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Notice of Intent and Proposal to Increase Rates and Fees for Mandated Cultural Resource Management Services performed by the Arizona State Museum (Final, August 25, 2017)

Laws 2016, Chapter 166, amends Arizona Revised Statutes (ARS) § 15-1631 to require that rate or fee increases for mandated cultural resource management services performed by the Arizona State Museum (ASM) shall be enacted via specified procedures, including public notice and adoption by the Arizona Board of Regents (ABOR).

The University of Arizona hereby requests that ABOR consider and adopt in its September 27-29, 2017 session the fees proposed herein for services performed by the state museum pursuant to title 41, chapter 4.1, article 4 and § 41-865, in adherence to the process specified under ARS § 15-1631.

Museum Background

ASM was established in 1893 by the Arizona Territorial Legislature, and is the official repository for archaeological collections from state, county, and municipal lands in Arizona and the permitting agency for archaeological projects on these lands. ASM also administers Arizona’s human burial protection law on state, county, municipal, and private lands. Under the auspices of ABOR, the University of Arizona directs and manages ASM and sets apart sufficient space to accommodate it, per ARS § 15-1631.

Justification for the Development and Application of Rates and Fees

There is no anticipated fiscal impact to the state General Fund associated with this legislation. In accordance with ARS § 41-844(I) and ABOR Policy 8-205(I)(1) Duty to Report Discoveries, the proposed rates and fees are commensurate with the expenses incurred in the provision of services provided in the removal, curation, or reburial of human remains, sacred ceremonial objects, or objects of national and tribal patrimony as the result of a construction or similar projects. The proposed rates and fees recover the costs for service provision and do not gift to or subsidize external entities that contract with the University by improperly using State Funds allocated for educational purposes, consistent with requirements in ARS Titles 15 and 35, and Article 9, Section 7 of the Arizona State Constitution.

Proposed Rates and Fees for Cultural Resource Management Services

Pursuant to ARS § 41-844(I), ARS Titles 15 and 35, ABOR Policy 8-205(I)(1) and Article 9, Section 7 of the Arizona State Constitution, ASM’s Proposed Cultural Resource Management Services rates and fees are calculated to recover the costs associated with providing mandated cultural resource management services, under ARS § 41-841 et seq. and § 41-865, to non-University of Arizona entities requiring these services (i.e., persons, corporations, institutions, state agencies other than the University of Arizona, and federal agencies). The proposed rates and fees for cultural resource management services for mandated programs are provided below, and the entire proposed schedule that will be posted per the statutory process can be found at the end of this document.

Proposed Hourly Service Rates	
\$38	Assistant
\$83	Specialist
\$125	Professional

Proposed In-Perpetuity Curation Fees	
\$1,502/half box	Curation of 1 half cubic foot box of artifacts ¹
\$214.75/inch	Curation of 1 linear inch of documents

¹ The half-box will be used as a minimum storage and billing unit where ASM deems appropriate and feasible, as subdividing a box into two equal parts is easily and efficiently accomplished (further subdivision into smaller, reliably measured units needed for consistent cost assessment is not).

Arizona Antiquities Act Permit	
No charge	Permit application review, up to 30 calendar days turnaround

Justification for Proposed Increases in Rates and Fees

ASM has under-recovered from project sponsors the costs to provide services mandated by state and federal law. Analysis has revealed that, in the past, substantial portions of the employee effort and other costs necessary to provide the services associated with mandated programs were not properly recovered due to the use of task-based fees that relied on estimated averages of time spent per task, rather than rates based on hours to execute the specific task. Furthermore, costs of in-perpetuity storage, despite statutory requirement, were not included in the previous fees.

The proposed new rate and fee structure generates funds for services to be provided in association with the initiation of new projects. The proponents of new projects will not be charged additional funds in order to recover costs associated with past projects. ASM will continue to submit proposals to external entities to fund the processing and curation of older collections.

The University of Arizona will restrict the use of the funds received through the new proposed ASM rate and fee structure. ASM reports to the office for Research, Discovery, and Innovation (RDI). RDI has a separate Business Center that reports directly to the Associate Vice President for Research, who has responsibility for administrative and compliance services. The RDI Business Center is responsible for the financial management of all ASM activities. This structure provides monitoring and oversight of expenditures independent of the ASM management structure. The University also independently monitors funds through the Financial Services Office and the Budget Office.

Description and Explanation of the Methodology Utilized to Calculate the Proposed Fees

Background and Facts

As previously documented, ARS and the Arizona State Constitution dictate that construction and similar projects shall bear all costs incurred to recover, process, and curate artifacts, as well as the costs associated with the treatment and disposition of human remains and funerary objects disturbed as a result of such projects.

To develop the proposed rates and fees, the standards and foundational processes that the university utilizes to determine appropriate rates for the delivery of services were employed (see <http://www.fso.arizona.edu/rate-studies>). These standards and processes are guided by the federal government which has issued uniform guidance to ensure that only allowable costs incurred by the institution in the delivery of services are billed to the federal government in the execution of grants or contracts.

In order to ensure that the revised rate and fee structure meets these requirements, analysis of the services historically provided by ASM was conducted, with a focus on the inputs necessary to provide those services, and the current business and regulatory environments in which ASM operates in delivering these services. Through multiple meetings and discussions with ASM faculty and staff over several months, as well as several tours of the facility, the following facts have been gathered and used in the framing of the proposed rate and fee structure.

1. ASM is required by state law to provide services necessary to ensure proper documentation and curation of artifacts and the treatment and disposition of human remains and funerary objects disturbed through construction activities across the state. These services are collectively referred to as mandated programs.
2. All of the services provided under mandated programs consist of some combination of professional services and the curation of documents and/or artifacts in perpetuity.
3. The time and effort involved in completing the services associated with any one project within mandated programs is highly dependent on a variety of factors, including:

- a. Distribution of archaeological sites across the landscape and areas of potential development.
 - b. Proximity of construction project to archaeological site(s).
 - c. Distribution of archaeological artifacts relative to ground disturbance within the construction site.
 - d. Artifact population density within the construction site.
 - e. The quality of documentation and record keeping provided by project sponsors or their agents regarding artifacts collected and deposited with ASM.
4. ASM is subject to many regulations that dictate services to be provided, professional standards by which they must be provided, for which services charges may be assessed, and even who must bear the burden of the cost for such services. This regulatory framework includes:
 - a. Curation of Federally Owned and Administered Archeological Collections, 36 CFR 79
 - b. State law, including but not limited to ARS §§ 15-1631, 41-865 and 41-841, et seq.
 - c. ABOR Policy, including but not limited to 8-101 through 8-110 and 8-201 through 8-207
 - d. Professional Standards as set out by the American Alliance of Museums
 5. The ASM Director and professional staff are responsible for determining the appropriate staff classification for completion of a given task in order to ensure compliance with the aforementioned obligations and standards. Much of the day-to-day, hands-on work is performed by lower-cost employees, and then reviewed by senior personnel to ensure compliance with the statutory obligations and professional standards previously mentioned. However, there are certain activities that for various reasons (e.g., they require more training or experience to conduct) require the direct effort of professional staff.
 6. The work of mandated programs typically relates directly to construction and similar projects on state or private lands across the state.
 7. It is our current understanding that ARS § 41-1008 prohibits ASM from charging fees for the issuance of permits. With the exception of permit issuance, all other ASM rates and fees were determined to be authorized under ARS § 41-844(I) and A.R.S. §15-1631(C), which provides that “The Arizona board of regents shall adopt any fees for services performed by the state museum pursuant to title 41, chapter 4.1, article 4 and section 41-865.”
 8. Paper records related to mandated programs must be physically maintained in perpetuity.

Framework for Rate and Fee Structure

Given fact 2, above, all services provided under mandated programs primarily consist of a combination of personnel and associated costs, as well as in-perpetuity storage costs. Fact 5, above, informs us that there are multiple tiers of employee skill and related compensation level that need to be accounted for in establishing rates to properly recover costs. Based on these facts, there were two methods identified by which cost recovery could be achieved: task-based fees or time-based rates.

Maintaining a task-based fee structure would keep the fees in a format comparable to how they were historically assessed. This method requires the outlining of each specific task and sub-task necessary to complete each service for which a fee is to be developed. It is then necessary to determine the average amount of time required from each tier of personnel to complete each specific task and sub-task. Flat fees are then set to recapture the costs associated with the total average amount of time necessary to complete each service, taking into account the various costs for each employee tier. However, given fact 3 above, it was noted that models based on average

time requirements could create substantial disparities between the costs incurred and charges assessed to a given project. Small projects having little to no impact on archaeological sites, and subsequently little costs incurred, could be assessed unduly disproportionate fees, and projects with large archaeological impact could be under-assessed in comparison to incurred costs.

Therefore, given the aforementioned potential variance in time requirements/fees assessed among the mandatory projects undertaken by ASM (see fact 3 above), and feedback from stakeholders requesting more scalability and transparency in the assessed charges, the time-based rate methodology was selected.

Based on employee classifications within ASM and their related salary levels, three service rates were determined (Assistant, Specialist and Professional) for all services to be provided. Service rates consist primarily of the average hourly pay rate of the employees within each class and the necessary operating costs to support their activities. See the Assistant, Specialist and Professional sections below for a full list of the expenses included within these rates.

In addition to the three hourly service rates developed for the various labor classes, fees for the curation of documents and artifacts in perpetuity also were developed. The vast majority of the artifacts curated within ASM are stored within standard one-cubic-foot boxes. Multiple artifacts will typically fit within a single box, and artifacts from up to two construction sites, or projects, may be co-located within a single box in the museum, in situations where ASM deems this to be appropriate and feasible based on best practices. Projects can, therefore, be assessed a flat fee for each box, or half-box, required to store in perpetuity the artifacts found within their respective construction sites. Artifacts too large for boxes are relatively infrequent, and will simply be charged the per-box fee for curation in perpetuity. Per fact 8 above, paper records also must be kept in perpetuity. Based on this fact, the fee for curation of documentation in perpetuity was developed on a per-linear-foot basis, a standard archival measure. Fees assessed for curation of documentation will be based on each linear inch submitted. These fees (per box and linear inch of documentation) were calculated based on the formula for a perpetuity due:

$$\text{Fee} = \text{current year costs} + \frac{\text{periodic storage costs}}{\text{periodic discount rate}}$$

See the Costs Wholly Allocable to Fee for In-Perpetuity Curation of a Box of Artifacts section and the Costs Wholly Allocable to the Fee for In Perpetuity Curation of Documents section below for a list of the expenses included within current year costs and periodic storage costs, as well as the periodic discount rate used in this calculation.

Costs associated with the provision of services under AZSITE and NAGPRA (see definitions below), and costs associated with the issuance of permits were *tracked separately, and are not included* in the calculation of service rates or in-perpetuity curation fees.

AZSITE is a Geographic Information System (GIS) that serves as a consolidated informational network of recorded cultural resources, including prehistoric and historic sites and properties, as well as surface surveys within the state of Arizona and a 40-mile buffer around the state. AZSITE is a collaborative project of the Arizona State Museum on the University of Arizona campus, Archaeological Research Institute on the Arizona State University campus, the State Historic Preservation Office and the Museum of Northern Arizona. Use of AZSITE is not mandated under ARS § 41-841 et seq. or § 41-865. The AZSITE expenses are not related to mandated programs, have been separately accounted in order to prevent them from being misallocated to mandated programs, and thus are not included in the mandated services rates or in-perpetuity curation fees.

The Native American Graves Protection and Repatriation Act (NAGPRA; 25 USC § 3001, et seq.) is a federal law that imposes responsibilities and costs on all museums that have ever received federal funding and that curate Native American human remains and/or funerary objects, sacred objects, and objects of cultural patrimony. The

responsibilities and costs associated with NAGPRA are not borne by project sponsors but by curatorial institutions and federal agencies. The NAGPRA expenses are not related to mandated programs, have been separately accounted for in order to prevent them from being misallocated to mandated programs, and thus are not included in the mandated services rates or in-perpetuity curation fees.

Per fact 7, above, charges related to the issuance of permits are currently understood to be impermissible under Arizona Revised Statutes. Therefore, the costs for permit issuance have been separately accounted in order to prevent these costs from being misallocated to other mandated programs, and are not included in the assessed service rates or the in-perpetuity curation fees.

Costs Included Within the Proposed Rates and Fees

First and foremost, all of the revised ASM rates and fees have been derived using a cost basis, ensuring that they are commensurate and proportionate to the scope of services provided. According to professional accounting principles, all costs included within the proposed rates and fees must be allowable. Allowability of a cost is determined prior to its incurrence and inclusion within the rates and fees, and requires that the following criteria be met:

1. Costs must be both **necessary and reasonable** for the provision of services. Transactions must be entered into “at an arm’s length” using sound business practices, and adhering to established University and ABOR policies.
2. Costs must be **properly allocable** in part or in whole to services provided in accordance with the relative benefits received or some other equitable relationship to the costs incurred.
3. Costs must be **readily determinable** for inclusion within rates/fees.
4. Costs must be **consistently and uniformly applied** according to generally accepted accounting principles and relevant University and ABOR policies and procedures.
5. Costs must be **substantiated** with adequate documentation, given the nature of the expense involved.

UA Financial Policies and Procedures are available on the web at policy.fso.arizona.edu/fsm

Costs Wholly Allocable to the Specified Rates and Fees

The benefits of these costs can be directly associated with the provision of a single service.

Costs Wholly Allocable to the Assistant Rate

Salary and Employee Related Expenses (ERE ²) for time spent directly providing services to clients (\$16,821.74; 0.67 FTE combined).

Salary and ERE for Managerial, Security & Administrative support (\$12,023.81).

Costs Wholly Allocable to the Specialist Rate

Salary and ERE for time spent by Specialists providing services to clients (\$289,473.95; 4.75 FTE combined).

Costs Wholly Allocable to the Professional Rate

Salary and ERE for time spent by Professionals providing services to clients (\$123,969.45; 1.06 FTE combined).

Costs Wholly Allocable to the Issuance of a Permit (and not included in the assessed rates and fees)

Salary and ERE for time spent issuing permits to clients (\$53,357.08; 0.84 FTE combined).

Net Present Value of cost of storing documentation related to permits in perpetuity (\$748.14 per permit).

Costs Wholly Allocable to Fee for In-Perpetuity Curation of a Box of Artifacts

Current Year Costs

Shelving cost per box, assuming 80% long-term efficiency, and based on historic cost of shelving units.

² Employee Related Expenses (ERE) are the expenses the University is responsible for as an employer. ERE is comprised of FICA, Retirement, Unemployment Compensation, Worker's Compensation, Liability Insurance, Health/Dental/Life Insurance, and Dependent Care Assistance. See <http://www.fso.arizona.edu/financial-management/ere-rates> for further information.

Space cost per box, assuming 80% long-term efficiency, and based on the UA's Responsibility Centered Management (RCM) Budget Model.

Costs of box, bags, acid free cardstock, archival pens, curation supplies, etc.

Periodic Costs

Cost recovery for shelving (est. 20-year useful life), space and inventory labor in perpetuity.

Costs Wholly Allocable to the Fee for In-Perpetuity Curation of Documents

Current Year Costs

Shelving cost per linear foot of documents, assuming 80% long-term efficiency, and based on historic cost of shelving units.

Space costs per linear foot of documents, assuming 80% long-term efficiency, and based on the cost per square foot under the RCM model.

Costs of document boxes, folders, curation supplies, etc.

Periodic Costs

Cost recovery for shelving (est. 20-year useful life), space, and inventory labor in perpetuity.

Applicable Interest Rates for Calculation of Perpetuities

The discount rate of 7.2% was used in calculation of the perpetuities due associated with curation of both boxes of artifacts and documentation. This rate was deemed appropriate, as it is approximately the average annual return of the S and P 500 Index over the period of 1950 to 2009.^{3,4} The inflation rate of 1.7% was used based on projections from tradingeconomics.com. Similar sites predict higher inflation rates, but the 1.7% figure has been used to produce more conservative costs for ASM customers.⁵

Sensitivity of Curation Fees to Applicable Discount Rate

7.0% Net Discount Rate: \$1,200.50 per half-box and \$172.42 per linear inch of documentation

5.5% Net Discount Rate: \$1,502.00 per half-box and \$214.75 per linear inch of documentation

4.0% Net Discount Rate: \$2,030.50 per half-box and \$289.00 per linear inch of documentation

2.0% Net Discount Rate: \$3,967.00 per half-box and \$561.00 per linear inch of documentation⁶

Costs Allocable to Multiple Rates

There exist costs that are required for the conduct of mandated programs, but which cannot be assigned directly to any one rate or fee. These costs are therefore aggregated and then allocated amongst the rates and fees either in accordance with the relative benefits thereby received, or in proportion to the resources consumed.

Managerial, Security and Administrative Support Salaries and ERE

A total of \$84,837.30 of Salary and ERE are incurred for managerial duties, ASM security, and general administrative support. These costs were pooled and allocated based on relative services provided. The cost pool for Professional services was not allocated managerial salary and ERE as individuals in this category work independently and are, by definition, professionals within their respective fields.

Managerial, Security, and Administrative support allocated to Assistants \$12,023.81.

Managerial, Security, and Administrative support allocated to Specialists \$58,011.27.

Managerial, Security, and Administrative support allocated to Permits \$1,159.27.

Security and Administrative support allocated to Professionals \$14,802.22.

³ <http://www.simplestockinvesting.com/SP500-historical-real-total-returns.htm>

⁴ <http://www.thesimpledollar.com/where-does-7-come-from-when-it-comes-to-long-term-stock-returns/>

⁵ <http://www.tradingeconomics.com/united-states/inflation-cpi/forecast>

⁶ This is the average rate of return on Operating Funds within the University of Arizona, per the Comptroller.

Environmental Control Costs

PEM2 Dataloggers cost recovery (est. 5-year useful life), eClimate Notebook, lift cost recovery (est. 15-year useful life) and repair. These costs are allocated between the Fee for In-Perpetuity Curation of a Box of Artifacts and the Fee for In Perpetuity Curation of Documents based on relative number of units processed (\$3,905.53 per annum).

Office Equipment

Cost recovery for computers (est. 5-year useful life), photocopier (est. 7-year useful life) and large bed scanner (est. 5-year useful life). These costs are allocated across the three labor rates and the permit issuance rate based on relative number of units provided (\$7,755.58 per annum).

Office Supplies

Paper, ink/toner, pens, pencils, plastic bags and other operating supplies. These costs are allocated across the three labor rates and the permit issuance rate based on relative number of units provided (\$5,007.97 per annum).

Communication User FTE Network Charges

\$776 per year per FTE assigned to mandated programs. These costs are allocated across the three labor rates and the permit issuance rate based on relative number of units provided, which is proportionate to the number of FTEs within each category. This rate is set annually by the University Information Technology Services (UITS) unit. The Communication User FTE Network charge recovers a portion of the costs of providing data and voice connectivity to UA campus users. This charge applies to all University FTEs (\$10,112.67 per annum based on current staffing levels).

Desktop Computing Support Costs

\$800 per year per FTE assigned to mandated programs. These costs are allocated across the three labor rates and the permit issuance rate based on relative number of units provided, which is proportionate to the number of FTEs within each category. Desktop computing support is provided under a service contract by University Information Technology Services (UITS) unit. UITS sets the annual rate (\$10,425.43 per annum based on current staffing levels).

Server Maintenance and Storage Costs

Annual costs for the proportion of server space utilized to support mandated programs and maintenance thereof. These costs are allocated across the three labor rates and the permit issuance rate based on relative number of units provided. Server maintenance and storage costs are provided under a service contract by University Information Technology Services (UITS) unit. UITS sets the annual rate (\$12,500 per annum).

Facilities and Administrative Costs

Facilities and Administrative Costs are those costs associated with maintaining a viable place of business in which to conduct the mandated programs, which are determined officially by review and approval of the federal authority, the Department of Health and Human Services, the cognizant agency for the University of Arizona. The following components of the official University of Arizona Facilities and Administrative Cost rates have been applied and included within the proposed rates (30.39% for services; 13.26% for curation).

- Building Expense ⁷
- Equipment Costs
- Interest Expense ⁷

⁷ These components of the Facilities and Administrative Rate have been excluded from the fees for curation in-perpetuity, in which space charges are directly applied based on net square footage of space occupied.

Operations and Maintenance Expense ⁷
Administrative Service Charges, including Financial Services

Allowable Costs not included in the Proposed Rates and Fees

There are substantial pools of costs that were not included within these rates and fees in order to mitigate the burden borne by project sponsors and to keep charges as low as possible. These allowable but excluded costs include the following:

1. Retrofitting of UA warehouse space for the curation of artifacts and documentation. In order to meet the space requirements of providing curation of artifacts and documentation in perpetuity, ASM must expand its storage space within the next five years. Rather than assuming and including additional on-campus space, ASM has identified a more cost-effective alternative location at an off-campus warehouse recently purchased by the University. This space requires retrofitting in order to be suitable for ASM storage and related activities. The current estimate of the cost of this retrofit is \$1,600,000. ASM is currently pursuing external funding via grants and a donor-based philanthropic campaign, and thus no portion of these costs are included within any of the proposed rates or fees for mandated programs.
2. Costs associated with the maintenance of a skilled workforce. Employee training is an integral part of maintaining ASM's professional workforce, thereby ensuring capacity to fulfill the mandated duties of curation and preservation of artifacts in a manner that comports with professional standards and practice expectations. ASM estimates that each continuing employee requires approximately \$1,000 worth of training each year to maintain skills consistent with these standards. New hires require substantially greater investments in training for appropriate skill development.
3. Costs for space where compactor shelving is not yet installed. The physical framework for existing compactor shelving contains enough space for an additional nine (9) carriages of shelving. Rather than apportioning the costs for this currently-dead-space amongst the shelving carriages that currently exist (which would have resulted in a higher fee), a rate consistent with the long-term efficiency achievable via the additional capacity in this dead-space was utilized. Had the dead-space been allocated across current capacity, the fee for in-perpetuity curation of either a box of artifacts or a linear foot of documentation would have increased by \$1,791.89.
4. Costs for the new Consolidated Collections Information System. ASM currently operates with an information system that is approximately 15 years old. The total estimated cost to replace ASM's antiquated information system with a modern consolidated collection information system is \$625,628. Rather than include the allowable proportionate amount of these costs in the rates and fees for mandated programs, ASM staff have submitted federal grant proposals and pursued a donor-based philanthropic campaign to underwrite these costs.
5. Salaries for UA's office for Research, Discovery & Innovation (RDI) Business Center personnel utilized by ASM were not included within the rates and fees. ASM is provided accounting, HR and other business service support by the RDI Business Center. The personnel, equipment, office supplies and other costs associated with the provision of these services were wholly excluded from the rates and fees for mandated programs.
6. The cost of engaging an external accounting firm in an attestation on the rates and fees herein proposed. RDI expects this engagement to cost a minimum of \$10,000.

Independent Review of Proposed Rates and Fees

The Financial Services Office (FSO) at the University of Arizona conducted an independent review of the methodology used in the development of ASM's proposed rates and fees, and has validated the methodology. Additionally, RDI is

in the process of engaging BeachFleischman, PC to perform an attestation on the proposed rates and fees. The opinion letter from this engagement will be made available by the September 27th ABOR meeting.

Quantification of the Rate and Fee Increase

The proposed changes herein relate not only to the rates and fees charged, but to their structure and the method by which they are applied. Due to this fundamental change in structure, the old and proposed new rates are not directly comparable.

Nonetheless, despite the different structure resulting in non-comparability, estimates for hypothetical project charges for the mandated services provided under the new structure have been generated for the purposes of illustrative comparison using historical averages of hours for task completion and the proposed services rates.

Example for Illustration:

Service	Old Structure	New Structure	
		Fee	Example Project Charges using estimated historical average hours for execution*
Project Registration for Monitoring Project (curated at ASM)	\$3,000.00	\$0.00	\$1,079.00
Project Registration for Testing/Excavation Project (curated at ASM)	\$6,000.00	\$0.00	\$1,283.00
Project Registration for Survey Project (must be curated at ASM)	\$0.60/acre	\$0.00	\$650.00
Project Registration for Monitoring Project (not curated at ASM)	\$150.00	\$0.00	\$249.00
Project Registration for Testing/Excavation Project (not curated at ASM)	\$150.00	\$0.00	\$249.00
Collections Intake (curated at ASM; assumes 2 half-boxes, 1 cataloged object, 1 inch of documentation)	\$1,000.00	\$0.00	\$1,321.00
Curation of Artifacts in Perpetuity (per half-box)	Not included	\$1,502.00	\$0.00
Curation of Documents in Perpetuity (per linear inch)	Not included	\$ 214.75	\$0.00
General Burial Agreement	\$250.00	\$0.00	\$250.00
Project-Specific Burial Agreement	\$300.00	\$0.00	\$2,375.00
Consultation Regarding Human Remains Discovery on State Lands (assumes 8 hours)	\$300.00	\$0.00	\$1,000.00
Burial Excavation and Analysis (assumes 8 hours)	\$440.00	\$0.00	\$1,000.00

*based on calculated historical average hours to complete tasks and Proposed Service Rates for Assistant and/or Specialist and/or Professional

Entities Directly Affected by Rate and Fee Increases

The entities directly affected by these costs are project sponsors and cultural resource management firms (archaeological consultants) engaged by project sponsors.

The entities who will bear the costs are project sponsors, with the exception of the costs associated with the issuance of permits (as these costs cannot be included in cultural resource management service rates or fees under ARS § 41-1008).

The proposed structure of the new rates and fees is designed to be responsive to concerns expressed by project sponsors, while at the same time, complying with regulatory requirements for service delivery and cost recovery. The proposed rate and fee structure is transparent, consistent, and scalable to the differing scopes of various projects.

The entities who will directly benefit from the proposed rate and fee increases are project sponsors and the people of the state of Arizona, including the state’s tribal communities.

Project sponsors will benefit from the greater predictability, transparency, and scalability in charges for ASM to provide the mandated cultural resource management services that support and enable their commercial, residential, and infrastructure development projects to proceed under federal and state law.

The people of Arizona, including the state's tribal communities, will benefit not only from the development projects facilitated by ASM's mandated mission, but also in that the information and objects recovered as a result of archaeological activities in advance of development will be studied, documented, and curated in perpetuity for ongoing research and use in educational programs and exhibitions, in compliance with federal and state law.

Explanation of the services ASM will provide with the proposed increased rates and fees

Mandated services provided pursuant to ARS § 41-841 et seq., ARS § 41-865, and ABOR Policy Manual Chapter 8 include:

- 1) project registration, including the development of curation agreements if the collection associated with a given project is to be curated by ASM;
- 2) development of burial agreements;
- 3) consultation regarding the discovery of human remains on state lands;
- 4) collections intake, if the collection associated with a given project is curated by ASM;
- 5) curation of collections and associated records in perpetuity, if the collection associated with a given project is curated by ASM and;
- 6) burial excavation and analysis, when required.

Project Registration

ASM is responsible for ensuring the care of all archaeological materials recovered from state lands and the lands of all political subdivisions of the state, as well as the records associated with these collections, whether they are to be curated at ASM or at another public repository. Under federal and state law, a permit for archaeological activity cannot be issued by ASM until ASM is presented evidence that the project sponsor and/or that entity's agent has secured a curation agreement from a public repository. Project registration is the process by which ASM either develops a curation agreement for curation at ASM or obtains information required to track collections and records to be curated by other public repositories.

Project Registration for Monitoring (Collections Curated at ASM)

The specific tasks associated with this service include:

- Creating an accession file and database record.
- Creating a curation agreement and obtaining signatures.
- Preparing cover letters and mailing documents.
- Consulting with clients as needed.
- Reviewing submitted documentation.

Project Registration for Testing or Excavation (Collections Curated at ASM)

The specific tasks associated with this service include:

- Creating an accession file and database record.
- Creating a curation agreement and obtaining signatures.
- Preparing cover letters and mailing documents.
- Consulting with clients as needed.
- Reviewing submitted documentation.

Project Registration for Survey (Collections Curated at ASM)

The specific tasks associated with this service include:

- Processing a Notification of Intent to Conduct Survey.
- Creating an accession file and database record.
- Issuing site numbers and updating the site number database.
- Reviewing submitted documentation.
- Plotting sites on maps, checking landownership, updating the site database.

Project Registration for Monitoring, Testing, or Excavation (Collections Not Curated at ASM)

The specific tasks associated with this service include:

- Consulting with clients as needed.
- Reviewing submitted documentation.
- Creating a permanent record file and database entries.

Burial Agreements

The specific tasks associated with this service include:

- Reviewing the work plan and sending comments to the client.
- Writing the draft burial agreement, addressing client comments, and preparing the final agreement.
- Reviewing the draft report of human remains, preparing comments, and sending comments to the client.
- Reviewing the project report and sending comments to the client.
- Preparing paper and electronic records for curation in perpetuity.

Consultation Regarding the Discovery of Human Remains on State Lands

The specific tasks associated with this service include:

- Telephone consultation.
- Organizing and attending face-to-face consultation meetings, regardless of whether a burial agreement is required.

Collections Intake (accession, inventory, and cataloguing of collections and associated records)

The specific tasks associated with this service include:

- Arranging for and accepting delivery of collections and associated records.
- Reviewing the electronic inventory and physically checking the contents of boxes against the inventory.
- Rehousing artifacts as needed.
- Cataloguing and photographing objects.
- Creating database records for each catalogued object.
- Inventorying and rehousing documents.
- Creating database records for documents.
- Inventorying and uploading digital images and other digital files to servers.
- Creating database records for digital files.

Curation of Collections and Associated Records in Perpetuity

The specific tasks associated with this service include:

- Providing space, shelving, and environmental controls.
- Providing archival-quality curation supplies (acid-free boxes, folders, etc.).
- Conducting an annual inventory.

Burial Excavation and Analysis

The specific tasks associated with this service include:

- Site visit and assessment.
- Documentation and removal (excavation) of human remains and funerary objects.
- Analysis of remains in secured laboratory (including, at a minimum, inventory and morphological and metric observations).
- Determination of cultural or religious affinity.
- Consultation with groups of cultural or religious affinity and possible site visit.
- Disposition of human remains and funerary objects, which may include reburial, repatriation, or permanent safekeeping at ASM.

Efforts to Avoid Fee Increases or Reduce Costs and/or Regulatory Burden

ASM's mandated mission consists of serving our stakeholders and communities in ensuring that construction or similar projects remain compliant with the regulatory framework to which they are subjected under federal and state law. Although the burden imposed upon such projects as a result of this regulatory framework is outside ASM's purview and well beyond the University's authority and control, the University and ASM have pursued several efforts to reduce the charges assessed to project sponsors in meeting our mutual responsibilities under the law.

There are substantial pools of costs that are allowable in the development of the proposed rates and fees that were not included in order to mitigate the burden borne by project sponsors and to keep charges as low as possible.

Cost Mitigation Efforts

RDI Business Support to ASM

ASM is provided accounting, human resource and other business service support by the RDI Business Center. The personnel, equipment, office supplies and other costs associated with the provision of these services were wholly excluded from the rates and fees for mandated programs in order to reduce charges to project sponsors.

Leveraging ASM Expertise

ASM, as part of the University of Arizona, is also able to leverage the expertise of its faculty and staff in archaeology and museum conservation such that only a small percentage of each highly trained professional's effort is expended in supervising lower-cost employees who complete the great majority of the tasks comprising mandated cultural resource management services.

Compactor Shelving

ASM's utilization of compactor shelving significantly reduces the space costs associated with curation in perpetuity of both boxes of artifacts and linear feet of documentation. Excluding consideration of the necessary costs associated with environmental controls, the per-box or per-linear-foot savings from employing compactor shelving is a net present value of \$1,432.56. These savings are a direct result of the fact that compactor shelving makes 45% more efficient use of square footage of storage space than standard shelving. The cost differential between compactor and standard shelving is recuperated within the first 85 boxes of artifacts or linear feet of documentation curated, and each compactor carriage can store an average of 336 boxes or linear feet of documentation. These savings are incorporated in the proposed rates and fees, and the benefits passed on directly to the entities that engage ASM for services under mandated programs.

Future Curation in UA Warehouse

Currently all curation at ASM is carried out within two historic buildings on the University of Arizona campus. The curation fees for both boxes of artifacts and linear feet of documentation are based on facilities cost of \$25.19 per square foot per month, the cost that is levied to all university units within the University's Budget

Model. This rate takes into account operations, utilities, and debt payments associated with facilities and grounds. To date, ASM has raised more than \$245,000 and has submitted five grant proposals requesting a total of \$1M toward the estimated \$1.6M necessary to secure and outfit 30,000 square feet of archaeological collections curation and research space in an off-campus facility. Once ASM is able to secure the remaining funding, this off-campus facility will be retrofitted to meet ASM's specific storage needs. This off-campus site will enable ASM to continue to meet its mission relating to the curation of artifacts and documents even as its historical space reaches capacity, and it is anticipated that this off-campus location can be operated at lower cost than the historical buildings that currently serve as the storage space. If realized, these cost reductions will be built into the rates and fees for mandated programs and the benefit passed through to project sponsors.

[Consolidated Collections Information System](#)

In September of 2016, ASM faculty submitted a grant proposal under the Humanities Collections and Reference Resources funding announcement offered by the National Endowment for the Humanities' division of Preservation and Access. If funded, this grant will provide \$289,502 towards the total estimated cost of \$625,628 needed to replace ASM's current antiquated information system with a modern consolidated information system. This new system will enable ASM staff to more efficiently, accurately, and adequately complete the process of cataloguing its holdings, thereby minimizing costs to projects associated with processing artifacts deposited. The simplified infrastructure of the new consolidated system is also anticipated to drive reductions in IT costs associated with server maintenance and storage.

[Independent IT Assessment for Museums](#)

In December of 2015, ASM's parent organization, the University's Office for Research, Discovery & Innovation (RDI), engaged WTC Consulting to formulate a strategy for complex networking, IT & telecommunications to be implemented across ASM, the Center for Creative Photography and the University of Arizona Museum of Art. After their analysis of server and storage infrastructures, user systems, applications and data management, and existing IT support, WTC formulated a strategy to create a shared IT support model across the three RDI units, which leveraged existing University Information Technology Services (UITS) services with targeted internal IT support. RDI and ASM are currently implementing this plan in stages, including submission of the aforementioned CCIS grant to the National Endowment for the Humanities, and a reduction in direct IT support staff. The recommendations included within the strategy have assisted in reducing the costs associated with the provision of mandated services and providing greater security to ASM's digital records.



Proposed Cultural Resource Management Business Practices

- ASM will provide scope-dependent quotes within two business days of a client's request.
- Quotes will be generated based upon information submitted by clients through the online Request for Services form.
 - Information submitted includes estimates of half-boxes of artifacts, individually catalogued artifacts, digital images and linear inches of documentation to be submitted for curation in perpetuity.
 - ASM will evaluate the client's submitted data for completeness and reasonableness based on historical data.
 - Quotes will be based upon the client's reasonable and complete estimates.
 - In the event the client's submitted estimates materially differ from ASM's historical data, ASM will work with the client to determine estimates for inclusion within the quote. The two-business-day guarantee for quotes does not apply in such cases.
- Quotes are binding, barring any material variance in the scope of the project.
- Materiality is defined as a +/- 10% or more difference in the count of half-boxes of artifacts, individually catalogued artifacts, digital images or linear inches of documentation:
 - As measured between client submitted estimates and ASM historical data, or;
 - Estimates embedded within the binding quote and collections submitted for intake and curation.
- All on-curation services requested of ASM, including collections intake, will be quoted based upon the estimated time to complete tasks, the necessary staff classification to complete each task, and the appropriate hourly service rate thereof.
- In-perpetuity curation fees will be charged per half-cubic-foot box of objects, per individually catalogued artifact, and per linear inch of documents deposited.
- ASM will provide permits at no charge to the project.
- ASM will bill in two installments, similar to current business practices.
 - The initial invoice will be based on the estimated costs of activities undertaken by ASM to complete work up to the point of collections intake, and will be issued at the inception of the project.
 - The second invoice will be issued at the time collections are submitted for intake, or project completion. The second billing will cover collections intake services and in-perpetuity curation for projects curated at ASM. For projects generating objects not curated at ASM, the second billing will cover the costs of document curation in perpetuity.
 - CRM firms may be subject to additional costs if submitted collections do not comport with state standards and must be returned for remediation and resubmission.
- Quotes will be based upon current rates and fees.
- Rates and Fees are subject to change through the process described in ARS § 15-1631.



Schedule of Mandated Cultural Resource Management Service Rates and Fees

Proposed Hourly Service Rates	
\$38	Assistant
\$83	Specialist
\$125	Professional

Proposed In-Perpetuity Curation Fees	
\$1,502.00/half box	Curation of 1 half-cubic-foot box of artifacts ⁸
\$214.75/inch	Curation of 1 linear inch of documents

Arizona Antiquities Act Permit	
No charge	Permit application review, up to 30 calendar days turnaround

⁸ The half-box will be used as a minimum storage and billing unit where ASM deems appropriate and feasible, as subdividing a box into two equal parts is easily and efficiently accomplished (further subdivision into smaller, reliably measured units needed for consistent cost assessment is not).