Introduction

The Tenement Museum seeks a \$350,000 grant to implement a collections storage reorganization plan. The Museum keeps its collections in 91 and 97 Orchard Street, two tenements built in the mid-late 19th century. Speculators quickly constructed these tenements to profit from large numbers of immigrants seeking housing. They did not build them with longevity or stable environmental conditions in mind. Thus, just as the Museum has innovated in its telling of the history of "ordinary" people, it has had to innovate in devising ways to care for its collections in tenement buildings. This grant enables the Museum to permanently improve its collections environment by: 1) improving environmental conditions in both storage spaces; 2) installing a high-density collections storage system; and 3) rehousing items into environmentally-appropriate spaces. The project draws upon 15 years of external assessments and staff expertise. When complete, the project will make the Museum's collections resilient in the face of natural and human-made disasters, including damage from agents of deterioration such as heat, moisture, and pests.

The collections contain objects and archival material about former inhabitants of the Museum's tenements. This project safeguards the items and their central role in the Museum's mission and programming, which teaches the public about U.S. im/migration and urban history through former residents' stories and homes. This project also advances the NEH's "A More Perfect Union" initiative. Protecting collections centered upon ordinary people on one city block demonstrates how Americans have constructed national identity, culture, and urban life throughout the nation's history.

The Tenement Museum's mission is teaching im/migration history through the personal experiences of the newcomers who built lives on Manhattan's Lower East Side. Its founders created a museum honoring the nation's working-class immigrants, rather than the famous and politically powerful who constituted many other museums' subjects. In 1988, they discovered 97 Orchard Street. Built in 1863, its last residents had been evicted in 1935, leaving the unoccupied tenement's historic fabric remarkably intact. Today, the Museum offers educational programming in two historic tenements: 97 Orchard Street, now a National Historic Landmark, and 103 Orchard Street, a Congressionally designated National Historic Site. These two tenements housed nearly 15,000 newcomers from 20 nations between 1863 and 2014. In addition to these buildings, the Museum also owns 91 Orchard Street, a tenement whose repurposed lower floors serve as office and collection storage space. The Tenement Museum is an Affiliated Site of the National Park Service.

The Museum's signature programs are guided tours through recreated tenement homes and the neighborhood that tell former residents' stories. For example, the "Sweatshop Workers" tour takes visitors into the recreated homes of two Jewish immigrant families who stitched together new lives on 97 Orchard Street in 1897 and 1910. The tour discusses the families' work and home lives and how they balanced their jobs and religious obligations. The "Under One Roof" tour takes visitors into 103 Orchard Street to experience the home of Bella Epstein, who lived there in the 1950s with her parents, Polish Holocaust survivors; the Saez Velez family, a Puerto Rican family who lived on the Lower East Side for fifty years; and the Wong siblings, whose stories about their mother and other garment workers come to life in an interactive 1980s Chinatown garment shop. All tours visit unpreserved "ruin" spaces inside the tenements. There, visitors can explore the tenement's layered architectural fabric and learn how historians and other specialists have examined paint, wallpaper, and other layers to extract stories. Ruin spaces often feature cases highlighting collections materials—overdue library cards, toy jacks, an Italian coupon, a sewing shears—that connect visitors to past residents' daily lives.

In 2019, 278,209 people visited the Museum, including over 31,000 grade K-12 students taking field trips. Visitors came from all 50 states and 46 countries. The Museum also offered free tours designed for

youth and adult English language learners. It served visitors with disabilities through a range of accessibility programs, such as tours in American Sign Language and touch tours for visitors who are blind. On March 14, 2020, the coronavirus pandemic forced the Museum to suspend in-person tours and transition to digital programming. Outdoor walking tours resumed on September 12 with reduced capacity and social distancing measures. As of this writing, the Museum's tenements are only accessible by virtual tour. Staff have adapted existing building tours into live, 60-minute virtual tour programs led by a Museum educator over video conferencing software. Virtual tours take groups inside the tenements and examine the experiences of families who once lived there through images, videos, and digitized primary sources.

The pandemic forced a significant reduction in the Museum's budget and staff. Currently, the Museum has 47 employees. The budget for its fiscal year 2021 (7/1/20-6/30/21) is \$3,792,403. Emergency fundraising, strengthened philanthropy, and digital programming have enabled the Museum to weather the pandemic's vicissitudes. The Museum will resume building tours when public health conditions and New York State regulations permit.

This project implements a preventative conservation strategy that meets the challenges posed by buildings and artifacts that were not designed to endure. The Museum's educational and preservation priorities center upon ordinary people's stories. Paradoxically, the objects that tell their stories require extraordinary care and skill to preserve. This project draws upon the expertise of the Museum's staff, 15 years of conservation assessments by outside experts, and the guidance of the Museum's *Collections Management Policy*. This project also advances the Museum's 2018-2022 strategic plan, which aims to strengthen core programs and facilities while utilizing new technologies to engage a national audience.

Significance of Collections

The Tenement Museum collects and preserves objects and properties pertaining to the im/migration history of New York City's Lower East Side. The Museum's collecting policy prioritizes materials directly relating to its tenements at 97 and 103 Orchard Street, their former inhabitants and businesses, and objects that help the Museum interpret their stories. The collections currently encompass 12,665 objects and 225.56 linear feet of archival records. The collections consist of:

Buildings: The National Historic Landmark 97 Orchard Street tenement is the Museum's largest and most significant artifact. The building is the basis for most of the Museum's research, exhibitions, and programming. The third floor of the Museum's 103 Orchard Street tenement also contains a preserved apartment and historic finishes. (The Museum's visitor center, classrooms, and office space occupy the rest of the building.) Though neither 97 nor 103 Orchard Street has been formally accessioned, staff treat both tenements with the same level of care as other objects in the collections.

Objects: The collection's 12,665 objects include:

- <u>Building Fragments</u>: When original building fabric is removed from any of the Museum's historic structures during a preservation or repair project, staff preserve and accession a representative portion into the collections. Architectural fragments must be a character-defining feature, a unique fragment, or a sample of a typical architectural feature. For example, the collections contain layers of wallpaper and linoleum collected from 97 Orchard Street. These fragments span the period 1863 through 1935.
- Archaeology: The Museum's archaeological artifacts were discovered in 97 Orchard Street and 103 Orchard Street or recovered from excavations conducted on Museum property. Often these objects were left behind by residents and other building occupants. For example, a 1993 excavation of the privy vault in 97 Orchard Street's rear yard uncovered objects and object

- fragments from the 1860s through 1905. They include a chamber pot, ceramic fragments, a glass mug, buttons, marbles, and a Civil War-era photographic plate.
- Permanent Collection: The collection contains additional artifacts discovered within the buildings or donated to the Museum by former residents, shopkeepers, owners, and their descendants. Objects include clothing, household accessories, food containers, furniture, textiles, and toiletry articles. For example, a descendant of former 97 Orchard Street resident Fannie Rogarshevsky donated a soup tureen from the "meat" set of Fannie's kosher dishes. She used it to serve her family cholent (stew) during the Sabbath meal. The collection also includes many food and domestic items found underneath the tenements' floorboards, such as children's games, buttons and other sewing items, matches, and animal (meat) bones.

Archives: The museum's archival collections consist of:

- <u>Audio/Visual Media</u>: The Museum's collection of audio and visual media contains 1,259 analog and digital items related to 97 and 103 Orchard Street, the Museum, and other Lower East Side tenements. Materials include oral histories recorded with former residents, shopkeepers, and landlords. Most audio/visual materials document the Museum's early history, as captured in media or advertisements. The collections contain audiotape, videotape, CDs, electronic (digital) magnetic tape, and born-digital audio files.
- Prints and Photographs: The Museum's archive holds 1,984 prints and photographs showing 97 and 103 Orchard Street, their former residents, other Lower East Side buildings, neighborhood street scenes, and tenements throughout New York City. Subcollections include the Family Photographic Archives, which contains images donated by former residents of 97 and 103 Orchard Street, often depicting their families, lives, and businesses. The Lower East Side Tenement Museum Photographic Archive contains images owned by the Museum. They depict images of 97 Orchard and 103 Orchard Street, tenements, businesses, and Lower East Side street scenes, as well as Museum programs and events. Collection highlights are documentary photographs by Arnold Eagle and mid-twentieth century street scenes by Edmund V. Gillon.
- <u>Documents</u>: 225.56 linear feet of archival records concern former tenement residents and their families, the Museum's institutional history, and research by staff and outside scholars.
 Institutional records document the Museum's creation and growth. The collection features personal items, such as the 1914 second-grade report card of Victoria Confino, a 97 Orchard Street resident who immigrated to the U.S the previous year.

On the Museum's guided tours, collections items tell the stories of ordinary people and demonstrate how the Museum learns about the past. The "Hard Times" tour takes visitors into two recreated homes of former 97 Orchard Street residents: the 1870s/1880s home of Nathalie Gumpertz, who started a dressmaking business in her parlor that supported her family after her husband disappeared; and the 1920s/1930s home of Adolfo and Rosaria Baldizzi, Sicilian immigrants eking out a living during the Great Depression. The Museum drew on collections items to help recreate and furnish their homes: wallpaper, paint, and linoleum fragments; textiles and cookware donated by descendants; and the Museum's 1989 oral history with the Baldizzis' daughter Josephine. Inside the kitchen, the Museum educator leading the tour plays an excerpt from her oral history that enlivens the kitchen setting; standing in that kitchen, visitors can imagine family members cooking, cleaning, and eating together. Throughout the tour, the Museum educator also shares copies of collections items. These include photographs from the collection: the only known photograph of Nathalie Gumpertz (c. 1890); photographs of both families' descendants; and a 1934 photograph of demolished Lower East Side tenements. The 1934 photograph illustrates how urban renewal ended 97 Orchard Street's period of occupancy and forced the Baldizzi family to move. In 2019, 66,239 people took the "Hard Times" tour.

During the pandemic, the Museum's shift to virtual programming has shined an even brighter spotlight on collections objects. Since visitors cannot stand in the buildings themselves, photographs, objects, and audio recordings have grown even more central in helping Education staff bring the Museum's stories to life for virtual visitors. Additionally, the Education Associate for Access designed three digital verbal description tours that serve visitors who are blind. Using Zoom, she described collections objects in detail while weaving together stories of former residents and behind-the-scenes looks at the Museum's interpretive strategies. For example, the "Floorboards" verbal description tour explored 97 Orchard Street's historic fabric and objects found under its floorboards during restoration. The Museum also created four digital exhibits that examined timely topics in historic context. The exhibits drew heavily upon the Museum's research and collections. The most ambitious exhibit was Beyond Statistics: Living in a Pandemic, an over 100-year virtual journey through the lives of five former tenement residents profoundly impacted by contagious disease. In 2020, the digital exhibits garnered over 29,000 users. A livestreamed public program, "Secrets from the Privy Vault: Insights on a Tenement Rear Yard," provided a virtual exploration of 97 Orchard Street's rear yard. There, four wooden privies (outdoor toilets) and a single water source served residents' needs for over 40 years. A Museum educator shared what staff and outside scholars have uncovered about the rear yard through excavation, city records, and oral histories.

The Museum's collections have benefitted students, artists, and scholars. Students have used the collections for undergraduate and graduate research in fields such as U.S. history, public history, and historic preservation. Story House Productions, a German film company, examined collections items related to coffee for an upcoming project. The Yiddish Theater Ensemble used collections images to inform sets, costume design, and direction for their production of the play *God of Vengeance*. Humanities scholars have used the Museum's collections to research urban, architectural, labor, cultural, and im/migration history. Recent examples are Andrew Dolkart's *Biography of a Tenement House in New York City: An Architectural History of 97 Orchard Street* (University of Virginia Press, 2017, 2nd ed.) and Gabrielle Berlinger's "Balancing Memory and Material at the Lower East Side Tenement Museum" (*Museum Anthropology Review*, 2018). The collections are also contributing to *Seasons in the City*, Kara Schlichting's forthcoming urban-environmental history of pre-"climate controlled" New York City. (See letters of support in Attachment #8.)

While other New York City repositories document im/migration and urban history, the Museum's collections are remarkable and challenging to preserve because they treat the lives of ordinary people whose homes and possessions were never designed to last. The collections' defining feature is its focus on two historic tenements, 97 and 103 Orchard Street, and the daily lives of their inhabitants, regardless of place of origin. Collections items help researchers develop a detailed understanding of domestic and commercial life there over two centuries. Other Lower East Side collecting institutions are the New York Public Library-Seward Park Library, the Museum at Eldridge Street, and the Museum of the Chinese in America. Their collections complement the Museum's by focusing on particular immigrant groups and the history of the neighborhood as a whole.

Current Conditions and Preservation Challenges

The Museum has collections storage spaces in the basement and second floor of 91 Orchard Street and the cellar of 97 Orchard Street. (Additional above-ground collections storage space is not available because both buildings' upper floors are fully occupied with exhibits, office space, and functioning apartments.) The tenements were built in the mid-late 19th century as cheap housing for newcomers. Both collections storage areas are located in mixed-use spaces with insufficient environmental controls to fully protect the collections from natural and human-made disasters, including damage from agents

of deterioration. The spaces are not independently climate controlled. The Museum's Curatorial Department closely monitors conditions and maintains collections in accordance with Museum policy and professional best practices. Curatorial staff mitigate damage and implement preventative conservation measures. They have identified numerous needs in both spaces.

Summary of Tenement Museum Preservation Challenges

Collections	91 Orchard Street Basement	91 Orchard Street	97 Orchard Street Cellar
Storage Area		Archives	
Collections Items	Oversize historic maps	Audio/Visual Media	Historic architectural
Currently Stored	 Neighborhood shop signs 	Prints and Photographs	finishes and fragments
	• Textiles	• Documents	Furniture
	 Documents and books 		 Domestic objects (religious
	 Personal objects (paintings, 		objects, personal care
	vinyl records, cookware)		items, bottles, tools)
	 Archaeology (food 		 Archaeology (spools, nails,
	remnants and packaging,		labels, tickets, makeup,
	animal bones from pests		food remnants)
	and meat, glass and		
	ceramic fragments)		
Preservation	 Extreme heat and low 	• Fluctuations in relative	Lack of adequate storage
Challenges	relative humidity caused by	humidity	leaves collections
	sharing storage space with		vulnerable to agents of
	the boiler and inadequate		deterioration
	ventilation		 Occasional flooding from
	 Occasional flooding from 		deteriorated pipes
	the sewer and water		Security concerns related to
	seepage through the walls		mixed-use space
	 Rat infestation 		Overall high level of relative
			humidity creates conditions
			for mold

^{*}Note: The Museum's 103 Orchard Street tenement does not contain collections storage space. However, many items in the Museum's collections pertain to 103 Orchard Street and its former residents.

91 Orchard Street

The Museum uses two spaces in 91 Orchard Street for collections storage. It keeps archival collections in a dedicated 337-square foot room on the building's second floor. The room is locked for controlled access. This space is connected to the building's HVAC system, and a stand-alone environmental data logger monitors temperature and relative humidity. In 2020, the temperature fluctuated from a low of 62.9 degrees Fahrenheit to a high of 88.1 degrees, but the temperature remained largely consistent in the mid-70s. Relative humidity fluctuated seasonally, from a low of 20% in the winter and spring to a high of 69% in summer and fall. Humidity fluctuations risk damaging the archive's documents and photographs. The Museum must install environmental monitoring sensors that will automatically alert staff to prolonged periods of dry and humid conditions, instead of relying on staff to check the monitors in person.

The Museum stores object collections in a 968-square foot room in the 91 Orchard Street basement. This locked room houses the building's electrical breaker boxes and main utility shut-off valves. It also

contains a small boiler room that holds the hot water heater for the entire building's forced hot water heating system. A stand-alone environmental data logger monitors temperature and relative humidity. Extreme temperature and humidity fluctuations have created an adverse environment for long-term collections care. On October 25, 2020, the boiler was turned on, and within four days, the temperature jumped from 71.14 to 92.39 degrees Fahrenheit. Relative humidity dropped from 67% to 24%, creating a highly unstable environment. The boiler room consistently heats the collections storage area to over 90 degrees from October to May. The highest temperature recorded in 2020 was 97.6 degrees on April 8. Such extreme heat can leave relative humidity levels as low as 16.4%. In summer and transition season, relative humidity is often greater than 70%, promoting mold growth and pest infestations, particularly American Cockroaches. (See temperature graphs in Attachment #6.) The Museum must build a firerated wall to separate the boiler room from the collections storage area in order to reduce these extreme environmental fluctuations.

Flooding, water seepage, and pests also pose significant risks to collections stored in 91 Orchard Street. A drain in an open area of the cellar can back up, and Museum environmental monitoring has noted occasional standing water. In 2018, a broken sewage pipe flooded the collections storage area, contaminating some items and forcing the Museum to deaccession them. Peeling paint and efflorescence on several walls indicates moisture movement through the masonry and requires investigation. Two bulkhead stairways leading into the space and open piping create opportunities for pest entry. Rats are a persistent challenge because of holes to the exterior. The Museum must install a new drain and environmental monitoring sensors, repair holes to the exterior, and mitigate the rat infestation. (See "History of the Project" for more details and Attachment #6 for photos.)

97 Orchard Street

The 97 Orchard Street collections storage space is located behind a locked door in the building's cellar, a level below the street-accessible basement. The water main enters the building through this space. The Museum also stores non-collections items in the cellar, including buildings supplies and interpretive materials. A stand-alone environmental data logger monitors temperature and relative humidity in the collections storage area.

Collections in 97 Orchard Street are at risk from exposure to water damage and agents of deterioration. Environmental monitoring has shown environmental conditions are fairly stable year-round: in 2020, the average temperature was 68.7 degrees and average relative humidity was 61%. Humidity in this space tends to be higher than ideal conditions, but levels remain stable. However, broken pipes occasionally flood the space and some collections items, particularly architectural fragments, rest directly on the cement floor. The building's system of sensors and data loggers does not extend to the cellar, so water damage can only be detected by staff entering the cellar. Storage is inadequate: furniture rests on wooden pallets while six metal shelving units house smaller items, where they are exposed to dust. The Museum must install water sensors and adequate collections storage that raises items off the ground.

The Museum's Board of Trustees and its Committee on Governance has fiduciary responsibility for the Museum's collections. It exercises ultimate authority over accessions and deaccessions. The Museum's President, Dr. Annie Polland, holds day-to-day responsibility for overseeing the collections and the Curatorial Department. The Museum's *Collections Management Policy* governs the acquisition, management, use, and preservation of collections items. The Board of Trustees originally adopted the *Policy* in 2001 and approved an updated policy in December 2020. The Senior Director of Curatorial Affairs and the Collections Manager carry out the policy in partnership with the Museum's Education, Facilities, and Housekeeping Departments. Each month, staff inspect collections spaces and monitor environmental data. Cleaning and maintenance take place in accordance with the Museum's

Architectural Cyclical Maintenance Plan. The Collections Manager records conditions to identify trends and institutes preventative measures in response to perceived risks.

The Museum's strong collections controls enable it to successfully reorganize and move the collections during the proposed project. The Museum uses PastPerfect Museum Software to manage collections. The Collections Manager will ensure that a full collections inventory is complete before moving any items. The inventory ensures that all locations in the collections database are up-to-date and that all items are accounted for. She will also photograph objects to assist with reconciliation. The Collections Manager will use PastPerfect's Inventory Module to generate box lists for packed collections. She will affix lists to the outside and inside of each box. The Collections Manager will immediately update item locations in PastPerfect after unpacking items in the new location. When all updates are complete, she will reconcile any numbering discrepancies. An annual inventory will continue to ensure intellectual control of the Museum's collections.

History of the Project

The proposed project builds on 15 years of preservation studies, environmental monitoring, and short-term mitigation efforts. Now an upcoming preservation project throughout 97 Orchard provides an important opportunity to put those plans into action and permanently improve the collections environment in both buildings. Studies conducted by outside experts have examined conditions throughout the Museum's collections storage spaces, made storage recommendations, and assessed risks. Collectively, they outline this crucial scope of work.

In 2004, a National Park Service (NPS) team observed that the collections storage areas in both 91 and 97 Orchard Street faced serious risks. Temperature and humidity fluctuated in both spaces, and collections could sustain significant water damage if a pipe broke or storm sewer backed up. The report recommended several mitigation measures: reorganizing collection storage areas to achieve the best possible environmental conditions for each collection type, installing physical barriers to improve the environment, and purchasing new shelving units to protect the collections and improve organization. (See the report summary provided in Attachment #6.)

In subsequent years, the Museum commissioned three assessments of 97 Orchard Street's historic resources and conditions. These cumulative studies monitored the deterioration of the building's structure and guided preservation efforts. Their findings enabled the Museum to develop building monitoring, maintenance, and usage plans. The first study, the 2006 Conservation Management Plan for 97 Orchard Street, was developed by a team of preservation architects, architectural conservators, and Museum staff. Like the 2004 NPS assessment, it observed dramatic temperature and humidity fluctuations as well as flood risk in the collections storage area. The 2015 Preservation Action Plan updated the 2006 plan and improved building monitoring and maintenance procedures. A multi-year award from the Institute of Museum and Library Services enabled the Museum to hire a team of preservation architects, climate control specialists, and preservation engineers who studied the building envelope and monitored ambient conditions. The team recommended installing proper collections shelving, regular cleaning for collections items stored in the open, and moving items away from pipes. The plan also suggested an integrated pest management policy to manage the pest population, since full eradication is impossible. As a result, the Museum developed new cleaning and monitoring procedures throughout the building and implemented an integrated pest management program. It also installed environmental sensors and data loggers on floors 2-5, facilitating real-time access to the data via the web.

In 2018 and 2019, a team of architects, engineers, and historic preservation experts assessed conditions throughout 97 Orchard Street in preparation for a preservation and stabilization project there. The 2019 Planning Study examined interior and exterior conditions and provided a plan for protecting the entire structure. As a result, the Museum will undertake extensive repairs to ensure the building's structural integrity, water tightness, and historic character. Work will take place from September 2021 through March 2022. The 97 Orchard Street preservation project will improve environmental conditions by sealing the building envelope and installing an improved HVAC system. The Museum determined this is also the most efficient time to implement the collections storage reorganization plan. Structural repairs in the cellar require the Curatorial Department to temporarily rehouse collections items stored there, creating an opportunity to install a new storage system and reorganize collections items.

While preservation repairs to 97 Orchard Street will improve its environmental conditions, monitoring shows that conditions in 91 Orchard Street continue to pose serious risks to the collections stored there. On October 10, 2018, the sewer system clogged and caused a pipe to crack, flooding the collections storage area. While the Museum's Facilities department fixed the pipe and drained the water, some collections racks had already been splashed. The Collections Manager was forced to deaccession some contaminated items. Despite the repairs, the sewer trap backed up again on June 29, 2019. This flood was smaller than the previous year, but it occurred on a weekend when limited staff were onsite. The full extent of the issue was not discovered until the following Monday. (See the Collections Manager's memo in Attachment #6 for more detail.)

Implementing the Museum's collections storage reorganization plan advances the Museum's sustainability initiatives and strategic plan. The reorganization plan implements a sustainable preventive conservation strategy that uses low-level interventions to improve the storage environment. The plan facilitates long-term preservation strategies, a proactive approach that consultants have recommended since the 2015 Preservation Action Plan. This project supports the Museum's 2018-2022 strategic plan, which aims to strengthen core programs and facilities.

Methods and Standards

This project will implement passive and mechanical solutions to improve the collections storage environments in 91 and 97 Orchard Street. These interventions will make the Museum's collections resilient in the face of natural and human-made disasters, including damage from agents of deterioration such as heat, moisture, and pests. The Museum's data monitoring and evaluation enabled the Museum to identify risks, proposed interventions to mitigate them, and designed a long-term collections storage strategy that will permanently improve storage conditions. This project implements improvements recommended by previous planning studies.

Summary of Project Methods and Procedures

91 Orchard Street Basement	91 Orchard Street	97 Orchard Street Cellar
	Archives	
Mitigate rat infestation by sealing holes to	Install wireless	Purchase and install a high-density
the exterior and implementing a trapping	environmental monitoring	collections storage system
and monitoring program.	system.	(SpaceSaver).
Install wireless environmental monitoring	Install dehumidifier and	Extend the building's wireless
system.	humidifier.	environmental monitoring system
		to the basement and first floor.
Install a pump in the sewer vault.		
Investigate and replace damaged drywall.		

Install partition and fire safety wall.
Install air exhaust system.
Install dehumidifier and humidifier.

Interventions in 91 Orchard Street will only require construction permits issued by the NYC Department of Buildings because work does not involve ground disturbance or changes to egress. Work undertaken in 97 Orchard Street will not require permits. However, the preservation project in 97 Orchard Street (which is not part of the proposed project or receiving NEH support) will require a review conducted under Section 106 of the National Historic Preservation Act. The review will also take place under Section 14.09 of the New York State Historic Preservation Act in consultation with the State Historic Preservation Office. The Museum will complete the review before beginning the collections storage reorganization plan.

Installing a wireless environmental monitoring system in both collections storage areas will enhance the Museum's ability to collect data and measure the project's effectiveness. The Museum will extend 97 Orchard Street's existing monitoring system to the first floor, basement, and cellar. A climate control consultant will install a monitoring system in 91 Orchard Street. The systems will automatically upload environmental data to a web portal, and water alarms will immediately alert Curatorial and Facilities staff when there are emergencies.

91 Orchard Street

The Museum will undertake several actions to improve environmental conditions in the 91 Orchard Street Basement collections storage. A new partition and fire safety wall will physically separate the collections storage space from the boiler room, stabilizing the collections climate and increasing the efficiency of a dehumidifier already in the space. A new air exhaust system will reduce soot and dust and improve airflow. The Museum will install a pump in the sewer vault to protect the collections from floods and drain overflow. It will also replace damaged drywall and investigate leaks to prevent further water damage. While the Museum recognizes that it can never completely eliminate the risk of rodents, it will mitigate the existing rat infestation by sealing holes to the exterior and implementing robust trapping and monitoring program. (See Attachment #7 for additional information.)

The Museum will also install a wireless environmental monitoring system in the basement collections storage and the archives on the second floor. The system will alert staff when conditions are dry or humid for prolonged periods. Staff will then respond accordingly by using stand-alone humidifiers and dehumidifiers to improve conditions.

97 Orchard Street

The Museum will install a SpaceSaver high-density storage system to improve security and to protect collections from environmental agents of deterioration. The SpaceSaver meets the professional standards recommended by previous collections environment assessments. The Museum will install a carriage mounted high-density mobile storage system that uses three-spoke operating wheels to open aisles and allow access to collections items. The system will measure 23'11 5/8"x 8'6" and include storage for 324 bankers boxes, drawers and shelves for objects, and textile roll storage racks. The SpaceSaver will raise collections 6" off the floor to protect items from flooding. The system uses a significant portion of recycled steel. (See Attachment #7 for product information and vendor estimate.)

When repairs and installation are complete, the Museum will resort and rehouse the collections according to material risk, as previous studies have recommended. The project will significantly improve

environmental conditions in 91 Orchard Street, but fragile items will be better served by storage in 97 Orchard Street, where conditions are more consistent. The entire archaeology collection, which is currently split between 91 and 97 Orchard Street, will be rehoused in 91 Orchard because it can sustain larger fluctuations in temperature and humidity. These items will be kept in existing storage cabinets in 91 Orchard Street. Temperature-sensitive items, including wood furnishings, vinyl records, prints, and paintings, will be rehoused within the SpaceSaver in 97 Orchard Street. The SpaceSaver will also house all textiles to protect them from elements of deterioration. All wallpaper and linoleum fragments will be rehoused in 97 Orchard Street to improve researcher access by storing them in a single location.

Workplan

Before Grant Period: Conduct a random sample inventory of collections to ensure records are up-to-date. Conduct a review of 97 Orchard Street under Section 106 of the National Historic Preservation Act.

October 2021: Museum staff, under the Collections Manager's supervision, begin packing collections in 97 Orchard Street's storage space.

November 2021: Continue packing collections.

December 2021: Continue packing collections.

January 2022: Purchase a SpaceSaver high-density collections storage system. Work with the architectural firm Perkins Eastman to begin creating construction drawings for upgrades to the 91 Orchard Street collections storage area.

February 2022: Continue packing collections.

March 2022: Begin the process of obtaining construction permits for work in 91 Orchard Street. Continue packing collections.

April 2022: Continue the permit process. Finish packing collections.

May 2022: Finish the permit process. Move wheeled collections storage units in 91 Orchard Street's basement out of the way of construction. Temporarily transfer oversized collections items in 91 Orchard Street to 97 Orchard Street's collections storage area.

June 2022: Install SpaceSaver storage system in 97 Orchard Street's basement and begin unpacking collections items. Install partition and fire safety wall in 91 Orchard Street.

July 2022: Extend 97 Orchard Street's wireless environmental monitoring system to the building's basement and first floor. Install wireless environmental monitoring system in 91 Orchard Street Basement and Archives. Continue unpacking collections items in 97 Orchard Street. Install an air exhaust system and sewer vault pump in 91 Orchard Street.

August 2022: Continue unpacking collections items in 97 Orchard Street. Investigate the source of water seepage in 91 Orchard Street and replace damaged drywall. Seal holes to the exterior that permit rats to enter 91 Orchard Street's basement. Continue integrated pest management trapping and monitoring program.

September 2022: Continue unpacking collections in 97 Orchard Street. Begin unpacking collections in 91 Orchard Street.

Project Team

David Favaloro, the Museum's Senior Director of Curatorial Affairs, will direct the project and manage its timeline, budget, staff, and consultants. He has overseen the Museum's preservation, conservation, and collections management programs since 2008. Favaloro has played an integral role in previous Museum capital projects and exhibition development, and he will oversee the 97 Orchard Street preservation project. He also serves as Hebrew Technical Institute Research Fellow. He holds a Master of Arts in American History and an Advanced Certificate in Public History from the University of Massachusetts-Amherst.

Lana Dubin, the Museum's Collections Manager, will oversee the movement, packing, storage, and registration of collections. Her Museum responsibilities include accessioning and deaccessioning collections objects, archives management, environmental monitoring, preventative conservation, and integrated pest management. She maintains the Museum's collections storage locations in collaboration with the Museum's Facilities and Housekeeping staff. Previously, she managed collections and developed exhibitions for U.S. Department of Interior and National Park Service sites in New York and Washington, D.C. She obtained a master's degree in Museum Anthropology from Columbia University and a bachelor's degree in Anthropology and Studio Art from Kenyon College.

Kevin McAllister, the Museum's Director of Facilities, will lead the team upgrading the collections storage conditions. He oversees maintenance and security across Museum buildings. Previously, he spent a decade managing the New York City locations of the Boqueria restaurant group, advising restaurant build-out, overseeing construction, negotiating vendor contracts, and managing contractors.

Perkins Eastman, a New York City-based architectural firm, will produce construction drawings for the environmental upgrades planned for 91 Orchard Street. The firm has worked on several of the Museum's previous projects and exhibit construction projects. The most recent was the award-winning "Under One Roof" exhibit, a recreated tenement home in 103 Orchard Street.

Project Results and Dissemination

The project implements a sustainable preventive conservation strategy that permanently improves the collections storage environments in 91 and 97 Orchard Street. Mechanical and plumbing improvements, environmental monitoring systems, and a high-density storage system will mitigate risks to the collections. Passive improvements to the building envelope and collections storage area will improve temperature and humidity, protecting the collections without increasing energy consumption. Following construction, the Curatorial Department will rehouse the collections and store items in the space with the most suitable environmental conditions:

Collections Storage Locations before and after the Project

Collections Storage Area	91 Orchard Street Basement	97 Orchard Street Cellar	
Collections Items Currently	Oversize historic maps	Historic architectural finishes	
Housed	Neighborhood shop signs	and fragments	
	Textiles	Furniture	
	Documents and books	Domestic objects (religious	
	Personal objects (paintings,	objects, personal care items,	
	vinyl, cookware)	bottles, tools)	

	Archaeology (food remnants and packaging, animal bones from pests and meat, glass and ceramic fragments)	Archaeology (spools, nails, labels, tickets, makeup, food remnants)
Collections Items Housed after Project Completion	All signs, including oversized signs All archaeology collections Less temperature-sensitive personal and domestic objects	Historic architectural finishes and fragments, including all wallpaper and linoleum Furniture All textiles Temperature-sensitive items: vinyl, prints, paintings, photographs, documents
Rationale for Changes	Archaeology collections can sustain larger fluctuations in temperature and humidity.	 Environmental conditions here better protect fragile objects. Improved researcher access to wallpaper and linoleum housed in a single location. Textiles are best protected within the SpaceSaver.

Data collection will demonstrate the project's impact on the Museum's collections, environmental conditions, and energy use. The Museum's existing environmental monitoring provides data against which staff will measure the project's impact. Installing additional environmental sensors and data loggers will allow staff to check conditions when they are offsite. Alarms will immediately alert staff to incidents such as flooding or a malfunctioning HVAC system. Improved data collection will allow the Museum to provide the NEH and wider cultural heritage community with detailed information about how the project improved the Museum's collections storage environment and energy use.

The Tenement Museum makes a lasting impact on visitors both because of its subject—ordinary people—and its method—immersive storytelling. Because the Museum's tours share "how we know what we know," its collections are as integral to teaching humanities methods as they are to teaching humanities subjects. At the same time, the ordinariness that makes the Museum so valuable for the humanities also makes its collections more difficult to preserve. Fancy homes and expensive furniture were built to last and become heirlooms; tenement buildings and their residents' possessions were not. This grant enables the Museum to improve its collections storage environment with the extra care and skill its unique collections require, advancing the Tenement Museum's mission and interpretive programs.

RESEARCH & RELATED BUDGET - Budget Period 1

OMB Number: 4040-0001 Expiration Date: 12/31/2022

ORGANIZATIO	ZATIONAL DUNS: (b) (4) Enter name of Organization: Lower East Side Tenement Museum											
Budget Type:		Subawar	d/Consortiun	n		Budget P	eriod: 1	Sta	rt Date:	10/01/2021	End Date: 09/30/2022	
. Senior/Key	Person											
Prefix	First	Middle	Last	Suffix	Base	Salary (\$)	Cal.	Months Acad.	Sum.	Requested Salary (\$)	Fringe Benefits (\$)	Funds Requested (\$)
r.	David	E	Cavaloro			b) (6)	12.00			(b) (6)	(b) (6)	(b) (6)
Project Role:	PD/PI				_							
	Lana	I	Oubin			b) (6)	12.00		11	(b) (6)	(b) (6)	(b) (6)
Project Role:	Collections	Manager										
	Jason	E	lisner		7	b) (6)	12.00		16	(b) (6)	(b) (6)	(b) (6)
Project Role:	Manager of	Exhibitions	and Tour Co	pordination		J (J)				(0) (0)		(0) (0)
	Kevin	N	McAllister			b) (6)	12.00		14)	(b) (6)	(b) (6)	(b) (6)
Project Role:	Director, F	acilities										
	Andy	7	/argas			b) (6)	12.00			(b) (6)	(b) (6)	(b) (6)
Project Role:	Building Su	perintendent										
	Benny	I)iaz			b) (6)	12.00	1		(b) (6)	(b) (6)	(b) (6)
Project Role:	Facilities	Associate			-							
	Theodore	F	Rivera			b) (6)	12.00			(b) (6)	(b) (6)	(b) (6)
Project Role:	Facilities .	Associate										
dditional Senio	r Key Persons			Add A	ttachment	Delete Att	achment	View A	tachmen		equested for all Senior ons in the attached file	
aditional ocillo	r rey i diaona. L										ons in the attached me	141 546

B. Other Personnel Months Number of Requested Fringe **Funds Project Role** Personnel Cal. Acad. Sum. Salary (\$) Benefits (\$) Requested (\$) Post Doctoral Associates **Graduate Students** Undergraduate Students Secretarial/Clerical **Total Number Other Personnel Total Other Personnel** Total Salary, Wages and Fringe Benefits (A+B) 141,546.72 C. Equipment Description List items and dollar amount for each item exceeding \$5,000 **Equipment item** Funds Requested (\$) 57,360.00 SpaceSaver collections storage system Environmental monitoring equipment 3,722.00 Additional Equipment: Add Attachment Delete Attachment View Attachment Total funds requested for all equipment listed in the attached file **Total Equipment** 61,082.00 D. Travel Funds Requested (\$) Domestic Travel Costs (Incl. Canada, Mexico and U.S. Possessions) 861.00 Foreign Travel Costs **Total Travel Cost** 861.00 E. Participant/Trainee Support Costs Funds Requested (\$) Tuition/Fees/Health Insurance Stipends Travel Subsistence Other

Total Participant/Trainee Support Costs

Number of Participants/Trainees

F. Other Direct Costs		Funds Requested (\$)
1. Materials and Supplies	- 7	30,786.37
2. Publication Costs		
3. Consultant Services		28,000.00
4. ADP/Computer Services		
5. Subawards/Consortium/Contractual Costs		
6. Equipment or Facility Rental/User Fees		
7. Alterations and Renovations		55,565.00
8. NYC construction and plumbing permit	s	13,500.00
9.		
10.		7
	Total Other Direct Costs	127,851.37
G. Direct Costs		Funds Requested (\$)
	Total Direct Costs (A thru F)	331,341.09
H. Indirect Costs Indirect Cost Type	Indirect Cost Rate (%) Indirect Cost Base (\$)	Funds Requested (\$)
Base 10% rate	10.00 Indirect Cost Base (\$)	35,000.00
	Total Indirect Costs	35,000.00
Cognizant Federal Agency	Total mandet Socie	30,000.00
(Agency Name, POC Name, and POC Phone Number)		
. Total Direct and Indirect Costs		Funds Requested (\$)
	otal Direct and Indirect Institutional Costs (G + H)	366,341.09
J. Fee		Funds Requested (\$)
K. Total Costs and Fee		Funda Basuastad (\$)
A. Total Costs allu Fee	Total Costs and Fee (I + J)	Funds Requested (\$) 366,341.09
L. Budget Justification		222,212.00
	Add Attachment Delete Attachme	ent View Attachment
Only attach one file.) 1234-justification po	Tud rinbernient Delete Attachine	AICM AUGCILITOTIC

RESEARCH & RELATED BUDGET - Cumulative Budget

	Totals (\$	Is (\$)			
Section A, Senior/Key Person		141,546.72			
Section B, Other Personnel					
Total Number Other Personnel					
Total Salary, Wages and Fringe Benefits (A+B)		141,546.72			
Section C, Equipment		61,082.00			
Section D, Travel		861.00			
1. Domestic	861.00				
2. Foreign					
Section E, Participant/Trainee Support Costs					
1. Tuition/Fees/Health Insurance					
2. Stipends					
3. Travel					
4. Subsistence					
5. Other					
6. Number of Participants/Trainees					
Section F, Other Direct Costs		127,851.37			
1. Materials and Supplies	30,786.37				
2. Publication Costs					
3. Consultant Services	28,000.00				
4. ADP/Computer Services					
5. Subawards/Consortium/Contractual Costs					
6. Equipment or Facility Rental/User Fees					
7. Alterations and Renovations	55,565.00				
8. Other 1	13,500.00				
9. Other 2					
10. Other 3					
Section G, Direct Costs (A thru F)		331,341.09			
Section H, Indirect Costs		35,000.00			
Section I, Total Direct and Indirect Costs (G + H)		366,341.09			
Section J, Fee		200,012.09			
Section K, Total Costs and Fee (I + J)		366 241 00			
		366,341.09			

Budget Justification

Salaries and Wages

Name	Title	Annual Salary	% Time	Salary to Charge	Fringe Rate	Fringe Cost	Salary+ Fringe
David	Senior Director,						
Favaloro	Curatorial Affairs	(b) (6)	5%	(b) (6)	23%	(b) (6)	(b) (6)
	Collections						
Lana Dubin	Manager	(b) (6)	90%	(b) (6)	23%	(b) (6)	(b) (6)
	Manager of						
	Exhibitions and						
Jason Eisner	Tour Coordination	(b) (6)	50%	(b) (6)	23%	(b) (6)	(b) (6)
Kevin							
McAllister	Director, Facilities	(b) (6)	20%	(b) (6)	23%	(b) (6)	(b) (6)
	Building						
Andy Vargas	Superintendent	(b) (6)	15%	(b) (6)	23%	(b) (6)	(b) (6)
Benny Diaz	Facilities Associate	(b) (6)	15%	(b) (6)	23%	(b) (6)	(b) (6)
Theodore							
Rivera	Facilities Associate	(b) (6)	15%	(b) (6)	23%	(b) (6)	(b) (6)

The Museum seeks \$115,078.63 in NEH support for salary and will contribute \$16,341.09 as cost share. Favaloro will oversee the project and the architectural firm creating construction drawings. Dubin will supervise packing, moving, and unpacking collections as well as the installation of a high-density collections storage system in 97 Orchard Street. Eisner will assist Dubin, while McAllister, Vargas, Diaz, and Rivera will move large collections items. McAllister will also supervise the general contractor making upgrades to the 91 Orchard Street collections storage area and lead the Museum's application for NYC construction and plumbing permits. See the Workplan in Attachment #2 for full staffing details.

Fringe Benefits

\$26,468.09: The Museum's fringe rate for full-time staff is 23%.

Equipment Description

\$57,360: SpaceSaver high-density collections storage system. It will house collections items stored inside 97 Orchard Street. The system will be manufactured in the USA. A quote from Modern Office Systems is attached to the end of this document.

\$3,722: Environmental monitoring equipment.

Product	Price	Quantity	Total Cost
HOBO RX3000 Remote Monitoring Station Data Logger	\$899	1	\$899
AC Power Adapter	\$39	1	\$39
Temperature/Relative Humidity Sensor Cables	\$195	10	\$1,950
Smart Sensor Extension Cable (10m)	\$33	5	\$165
Smart Sensor Extension Cable (25 m)	\$50	5	\$250

Smart Sensor connection case for extension cable	\$30	10	\$300
Replacement Battery	\$39	1	\$39
Cable Caddy	\$80	1	\$80
	\$3,722		

Travel

\$861: Lodging and travel between Bridgeton, NJ and New York, NY for Michael Henry, environmental management consultant. Henry will install the environmental monitoring system in 91 Orchard Street. His travel costs include:

- \$99 for roundtrip auto mileage, tolls, and parking between Henry's home in Bridgeton, NJ and the Wilmington, DE Amtrak station: \$56 for mileage (100 miles x \$.56 mileage rate) + \$10 for tolls+ \$33 for parking (\$11/day x 3 days)
- \$56 for one roundtrip coach train ticket from Wilmington, DE to New York Penn Station
- \$516 two night's lodging in Manhattan (2 nights x \$258)
- \$190 for meals: 2 travel days (\$57 x 2) + 1 day in Manhattan (\$76)

All calculations use GSA rates, in accordance with Museum policy.

Materials and Supplies

\$30,786.37: Collections storage supplies. These supplies will enable the Museum to properly pack, move, unpack, and account for collections items throughout the project.

This cost breaks down as follows:

Cleaning Products	Price	Quantity	Total Cost
HEPA Vacuum	\$1,602.95	2	\$3,205.90
HEPA Vacuum Speed Control	\$506.08	2	\$1,012.16
Nilfisk Vacuum Bags	\$25.75	4	\$103.00
Nilfisk HEPA Cartridge	\$243.18	3	\$729.54
Nilfisk Micro Filter	\$43.10	3	\$129.30
Metro DataVac	\$371.99	2	\$743.98
Metro DataVac HEPA Cone Filter MVC- 51B	\$21.10	4	\$84.40
Evolon CR Non-Woven Textile	\$2.00	50	\$100.00
Orvus WA Paste (1 gallon)	\$32.95	1	\$32.95
Dry Cleaning Soot Sponge (small)	\$2.75	20	\$55.00
Dry Cleaning Soot Sponge (large)	\$6.20	10	\$62.00
Hake Brushes (3 shaft)	\$1.68	5	\$8.40
Hake Brushes (6 shaft)	\$3.36	10	\$33.60
Hake Brushes (10 shaft)	\$5.45	5	\$27.25
	\$6,327.48		

Packing and Wrapping Items	Price	Quantity	Total Cost
Plastic Sheeting (10 ft. x 100 ft. Clear 4 mil)	\$37.38	8	\$299.04
Plastic Sheeting (10 ft. x 25 ft. Clear 3.5 mil Plastic Sheeting: 2-Pack)	\$17.98	5	\$89.90
Unbleached Muslin (44" wide, 78 x 78 thread count)	\$3.60	50	\$180.00
Cotton Tape (3/8", Tight Weave, 72 yards)	\$18.75	2	\$37.50
Cotton Tape (1/4", Loose Weave, 144 yards)	\$13.25	2	\$26.50
Bone Folder	\$5.70	5	\$28.50
Tyvek® 6060 Roll	\$334.35	1	\$334.35
Volara Foam (1/4" Thick, 10 yard roll)	\$165.70	2	\$331.40
Volara Foam (1/8" Thick, 10 yard roll)	\$101.70	2	\$203.40
Volara Foam (1/16" Thick, 10 yard roll)	\$63.55	2	\$127.10
Acid-Free Unbuffered Tissue	\$204.20	2	\$408.40
Gaylord Archival® Unbuffered Acid-Free Tissue (Roll)	\$221.75	3	\$665.25
Cellu-Cushion® Polyethylene Foam Sheets	\$98.05	20	\$1,961.00
Cellu-Cushion Roll	\$535.40	1	\$535.40
Ethafoam Planks (12" x 24" x 2", pack of 13)	\$207.95	2	\$415.90
Ethafoam Planks (12" x 24" x 4", pack of 8)	\$249.55	2	\$499.10
Small Bubble Wrap (48" W, 175' Long)	\$59.95	2	\$119.90
Small Bubble Wrap (12" W, 350' Long)	\$39.95	2	\$79.90
Large Bubble Wrap (48" W, 65' Long)	\$56.50	2	\$113.00
Large Bubble Wrap (12" W, 260' Long)	\$44.95	2	\$89.90
Permalife 20 lb. Archival Bond Paper	\$24.75	4	\$99.00
Mylar Film Roll	\$64.90	2	\$129.80
Olfa 9 mm snap off utility knife	\$8.00	6	\$48.00
Olfa 9 mm blade replacement	\$5.50	3	\$16.50
Olfa 18 mm snap off utility knife	\$15.00	6	\$90.00
Olfa 18mm blade replacement	\$5.50	3	\$16.50
Flexible Stainless Steel Rulers	\$8.88	3	\$26.64
Humidity Cards	\$3.50	30	\$105.00
3M 415 Tape (1/4", 36 yards)	\$10.52	2	\$21.04
3M 415 Tape (1/2", 36 yards)	\$15.40	2	\$30.80
Scotch Security Tape (6 pack)	\$100	1	\$100.00
Scotch® Long Lasting Moving & Storage Packing Tape with Dispenser (1.88" x 38.2 yds., Clear, 4 Rolls)	\$12.99	1	\$12.99
ScotchBlue 0.94 in. x 60 yds. Original Multi-Surface Painter's Tape (9-Pack)	\$33.42	1	\$33.42
Self-Adhesive Box Label Holders with Label (3" x 2", 12 per pack)	\$9.30	20	\$186.00

		SUBTOTAL	\$20,137.18
PastPerfect Inventory Manager Upgrade	\$295	1	\$295.00
Polypropylene Sleeves (5 x7, 50 pack)	\$9.65	4	\$38.60
Polypropylene Sleeves (4x5, 50 pack)	\$7.50	4	\$30.00
Gaylord Archival® Blue/Grey Barrier Board Textile & Costume Box (24 x 36 x 8)	\$54.55	10	\$545.50
(18 x 30 x 6)	46.1	10	\$461.00
Gaylord Archival® Blue/Grey Barrier Board Textile & Costume Box	75.25		752.50
Perma/Dry Document Cases (15.25" x 10.25" x 2.5")	\$9.25	10	\$92.50
Perma/Dry Document Cases (15.25" x 10.25" x 5")	\$10.35	50	\$517.50
Paper File Folder Inserts	\$27.75	10	\$277.50
Archival File Folders	\$37.00	10	\$370.00
Double Walled Archival Board	\$170.25	5	\$851.25
Perma/Cor B-Flute Corrugated Board (11 x 14, 10 sheets)	\$14.80	10	\$148.00
Perma/Cor E-Flute Corrugated Board (30 x 40, 25 sheets)	\$206.95	3	\$620.85
Perma/Cor E-Flute Corrugated Board (20 x 24, 10 sheets)	\$49.25	5	\$246.25
Perma/Cor E-Flute Corrugated Board (14 x 18, 10 sheets)	\$25.85	8	\$206.80
Archival Record Storage Cartons, Blue/Gray Perma/Cor (15"x12"x 10", 25 boxes)	\$218.00	10	\$2,180.00
Archival Record Storage Cartons, Moisture Resistant (15"x12"x10")	\$19.35	200	\$3,870.00
Archival Zipper Lock Bags (9x 12, 100 bags)	\$19.40	1	\$19.40
Archival Zipper Lock Bags (6 x 8, 100 bags)	\$16.10	1	\$16.10
Archival Zipper Lock Bags (4 x 6 , 100 bags)	\$8.20	1	\$8.20
Archival Zipper Lock Bags (2.5 x 3, 100 bags)	\$8.20	3	\$24.60
Gaylord Archival® Tyvek® Prestrung Artifact Tags (100-Pack)	\$32.79	10	\$327.90
Self Adhesive Label Holders	\$42.88	15	\$643.20
Heritage® Architectural Drawing Boxes	\$14.90	10	\$149.00
Self Healing Mat (24" x 36")	\$55.00	2	\$110.00
Self Healing Mat (36" x 48")	\$89.50	2	\$179.00
Mini Glue Gun	\$12.00	2	\$24.00
Glue Gun	\$30.00	1	\$39.20
Dahle 50038 All Around Shear Fiskars 9451 Original Scissors	\$35.00 \$14.80	2	\$70.00 \$59.20
Soft Tape Measure	\$4.00	6	\$24.00
Non-Fading Black Pigma Pen	\$23.35	2	\$46.70
Self-Adhesive Box Label Holders with Label (3" x 4", 12 per pack)	\$9.70	20	\$194.00

Support Suppplies	Price	Quantity	Total Cost
Tripod Work Light (7000-Lumen Multi-Directional LED)	\$99.96	3	\$299.88
Portable Work Light (5000lm LED)	\$49.96	5	\$249.80
50 pint Dehumidifier	\$270.00	3	\$810.00
Evaporative Humidifier	\$150.00	3	\$450.00
4 Ft Folding Table	\$39.98	2	\$79.96
6 Ft Folding Table	\$49.98	4	\$199.92
Folding Chairs (set of 4)	\$110	1	\$110.00
4 Drawer Storage Cart	\$25	2	\$50.00
Harper™ PGDK1935P Ultra Lite Nylon 2-in-1 Convertible Hand Truck			
Pneumatic Wheels	99.95	2	\$199.90
Flock Lined Nitrile Gloves	\$35.60		\$35.60
Nitrile Gloves	\$25.15	4	\$100.60
N95 Particulate Respirator Masks (20 pack)	\$30.15		\$30.15
Saftey Glasses	\$15	5	\$75.00
Platform Truck	\$200	1	\$200.00
Canon EOS Rebel	\$799	1	\$799.00
Magnetic Letters and Numbers	\$30	3	\$90.00
Global Industrial™ Deluxe Tray Top Plastic Utility Cart	\$270.95	2	\$541.90
SUBTOTAL			

Consultant Services

(b) (6) : Perkins Eastman, a New York City-based architectural firm, will produce construction drawings for the storage environment upgrades in 91 Orchard Street.

(b) (6) Fee for environmental management and climate control consultant Michael Henry, who will install environmental sensors in 91 Orchard Street.

Alterations and Renovations

\$55,565: Environmental upgrades to 91 Orchard Street's storage area. Work includes installing a fire door and sewer pump vault, replacing drywall, and repairing holes to the exterior. A quote from Streamline Construction & Management company is attached to the end of this document.

Other

\$13,500: NYC construction and plumbing permits for work in 91 Orchard Street.

Total Direct Costs: \$331,341.09 (NEH Request: \$315,000; Tenement Museum Cost Share: \$16,341.09)

Indirect Costs

\$35,000: The Museum does not have a federally-negotiated cost rate, so it is using the 10% rate.

Total Project Costs: \$366,341.09 (NEH Request: \$350,000; Tenement Museum Cost Share: \$16,341.09)



EXHIBIT A

Streamline USA LLC

483 10th Ave, New York, NY 10018, Suite 205

Tel: 646.307.9001

Project : The Tenement Museum Office Storage

Address: 91 Orchard street New York
Date: Thursday, December 24, 2020

Below is our proposal for The Tenement Museum Office Storage project as outlined in the drawings as shown on the drawing log . Streamline appreciates the opportunity to bid this with your company and looks forward to working with together in the near future. Contact us with any questions or need of clarification.

Scope Of Work

See Scope of Work Attached

Cost Break De	own By Trade	
01 00 00	General Requirements	\$ 4,500.00
01 74 16	Site Maintenance	\$ 2,500.00
06 10 00	Rough Carpentry	\$ 3,557.00
08 10 00	HM/WD - Doors / Frames	\$ 2,250.00
09 20 00	Plaster and Gypsum Board	\$ 5,582.00
09 90 00	Painting and Coating	\$ 9,100.00
22 00 00	Plumbing	\$ 4,500.00
23 06 70	HVAC Equipment	\$ 13,500.00
26 00 00	Electric	\$ 1,500.00
Subtotal		\$ 46,989.00
Overhead		\$ 3,290.00
Profit		\$ 2,514.00
Insurance		\$ 2,772.00
Total		\$ 55,565.00

Date 12/24/20

Project The Tenement Museum Office Storage

General Conditions

See Scope of Work

Exclusions & Clarifications

Clarifications & Exclusions

This proposal does not include removing any of the items in the storage.

See Notes and Qualification Page

Payment.

Contractor shall submit an Application for Payment and/or invoice as applicable, to owner (or to Architect if directed by Owner) based of the payment terms on the Proposal. Owner/Architect shall certify such Application/Invoice within (5) days of receipt and shall pay amount due under such Application/Invoice within (10) days of the Owner's approval of such Application/Invoice. By including any item of work in an

Application for Payment and/or invoice, Contractor certifies that such item, or the stage of the Work for which payment is requested, has been properly provided and that Contractor is currently entitled to payment therefor under the Agreement Documents.

Changes in the Work/Change Orders

The Agreement may only be modified by written change order signed by both Owner and Contractor, and Contractor shall have no claim for any extra or additional work unless such work is clearly authorized in writing by Owner before such extra or additional work is performed. Contractor's change orders will include the following billable percentages in addition to the cost of the additional work:

 General Conditions – Based off Project Management and Site Supervision requirements to complete the work

10% - Profit

6.5% - Overhead

5% - Insurance

Date of Commencement.

Shall be the latter of (i) the date that is five (5) days after the Contractor receives written notice to proceed. (ii) the date that is five (5) days after the Contractor receives a written notice form the Owner setting forth

that the owner has filed for and obtained the permits for the work and such permits are ready to be pulled by
the Contractor and (iii) the date that is five (5) days after the contactor receives the deposit payment set forth
in the proposal.

Binding Dispute Resolution

For any claim subject to, but not resolved by mediation, the method of binding dispute resolution shall be as follows: Arbitration

Failure of Payment

Each time the Work is stopped due to failure of payment, beginning with the second time the Work is stopped, the Contract sum shall be increased by \$5,000.00 each time the Work is stopped to compensate Contractor for the costs of shut-down, delay and start-up.

Delays and Extensions of Time.

If the Contractor is delayed at any time in the commencement or progress of the Work by an act or neglect of the Owner or Architect, or of an employee of either, or of a separate contractor employed by the Owner, or by changes ordered in the Work; or by delays caused by lack of drawings, details, specifications and/or clear direction in being able to progress and complete contractual scopes of Work; or by labor disputes, fire, unusual delay in deliveries, unavoidable casualties or other causes beyond the Contractor's control; or by delay authorized by the Owner pending mediation and arbitration; or by other causes that the Architect determines may justify delay, then the Contract Time shall be extended by Change Order for such reasonable time as the Architect may determine. The Change Order for extension of time will include Contractor's extended values, based on the original scope of Work, for: 1.General Requirements 2.1nsurance 3.0verhead 4.Profit for the approved time extension, as well as other expenses to be incurred with the elongation of the Project's Critical Path, such as rents for scaffolding and sidewalk sheds, charges for certified Site Supervisor, security requirements, demobilization costs, and the like.

Termination

The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause. In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for the work executed, and direct costs incurred as a result of such termination (such as demobilization costs and cancellation fees) and costs incurred by reason of such termination, along with reasonable overhead and profit on the work not executed.

Payment Terms	
Deposit - 40%	\$ 22,226.00
Progress Payment 30%	\$ 16,669.50
Substantial completion 20%	\$ 11,113.00
Completion of Punchlist 10%	\$ 5,556.50

Client:	Contractor:
	Eric Ortense
Owner	CEO

Bid Breakdown



EXHIBIT A

The Tenement Museum Office Storage

Project Duration	1 3	Weeks						
		ITEM DESCRIPTION	QTY	UNT	SL	JBTOTAL		
01 00 00	Genera	l Requirements						
		Site Foreman	3	Wks.	\$	4,500.00		
							\$	4,500.00
01 74 16	Site Ma	intenance						
		Interior protection	1	LS	\$	1,000.00		
		Trash removal	1	LS	\$	1,500.00		
		_					\$	2,500.00
06 10 00	Rough	Carpentry						
		F&I Framing	138	SQ FT	\$	1,008.00		
		F&I Faring strips to wall	405	SQ FT	\$	1,782.00		
		F&I Framing for return wall	105	SQ FT	\$	767.00		
00.40.00	1.18.40.675) D /F					\$	3,557.00
08 10 00	HIM/VVL	O - Doors / Frames Custom size fire resistant metal door and buck -						
		6'-2" x 3'	1	LS	\$	1,800.00		
		Door hardware allowance	1	LS	\$	450.00		
							\$	2,250.00
09 20 00	Plaster	and Gypsum Board						
		F&I Mold resistant drywall for short wall - 2 sides	276	SQ FT	\$	1,408.00		
		F&I Mold resistant drywall for stone wall - 1 side	405	SQ FT	\$	2,066.00		
		(Faring strips) F&I Mold resistant drywall for return wall - 1 side	105	SQ FT	\$	536.00		
		Taping	786	SQ FT	\$	1,572.00		
		тарті	700	OQTI	Ψ	1,072.00	\$	5,582.00
09 90 00	Painting	g and Coating					•	0,002.00
00 00 00	i amang	Epoxy paint floor	800	SQ FT	\$	2,600.00		
		Clean and scour floor before paint	1	LS	\$	500.00		
		Priming and painting of new space	800	SQ FT	\$	6,000.00		
		3 1 3 1			·	.,	\$	9,100.00
22 00 00	Plumbir	ng						
		F&I Check valve at floor drains (Allowance)	1	LS	\$	3,500.00		
		Excavate for pit at floor drain line	1	LS	\$	1,000.00		
							\$	4,500.00
23 06 70	HVAC I	Equipment						
		F&I 2 Ton Mitsubishi split system - 2 cassette wall mounted air handlers	1	LS	\$	12,500.00		
		Allowance for precipitation drip line	1	LS	\$	1,000.00		
					•	,	\$	13,500.00
26 00 00	Electric						Ė	,
		F&I electrical hook up for split system	1	LS	\$	1,500.00		
							\$	1,500.00
		SUB-TOTAL						\$46,989.00

Bid Breakdown



EXHIBIT A

The Tenement Museum Office Storage

Project Duration 3 Weeks

 TRADE: ITEM DESCRIPTION
 QTY
 UNT
 SUBTOTAL

 Overhead
 \$ 3,290.00

 Profit
 \$ 2,514.00

 Insurance
 \$ 2,640.00
 \$ 2,772.00

 TOTAL
 \$55,565.00

Modern Office Systems, LLC

Phone: (212) 290-0440 Fax: (212) 290-0455 45 West 36th Street New York, NY 10018



Quote

No.: 14553

Date: 01/07/2021

OFFICE SYSTEMS, LLC

Prepared for:

Tenement Museum 103 Orchard Street

New York, NY 10002

Phone: (877) 975-3786

Account No.: 12297

Prepared by: Parth Jobanputra

Scope of Work:

Modern Office Systems, LLC is pleased to provide the following:

Tenement HD System (opportunity # 3580)

(Qty - 6) Mobile Carriages 36" X 96" (Qty - 1) Stationary Platform 24" X 96"

(Qty – 6) Shelving Units [U1] 18"d X 48"w X 67 1/4"h

- (3) Drawers
- (3) Shelving Openings

Closed sides/Shared back panel

(Qty – 6) Shelving Units [U2] 36"d X 48"w X 49 1/4"h (3) Shelving Openings w/ Center Stops

(Qty - 1) Shelving Units [U3] 24"d X 48"w X 67 1/4"h

- (3) Drawers
- (3) Shelving Openings

(Qty – 1) Shelving Units [U4] 24"d X 48"w X 49 1/4"h

- (3) Drawers
- (2) Shelving Openings w/ Center Stops

(Qty – 5) Shelving Units [U5] 18"d X 48"w X 67 1/4"h

(5) Shelving Openings

(Qty - 1) Textile Cantilever System 66"w X 17"d X 70"h

- (6) Tier of textile rods
- (3) Rods per tier

Fire retardant deck and ramp. Black VCT deck covering.

Please Note:

- Lead Time: 16 weeks (ARO) does not include installation time

quote - straight time.rpt Printed: 1/7/2021 12:35:16PM Page 1

Quote

No.: **14553**

Date: 01/07/2021

^{*}Please send purchase orders referencing our quote number to orderentry@modernofficesystems.com

Description		Total
Material		\$43,110.00
Freight		\$3,700.00
Straight Time Delivery		\$3,080.00
Straight Time Non-Union Installation		\$6,480.00
Deck Tiling		\$990.00
	Your Price: Sales Tax SubTotal:	\$57,360.00 \$5,090.70 \$62,450.70
	Total:	\$62,450.70

⁻ Finish: Any Standard Spacesaver Finish

^{*}Lead times are subject to change due to Covid-19 disruptions.

^{*50%} Deposit Required with Purchase Order