filled</li> </ul>	<ul> <li>July 1</li> <li>Meets requirements for staff skill level or is temporary contractor</li> </ul>
		<ul> <li>Staff begin work in Cheney</li> </ul>	May 25
		Core Training plans developed	June 1
		Core Training completed	<ul> <li>October 1</li> <li>Evidence of acceptance by agency to the training plan.</li> </ul>
12. Install and Shakedown	All components are installed and operational, working with test counties to ensure system functionality and reliability.	<ul> <li>Demo version from EDS installed and tested</li> </ul>	<ul> <li>August 16</li> <li>Record outcome or result</li> <li>Demo test plan/scenario developed including accepted benchmark criteria.</li> <li>Pass (assumes simulation)</li> </ul>

0

Major QA Events	Definition	Milestone / supporting activity	Measurement Criteria
		<ul> <li>Ingest data from 3 counties and OSOS</li> </ul>	<ul> <li>September 15</li> <li>100% of the electronic records in the series</li> </ul>
		<ul> <li>Archival software system fully operational</li> </ul>	<ul> <li>October 1</li> <li>Evidence of acceptance by agency</li> </ul>
13. Grand Opening	A formal and live demonstration of the accession	<ul> <li>Dry run successful for Grand opening</li> </ul>	October 1
	of one local government records series (e.g. marriage records) into the Digital Archives from three volunteer counties.	<ul> <li>Grand opening completed</li> </ul>	October 4
14. Post Grand Opening, Phase I – Part 2.	Continuation of Phase I plan to include incorporating OSOS archival records and county	<ul> <li>Acquire Memos of Understanding with remaining 36 Counties.</li> </ul>	70% of participating counties
	marriage records into archival system and creation of documentation for agencies to develop 'best practices' in archiving electronic records in the Digital Archives.	<ul> <li>Creation of documented processes and procedures for sustained operation of Digital Archives</li> </ul>	<ul> <li>September 30</li> <li>Evidence of documented processes and SOP's.</li> </ul>
		<ul> <li>Creation of best practices documents.</li> </ul>	<ul> <li>December 30</li> <li>Evidence of documented best practices.</li> </ul>
		<ul> <li>Accession of Legislative Policy documents into the Digital Archives</li> </ul>	<ul> <li>Beginning November 30</li> <li>Test plan followed with evidence of acceptance.</li> </ul>
		<ul> <li>Accession of up to 10 OSOS executive level staff e-mails</li> </ul>	<ul> <li>September 30</li> <li>Test plan followed with evidence of acceptance.</li> </ul>
		<ul> <li>Accession of OSOS web site web- spidering</li> </ul>	<ul> <li>September 30</li> <li>Test plan followed with evidence of acceptance.</li> </ul>
		<ul> <li>Phase I complete</li> </ul>	December 31st



## **Appendix A: Report Template**

	ate Digital Archiv	ves	c	A Progress Rep	port
	У tions and risks parization of major o		risks>		
2. Financia <enter descrip<="" th=""><th></th><th></th><th></th><th></th><th></th></enter>					
BUDGET CATEGORY	investment Plan Estimate	Current Estimate (as of 🔀)	Current Estima Expended/Oblig to Date	ated Un-oblig	nt Estimate: ated Balance
Personal Services			\$ 9	6 <b>S</b>	%
Contracts Hardware Maintenance					
Software Maintenance/upgrade					
Goods and Services Hardware Purchase					
Software Purchase					
	tions and risks observations and ri hts				
Enter descri 3.1 <enter q<br=""><enter description<="" p=""></enter></enter>	A Event name	here>			
3.1 <enter q<br=""><enter descri<="" td=""><td>A Event name</td><td></td><td>ement Criteria</td><td>Result / P</td><td>lan</td></enter></enter>	A Event name		ement Criteria	Result / P	lan
3.1 <enter q<br=""><enter descrip<br="">Milestone / s</enter></enter>	A Event name   ption> supporting activity		ement Criteria	Result / P	lan
3.1 <enter q<br=""><enter descrip<br="">Milestone / s • 3.1.1 Observat</enter></enter>	A Event name   ption> supporting activity	/ Measur	ement Criteria	Result / P	lan
3.1 <enter q<br=""><enter descrip<br="">Milestone / s • 3.1.1 Observat <enter major<br="">Add additional Q</enter></enter></enter>	A Event name   ption> supporting activity tions and risks observations and ri	Measur sks> rate, level 2, sub	headings and add		



## Appendix B: Risk Assessment Template

The following format will be used to capture various risk issues for the storage related aspects of the Technical QA process. These risks will be communicated to the OSOS team via MS Excel. The columns below contain definitions and explain the purpose of the information captured in each column. This is a decision tool for OSOS and is used only as a means to collect major and minor issues related to the storage. The final decision made by the OSOS team may not necessarily be tracked in this assessment template.

If an issue is not resolved to the satisfaction of both the QA Provider and the OSOS team, then the following "Acceptance Text" will appear in the Resulting Comment field:

The OSOS team accepts the QA Providers risk assessment for this issue and, due to agreed constraints, chooses to allow the risk to exist in its current state until further notice.

The contents of this tool are not reflected directly in the progress reports submitted to ISB. However, the decisions made on issues contained in this assessment tool will have an impact on the QA Events represented in the progress report to the ISB.

Completed?	#	Issue	Submitted Party:	Initial Risk Level	Response (SoWA SOS and/or Vendor)	Resulting Comment/Mitigation (GlassHouse)	Resulting Risk Level
Check indicates completion	Issue number given at time of logging	Description of the issue with a brief explanation as to why this is an issue. Example: Capacity in quotes is different between Dell/EMC and HP (EMC - 5.7 TB raw, HP - 7 TB raw) - Does not provide foundation for fair nor accurate comparison.	The initials of the person who identified the issue	Risk level at time of logging. "high" indicates costs or technical severity, "medium" indicates important but not high impact and "low" indicates some impact but not severe.	GlassHouse captures the vendor or OSOS team's initial response to the issue. This is paraphrased from e- mails or phone conversations along with the initial of the OSOS team member who responded. Any further responses to the GlassHouse recommendation are also captured in this column	<ul> <li>GlassHouse will provide one or all of the following:</li> <li>Further analytical comments in order for the OSOS team to make a decision which will impact the risk level</li> <li>Conclusion comment that shows closure for the given issue</li> <li>"Acceptance Text" listed above.</li> </ul>	Risk level after the OSOS response and GlassHouse mitigation comment.

