



Administered by
UNIVERSITY OF MAINE SYSTEM
Office of Strategic Procurement

REQUEST FOR PROPOSALS

AUDIO AND VIDEO DIGITIZATION AND PRESERVATION
University of Maine

RFP # 12-12

ISSUE DATE:
October 28, 2011

PROPOSALS MUST BE RECEIVED BY:
November 30, 2011

DELIVER PROPOSALS TO:

University of Maine System
Office of Strategic Procurement
Attn: Hal Wells
16 Central Street
Bangor, ME 04401

SECTION ONE

1.0 GENERAL INFORMATION:

- 1.1 Purpose: The University of Maine System acting through the University of Maine is seeking proposals from qualified providers for the audio and video digitization and preservation of the Maine Folklife Center's collection of oral histories.

This Request for Proposals (RFP) states the instructions for submitting proposals, the procedure and criteria by which a vendor may be selected and the contractual terms by which the University intends to govern the relationship between it and the selected vendor.

- 1.2 Definition of Parties: The University of Maine will hereinafter be referred to as the "University." Respondents to the RFP shall be referred to as "Bidder(s)" or "bidder(s)". The Bidder to whom the Contract is awarded shall be referred to as the "Contractor."

- 1.3 Scope of Services: The University's Maine Folklife Center, wishes to engage a provider to provide audio and video digitization services to create one (1) preservation master each for the Library of Congress and the University. The Contractor shall have experience with digital audio and video preservation and conservation of cultural heritage collections for museums, libraries and archives.

This RFP contains the general specifications for this digitization project, a description of project shipments, the technical requirements for the digital files being produced, the evaluation process which will be applied by the University, and the requirements for delivering the digital products to the University and the Library of Congress. The following practices and strategies for both playback of analog sources and preservation in the digital domain shall include but not be limited to:

- Employ professional engineers for digitization work. All transfers will be attended;
- Conduct all transfer work for audio digitization in a studio that functions as a critical listening space;
- Use professional-quality playback machines and detailed, format-specific playback techniques for each type of recording;
- Use professional-quality outboard analog to digital converters;
- Create high-resolution files that preserve unaltered versions of the source recordings;
- Collect extensive metadata about the source recording, its derivatives, and the digitizing process;
- Store files in a managed preservation repository.¹

¹ Adapted from International Association of Sound Archives: *Standards, Recommended Practices and Strategies (IASA-TC03)* by Indiana University. The full document is available at: http://www.dlib.indiana.edu/projects/sounddirections/papersPresent/sd_bp_07.pdf

For purposes of this document, the term “project” shall be defined as the digitization of these analog recordings listed below. Each group of items shipped to the Contractor shall be defined as a “batch” and will include audio and video materials and the worksheets for the materials in the batch.

- Estimated 1,600 reel-to-reel recordings, approximately 114,810 minutes; 1,995 hours
Various sizes (5, 7 inch) and speeds
- Estimated 1,400 cassette recordings; 153,433 minutes; 2,557 hours
Sizes of cassettes vary: 60, 90, 120 and a small number of minicassettes
- Estimated 310 VHS recordings; 40,874 minutes, 681 hours
- Estimated 10 DVD recordings

Recordings are monaural/stereo, color or black & white, according to original. Most of the recordings are in at least fair condition. Approximately 5 reels exhibit Sticky Shed Syndrome (SSS) and will need extraordinary intervention. Complete specifications are listed in Section Three.

1.4 Evaluation Criteria: Proposals will be evaluated on many criteria deemed to be in the University's best interests, including, but not limited to:

- Demonstrated understanding of the scope of work and proposed methodology;
- References from libraries, museums and archives for similar work;
- Bidder's facilities, ability to handle original materials safely and house them securely, equipment including playback and digitization equipment, experienced personnel available to perform the work;
- Production capacity, ability to complete the project within specified time;
- Quality control procedures;
- Price Proposal

1.5 Award of Proposal: Presentations may be requested of two or more bidders deemed by the University to be the best suited among those submitting proposals on the basis of the selection criteria. After presentations have been conducted, the University may select the bidder which, in its opinion, has made the proposal that is the most responsive and most responsible and may award the Contract to that bidder. The University reserves the right to waive minor irregularities. Scholarships, donations, or gifts to the University, will not be considered in the evaluation of proposals. The University reserves the right to reject any or all proposals, in whole or in part, and is not necessarily bound to accept the lowest cost proposal if that proposal is contrary to the best interests of the University. The University may cancel this Request for Proposals or reject any or all proposals in whole or in part. Should the University determine in its sole discretion that only one bidder is fully qualified, or that one bidder is clearly more qualified than any other under consideration, a contract may be awarded to that bidder without further action.

1.6 Award Protest: Bidders may appeal the award decision by submitting a written protest to the University of Maine System's Director of Strategic Procurement within five (5) business days

of the date of the award notice, with a copy of the protest to the successful bidder. The protest must contain a statement of the basis for the challenge.

- 1.7 Communication with the University: It is the responsibility of the bidder to inquire about any requirement of this RFP that is not understood. Responses to inquiries, if they change or clarify the RFP in a substantial manner, will be forwarded by addenda to all parties that have received a copy of the RFP. Addenda will also be posted on our web site, www.maine.edu/strategic/upcoming_bids.php. The University will not be bound by oral responses to inquiries or written responses other than addenda.

**WRITTEN INQUIRIES SHALL BE SUBMITTED NO LATER THAN November 10, 2011
RESPONSES TO INQUIRIES WILL BE SENT NO LATER THAN November 16, 2011**

Inquiries must be made to: Hal Wells
Office of Strategic Procurement
University of Maine System
16 Central Street
Bangor, Maine 04401
hcwells@maine.edu

- 1.8 Proposal Submission: A **SIGNED** original, three (3) hard copies and one electronic copy of the full proposal must be submitted to the Office of Strategic Procurement, University of Maine System, 16 Central Street, Bangor, Maine 04401, in a sealed envelope by **Wednesday, November 30, 2011**, to be date stamped by the Office of Strategic Procurement in order to be considered. The electronic copy shall be submitted as a pdf document and sent to hcwells@maine.edu no later than 5:00 p.m. EST, November 30, 2011. The subject line shall read: RFP #12-12, Digitization Project. Normal business hours are 8:00 a.m. to 5:00 p.m., Monday through Friday. Bidders may wish to check <http://www.maine.edu/alerts/> to determine if University operations have been suspended. Proposals received after the due date will be returned unopened. There will be no public opening of proposals (see Confidentiality clause). In the event of suspended University operations, proposals will be due the next business day. Vendors are strongly encouraged to submit proposals in advance of the due date to avoid the possibility of missing the due date because of unforeseen circumstances. Vendors assume the risk of the methods of dispatch chosen. The University assumes no responsibility for delays caused by any package or mail delivery service. Postmarking by the due date WILL NOT substitute for receipt of proposal. Additional time will not be granted to any single vendor, however additional time may be granted to all vendors when the University determines that circumstances require it. **FAXED PROPOSALS WILL NOT BE ACCEPTED.** The envelope must be **clearly** identified on the outside as follows:

Name of Bidder
Address of Bidder
Due Date: November 30, 2011
RFP #12-12

- 1.9 Proposal Understanding: By submitting a proposal, the bidder agrees and assures that the specifications are adequate, and the bidder accepts the terms and conditions herein. Any exceptions should be noted in your response.
- 1.10 Costs of Preparation: Bidder assumes all costs of preparation of the proposal and any presentations necessary to the proposal process.
- 1.11 Debarment: Submission of a signed proposal in response to this solicitation is certification that your firm (or any subcontractor) is not currently debarred, suspended, proposed for

debarment, declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal department or agency. Submission is also agreement that the University will be notified of any change in this status.

- 1.12 Proposal Validity: Unless specified otherwise, all proposals shall be valid for ninety (90) days from the due date of the proposal.
- 1.13 Specification Protest Process and Remedies: If a bidder feels that the specifications are written in a way that limits competition, a specification protest may be sent to the Office of Strategic Procurement. Specification Protests will be responded to within five (5) business days of receipt. Determination of protest validity is at the sole discretion of the University. The due date of the proposal may be changed if necessary to allow consideration of the protest and issuance of any necessary addenda. Specification protests shall be presented to the University in writing as soon as identified, but no less than five (5) business days prior to the bid opening date and time. No protest against the award due to the specifications shall be considered after this deadline. Protests shall include the reason for the protest and any proposed changes to the specifications. Protests should be delivered to the Office of Strategic Procurement in sealed envelopes, clearly marked as follows:

SPECIFICATION PROTEST, RFP #12-12

- 1.14 Confidentiality: The information contained in proposals submitted for the University's consideration will be held in confidence until all evaluations are concluded and an award has been made. At that time, the winning proposal will be available for public inspection. Pricing and other information that is an integral part of the offer cannot be considered confidential after an award has been made. The University will honor requests for confidentiality for information of a proprietary nature to the extent allowed by law. Clearly mark any information considered confidential.

SECTION TWO

2.0 GENERAL TERMS AND CONDITIONS:

- 2.1 **Contract Administration:** The University of Maine's Director of Purchasing and Resource Efficiency or designee shall be the University's authorized representative in all matters pertaining to the administration of this Contract. The University's Director of the Maine Folklife Center shall be the Project Manager responsible for managing and directing all work performed under the Contract
- 2.2 **Contract Documents:** If a separate contract is not written, the Contract entered into by the parties shall consist of the RFP, the signed proposal submitted by the Contractor, the specifications including all modifications thereof, and a purchase order or letter of agreement requiring signatures of the University and the Contractor, all of which shall be referred to collectively as the Contract Documents.
- 2.3 **Contract Term:** The Contract term shall be effective as of the date of the last signature (execution of the Contract) and shall terminate upon successful completion of the project. All work must be completed by May 31, 2013.
- 2.4 **Contract Modification and Amendment:** The parties may adjust the specific terms of this Contract (except for pricing) where circumstances beyond the control of either party require modification or amendment. Any modification or amendment proposed by the Contractor must be in writing to the Contract Administrator. Any agreed upon modification or amendment must be in writing and signed by both parties.
- 2.5 **Cancellation/Termination:** If the Contractor defaults in its agreement to provide personnel or equipment to the University's satisfaction, or in any other way fails to provide service in accordance with the contract terms, the University shall promptly notify the Contractor of such default and if adequate correction is not made within ten (10) days, the University may take whatever action it deems necessary to provide alternate services and may, at its option, immediately cancel this Contract with written notice. Except for such cancellation for cause by the University, either the University or the Contractor may terminate this Contract by giving sixty (60) days advance written notice to the other party. Cancellation does not release the Contractor from its obligation to provide goods or services per the terms of the Contract during the notification period.
- 2.6 **Contract Validity:** In the event one or more clauses of the Contract are declared invalid, void, unenforceable or illegal, that shall not affect the validity of the remaining portions of the Contract.
- 2.7 **Clarification of Responsibilities:** If the Contractor needs clarification of or deviation from the terms of the Contract, it is the Contractor's responsibility to obtain written clarification or approval from the Contract Administrator.
- 2.8 **Non-Waiver of Defaults:** Any failure of the University to enforce or require the strict keeping and performance of any of the terms and conditions of this Contract shall not constitute a waiver of such terms, conditions, or rights.
- 2.9 **Litigation:** This Contract and the rights and obligations of the parties hereunder shall be governed by and construed in accordance with the laws of the State of Maine without reference to its conflicts of laws principles. The Contractor agrees that any litigation, action or proceeding arising out of this Contract, shall be instituted in a state court located in the State of Maine.

- 2.10 Indemnification: The Contractor agrees to be responsible for, and to protect, save harmless, and indemnify the University and its employees from and against all loss, damage, cost and expense (including attorney's fees) suffered or sustained by the University or for which the University may be held or become liable by reason of injury (including death) to persons or property or other causes whatsoever, in connection with the operations of the Contractor or any subcontractor under this agreement.
- 2.11 Assignment: Neither party of the Contract shall assign the Contract without the prior written consent of the other, nor shall the Contractor assign any money due or to become due without the prior written consent of the University.
- 2.12 Equal Opportunity: In the execution of the Contract, the Contractor and all subcontractors agree, consistent with University policy, not to discriminate on the grounds of race, color, religion, sex, sexual orientation, including transgender status or gender expression, national origin or citizenship status, age, disability, genetic information, or veteran's status and to provide reasonable accommodations to qualified individuals with disabilities upon request. The University encourages the employment of individuals with disabilities.
- 2.13 Sexual Harassment: The University is committed to providing a positive environment for all students and staff. Sexual harassment, whether intentional or not, undermines the quality of this educational and working climate. The University thus has a legal and ethical responsibility to ensure that all students and employees can learn and work in an environment free of sexual harassment. Consistent with the state and federal law, this right to freedom from sexual harassment was defined as University policy by the Board of Trustees.

Failure to comply with this policy could result in termination of this Contract without advanced notice. Further information regarding this policy is available from the Director of Equal Opportunity, University of Maine, 5754 North Stevens Hall, Orono, Maine 04469, telephone 207-581-1226

- 2.14 Contractor's Liability Insurance: During the term of this agreement, the Contractor shall maintain the following insurance:

<u>Insurance Type</u>	<u>Coverage Limit</u>
1. Commercial General Liability (Written on an Occurrence-based form)	\$1,000,000 per occurrence or more (Bodily Injury and Property Damage)
2. Vehicle Liability* (Including Hired & Non-Owned)	\$1,000,000 per occurrence or more (Bodily Injury and Property Damage)
3. Workers Compensation	Required for all personnel (In Compliance with Applicable State Law)**

*Hired and Non-Owned Vehicle Liability covers vehicles used by the Contractor that are not owned by the firm. This type of coverage by itself is acceptable if the Contractor does not own any vehicles. If the Contractor is a sole proprietor with no employees, then personal vehicle insurance is acceptable with a limit of \$500,000; however, it must be verified that coverage extends to vehicles rented for use regarding this Contract or verified that vehicles will not be rented for use in fulfilling this contract.

** Workers Compensation for Sole Proprietors: The requirement for Workers' Compensation Insurance is waived if the Contractor is self-employed and not required to have Workers'

Compensation Insurance under the State of Maine or other applicable state workers' compensation laws. However, the Contractor is, and agrees to be, solely responsible for his or her own injuries and for the injuries of any employees hired during the course of the Contract. The Contractor agrees to be in compliance with the State of Maine Workers' Compensation or applicable state workers' compensation laws at all times while working under the terms of this Contract.

The University of Maine System shall be named as Additional Insured on the Commercial General Liability insurance.

Certificates of Insurance for all of the above insurance shall be filed with:

The Director of Purchasing and Resource Efficiency
University of Maine
5765 Service Building
Orono, Maine 04469

Certificates shall be filed prior to the date of performance under this Agreement. Said certificates, in addition to proof of coverage, shall contain the standard Acord statement pertaining to written notification in the event of cancellation, with a thirty (30) day notification period.

As additional insured and certificate holder, the University should be included as follows:

University of Maine System
16 Central Street
Bangor, Maine 04401

The University reserves the right to change the insurance requirement or to approve alternative insurances or limits, at the University's discretion.

- 2.15 **Payments:** Payment will be upon submittal of an invoice to the University's Accounts Payable office by the Contractor on a Net 30 basis unless discount terms are offered. Invoices must include a purchase order number. The University is using several, preferred methods of payment: PCard (Visa); Bank of America's ePayables and PayMode electronic payment systems. Please indicate your ability to accept payment via any or all of these methods.
- 2.16 **Independent Contractor:** Whether the Contractor is a corporation, partnership, other legal entity, or an individual, the Contractor is an independent contractor. If the Contractor is an individual, the Contractor's duties will be performed with the understanding that the Contractor is a self-employed person, has special expertise as to the services which the Contractor is to perform and is customarily engaged in the independent performance of the same or similar services for others. The manner in which the services are performed shall be controlled by the Contractor; however, the nature of the services and the results to be achieved shall be specified by the University. The Contractor is not to be deemed an employee or agent of the University and has no authority to make any binding commitments or obligations on behalf of the University except as expressly provided herein. The University has prepared specific guidelines to be used for contractual agreements with individuals (not corporations or partnerships) who are not considered employees of the University.
- 2.17 **Publicity, Publication, Reproduction and Use of Contract's Products or Materials:** The Contractor shall not publicize this Contract or disclose, confirm or deny any details thereof to third parties or use any photographs or video recordings of the University's name in connection with any sales promotion or publicity event without the prior express written

approval of the University.

- 2.18 Rights: The materials to be digitized will remain the property of the owner and may not be reproduced or sold.
- 2.19 Non-Disclosure: The Contractor and the University acknowledge that they or their employees may, in the performance of the Contract, come into the possession of proprietary or confidential information owned by or in the possession of the other. Neither party shall use any such information for its own benefit or make such information available to any person, firm, or corporation, or to other organizations, whether or not directly or indirectly affiliated with the Contractor or the University unless required by public law.
- 2.20 Right to Audit: At any time during the term of this Contract and for a period of four (4) years thereafter, the University or duly authorized audit representative of the University, or of the University of Maine System, at its expense and at reasonable times, reserves the right to incrementally audit the Contractor's records. In the event such an audit by the University reveals any errors, the Contractor shall rectify the error within thirty (30) days of such audit findings.
- 2.21 Employees: The Contractor shall employ only competent and satisfactory personnel and shall provide a sufficient number of employees to perform the required services efficiently and in a manner satisfactory to the University. If the Contract Administrator or designee, notifies the Contractor in writing that any person employed on this Contract is incompetent, disorderly, or otherwise unsatisfactory, such person shall not again be employed in the execution of this Contract without the prior written consent of the Contract Administrator.
- 2.22 Pricing: Costs for basic digitization services shall be fixed for the term of the Contract. Costs for contingent services may be billed on a cost per time basis as proposed by the Contractor and as approved by the University.
- 2.23 Time is of the Essence: Time is of the essence in this Contract. The University requires completion and delivery of the entire digitization project including rework by May 31, 2013.

SECTION THREE

3.0 SPECIFICATIONS:

- 3.1 Scope of Work: The University will furnish the materials to be digitized to the Contractor. Two preservation masters will be required for the following source recordings:
- Estimated 1,600 reel-to-reel recordings, approximately 114,810 minutes; 1,995 hours
Various sizes (5, 7 inch) and speeds.
 - Estimated 1,400 cassette recordings; 153,433 minutes; 2,557 hours
Sizes of cassettes vary: 60, 90, 120 and a small number of minicassettes
 - Estimated 310 VHS recordings; 40,874 minutes, 681 hours
 - Estimated 10 DVD recordings
- 3.2 Production of Preservation Masters:
- 3.2.1 Audio
- Broadcast Wave (“BWAV” or “BWF”) file format with pulse code modulation (PCM) encoding, 96kHz/24 bit resolution;
 - Mono or stereo according to original;
 - Metadata sourced from University worksheet and embedded in the BEXT chunk;
 - File names and directory structure provided by the University;
 - Delivery on HDD, FAT32 formatted; intellectual units compiled together on each drive until full;
 - MD5 checksums will be generated when the files are created and copied with the files to the delivery medium.
- 3.2.2 Video
- 10-bit uncompressed 4:2:2 (96 GB/hour) or 50 Mbps MPEG2 (26 GB/hour), in .mov wrapper (Quick Time);
 - Mono or stereo sound according to original;
 - Color or black & white according to original;
- 3.3 Identification of Source Recording Boxes: Each original item furnished will be marked with a physical identification number. Boxes typically have an identification number written on the back.
- 3.4 University Furnished Data Set: For each batch, the University will provide a database pertaining to the items to be digitized. The database will be provided to the Contractor in a common software, e.g., MS ACCESS, Paradox, or dBase, or the data will be provided in a comma-delimited ASCII file that can be loaded into common software. The database will contain core information about the items or groups of items; the Contractor shall add technical information that reflects the digitization process.
- 3.5 Shipment of Materials to Contractor: All work shall be performed at the Contractor's work site. The University will prepare and pack the original source recordings for pick-up or shipping. Bidders shall indicate in their proposal whether the material will be picked up by the Contractor or the Contractor's licensed and bonded courier at the University, or shipped, at Contractor's expense, to the Contractor via a University-approved shipper.

Each shipment will be accompanied by an inventory that lists each original recording by item number. The Contractor shall validate shipments and sign a receipt for them. The Contractor shall return a receipt that lists all items received to the University within one week. A written record shall be made of any deviations from the University-furnished inventory and the University's Project Manager shall be notified immediately. To minimize the potential for loss or damage to the original recordings, the University will ship materials in batches.

- 3.6 Audio Capture Requirements: All analog audio recordings should be captured at a 96 kHz sampling rate with a 24-bit sampling size. Recordings should be captured monaurally for monaural originals, and in stereo for stereo originals.

In the event that an analog recording contains audio recorded at different speeds (e.g., a reel-to-reel tape with one recording at 1 7/8 ips and a second recording at 3 3/4 ips), the Contractor should capture both at the correct speed for each recording, and a separate file should be created for this change. This ensures that the digital file will be comprehensible to the listener and is being true to each recording on the tape. In this example, the Contractor would play the reel-to-reel tape at 1 7/8 ips for the first section, stop, create a new file, change speed and play the reel-to-reel tape at 3 3/4 ips for the second section. Similarly, when an analog recording contains audio recorded in different track formats (e.g., a reel-to-reel tape with one recording in stereo, and a second recording in quarter-track), the Contractor should capture both in the correct track format.

The normal audio capture requirement for all objects is to convert the entire side or face of each recording to a single, unbroken Broadcast Wave Format (BWF) file. Unless otherwise specified, each side/face should be recorded in one continuous file (one file per side/face) complete with breaks/silence/gaps. However, the metadata provided with a recording may indicate that there is more than one distinct item, or event, on a side. In these cases, which the Project Manager will note for the Contractor, the University requests a separate file for each distinct item on the side/face of the object. In cases where the metadata about the object is insufficient, the University requests that the Contractor capture the side/face of the recording in one continuous file complete with breaks/silence/gaps. The University will note this (whether one file per side or multiple files per side) for the Contractor for each recording.

In addition to providing separate files where specified, the University requests that if there is silence on one side, or face, of an original recording for longer than ten seconds after the last audio content, the engineer will note the time of the recording at which the content ends, and continue recording until the end of the object to confirm that there is no additional audio content. Silence that occurs after the conclusion of all audio content on that face or side shall be removed from the preservation master files.

For special situations not addressed in this document, the Contractor shall contact the Project Manager for instructions.

- 3.7 Audio Content Problems: The University expects the highest quality playback of original audio recordings, including proper calibration and equalization of playback equipment. However, audio on analog media may occasionally have physical imperfections that can render a portion of the recording inaudible (with magnetic tape media). Similarly, conservation treatments for magnetic tape media prior to this project, or as part of this project, may cause inadvertent skips in the recording where content has been deleted.

For the preservation master files in which the University wants unaltered playback of the original recording, the Contractor should attempt to note all such events in the Audio Digitization Production Notes text file. Each instance will indicate the time in the recording that an event occurs, and what sort of event occurred. If this is directly related to conservation

work performed for this project, then that should be noted as well.

Only in cases where obvious technical problems exist shall the Contractor utilize selective filtering or noise suppression to improve the quality or intelligibility of the original recording. In such cases, the Contractor is encouraged to rely upon appropriate professional judgment to achieve the best results. Any questions about a specific technical application shall be discussed with the Project Manager.

3.8 Quality Factors and Audio Characteristics

3.8.1 Quality of Sound and Cleanup of Historical Recordings: Issues of audio quality are important and the University shall maintain a very conservative stance on cleanup, i.e., the removal of pops and clicks and the suppression of noise. The University expects to maintain a close working relationship with the Contractor as materials are digitized. The source items are variable in their inherent quality and condition and this means that precise, comprehensive rules for treatment and digitization cannot be articulated. The digitization process shall yield *preservation master* versions of the materials digitized. In general, masters are to receive little or no cleanup and/or enhancement.

3.8.2 Sound Equalization, Noise Reduction and Minimization of Distortion: The overall objective of this project is not to "restore" the original recordings, but to make a clear, accurate re-recording of the original. In this context, "restore" means the transformation of the recording into a state that, for example, attempts to recreate the sounds that reached the original recording device. This is not the University's goal. The University's goal is a reproduction of the recording as a recording. Although this concept may sometimes allow for reducing the effect of defects like scratches that affect a particular copy of an original disc recording, the University's general stance about cleanup is very conservative.

The Contractor shall play all original recordings with the appropriate original system de-emphasis curve ("playback equalization," e.g., a Dolby system on an audiocassette or the RIAA curve on an lp) to obtain the full natural presence of the original sound and the best possible re- recording from the original.

Only in cases where obvious technical problems exist shall the Contractor utilize selective filtering or noise suppression to improve the quality or intelligibility of the original recording. In such cases the Contractor shall use appropriate filtering and noise reduction techniques in moderation and generally such techniques are to be applied to only defects obviously extraneous to the desired program material. The Contractor is encouraged to rely upon appropriate professional judgment to achieve the best results. Any doubts or questions about a specific technical application should be discussed with the University's Project Manager.

3.8.3 Adjustment and Measurement of Playback Devices: The Contractor shall employ recognized professional methods to prepare the equipment used for playback of the source materials, e.g., the Contractor-furnished tape players used to play the analog tapes furnished by the University, and other associated Contractor-furnished equipment: amplifiers, switching devices, equalizers, etc. The Contractor shall have the means to record the results of alignment tests, which can be provided to the University. Such reports on the adjustment and setup of playback devices are required at the start of every job and, if so noted in task orders for large-scale jobs, may also be required "at the beginning" of certain batches within a job.

Professional methods for the adjustment and setup of equipment include such elements as cleaning and demagnetization of playback heads, azimuth and other adjustments, and the transmission, recording, and analysis of test tones to determine that a full range of frequencies travel through the system, and that the overall system is free of noise, flutter, and other distortions.

- 3.8.4 Adjustment and Measurement of Recording Devices: The Contractor's equipment shall meet the requirements of customary industry standards for recording devices. The Contractor shall employ recognized professional methods to prepare the digital workstations used to produce the digital files and the analog tape recorders used to record analog preservation tapes. The Contractor shall have the means to record the results of alignment tests, which can be provided to the University. The Contractor shall have a means to record the application of this method and of reporting its outcome to the University. Reports on the adjustment and setup of recording devices are required at the start of every job.
- 3.8.5 Unidentified Selections: When comparing the recordings found on the tapes supplied by the University to the database furnished by the University, the Contractor may encounter instances of undocumented selections. The University would like to receive digital files for these selections. When such unidentified selections are discovered, however, the Contractor shall notify the Project Manager to determine the proper course of action, e.g., the filename to be assigned and the details for a placeholder record in the database.

- 3.9 File Structure Requirements: The top level of directories consists of directories named for the accession number (provided by the University) of individual physical objects.

Each recording will be assigned a number by the University. The directory name for each set of digital files deriving from the original recording will be comprised of this number, while the filename of each digital file will be a sequence of eight characters that indicate the purpose of the digital file and the side, or face, from the recording contained in that digital file. The first two characters that indicate the purpose of the digital file will be noted as "pm" for Preservation Master. The remaining six characters will be digits that indicate the granularity of how the item was separated into digital files, whether by side, face, or track of the source recording. Thus "pm000001.wav" will be the filename for the preservation master of the first side/face/track of a source recording.

Each physical recording gets its own directory named for the recording's number and all information from each side/face of the recording are contained therein, as well as all associated metadata. These barcode directories will be subdirectories of a single first-level directory named for the University shipment number for delivery on an external hard drive.

- 3.10 Metadata Requirements: All digital files must have technical and source metadata embedded within the file itself. The requirements for metadata inclusion for each format are detailed in the following sections.

Broadcast Wave Format (BWF) metadata: To help ensure the long-term sustainability of their master digital files, the University requires the use of the Broadcast Audio Extension chunk or <bext> in the file header. The Contractor should include the following metadata fields in the <bext> file header:

- Description: free text field to describe the contents of the file (256 character limit): this field should include the sound recording's identification/ number, such as ROSSICA-12, or KRAMRR-38

- Originator: Maine Folklife Center.
- Originator Reference: number (directory name)/filename (e.g. 39015039008266/pm000001)
- Origination Date: file creation date, in the form of YYYY-MM-DD (standard ISO 8601 form).
- Time Reference: time stamp of start position for each side/face of a recording (e.g. the first face of a disc would be 0, while the time stamp for the second face would be a number greater than 0).
- Coding History: lists data about the digitization process, following a prescribed manner listed by the European Broadcast Union (EBU). This includes Coding algorithm (A=), Sampling frequency (F=), Bit rate (B=), Word length (W=), Mode (M=), Free text (T=).

For example:

A=ANALOG,M=Mono,T=Studer A810; SN3690; 15 ips, open reel tape,
 A=PCM,F=96000,=24,M=Mono,T=Benchmark; ADC1; SN 00252, A/D
 A=PCM,F=96000,W=24,M=Mono,T=Lynx; AES16, DIO

The first line of Coding History reads: an analog tape with a mono sound field was played back on a Studer A810 machine with serial number 3690, with a tape speed of 15 ips. The second line reads: the tape was digitized using PCM in mono using a Benchmark ADCA A/D converter, serial number 00252 at 96 kHz, 24-bit. The third line reads: the tape was stored as a 96/24 mono file using a Lynx AES16 digital input/output interface.

- 3.11 METS Document: In addition to metadata for the <bext> chunk, the Contractor shall record metadata about the entire digitization process, including the source recording, equipment and processes used during digitization, and resulting digital files. The Contractor shall deliver this metadata to the University in a METS document in XML format. The METS document for each source recording is to be stored in the subdirectory for that recording, and is to be named **mets.xml**.

The Contractor shall use the draft metadata schemas from the Audio Engineering Society (AES-X098B Core Audio Object and AES-X098C Process History) for the technical metadata for audio objects, both analog and digital, as well as process history. One METS file will be created for each source recording. Within each METS file, the University requires metadata about the source recording, as well as metadata about the preservation master files. The Contractor shall include placeholders for bibliographic information for the University to produce upon receipt of METS file.

The University will supply the Contractor with the bibliographic and descriptive metadata for each recording. The University will work with the Contractor to provide this metadata in the Contractor's preferred format (e.g. XML document for each item, spreadsheet), if possible.

- 3.12 Digitization Notes Text File: Every set of digitized files, whether a complete face/side of the original media or a subdivision of the side/face of the original media, must include a plain text file which reports any problems in conversion and digitization, i.e., any deviations from desired kHz/bitrate, non-normal conservation done to make the original media playable, problems encountered during capture, or any other information about the digitization process which the Contractor deems important to report to the University and is not included in the metadata schema. Each instance in the Digitization Notes Text File will indicate the time in the

recording (in ISO 8601 format) that an event occurs and what sort of event occurred. If any event is directly related to conservation work performed for this project, then that should be noted as well.

This file must be a text file named "notes.txt" exactly with appropriate letter case observed. The notes.txt file should be saved in the same directory as the digital files the notes describe.

Bidders responding to this RFP shall provide an example of the types of digitization notes text files the bidder is capable of providing for any restoration, digitization and post-processing problems and other deviations.

3.13 File Checksum Requirements: An MD5 checksum shall be created for each of the digital files. This is done to verify that the digital files are complete and intact as the files are moved and migrated from system to system and disk to disk. The metadata schema in AES-X098B contains fields for checksum, and all generated checksum should be associated with a appropriate file in the mets.xml document.

3.14 Handling and Storage of Materials: All handling and scanning labor shall be performed by the Contractor and shall include removing items from storage containers one at a time, performing the digitization and associated record keeping, and replacing the items in the housing after capture has been completed. The capture device(s) to be utilized shall not cause harm to the materials being scanned.

The Contractor shall observe the detailed guidelines on handling and storage of materials outlined in Attachment 1.

3.15 Contractor Quality Control: Contractor quality control of digitized materials shall include but is not limited to the following criteria:

- Complete item has been captured;
- Re-recordings are not flawed by noise or distortion beyond that present in the source recordings;
- All files open and play properly;
- Re-recordings meet specifications for resolution, sampling frequency, and other formatting requirements;
- Recorded calibration tone sets meet requirements for reproduction quality;
- Accuracy of file-naming, directory structure, delivery media marking or naming;
- Completeness and accuracy of documentation in the form of associated databases and quality review reports;
- Verify the checksum at various points during the process.

3.16 University Quality Control: The University shall perform a formal evaluation to verify that the digital product of the Contractor meets the specifications detailed in this document. The University reserves the right to reject any digital file or files not meeting specifications. The University also reserves the right to require the re-digitization of any digital files not meeting specifications or to refuse payment, up to and including the whole digital product produced for a shipment of materials. If the digital product of any Contractor fails to meet these

specifications after re-digitization, the University reserves the right to require the return of materials for submission to another Contractor.

The University shall use a variety of automated means as well as manual inspections to ensure the finished digital product meets specifications. The evaluation will include but shall not be limited to the following areas:

- Validation of File Structure: This will include verifying the parent directory is named with the proper identifier according to shipment designation and verifying that all individual recordings are broken out into appropriate subdirectories that are named.
- Validation of File Naming Conventions: This will include verifying the number of characters in each file name as well as verifying that all files in a given subdirectory are named in sequential numeric order.
- Validation of File Metadata: The University shall verify that the required metadata elements are present in each digital file, such as metadata noting the sampling rate and size or volume levels.
- Validation of Checksum: This will include verifying that the required MD5 checksum files are present in each digital file subdirectory and that all digital files are fully valid and verified to a check of the MD5 calculations.
- Validation of File Format: The primary software tool for accomplishing this will be the JHOVE object validation environment developed by Harvard University. This tool is freely available to the public at the following URL: <http://hul.harvard.edu/jhove/>. The University currently uses version JHOVE 1.1, 2008-02-22. Any questions on what constitutes an acceptable file validation output from JHOVE can be directed to the Project Manager.
- Evaluation of Digital Audio shall include the following:
 - Volume for preservation masters will be set to comfortable listening levels by default (according to industry standards);
 - All files will have the full dynamic range (no clipping)
 - Set at the correct sampling rate and size
 - Spoken words/vocals shall be comprehensible

3.17 Rework: Rework means the digitization of replacements for unacceptable digital content delivered to the University. For rework, the Contractor shall follow all contract specifications and specific task specifications as agreed to for the original digitization and database content, unless otherwise directed by the Project Manager. Rework should be done only after the Contractor has consulted with the Project Manager to understand the requirements of the rework. Re-digitized material shall be delivered no later than 10 business days after rework notification was provided.

When the Contractor cannot meet quality standards or specifications due to the condition of the original materials, the Contractor shall immediately contact the Project Manager for instructions.

3.18 Contractor Reports: The Contractor shall produce the following reports as work proceeds:

- Receipt of Materials Acknowledgement: Receipt due no later than five (5) days after the arrival of shipment of original materials to Contractor site. (see Section 3.5)
- Delivery Report: This report shall accompany each delivery of re-recordings and each rework batch. It shall include two elements:
 - Documentation pertaining to the shipment to include a list of the delivery media and a printout of the delivered directories and files.
 - Quality Control Summary Report: This report shall be a narrative statement of any problems encountered and actions taken. When appropriate, problem statements shall be listed in terms of the identifier(s) for the item or items associated with the problem. If details have been recorded in the database for this batch, the summary report need only state that the database must be consulted for descriptions of problems and actions taken.

3.19 Storage of Materials: All materials submitted to the Contractor for digitization shall be stored in a secure and climate-controlled environment appropriate for audio and video materials.

3.20 Contractor Facilities: A bidder whose digitization facilities are located outside North America, even if those facilities are part of the bidder's overall business operations, shall provide detailed information about the facility in the proposal. Any cost estimates not included in the bidder's pricing matrix, which may be incurred by the University with regard to shipping fees, must also be provided in the pricing submittal.

3.21 Approval Required for Return of Materials: The Contractor shall obtain written approval from the Project Manager or designee via fax, email or postal delivery, before any materials are shipped. Materials shipped without written authorization may be subject to financial penalties if digital files are unacceptable and require re-digitization. The University may withhold payment for the entire shipment if all digital files are unacceptable and the Contractor has returned the materials without prior written authorization.

3.22 Shipment and Delivery Requirements: The University requires the safe arrival of outbound and inbound shipment of materials and files. Bidders shall explain how delivery will be accomplished with the highest level of security. Batches shall be delivered complete and may not be shipped in separate packages. Delivery of a batch shall be considered complete when all of the files that comprise the batch have arrived at the delivery destinations, including the worksheets. Once the shipment of digital files has passed evaluation and quality control inspections, payment will be made to the Contractor 30 days from date of invoice. Upon receipt of payment, the Contractor shall return the original recordings within 30 days.

3.23 Shipping Addresses: No later than thirty (30) days after approval of the digital files, the Contractor shall ship the analog recordings and one copy of the preservation master to:

Library of Congress
 American Folklife Center
 101 Independence Ave, SE
 Washington, DC 20540-4610
 Telephone: 202-707-1739

One copy of the preservation master shall be shipped to:

Maine Folklife Center
 5773 South Stevens Hall

University of Maine
Orono, ME 04469-5773
Telephone: 207-581-1848

3.24 Delivery Media: The digital files shall be shipped on external hard drives. The delivery media must be formatted so that they can be accessed from a variety of computer platforms and operating systems. It is strongly recommended after moving the digital files onto the mass storage device that the MD5 checksums be verified to insure that all data has successfully migrated onto the mass storage device. At time of delivery, each delivery item shall be labeled with the collection name, delivery batch identifier and date completed.

3.24.1 External Hard Drive: An external hard drive is the required data delivery method for preservation master files. The file organization structure specified in this document must be maintained through the process of storing or moving the data to the mass storage device.

The external hard drive should be formatted using the FAT32 file system with a USB 2.0 interface to maintain the highest possible degree of interoperability among computer systems and operating systems. The mass storage device and the file system may not be altered or reformatted without contacting the Project Manager in advance.

3.25 Pricing Format: The bidder shall provide a detailed cost breakdown of basic digitization services including project set up costs, digitization costs, metadata creation, cost of shipping and delivery media and costs for engineer time (per hour or half-hour). Quoted fees for basic services shall be fixed for the term of the Contract.

In addition to costs for basic services, bidders shall provide pricing for additional services not covered in the basic digitization work. All additional services billed as a cost per time must be included in the breakdown. It is expected that costs for certain work cannot be predicted. The Contractor shall provide more specific cost estimates for these contingent services as required during the term of the Contract. The University reserves the right to negotiate contingent services cost estimates with the Contractor until an agreement can be reached.

SECTION FOUR

4.0 PROPOSAL CONTENT:

Bidders shall ensure that all information required herein is submitted with the proposal. All information provided should be verifiable by documentation requested by the University. Failure to provide all information, inaccuracy or misstatement may be sufficient cause for rejection of the proposal or rescission of an award. Responses should be in order and clearly marked with the section number to which they respond.

In addition to the information requested in this section please address the following:

- Compliance with the specifications in Section Three above is valued at **thirty percent (30%)** of the total possible evaluation score. Bidders are required to clearly state whether or not specifications can be met. Any specification that is not met shall be identified in your response by paragraph number and bullet (e.g. section 3.17 bullet 2).
- Bidders are encouraged to provide any additional information describing operational abilities. If your services exceed the specifications in Section Three please describe the additional features/capabilities. Clearly identify, by paragraph number, etc. (if applicable) which specification or description the additional information applies to.

4.1 Business Profile and References:

- Describe your company's experience and resources in providing digitization services of cultural heritage collections for museums, libraries and archives. The Bidder's experience in providing the type of services required is valued at **thirty percent (30%)** of the total possible evaluation score.
- A minimum of three references from libraries, museums or archives is required. These should be organizations your firm has done business with in the past two years **on projects with a similar scope**. Provide organization names with a contact person, telephone number and email address. References are valued at **ten percent (10%)** of the total possible evaluation score.

4.2 Facility Information and Materials Shipments: Provide the geographic location where materials shall be digitized. Describe the facility's production capacity. Document how the work will be accomplished at the specified quality within the required time frame. Provide a description of the hardware and software that will be used. Explain how delivery of materials and files will be accomplished with the highest level of security from this location.

4.3 Quality Control Plan: Include a detailed description of your quality control procedures.

4.4 Estimated Schedules: Provide estimated schedules for deliveries, deadlines and turnaround times.

4.5 Digitization Notes Text Files: Provide an example of a digitization notes text file.

4.6 Pricing and Fees: See Section 3.24. Bidders shall provide a detailed breakdown of costs and fees for the specifications listed herein. Bidders may offer multiple pricing models but shall follow the basic format of firm fixed pricing for basic digitization services, including but not limited to shipment and delivery of materials, and alternative cost structures for contingent services. Cost is valued at **thirty percent (30%)** of the total possible evaluation score.

4.7 Provide a completed signature page.

SIGNATURE PAGE

COMPANY NAME: _____

By: _____
(Signature)

(Print Name)

(Title)

(Phone)

(Cell Phone)

(E-mail Address)

(Date)

ATTACHMENT 1 HANDLING ORIGINAL RECORDINGS ²

1. Inspection. The Contractor must, before copying, inspect each tape for damage and deterioration. The physical condition of the recordings varies is generally excellent, although some may suffer from sticky-shed syndrome. Tapes that, in the Contractor's judgment, require extensive preparation and repair shall be discussed with the Project Manager before such work is undertaken and/or returned to the University for further review and evaluation. Original recordings in extremely poor condition shall not be copied but returned to the University for review and evaluation.
2. Cleaning. The only cleaning permitted under this Contract shall consist of the manual removal of dirt and dust by means of a soft brush or a lint-free velvet cloth. Any other cleaning methods or techniques that may seem necessary shall be proposed to and approved by the University prior to any work being performed.
3. Baking. Some polyester magnetic tapes suffer from sticky-shed syndrome and shall be baked prior to copying. The detailed specifications for the baking process (type, temp., duration, etc.) shall be proposed in response to the task order that requires baking, and agreed to by the University in its acceptance of the task order.

Note that not all polyester tapes require baking and indiscriminate baking is not acceptable. When materials are analyzed at the beginning of any job, if baking is proposed, the Project Manager and the Contractor must agree on the establishment of criteria for determining the need for baking polyester tapes. Acetate tapes do not exhibit sticky-shed syndrome and should never be baked. The acetate failure mechanism is actually a dry shedding as compared to the more gooey sticky-shed syndrome commonly encountered with polyester.

Thus it is important to distinguish polyester from acetate tapes. The University uses the following approach to make this distinction:

(1) Hold up the tape reel with open flanges to the light and if the pack is translucent then it is acetate and if light does not pass through then it is polyester.

(2) Attempt to break off the end piece of tape. If it snaps off cleanly then it is acetate and if not then it is polyester.

4. Work environment and handling of original recordings. The source recordings shall be handled in a clean work environment, with dust and clutter-free work tables, where smoking, drinking, and eating are prohibited.
5. Equipment. All playback equipment intended to come in contact with the original recordings shall be in good working order and cleaned between plays.
6. The temperature and humidity in the work environment shall be maintained within the limits of 65°F to 75°F and 40% to 60% RH with the least possible cycling of either parameter.

² Library of Congress: *Typical Elements for Use in a Statement of Work for the Digital Conversion of Sound Recordings and Related Documents*. <http://www.loc.gov/rr/mopic/avprot/audioSOW.html>