LIBRARY DEVELOPMENT

Submit four copies of this application. Original signatures are required on each copy of the Institutional Authorization. Applications must be received by 5:00 pm December 2, 2005. Submit to:

Conservation/Preservation Program
Division of Library Development, New York State Library,
1084 Cultural Education Center, Albany, NY 12230; (518) 474-7890
www.nysl.nysed.gov/libdev/cp/

Name of Institution: New York
Mailing Address: Archives
New York, N.Y.
County: New York

Director: , Director, Archives phone: 

PROJECT TITLE: Preservation of Oversized Brooklyn Bridge and NYC Parks Drawings

SUMMARY DESCRIPTION: The Archives of the is requesting discretionary grant funds to re-house 445 oversized items from two of its most significant collections, the Brooklyn Bridge drawings, and NYC Parks drawings. Created with meticulous detail, these visually beautiful architectural drawings provide important documentation on the design and construction of two of the greatest public works achievements of the nineteenth century, the Brooklyn Bridge and Central Park. The current storage environment does not provide adequate protection for these items. The goal is to provide safe storage that will promote long-term preservation as well as facilitate access. The drawings will be re-housed rolled around wide diameter storage tubes, or in oversized flat file drawers (depending on the media/support and dimensions of the drawing). The workplan will also include a condition survey for future conservation planning.

AMOUNT REQUESTED: $29,323

Project Manager: 
Deputy Director phone:

Email:
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PROJECT DESCRIPTION

I. DESCRIPTION OF INSTITUTION OR AGENCY

A. Size of the institution’s operation.

The Archives is a division of the New York. Its mission is to preserve and to provide public access to the historical records of the New York.

In Fiscal Year 2005 (July 2004–June 2005), the total operating budget of the Archives was $1,134,226.31. Of that amount, $501,283 was allocated for staff salaries and $632,943.31 was allocated for supplies, equipment, service contracts, and for rent in the storage facility ($457,244). Currently, there are 19.5 FTE positions (4 are grant-funded) consisting of 9 professionals and 10.5 para-professionals. Each year the Archives hosts 2 or 3 part-time unpaid student interns.

B. The agency’s total collection of library research materials.

(1) Size of the collection and types of materials held.

The Archives was established in 1950. Its collections date back to 1647, and are comprised of approximately 160,000 cubic feet of manuscript material, official correspondence, photographs, moving images, sound recordings, architectural records, maps, ledgers, and vital records.

(2) Collecting policy and sources of materials acquired.

The Archives acquires material exclusively from agencies and departments of New York.

(3) Number of items acquired.

This year the Archives accessioned 4,523 cubic feet of records. The accessions included over 900,000 photographic images of New York City property taken by the in the 1980s, video and audio recordings and correspondence files of former , and (from the New York City Housing Authority) a vast collection of architectural drawings of dating back to the 1880s.

(4) Other relevant background information on the nature and use of the collection.

As custodians of the permanently valuable records of the , the Archives serve a wide variety of patron research needs. The most heavily used materials are the nineteenth and early-twentieth-century vital records. The records pertaining to the administration of , dating from 1684 to 1966, constitute the largest and most comprehensive collection of such material in the English-speaking world.
Demand continues to increase for the over 2,000,000 images from the Archives’ photographic collections.

The Archives has significant holdings related to the city’s infrastructure, such as parks, bridges, piers, streets, and buildings. Within these holding are extensive collections pertaining to the planning and construction of the Brooklyn Bridge and the creation of the New York City parks system, especially Central Park.
II. INSTITUTIONAL COMMITMENT TO CONSERVATION/PRESERVATION

A. Institutional conservation/preservation activities.

The Archives is committed to long-term preservation of the materials in its care. The institution maintains a well-equipped paper-conservation laboratory and a complete in-house preservation microfilm laboratory. Nearly half of the full-time staff is devoted to preservation activities.

In the 1990s the Archives undertook two conservation assessments.

Since these reports were issued, the Archives has concentrated its preservation activities on improving the physical environment for its collections and reformatting heavily requested materials.

The Archives began operating an in-house preservation microfilm laboratory in 1987. The laboratory is equipped with four 35mm Kodak MRD-II planetary cameras, two Minolta DR1600 16mm cameras, a Prostar film processor, and Extrek silver and diazo duplicating machines. Materials are selected for preservation filming based on demand for the information contained in the record and its physical condition. Fragile materials which are in heavy demand have priority for microfilming. Vital records, mayoral correspondence files, colonial-era Common Council records, and criminal court materials have been filmed in recent years. During the 2003–2004 funding cycle, the New York State Library Discretionary Grant program awarded funding to the Archives to preserve and microfilm historical records maintained by the towns and villages prior to consolidation with New York City in 1898.

The Archives Conservation Unit is responsible for the systematic planning and execution of preservation re-housing and conservation treatments of the Archives’ diverse holdings. Recent projects have focused on re-housing the photographic collections in response to the immediate risk early film negatives present. The Archives is currently re-housing three collections of film negatives with support from the New York State Library Discretionary Grant program.

The Archives has successfully competed for grant funds from federal and state sources to support preservation-related activities. In addition to the New York State Library-funded project previously mentioned, the Archives has been awarded a grant from the National Endowment for the Humanities to microfilm the New York County grand jury dismissed indictments, 1844–1899. The series, totaling 130 cubic feet, will be preserved on 35mm silver-halide microfilm.

The Archives has updated and revised its disaster preparedness plan. The revised plan was completed and distributed in April 2004.

B. Participation in cooperative or regional conservation/preservation activities.

The Archives is currently engaged in a number of cooperative projects. For more than fifteen years, the Archives and the LaGuardia and

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Wagner Archives at LaGuardia Community College (CUNY) have been cooperating on preservation projects. In 2004, with assistance from the LaGuardia and Wagner Archives, the Archives microfilmed a significant series within the Mayor LaGuardia collection pertaining to the Office of Civilian Defense. Archives' conservation staff has provided paper conservation services to the New York City Department of Environmental Protection since 2000. Beginning in 2002, the Archives and the Bronx County Historical Society have been cooperating on a series of projects to process the papers of former Bronx Borough Presidents Robert Abrams and Fernando Ferrer. In 2004 the New York City Art Commission and the Archives completed a joint project involving the reformatting and re-housing of scrapbooks generated by the Art Commission. This year, the New York City Department of Parks and Recreation and the Archives are jointly preserving and reformatting a selection of images of New York City Parks.
III. ACCESSIBILITY OF COLLECTIONS TO THE PUBLIC

A. Access policies and practices of the institution.

The [redacted] Archives is committed to providing the broadest possible access to its holdings. The Archives Reference Room is open to the public from Monday to Thursday, 9 a.m. to 4:30 p.m. and on Friday from 9 a.m. to 1 p.m. Appointments are not necessary, though they are recommended. In fiscal year 2005, the Archives’ reference staff responded to more than 60,000 requests for research service via mail, telephone, e-mail, and in-person. Patrons must use all archival material on-site in the Archives reference room at [redacted] Street. The Archives provides twenty-six motorized microfilm reader machines and three Canon MP400 microfilm reader/printer machines for public use. Researchers may make their own photocopies and paper prints from microfilm. They may also purchase diazo duplicate microfilm. The Archives produces photographic reproductions for patrons and licenses images in its collections for a variety of uses including books, articles, motion pictures, documentaries, and performance.

The Archives is an enthusiastic participant in the interlibrary loan program loaning diazo copies of microfilm. Over the last year, the Archives loaned microfilm of Parks Department records, New Amsterdam records, criminal courts records, coroner’s reports, mayor’s papers, and WPA records to educational institutions and libraries throughout the United States.

B. Cataloging or other forms of bibliographic control.

Between 1989 and 1994, the [redacted] Archives maintained membership in the Research Library Information Network (RLIN). During that time, the Archives employed specially trained catalogers who created machine-readable series- and collection-level cataloging records of archival holdings and entered them into the RLIN on-line bibliographic network. Although the Archives discontinued its RLIN membership after 1994, due to expense considerations, the bulk of its holdings are described in the RLIN network, including the two collections to be preserved with grant funds (Parks Drawings Collection and Brooklyn Bridge Drawings Collection).

C. Ownership of materials.

All materials to be preserved during this project are owned by the [redacted] Archives.
IV. RESEARCH VALUE OF MATERIALS TO BE PRESERVED

A. Description of materials to be preserved with grant funds.

The [ARCHIVES] Archives seeks funding to re-house 445 oversized architectural drawings and reproductions, referred to hereafter as “drawings,” from two collections: Parks Drawings (321 drawings) and Brooklyn Bridge Drawings (124 drawings). Currently stored in map folders placed on top of shelving, or tightly rolled, these drawings require re-housing in order to ensure protection from environmental hazards and inappropriate handling.

Parks Drawings Collection:

Dating from 1850 to 1934, the Parks Drawings collection provides complete documentation of the design and evolution of New York City’s park system. The collection comprises 3,117 drawings including design, presentation, and working drawings; plans, elevations, perspectives, and full-scale details, often in color, of 62 city parks as well as bridges, roads, monuments, buildings, and other structures located within the parks. Approximately 1,800 drawings pertain to Central Park during the critical stage of its design and construction from 1850 to 1880.

The collection is used for historical study of the parks system, the renovation and restoration of current parks, and for aesthetic study. The proposed project will re-house 321 oversized drawings in the collection. These drawings are representative of the whole collection in terms of subject, style, and materials.

The entire collection has been comprehensively cataloged (drawing-level) and re-formatted on 35mm silver-halide microfilm. 625 drawings from the collection that used color as an important component of their design were reproduced as color microfiche with funds provided by a New York State Library Conservation/Preservation Discretionary Grant. Access to the collection is facilitated by the cataloging and the reformatted editions. Patrons are able to view the microform in the reference room without prior appointment.

The drawings and reproductions in the collection represent a variety of media (watercolor, graphite, inks, crayon, and photo-reproductive processes) and supports (tracing paper, watercolor paper, cloth-lined paper, and tracing cloth). Many images are beautifully rendered and considered of great aesthetic value.

The collection is housed in the map storage room (B1) of the Archives facility at [ADDRESS] Street. Most of the drawings in the collection are stored in standard-sized flat files (drawer dimensions of 36x48 inches). The 321 drawings to be re-housed with grant funds are currently stored in 10pt map folders in two large stacks on top of a bank of flat files. The folders do not adequately support or protect the drawings. Dust has settled on the top of the folders and penetrated through the open edges. The stacking of folders hinders access. Furthermore, drawings could potentially be damaged by the heavy weight of the stack.

The condition of the entire collection is generally good. A condition survey was completed during the cataloging. The survey was utilized prior to reformatting, when a majority of the collection received some conservation treatment. The oversized drawings to be re-housed do exhibit a greater degree of physical damage.
Physical damage is usually in the form of tears, breaks, and fractures caused by past mishandling and/or poor storage. Many drawings exhibit fractures consistent with damage caused by inappropriate rolled storage in the past. Edge tears and losses are common, especially on the oversized drawings.

Brooklyn Bridge Drawings Collection:

The Brooklyn Bridge Drawings collection documents the original construction and subsequent alteration plans for the 1,596-foot steel suspension bridge connecting Manhattan to Brooklyn. At the time of its completion in 1883, the bridge was the longest in the world and was considered an important technological achievement.

The 8,706 drawings in the collection date from 1867 to 1938. Executed in a variety of media, supports and dimensions, the collection has presented a re-housing challenge ever since its accession by the Archives in the mid-1970s. Media represented include watercolor, graphite, pen and ink, and photo-reproductions (mostly cyanotypes (blueprints) or diazotypes). Supports include tracing cloth, tracing paper, handmade paper, and hot-pressed machine-made papers. Many of the paper supports have been lined with a woven cloth. Dimensions vary from less than one foot to over 34 feet (!) in length.

Despite the significance of the drawings to the history of the City of New York and the field of engineering, the collection suffered greatly from neglect and mishandling prior to arrival at the Archives. The drawings were stored in a poorly-maintained workshop underneath the Williamsburg Bridge. After accessioning by the Archives in the mid-1970s, the drawings were the subject of a series of preservation projects. Beginning in 1979, city archivists began a drawing-level inventory and cataloging project; this work was completed in 1981. The cataloging information included type of support and media.

In 1982, the Archives arranged for preservation microfilming of the entire collection. Staff conservators dry-cleaned, mended, and polyester-encapsulated some drawings prior to microfilming. However, the vast majority of the collection did not receive conservation treatment. Subsequently, a few drawings have received conservation treatment prior to exhibition and/or reproduction.

The collection is housed in the map storage room (B1) of the Archives facility at Street. Physical damage is evident. Many drawings have losses, tears, fractures, and breaks, especially along the edges. It is also apparent that a few drawings had been damaged by smoke and fire at some point during their long lives. The drawings on tracing paper are very fragile and some exhibit brittleness.

The majority of the collection is housed in standard-sized flat files (drawer dimensions of 36x48 inches). The majority of the oversized drawings on tracing cloth are stored rolled around tubes inside a steel rolled-storage cabinet (Staktube units.) These drawings were re-housed after a condition survey of the oversized drawings was completed in 1988. Information from the survey was used in the development of the proposed project.

The drawings stored in the flat files and the drawings stored in the “Stakubes,” while often fragile, are well protected and easily accessible. Access to the 124 drawings (selected for re-housing with grant funds) is at best awkward, and in some cases prohibitive. They are currently stored either tightly rolled without internal
support or flat within a polyester sleeve and a 10pt folder stretched across several steel shelves. Neither of these storage methods provides adequate support, or protection from environmental risks.

Of the 124 oversized drawings to be re-housed, 26 are currently stored very tightly rolled without internal support. These drawings are completely inaccessible and have suffered visible damage in the form of fractures, creases, and breaks. The remaining 98 bridge drawings to be re-housed are currently stored flat within a polyester film sleeve and 10pt folder on oversized shelving. This storage system provides a minimal protection from environmental hazards (the shelves are covered). Access is awkward due to the configuration of the shelving and the dimensions of the storage room. The condition of this group of drawings is generally fair, as handling has been intentionally minimized.

B. Significance of the materials for research.

The Central Park and Brooklyn Bridge are two of the most important public works achievements in New York City history. Beyond the technological and design innovations, they have become symbols of the city itself.

Parks Drawings Collection:
Just as Central Park is known as the “jewel in the crown” of New York City Parks, the [redacted] Archives collection of Parks Drawings is its own “jewel in the crown.” Not just ordinary two-dimensional documentation of a three-dimensional environment, the extraordinary care and detail exhibited by their creators makes them works of art.

These unique records provide the basis for the study of the creation and evolution of American public parks, which were first established in New York City. The collection is a rich resource for urban historians, architects, and engineers alike.

Approximately 1,800 drawings pertain to Central Park during the critical stage of its design and construction from 1850 to 1880. The collection includes renderings of everything from landmark structures like the Boathouse, Belvedere Castle, and Sheepfold to a three-level circulation pattern for people, horses, and vehicles, and a complete underground drainage system. Numerous plans are executed in delicate watercolors. The Central Park drawings delineate the entire range of the parks’ amenities.

The collection also includes the original drawings of Riverside Park, the Museum of Natural History, and the Metropolitan Museum of Art and contains the only extant pre-1934 drawings relating to City Hall Park, Gracie Mansion, and more than fifty other city parks. Among this group are drawings by McKim, Mead and White for Washington Arch in Washington Square Park, as well as the New York Public Library facade drawings for Bryant Park by Thomas Hastings of Carrère and Hastings.

Demand for documentation of the city’s infrastructure is strong and growing, according to analysis of the Archives’ collection use patterns. The Central Park Conservancy and the NYC Parks Department actively use the drawings to plan alterations and restorations of Central Park and other city parks. In recent years,
designers, planners and architects have utilized the collection for the planning, renovation, and/or restoration of Highbridge Park, Riverside Park playgrounds, and Columbus Park. Parks Department landscape architects have made extensive use of the drawings pertaining to Washington Square Park for a proposed major restoration project.

The collection has great value to researchers of urban history and landscape architecture. Drawings from the collection are referenced and reproduced in numerous academic studies with topics ranging from analysis of Bethesda Terrace in Central Park to studies on the construction and design of Van Cortland Park, Bryant Park, and Grand Army Plaza. Sara Cedar Miller, author/historian, Central Park Conservancy, relied on the collection for her book Central Park, an American Masterpiece: A Comprehensive History of the Nation’s First Urban Park published in 2003.

The Park Collection drawings are also an educational and aesthetic asset. The Archives participated in its first international exhibition when the Deichtorhalle Museum of the City of Hamburg borrowed three original Frederick Law Olmsted drawings for an exhibition on the works of city planner Fritz Schumacher. Fifteen drawings (including one oversized drawing) were loaned to the Metropolitan Museum of Art for the 2003 exhibition Central Park: A Sesquicentennial Celebration. Drawings were also loaned to the museum for two previous exhibitions in 1995 and 1998.

Brooklyn Bridge Drawings Collection:

The Brooklyn Bridge drawings collection supplies researchers with an in-depth and fantastically detailed record of construction of one of the most important bridges in the world.

The Brooklyn Bridge collection of original drawings and sketches, dating from 1867, were produced by architects and engineers who developed techniques for bridge construction that were unknown or considered unproven among their profession at that time. Many of the drawings in the collection are the work of the most celebrated American engineers and architects of the nineteenth century, such as John and Washington Roebling, George McNulty, and Wilhelm Hildebrand.

The collection is a set of complete documents in that the myriad of theoretical and technical problems the designers and engineers faced in the course of building the bridge are detailed in the drawings, as well as the methodology and calculations they used to resolve them. The drawings are fully detailed to the smallest degree. They are colorful and exhibit a high quality of graphic display, making these drawings works of art. The collection also features rejected designs and flights of fancy, affording researchers a new perspective into the builders’ thought processes.

Upon arrival at the Archives the collection was the subject of a series of cataloging and preservation projects, culminating in a centennial exhibition in 1983 at the Brooklyn Museum. The accompanying publication, The Great East River Bridge 1883–1983, is a significant resource on the construction of the bridge and the product of intensive study of the collection. The British Broadcasting Company (BBC) filmed a group of drawings for use in a docu-drama on the construction of the Bridge. This fall, a group of academic researchers visited the Archives from Berlin to plan a major exhibition to celebrate the bicentennial of the birth of John A. Roebling, chief
architect of the Brooklyn Bridge, whose signature is found on many drawings in the collection. The researchers have requested reproductions of a number of drawings for display in an exhibition that will open in 2006 in Berlin and then travel throughout Europe and possibly America.

Aside from exhibition demands, the collection is used by city engineers when planning the maintenance of the bridges. Students in engineering and architecture programs also frequently utilize the collection, via the microfilm edition, in pursuit of a greater understanding of the construction and planning of the Brooklyn Bridge.
V. PLAN OF WORK

A. The timetable for the project.

Month 1:
- Upon notification of the grant award, project manager [redacted] will coordinate recruitment and selection of the conservation technician.
- Ms. [redacted] will provide the necessary information to the Department [redacted] procurement officer, [redacted], who will purchase the necessary supplies (folder stock, storage tubes, etc.), and storage cabinet. Mr. [redacted] will follow procurement policies in completing the purchases.

Month 2:
- The department's personnel officer will complete the necessary procedures to formally hire the selected candidate.
- Ms. [redacted] and conservation unit supervisor Ms. [redacted] will begin humidifying and flattening the 26 oversized Brooklyn Bridge drawings that are currently tightly rolled. (The methodology is described in the following section.)

Month 3:
- Ms. [redacted] and Ms. [redacted] will train the conservation technician in the handling of oversized materials.
- Treatment of the 26 Brooklyn Bridge rolled drawings will be completed.
- Ms. [redacted] and the conservation technician will identify and separate the Parks Department drawings to be stored flat and those designated for rolled storage.
- As the supplies arrived they will be unpacked and inventoried.

Month 4:
- The storage cabinet will be delivered and set up in the map storage room (B1) in the Archives facility at [redacted] Street.
- Ms. [redacted] and the conservation technician will construct 100 folders for use in oversized flat files.
- The conservation technician will cut the thirteen 10-foot storage tubes into approximately 32 tubes of either 3-foot or 4-foot lengths.
- The conservation technician will carve the Ethafoam blocks into approximately 64 cradles for the ends of the storage tubes.
- Ms. [redacted] will design a MS Access based condition survey to be completed for each drawing during re-housing.

Months 5-6:
- The conservation technician, along with Ms. [redacted] and Ms. [redacted] will prepare 148 drawings for rolled storage. (The methodology is described in the following section.)
- The conservation technician will label each tube and place them onto the prepared Ethafoam cradles.
The conservation technician will complete the condition survey for the 148 drawings re-housed, and inform Ms. McCann of the new location of all re-housed drawings.

Month 7:
- The conservation technician and Ms. will folder and interleave 150 of the 205 Parks drawings to be re-housed in 7 oversized flat-file drawers. Each folder will hold a maximum of 5 drawings. If a drawing requires extra support an individual wrapper or polyester sleeve will be constructed by the conservation technician. (The methodology is described in the following section.)
- The conservation technician will complete the condition surveys for the 150 drawings re-housed, label all drawers/folders, and report the new location of all re-housed drawings to Ms. 

Month 8:
- The conservation technician and Ms. will complete re-housing the remaining 55 Parks drawings and re-house 92 Brooklyn Bridge drawings in 3 drawers of the oversized flat-file. (The methodology is described in the following section.)
- The conservation technician will complete the condition surveys for the 147 drawings re-housed, label all drawers/folders, and report the new location of all re-housed drawings to Ms. 

Month 9:
- Ms. will update the cataloging with new location information reported by the conservation technician.
- Ms. will produce a project report and evaluate the success of the project.

B. Conservation/preservation activities to be carried out during the project.

The proposed project is part of the Archives overall preservation plan. The preservation of the Parks Drawings and the Brooklyn Bridge Drawings began when the Archives accessioned the collections. Generous grants from the Mellon Foundation, Luce Foundation, the National Endowment for the Humanities, and the New York State Library have supported the cataloging and reformatting of the both collections, as well as the conservation, photography, and rehousing of selections from the collection. The proposed project will complete the rehousing of the drawings.

The Archives proposes to re-house a total of 445 drawings; 321 from the Parks Drawings Collection and 124 from the Brooklyn Bridge Drawings Collection. Current housing has proved to hinder access and does not adequately protect the drawings from environmental hazards. The proposed re-housing will dramatically improve access to, and preservation of, these drawings.
The Archives proposes to improve storage and preservation of the selected drawings through the following conservation/preservation activities:

- Humidification/flattening and stabilization of 26 rolled Brooklyn Bridge drawings.
- Rolled storage of 148 drawings.
- Flat storage of 297 drawing in an oversized flat file.
- Condition survey of all re-housed drawings.

**Humidification/Flattening and Stabilization of 26 Rolled Brooklyn Bridge Drawings:**

The twenty-six rolled drawings will be removed from storage and a condition report will be completed. The report will include photography. After documentation, the exposed areas will be surfaced cleaned using a variable speed HEPA-vacuum, expanded latex sponges, and vinyl erasers. Once cleaned, the drawings will be placed into a prepared humidification chamber.

The Archives conservation lab is equipped with a cold-suction table that is fitted with a hood for humidification. The chamber will be prepared by protecting the suction platen with a layer of polyester film and then placing a layer of wet blotters above the film. A plastic grating will be placed above the wet blotters. The drawing, still rolled, will be placed on top of the grating and the lid of the chamber will be closed. Each drawing will be checked periodically for moisture content and the media will be monitored for sensitivity. Additional moisture can be added using an ultra-sonic humidifier if necessary.

Once a drawing is damp enough to unroll, staff will place it on a table in the conservation lab between 100% cotton blotters, and/or paper-makers felts, lightly weighted under boards. Tables in the conservation lab can accommodate drawings up to 192 inches. One drawing with dimensions exceeding 192 inches will be humidified/flattened in stages.

After humidification and flattening, any large tears or other physical damage that present an immediate preservation risk will be treated. Mending will be carried out using traditional repair techniques with Japanese paper and prepared wheat starch paste. Other damage that does not present any immediate risk will be documented along with all treatment activities.

**Rolled Storage of 148 Drawings:**

The following drawings have been selected for rolled storage, 116 Parks drawings on tracing cloth with stable media (i.e., non-friable, non-flaking), 16 Brooklyn Bridge drawings on tracing cloth with stable media, and 16 Brooklyn Bridge drawings with dimensions that preclude flat storage.

The Municipal Archives conservation staff does not anticipate any problems with media sensitivity, however, prior to any re-housing Ms. and Ms. will

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\(^6\) Initially the entire drawing will be humidified. The drawing will be flattened on the table as previously described. Any support that is larger than the table will be draped over a roll of thick felts and air-dried. After drying, the area dried under weight will be rolled around its storage tube (diameter of 10 inches), allowing the air-dried section to lie flat on the table and be re-humidified using Gore-tex. After Gore-tex humidification, this area will be dried under restraint. The process will be repeated twice, as the length of the drawing is 415 inches. (Any repair of this drawing will also be completed in stages.)
examine the drawings to determine that the media will tolerate rolled storage. Any
drawings with cracked or flaking media will not be stored rolled. These drawings will
be stored flat in a flat file or, if their dimensions exceed the flat file, in polyester
sleeves and folders on oversized shelving.

The 132 tracing-cloth drawings will be rolled on archival storage tubes\(^\circ\) with a
diameter of 4.5 inches and a length of either 36 or 48 inches. Tracing cloth is an ideal
support for rolled storage as it is a highly flexible woven textile. The accepted method
for housing textiles is rolled storage. The drawings will be segregated by collection
and stored numerically by drawing number. Approximately 6 drawings will be stored
per tube.

The 16 Brooklyn Bridge drawings, with dimensions that prevent flat storage,
will be re-housed on 6 or 10 inch diameter archival storage tubes\(^\circ\). The larger diameter
tubes are needed as the supports are paper, and therefore not as flexible as tracing
cloth. The drawings will be stored numerically with a maximum of two drawings per
tube.

After extensive research and testing the Archives' conservation staff
devised the following rolled storage methodology:

- The drawings are laid out on the large table in the conservation
  lab.
- The drawings are interleaved with acid-free tissue. A buffered
tissue is used (minimum 3% calcium carbonate) if the media is
not alkaline-sensitive. Alkaline-sensitive drawings, such as
cyanotypes, are interleaved with an unbuffered, PAT
(Photography Activity Test) passed paper.
- The drawings are slowly rolled around the storage tube by two
  people with the third person securing the end of drawing.
- The outside of the tube is covered in a high-quality, heavy-
  weight, acid-free paper and then a layer of polyester film (Mylar
  D or Melinex 516).
- The ends of the tubes are placed on *Ethafoam* cradles. The
  cradles ensure that the drawings are suspended on the tube and
  not resting on a surface, which could cause distortion or other
damage to the support. (Please refer to photograph in the
appendix.)
- A label will be attached to the tube listing the drawings on the
tube. The location of the drawings will be recorded in the
cataloging.

*Flat Storage of 297 Drawings in an Oversized Flat File:*

The 297 drawings (205 Parks and 92 Brooklyn Bridge) with dimension less than
75x45 inches will be stored in 2 five-drawer baked-enamel steel flat-file cabinets. The
specification for the flat files can be found in the appendix. Approximately 30
drawings will be stored per drawer. Three drawers will be allocated for the Brooklyn
Bridge drawings and the remaining for the Parks drawings.

\(^\circ\) The storage tubes are constructed with layers of acid-free, buffered paper bonded with a water resistant,
normal pH adhesive. The thickness of the tube wall is approximately \(\frac{1}{4}\) inch.
The 28 drawings with lengths less than 75 inches but greater than 72 inches will be stored in individual 10pt acid-free/lignin free folders. The remaining drawings will be stored inside 45x72 inch, 20pt, acid-free/lignin free folders. The folders will be constructed using sheets of 20pt acid-free/lignin-free folder stock or rolled 10pt acid-free, lignin-free folder stock and high-quality acid-free gummed linen tape. The tape will be applied to the outside of the folder only.

One to five drawings will be placed in each folder. A layer of acid-free, buffered interleaving paper will be placed between each drawing. The exact number of drawings per folder will be determined by the condition, support, and composition of the drawings. Cyanotype architectural reproductions and other drawings with sensitive media will be segregated and interleaved with non-buffered tissue, to prevent any alkaline-based deterioration from storage materials or adjacent drawings (i.e., diazotypes).

Fragile drawings with non-friable media may be stored in polyester sleeves for additional support. The polyester sleeves will be constructed of Mylar D or Melinex 516 using the Archives’ ultrasonic polyester welder (purchased in 2004). After analysis of the cataloging information and the existing condition surveys it is estimated that less than 10 drawings are extremely fragile and may require polyester sleeves.

The drawings will be stored by catalog number, and the folders and drawers clearly labeled. Information on the location of the drawings will be recorded in the cataloging.

*Condition Survey of all Re-housed Drawings:*

A condition survey will be completed for all 445 drawings re-housed in the project. The survey will be designed in MS Access by [Name] and will be based upon similar surveys conducted by the [Name] Archives. The survey will record physical features, damage, and an overall condition grade. The database can be linked up to the existing Park Drawings Collection catalog, which is also an MS Access database. The survey will be used for future treatment planning.

*C. Personnel and vendors involved in the project.*

*Project Manager, [Name], Archives Deputy Director, [Name], 20% time, 9 months. [in-kind contribution]*

Ms. [Name] has been associated with the [Name] Archives for six years and has recently been appointed Deputy Director. She will continue her conservation duties while serving in the administrative position. She has wide experience in all areas of preservation management and has supervised several grant-funded and collaborative projects.

Her primary responsibilities will be to manage the day-to-day operations of the project and to guide the smooth integration of the project into the overall re-housing program of the Archives. She will supervise all staff involved the project, provide necessary training, draft progress reports, design a condition survey, and update the cataloging. She will participate during the re-housing of the drawings whenever necessary. Ms. [Name] will devote 20% of her time throughout the 9 months of the
project.

Ms. is a fully-trained paper conservator and will directly supervise all preservation activities. Her resume is attached.

**Conservation Unit Supervisor, 50% time, 7 months. [in-kind contribution]**

A senior conservator on the Archives staff, has twenty years experience in archives conservation. Ms. has participated in many grant-funded preservation projects, including a major project to humidify/flatten and repair Nineteenth-Century court cases funded by the National Endowment of the Humanities that will be completed in spring of 2006.

In the proposed project Ms. will work with and direct the conservation technician during the handling and re-housing of the drawings. During the seven months allocated in the work-plan for the re-housing, Ms. will devote 50% of her time to the project. With Ms., she will provide any necessary training for the conservation technician.

Ms. is thoroughly familiar with the proposed re-housing methodology. Her resume is attached.

**Conservation Technician, to be hired, approximately 24 hours per week, 6 months.**

The conservation technician will have formal training in conservation. Candidates with master’s degrees in conservation and specialization of paper conservation will be preferred. In addition to conservation training, the technician will possess a minimum of two years experience working in a conservation/preservation lab of a cultural institution with paper based collections. The conservation technician will be selected by a committee comprised of senior administrative and senior conservation staff and will be supervised by Ms. and Ms. Job description is attached.

**D. Environmental conditions in which preserved materials will be stored.**

The architectural drawings and reproductions re-housed over the course of the project will be stored either in heavy-duty reinforced steel flat file cabinets with a baked powder-coat finish that is non-off-gassing, and non-reactive, or around large diameter (4.5 inches, 6 inches or 10 inches) ¼ inch thick, acid-free, lignin-free storage tubes suspended on Ethafoam blocks. The suspension of the tubes will ensure that damage is not caused by gravity. The outside of the drawings will be protected by a high-quality paper and polyester film.

The flat files and tubes will be stored in room B1 at the Archives facility at Street. All storage rooms at Street are environmentally controlled with a HVAC system that operates continuously. Hygrothermographs are placed in each storage room to monitor temperature and humidity levels. The building engineers are on-site and monitor the system 24 hours a day and are responsive to requests for modifications.
E. Preparation for disasters.

The World Trade Center (six blocks from the Archives) tragedy on September 11, 2001, prompted a thorough revision and update of the existing disaster-preparedness plan. Deputy Director headed a committee comprised of Archives senior staff who coordinated a revision and expansion of the plan. Additionally, Ms. attended the week-long FAIC Disaster Response Course in October 2001. She completed revisions and promulgated the revised plan in March 2002. Ms. has updated the disaster plan twice, most recently in April 2004. The next revision is underway, and should be completed by April 2006.

F. Security arrangements for protecting the collections.

All Archives storage areas are always locked. In Manhattan, they are located in the lower part of the Street facility and are not accessible to the public or unauthorized personnel. The facility is protected 24/7 by security guards. All visitors to the building must show identification and pass through magnetometers.
VI. INSTITUTIONAL CONTRIBUTION TO THE PROJECT

A. Contributions of staff time by existing institutional staff.

The Archives is contributing a significant amount of staff time for the proposed project. The project manager, will devote 20% percent of her time for the entire grant period (9 months) to the project. During the actual physical re-housing (7 months), conservation unit supervisor, will spend half of her days working on the project. These contributions in terms of salary and fringe benefits are equal to $31,220.

Additional staff time will be contributed by the Department personnel and procurement divisions during the hiring of the conservation technician and the purchase of supplies and equipment.

B. Financial contribution towards the overall costs of the project.
Institutional contribution to the project consists of professional staff time totaling $31,220, plus all administrative and other indirect costs not itemized in the budget.
Ethafom constructed from Cradles (support type) determined by tube diameter of tube or 10” 4 ½”, 6”, or 10”

Rolled Storage System for Oversized Drawings
Thank you for the opportunity to quote you on your budget requirements.

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>For 2 – FSS-794918 Flat Drawer Cabinet and 1 base MAB-794907</td>
<td>$7,336.50</td>
</tr>
<tr>
<td>Crating charge for Common Carrier shipment</td>
<td>400.00</td>
</tr>
<tr>
<td>Freight to loading dock</td>
<td>850.00</td>
</tr>
<tr>
<td><strong>Installation – if requested – cabinets would ship to installer</strong></td>
<td><strong>$800.00</strong></td>
</tr>
<tr>
<td>warehouse</td>
<td></td>
</tr>
<tr>
<td><em>Instead of direct, installer would then deliver on its own truck,</em></td>
<td></td>
</tr>
<tr>
<td>uncrate and position cabinets.</td>
<td></td>
</tr>
<tr>
<td><strong>If union workers are required add $400.00</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Purchase order and/or installation will be through our local dealer</strong></td>
<td></td>
</tr>
<tr>
<td>Modern Office Systems</td>
<td></td>
</tr>
<tr>
<td>45 West 36th St., 9th floor</td>
<td></td>
</tr>
<tr>
<td>New York, N.Y. 10018</td>
<td></td>
</tr>
<tr>
<td>Att: John Glauze</td>
<td></td>
</tr>
<tr>
<td>212 290 0440</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Not included this proposal: Taxes, or Permits of any kind that may be required. Pricing is based on ordering material in one of our standard colors. The price is based on the above number of units and configuration; changes to either the number of units or the configuration will affect the price. **The lead-time is currently 12 - 14 weeks. Pricing is good for 30 days from the above date.** Borroughs Standard terms and conditions apply.

Thank you

**Richard Carroll**
National Museum Products Specialist
3002 North Burdick Street
Kalamazoo, MI 49004
Toll Free 800-255-1567
Local 516-887-7744
Fax 516-887-8444

**Borroughs** Museum Storage Solutions
Job Description: Conservation Technician

Description:
Approximately 24 hours per week for 6 months.
Under the direct supervision of the deputy director and the conservation unit supervisor, the conservation technician will:
- Construct oversized folders.
- Prepare storage rolls and cradles.
- Re-house 445 oversized architectural drawings and reproductions with the conservation supervisor and, when necessary, the deputy director.
- Complete a condition survey for each item re-housed.
- Inventory and track new locations of the drawings and reproductions.

Qualifications:
- BA or BS from an accredited institution.
- Formal training in conservation. (Candidates with a Masters Degree in conservation/preservation will be preferred.)
- Conservation work experience in paper-based collections or archives.
- Experience in handling oversized materials.
- Knowledge of architectural photo-reproduction processes.
- Familiarity with Microsoft Access.
### CONSERVATION/PRESERVATION DISCRETIONARY GRANT PROGRAM

**BUDGET FOR**

*Name of Institution*

I. Salaries

<table>
<thead>
<tr>
<th>Name &amp; Title</th>
<th>A Project Total</th>
<th>B Inst'l Contrib.</th>
<th>C Grant Request</th>
<th>D Grant Approved</th>
<th>E Expenses Submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager ($50,000 x .15 FTE)</td>
<td>$ 7,500</td>
<td>$ 7,500</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Cons. Unit Spvsr. ($57,584 x .29 FTE)</td>
<td>16,795</td>
<td>16,795</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservation Tech. (T-B-H) ($37,219 x .35 FTE)</td>
<td>13,027</td>
<td>13,027</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong> $37,322</td>
<td>$ 24,295</td>
<td>$ 13,027</td>
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<td></td>
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</tbody>
</table>

II. Employee Benefits 28.5%

<table>
<thead>
<tr>
<th></th>
<th>A Project Total</th>
<th>B Inst'l Contrib.</th>
<th>C Grant Request</th>
<th>D Grant Approved</th>
<th>E Expenses Submitted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ 2,138</td>
<td>$ 2,138</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>4,787</td>
<td>4,787</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cons. Tech.</td>
<td>3,713</td>
<td>3,713</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong> $10,638</td>
<td>$ 6,925</td>
<td>$ 3,713</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
IV. Supplies & Materials  
(list)

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Unit Qty</th>
<th>Unit Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acid-free, Lig.-free Folder stock/sheet</td>
<td>100</td>
<td>$6.70</td>
<td>$670.00</td>
</tr>
<tr>
<td>Mylar, 3ml x (40&quot; x 100') roll</td>
<td>4</td>
<td>$81.70</td>
<td>326.80</td>
</tr>
<tr>
<td>Ethafoam Sheets</td>
<td>8</td>
<td>$12.65</td>
<td>101.20</td>
</tr>
<tr>
<td>Archivart Buffered a/f tissue 40&quot;x400 yd/roll</td>
<td>1</td>
<td>$186.45</td>
<td>$186.45</td>
</tr>
<tr>
<td>Archivart Photo-tex tissue 50&quot; x 250 yards</td>
<td>2</td>
<td>$193.20</td>
<td>386.40</td>
</tr>
<tr>
<td>Archivart Storage tube 4.5 ID x 10' x 8/ctn</td>
<td>1</td>
<td>$302.50</td>
<td>302.50</td>
</tr>
<tr>
<td>Archivart Storage tube 6 ID x 10' 4/ctn</td>
<td>1</td>
<td>$257.07</td>
<td>257.07</td>
</tr>
<tr>
<td>Archivart Storage tube 10 ID x 8' 1/ctn</td>
<td>1</td>
<td>$286.00</td>
<td>286.00</td>
</tr>
<tr>
<td>A/F L/F 7 pt. folder stock 52&quot; x 250 yard/roll</td>
<td>1</td>
<td>$402.80</td>
<td>402.80</td>
</tr>
<tr>
<td>Cotton Tying tape</td>
<td>1</td>
<td>$81.70</td>
<td>81.70</td>
</tr>
<tr>
<td>Linen Tape A/F gummed 3&quot; x 100 yd/roll</td>
<td>4</td>
<td>$48.65</td>
<td>194.60</td>
</tr>
</tbody>
</table>

**TOTAL** $3,195.52

*Unit price includes Lower Manhattan delivery surcharge*