

APPENDIX H: DOCUMENTATION OF CONSERVATION TREATMENT

A. STEPS IN CONSERVATION TREATMENT DOCUMENTATION

It is essential that curatorial staff provide, if available, any historical information relevant to treatment or any past record of condition or treatment to the conservator who is examining an object.

The steps in documentation of conservation treatment of museum property are as follows:

1. Object Examination Report

The conservator prepares an examination report. Figures H.1a-b show a sample examination report. This report includes:

- ! a description of the materials, structure, and method of fabrication of the object;
- ! an analysis of materials, when appropriate;
- ! a description of the condition of the object based on observed chemical, physical, or biological deterioration, including previous repairs or alterations; and,
- ! as appropriate, any deductions, interpretations, or comments.

2. Object Treatment Proposal

The conservator prepares a treatment proposal for review and approval by curatorial staff. Figures H.2a-b show a sample treatment proposal. This document outlines the proposed treatment, including alternatives, if any. Enumeration of all technical details is not usually necessary at this stage. The proposal should reflect the problems identified in the examination report, and include time/expense estimates. The unit staff reviews the treatment proposal and approves it with the concurrence of the unit manager. **NOTE:** As the proposed treatment proceeds, the conservator should discuss with the curatorial staff or any significant departures from

what was initially proposed and approved.

3. Object Treatment Report

The conservator prepares a treatment report. Figures H.3a-b show a sample treatment report. This report describes the procedures followed, the materials used and the method and extent of stabilization/restoration. Photographs and illustrations should supplement the written report, as necessary. Recommendations for subsequent preventive care may be included.

File treatment reports in the object's catalog folder.

OBJECT EXAMINATION REPORT

OBJECT: Leather Carrying Case OWNER: (Bureau's Name)

CATALOG NUMBER: XXXX

MEASUREMENTS: 20" deep; 26" wide; 45" long

DESCRIPTION:

1. Materials: Brown leather (cowhide); linen fabric lining; iron buckles; linen stitching thread; painted inscription "1880."

2. Manufacture: Leather was vegetable tanned; natural, unbleached linen, plain weave, hand loomed; buckles are hand forged; case is handstitched with heavy linen thread (4 ply, double strand); white lead (?) pigment applied in script to the case cover after the historic period.

CONDITION:

1. Leather
 - a. Chemical Stability: Weakened overall condition due to oxidation of collagen fibers; powdering and lack of cohesion of leather due to sulfuric acid decay from contaminants in manufacture and exposure to air pollutants; embrittlement due to detanning of leather from water contact, loss of volatile oils; heavy discoloration of leather due to sulfuric acid decay, loss of surface, exposure to airborne dirt and human contact soils.

 - b. Physical Stability: Severe deformity of case due to heavy use, collapsed and unsupported while in storage, shrinkage and stiffening of leather and mechanical tearing and dislocation of sections. Considerable loss of leather (5%) from perhaps souvenir hunters (on rear panel near right end),

Figure H.1a. Sample Object Examination Report

2. Linen Fabric

- a. Chemical Stability: The fabric is weakened from oxidation and depolymerization. Staining of the fibers with numerous inorganic and organic soils has not only caused weakening but disintegration where stains were metallic in nature.
- b. Physical Stability: The fabric has been mechanically stressed in the same areas as the leather and has been torn accordingly. Lack of stitching has loosened the fabric at the case's seams.

3. Metal Buckles

- a. Chemical Stability: Corrosion products are being actively produced. Contact with the leather does not appear to have stimulated deterioration.
- b. Physical Stability: Three buckles are missing. Some of the center prongs are bent.

4. Linen Thread

- a. Chemical Stability: Threads are oxidized. Oils from the leather have softened linen.
- b. Physical Stability: Numerous areas are seriously abraded. Stressing of stitching along tears has broken threads. Stitching has become missing (attaching case top) and some new repair stitches have been added.

5. Painted Inscription

- a. Chemical Stability: Pigment binder appears to have sufficient adhesion. Staining of the paint inhibits reading.
- b. Physical Stability: Surface of leather is badly cracked and losses have removed paint. Surface soil accumulations discolor and inhibit reading.

Figure H.1b. Sample Object Examination Report (Continued)

OBJECT TREATMENT PROPOSAL

OBJECT: Leather Carrying Case OWNER: (Bureau's Name)

CATALOG NUMBER: XXXX

NOTE: Reference Examination Report prepared on 6/26/88

1. Leather

- a. Cleaning: Mechanical cleaning will be accomplished by brushing, vacuuming, and compressed air. Chemical cleaning will be accomplished by local solvent cleaning of soluble soils and stains.
- b. Correction of Deformity: Humidification will be used to relax stiffened, distorted leather. Alignment of case will be accomplished by blocking.
- c. Mending of Tears: Torn areas will be joined and stabilized (stitched or adhered by a backing material). Tears with missing material will be infilled with an aesthetically and structurally compatible material. Loose straps will be reapplied, but missing elements will not be reproduced.
- d. Consolidation: Impregnate areas of leather where acid decay and surface spalling is advanced with a undetectable synthetic resin.

2. Linen Fabric

- a. Cleaning: Mechanical cleaning by vacuum; wet cleaning with deionized water.
- b. Mending of Tears: Torn areas will be mended by stitching with cotton thread. Backing will be applied to those areas considered to be unstable.

3. Iron Buckles

- a. Cleaning: All corrosion products will be removed

Figure H.2a. Sample Object Treatment Proposal

4. Painted Inscription

- a. Cleaning: Cleaning of the surface will be accomplished by chemical process.
- b. Protective Coating: A protective varnish will be applied over the writing.

5. Linen Stitching

Stitching will be secured where severed by tying off ends. Those areas that are unstable will be restitched with distinguishable linen thread. Recent repair stitches will be removed.

- 6. The carrying case will be prepared with a custom fit support to protect it while on exhibit and during transport.
- 7. Photographic documentation of before and after treatment condition will be provided.

COST OF TREATMENT:

Prepared by: _____ Date: _____
 Conservator

Approved by: _____ Date: _____
 Unit Staff

Concurred by: _____ Date: _____
 Unit Manager

Figure H.2b. Sample Object Treatment Proposal

OBJECT TREATMENT REPORT

OBJECT: Leather Carrying Case OWNER: (Bureau's Name)
CATALOG NUMBER: XXXX

The conservation treatment of the leather carrying case was influenced by the fact that it is a highly significant historic object and that its immediate use is for a unit exhibit. A conservative approach was employed for its treatment. The treatment did not include restoration.

1. Leather

- a. Cleaning: Overall mechanical cleaning which included brushing and vacuuming; solvent cleaning of all soiled areas with trichloroethane 1.1.1.
- b. Correction of Deformity: Relaxation of the stiffened distorted leather through local and general humidification; blocking and realignment of the deformity with weights and Plexiglas® forms.
- c. Mending of Tears: Torn areas which seriously weakened the integrity of the bag were mended by application of backing supports (dyed calf skin-vegetable tanned) and polyvinyl acetate emulsion adhesive (R2258 by Talas); loose straps were reapplied using the same adhesive and backings were added where necessary; areas of leather loss and missing straps were not restored.
- d. Consolidation: The weakened leather was not impregnated with resin with the exception of the severely weakened straps (15% methyl-methacrylate - Pliantex in trichloroethane 1.1.1 was used).
- e. Lubrication: A light spray coating of synthetic oil was applied to the leather surface to unify surface color (Bavon ASAK ABP) 40% in isopropyl alcohol and water).

2. Linen Fabric

- a. Cleaning: Overall mechanical cleaning was accomplished by vacuuming. Various organic solvents were used to reduce and remove local stains.
- b. Mending: The weakened and torn fabric was not backed and mended. The unattached back edge of the bag's flap was tacked through the original holes

Figure H.3a. Sample Object Treatment Report

Release Date:
New

H:7

stitch using dyed linen thread (similar stitches were used in the past which can be evidenced).

3. Iron Buckles

- a. Cleaning: All active corrosion products were removed mechanically with scalpel and 0000 steel wool. The metal was degreased with Stoddard's solvent.
- b. Coating: All metal buckles received a protective coating of micro-crystalline wax (B Square 190).

4. Painted Inscription

Photography: The painted inscription of the flap was photographed to decipher its content using infrared and ultraviolet photographic techniques. (A set of these photographs is included with this report.) The white letters were cleaned using a .1% ammonium hydroxide solution in alcohol.

5. Linin Stitching

Modern repairs were removed with the stitching.

6. Inner Support

An inner support was made for both flap and bag. (The flap was not reattached). The supports were fabricated from polyethylene foam covered with 100% hand loomed linen fabric. The bag was held to its support with fifteen stainless steel 2" pins. The heads were painted brown and they were inserted through stitch holes in the leather.

PHOTOGRAPHS INCLUDED WITH THIS REPORT

Before:	4 Polaroid 35 Infrared
During:	12 35 mm slides
After:	6 35 mm slides

Conservator(s) who performed treatment:

Figure H.3b. Sample Object Treatment Report (Continued)

B. SAMPLE SCOPE OF WORK STATEMENT

A sample Scope of Work Statement for a contracted conservation survey is included in this section.

CONTRACT CONSERVATION SURVEYS, 1988

STATEMENT OF WORK

I. PURPOSE

The purposes of the work are (a) the carrying out of Conservation Surveys at different units in the Region and (b) the production of one or more reports identifying the conservation needs of museum property in those units. There shall be at least one report prepared for each unit. The results of the surveys will provide guidance to the unit and Regional Office in setting priorities for object and/or specimen treatment and will facilitate budgeting, scheduling, and subsequent communications with conservators regarding treatments.

The focus of the surveys is upon conservation treatment needs (i.e., recording the condition of individual objects in the museum property collection which are in need of some form of professional or sub-professional treatment). Secondary foci include preventive maintenance needs, needs for improvement to environmental monitoring or controls, and needs for improvement to storage and exhibit conditions. The surveys also will indicate whether other, more specific surveys are needed; for example, it may be necessary for archival and photograph collections to be surveyed by conservators specializing in those areas. Should that be the case, the first survey should so indicate.

The units needing surveys in 1988 are listed below, with addresses and names of contact persons given; literature about each of the units also is enclosed.

Settlement National Monument of America
Ms. Anna Marx

Route 4, Box 93
Beatrice, Oklahoma 97654
(918) 455-6677

Crockett National Research Center
Mr. John Adams

Figure H.4a. Sample Scope of Work Statement

II. NATURE AND SIZE OF UNIT COLLECTIONS

[HERE ENTER A DESCRIPTION FURNISHED BY THE UNIT AND DATA FROM THE MOST RECENT MUSEUM PROPERTY SURVEY.]

Specific information regarding the nature of the unit's museum property collections and facilities may be obtained from the contact persons named above. These persons are not qualified or authorized to discuss the prospective contract or the nature of the work to be performed.

III. WORK TO BE PERFORMED

1. Travel to the unit, on a schedule that is mutually agreeable to the unit staff.
2. Upon arrival, conduct an entrance interview with the Unit Manager or his/her designee and with designated unit curatorial staff. The purpose of the interview is to explain the methodology and anticipated schedule for the survey and to request any local support that may be needed. Except as may be approved in advance by the Unit Manager, on site support to be provided by the unit staff will be limited to:
 - A. Providing a suitable work space.
 - B. Providing access to museum property storage rooms, vaults, cabinets, shelves, and other locations of museum objects.
 - C. Opening and closing of storage cabinets and vaults or other containers that may be locked;
 - D. Opening and closing of exhibit cases;
 - E. Moving heavy, bulky, or unwieldy objects;
 - F. Making historically furnished rooms accessible;
 - G. Making museum property accountability (catalog and accession) and conservation (treatments and surveys) records accessible when required;

Figure H.4b Sample Scope of Work Statement (Continued)

H. Answering questions about such matters as existing environmental monitoring and control, preventive maintenance of objects, uses of objects, cleaning of exhibits and storage furniture, schedules of curatorial work, plans for future acquisition and disposition of objects, and pest management program, and providing such other information as reasonably may be needed.

3. Conduct a hands-on survey of the entire museum property collection by examining each object individually or, as appropriate, by examining representative samples of large groups of essentially identical objects. Fragile objects must not be moved any more than is necessary to determine condition, state of preservation, and needed treatment(s). Heavy, bulky, or unwieldy objects need be moved only to the extent necessary to fully comprehend their nature and condition. To the extent that it is both desirable and applicable, reliance also may be made upon photographs of objects which the unit staff may have available. At a minimum, the following factors shall be considered in determining the condition of an object and its needed conservation treatment:

A. The nature of the environment in which museum property collections are stored or exhibited: building construction, temperature, relative humidity, dust, natural and artificial light (UV, visible, and IR), pests, and other agents of deterioration.

B. Storage furniture, fixtures, materials, and techniques (e.g., appropriateness, quality, efficiency of use, condition [harmful to objects or unsafe to staff?], and overcrowding of objects).

C. Exhibits (e.g., cases, mounts and mounting techniques, lighting, environmental control, pest control, protection against handling by visitors, protective barriers [waxes and lacquers] applied to prevent deterioration, and condition (harmful to objects or unsafe to visitors and staff).

D. Evidence of recent damage or deterioration, including failure of preservation treatments, damage to objects during their use for interpretation and study, effects of visitor touching or vandalism, and deterioration due to adverse environmental factors.

Figure H.4c Sample Scope of Work Statement (Continued)

E. Any other general or specific problems or issues that the surveyor believes must be addressed in order to properly and comprehensively advise unit management concerning the collection's preservation and conservation treatment needs.

4. Upon completion of the survey, meet with the Unit Manager or his/her designee and with designated curatorial staff to go over the results of the survey and the surveyor's findings and recommendations. This exit interview should cover substantially the same subjects and make substantially the same recommendations that the surveyor anticipates including in his/her report. At this time, gather any data or information not already obtained that will be required in production of the survey report.

5. Prepare a written report of the survey just completed; this normally will be done at the surveyor's place of work. The report must include, at a minimum, the following elements in generally the order stated.

A. Brief description of the schedule, sequence, procedures, and methodology used in conducting the survey in the unit; identification of person(s) conducting the survey; identification of unit staff who were involved in the survey and in what respect; and a brief summary of the entrance and exit interviews.

C. A description of the condition of each object examined or of samples examined from large groups of essentially identical objects. At a minimum, this section should include each object's catalog number, name, location, and description of condition. [The format for reporting conditions may be in a narrative or in a checklist.]

D. A conservation treatment priority for each individual or representative object examined. Objects shall be prioritized into one of the following categories or into substantially similar categories devised by the surveyor. (If the surveyor elects to use his/her own prioritization system, it must be fully explained and justified and any specialized terms must be defined.) The purpose of prioritizing objects according to needed conservation is to ensure that scarce funds for treatments are applied first to those objects that need treatment the most. [This information may be provided in the same narrative or checklist in which descriptions of conditions are provided.]

Figure H.4d. Sample Scope of Work Statement (Continued)

The priority for treatment must be determined, in part, according to the significance and use of an object; it may be more appropriate to give a higher priority to a significant object in need of only minor work than to an insignificant object in need of major work.

Information about the significance of objects is obtainable from the unit curatorial staff.

Priority 1. The object (or group of objects) requires urgent treatment by a professional conservator to prevent serious damage or loss, OR requires immediate improvements in storage or exhibit conditions. The degree of urgency should be expressed in terms of how soon the work should be done (e.g., days, weeks, or months) and in terms of the results to be anticipated should the work not be done on time.

Priority 2. The object requires major treatment by a professional conservator, OR the object is unstable and short term deterioration can be expected if nothing is done. The degree of urgency should be expressed in terms of how soon the work should be done (e.g., months or years) and in terms of the results to be anticipated should the work not be done on time.

Priority 3. The object requires minor treatment by a professional conservator, OR the object is somewhat unstable and long term deterioration can be expected if nothing is done. The degree of urgency should be expressed in terms of how long the work can wait (e.g., months or years).

Priority 4. The object requires treatment, but it can be performed by the unit curatorial staff. The recommended time frame for accomplishing the work should be expressed.

Priority 5. The object currently is stable, but requires preventive maintenance attention by the unit curatorial staff in order to prevent the onset of deterioration. (NOTE: It is possible for objects in Priorities 1-4 also to require preventive maintenance; should that be the case, the need for their maintenance should be mentioned, but the objects should be prioritized primarily according to the criteria mentioned above.)

Figure H.4e. Sample Scope of Work Statement (Continued)

Priority 6. Preventive maintenance is being done OR is not needed, AND the object is stable and requires only eventual improvements in storage or exhibition conditions. The maximum time to allow for making the improvements should be indicated.

Priority 7. Preventive maintenance is being done OR is not needed. The object is stable and no actions will be required to improve its storage or exhibition.

If treatment is found to be needed, that treatment should be described. Generally, no more than one or two sentences or a few phrases should be used to express what is needed. Do not attempt to describe how to carry out treatments. Describe needed work in terms of results, expectations, or anticipated benefits. In all instances, needed work should be described in the following manner:

(1) When an object is classified as Priority 1, Priority 2, or Priority 3, the work that is needed shall be described for each object individually, EXCEPT that essentially identical objects with essentially identical needs may be grouped together for purposes of describing those needs. When objects are grouped in this manner, the catalog numbers of the individual objects still must be given.

(2) Work needed on objects classified as Priority 4, Priority 5, or Priority 6 should be described for individual objects to the extent that it is necessary and practical to do so. However, in some instances it may be more practical and efficient to group together objects that are similar in nature (for example, all newspapers or all black and white photographic prints) or that are similar in materials of construction (for example, ceramic tableware) when they are found to require the same or essentially the same treatments.

For example, it could be appropriate to say "Unfold all newspapers and place them in individual acid-free oversize file folders," or to say "Disassemble and clean metal and wooden parts of the block planes, apply barrier wax, and reassemble." There would be no point to saying the same thing for several dozen individual newspapers or for each block plane. Do not, however, group dissimilar objects together. For example, it would not be appropriate to say "Wax the wood of the block planes and the varnished oak chairs." Describe the needs of

Figure H.4f. Sample Scope of Work Statement (Continued)

each class of object separately, even if it means occasionally repeating treatment descriptions.

F. Provide an estimate of the time required for a professional conservator to carry out treatments recommended for objects in Priorities 1-3, and provide an estimate of what the work would cost if done by a conservator specializing in that work. This information will be used by the unit staff and the Regional Office staff to program funds for accomplishing the work. When appropriate, note economies of cost or other benefits that might be realized by grouping together objects with similar conservation treatment needs.

G. Provide instructions which the unit curatorial staff will find useful when carrying out work which the surveyor deems they are capable of performing. In most instances, such instructions will have been prepared for another institution or will be copied from published works. This contract does not require the surveyor to prepare unit-specific instructions for how to carry out work needed on the unit's collection, but only what work is needed. However, there is nothing in the terms of this contract that precludes the surveyor, at his/her option, from preparing brief unit-specific instructions for simple treatment methods

H. If the surveyor determines that additional, specialized surveys need to be conducted in order for the unit staff to have comprehensive data for programming and budgeting purposes, then that should be so stated, and recommendations should be made in respect to the type(s) of conservator(s) who should do the work.

The surveyor's report must be typed on 8-1/2 x 11" white paper with margins of 1-1/4" left and at least 1" right, top, and bottom; type single-side only. Pages must be numbered, either in the upper right corner or centered at the bottom. A table of contents may be necessary. A title page is required; it must indicate, at a minimum, the name of the unit, the number of the contract, the surveyor's name, and the completion date of the project. A specimen page is enclosed. The report may be placed in a ring binder or stapled (in the upper left corner), but must have some sort of cover.

Figure H.4g. Sample Scope of Work Statement (Continued)

The report should be prepared on a word processor, if at all possible. If it is so prepared, then the text of the report shall accompany it on a 5-1/4" or a 3-1/2" floppy diskette; the diskette should be placed in an envelope which is bound into the report. The Bureau's standard word processing software is "WordPerfect, Version 4.2." If the report cannot be written in WordPerfect, then the report should be furnished on the diskette as an ASCII text file which can be converted by the Bureau to a WordPerfect file as needed.

6. Send or deliver the original typed or computer printed report, the floppy diskette, if applicable), and any accompanying documentation which is being submitted in support of the report to the Contracting Officer's Technical Representative, who is:

Ms. Jane Smith
Regional Office
Bureau Name
1709 Wilmer Street
San Antonio, Texas 98765-4321

Figure H.4h. Sample Scope of Work Statement