

NATIONAL TRUST for HISTORIC PRESERVATION

Request for Proposals for Fabrication, Delivery, and Installation of a High-Density Storage and Shelving System at Chesterwood, Stockbridge, Massachusetts Proposals due: November 8, 2023, at 5:00 p.m. EST

1. Introduction

The National Trust for Historic Preservation in the U.S. (“National Trust”) is soliciting competitive proposals for a fixed-price contract from qualified Contractors capable of installing a new high-density storage and shelving system at Chesterwood, a Site of the National Trust, in Stockbridge, Massachusetts.

This project is supported with funds from the Institute of Museum and Library Services (“IMLS”), a federal agency. This RFP is offered in compliance with federal government’s rules and regulations for procurement.

2. Background

Chesterwood was the summer home, studio, and gardens of Daniel Chester French (1850-1931), the acclaimed American Renaissance sculptor known best for the seated Lincoln within the Lincoln Memorial on the National Mall in Washington, DC; the Minute Man statue in Concord, MA; and the bronze doors of the Boston Public Library.

French lived and worked at Chesterwood for 35 years. The site includes the studio, designed by renowned architect Henry Bacon, built in 1898, and the nine-bedroom residence, also designed by Bacon, completed in 1901. His daughter, Margaret French Cresson, a sculptor in her own right, preserved the home and established the estate as a historic site of the National Trust for Historic Preservation in 1969. The property is a designated Massachusetts and National Historic Landmark.

The site includes a 4,000 piece-collection, including original furnishings and objects owned by French, numerous works by other artists, and over 500 works by French, many of which are in storage and not available to scholars.

As part of a multi-million-dollar reimagining of the site, the Trust is creating a Collections and Research Study Center in the lowest level of the French family residence. The Center has been upgraded with state-of-the art environmental controls and a fire suppression system. The updated space facilitates bringing hundreds of objects out of storage and provides an extraordinary opportunity for scholarship and state-of-the-art collections management that will be available to students and scholars by appointment.

3. Project Description

This project involves creation and installation of a mechanically assisted, carriage mounted high-density mobile storage and shelving units, support rails, fabrication, including leveling of support rails.

4. General Conditions, Scope of Work, Contract Documents, and Project Standards

The General Conditions and Scope of Work is attached as **Exhibit A**. The construction schedule will be coordinated based on lead times, schedules, and scheduled community events. A National Trust’s standard contract will be used with supplemental federal terms attached as **Exhibit D**. Insurance requirements are attached as **Exhibit B**.

A. **General Conditions**

1. This contract will be based on a fixed price. Include said fixed price in the bid response. The owner will not accept substitutions, allowances, omission, additions, etc., unless otherwise agreed upon before receipt of bids.
2. The contractor and their subcontractors are responsible for all permits and permit inspections related to the scope of work as defined in the bid documents.
3. The Contractor’s primary point of contact shall be provided in the contract.

4. The Contractor shall provide temporary protection of historic materials outside of the scope of work during Construction. Any attachments of temporary protection to existing construction must be approved by the Owner prior to installation.
5. Construction parking and access is from the main parking lot and a short driveway at the basement entrance. There is no loading dock.
6. From October 24, 2023, through May 7, 2024, the site is closed to the public, but staff and other contractors may be in the building. Work hours for construction will be limited to 7:30 am to 4:30 pm and shall be coordinated with the Senior Superintendent of Buildings & Grounds.
7. The contractor must have a responsible supervisor onsite at all times. Their contact information must be shared with the National Trust.
8. The Contractor must maintain a safe, OSHA compliant, work site at all times.
9. Chesterwood's public bathrooms are located in another building on site and are available for use by the Contractor's employees during this project.
10. Owner will provide access to power and water on the project site.
11. At the end of each day, the Contractor will clean and secure the worksite.
12. All construction debris must be disposed of offsite. Truck location to unload and haul equipment will be determined and coordinated before the project begins.
13. Contractor shall review existing site and building conditions prior to commencing work and notify the Owner of any site or building elements required to be relocated during Construction. Owner will be responsible for moving and storing such items, unless otherwise agreed in writing.

B. Project Standards

1. All construction shall comply with local, state and, international model codes.
2. All materials, workmanship, and equipment shall be guaranteed by the Contractor for a minimum of one year from the date of final completion and acceptance by the owner.

C. Project Timeline

1. The Owner intends to complete the work by February 29, 2024, with testing and training within two weeks before final project closeout.

5. Deadline for Proposals

Responses must be submitted by November 8, 2023, at 5:00pm EST preferably in .pdf format, via e-mail to:

Elaine Chang, Associate Manager | Law & Contracts
National Trust for Historic Preservation
600 14th Street NW, Suite 500
Washington, DC 20005
EChang@savingplaces.org

Written questions may be submitted to EChang@savingplaces.org no later than October 24, 2023 at 5:00pm EST. Responses will be posted in the form of an addendum on the National Trust's website on November 1, 2023 at <https://savingplaces.org/requests-for-proposals>.

5. **Updates.** This RFP may be downloaded from the Trust's website at <https://savingplaces.org/requests-for-proposals>. Contractors interested in submitting proposals in response to this RFP should download the RFP from the website. Any contractor submitting a statement in response to this RFP is solely responsible for obtaining complete information and documentation as may be needed to generate a comprehensive response.

6. **Confidential Information**

Please do not submit any confidential or proprietary information, except to the extent expressly requested by this RFP. The Respondent should consider the information in its response to be publicly available, although it is the general policy of the National Trust, as a routine matter, to not publish or publicly release documents submitted in response to Requests for Proposals or Invitation for Bids, unless stated otherwise in this RFP or elsewhere, or required by law, order, regulation, or grant or funding source requirements.

7. **Pre-Bid Site Meeting**

A mandatory pre-bid site meeting is scheduled for 10:00AM on Wednesday, October 11, 2023. Contractors should RSVP to Elaine Chang, National Trust Associate Manager, at EChang@savingplaces.org, no later October 6, 2023, at 5:00pm EST. Please include the company name, representative's name, and contact information, and include "Chesterwood High-density Storage" in the subject heading.

8. **Instructions for Submission of Proposals**

- A. Proposals must be written and submitted on the firm's letterhead as a PDF.
- B. Bids that are unsigned, conditional, illegible, obscure, contain arithmetical errors, erasures, alterations, or irregularities of any kind, may, at the discretion of the Owner, be declared unacceptable.
- C. Proposals should include the following information:
 1. A description of the professional qualifications of the firm and its members;
 2. Certification Regarding Debarment and Suspension (**Exhibit C**);
 3. Statement regarding the Contractor's DEIA policy, if any, and steps taken to use MWBEs;
 4. Statement that there are no potential or actual conflicts of interest with the National Trust;
 5. Statement you will disclose in writing to the Trust any violations of Federal criminal law involving fraud, bribery, or gratuity violations (2 CFR 200.113);
 6. Statement that Contractor shall make domestic preferences for purchasing/using materials;
 7. Statement that no contract funds shall be used for lobbying any federal, state, or local officials;
 8. If third-party subcontractors will be used, the name and address of such firms, together with a description of their area of responsibility and qualifications;
 9. An organization chart that identifies the project manager and other members of the team and clearly defines their respective roles and responsibilities;
 10. A statement the proposal will be valid for a period of 90 days from the RFP closing date;
 11. A listing of any allowance for reimbursable direct expenses;
 12. The name, address and telephone numbers of references who may be contacted concerning work done on comparable projects;
 13. A proposed timeline for the completion of the project;
 14. A description of the legal status of the firm, i.e., sole proprietorship, partnership, corp., etc.;
 15. The name, address and position of person in the firm who are authorized to execute contracts;
 16. Notes and clarifications to help define the scope of work included in the proposal;
 17. Proposed start and completion dates;
 18. Include any discounted and/or non-profit rates for this project;
 19. A statement indicating whether the firm carries insurance in the following categories and principal amount of the coverage maintained:
 - a) Commercial General Liability
 - b) Professional Liability
 - c) Automotive Liability
 - d) Worker's Compensation.

20. Fee proposal

9. Criteria for Selection

Any contract awarded will be to a responsible offeror whose proposal is the most advantageous to the Trust.

A. The National Trust will consider the following factors equally when evaluating proposals:

1. The professional qualifications of the individual team members;
2. Experience working on similar projects of comparable size;
3. The range of services offered and any limitations imposed;
4. Ability to complete the project within the time frame established;
5. Responses received from references;
6. Small, disadvantaged, veteran, minority and/or women owned status of company; and
7. The total bid amount.

B. The National Trust reserves the right, in exercising its discretion:

1. To reject all submissions received;
2. To accept a submission with no further discussion, in whole or in part;
3. To reject a submission due to its defects, irregularities or provisions inconsistent with this RFP;
4. To waive any defect or irregularity in any submission and to accept it when it is otherwise proper and reasonable to do so; and
5. To negotiate directly with respondents for other terms, prices, and conditions deemed reasonable and proper for the completion of the project.

10. Equal Opportunity

A. The National Trust is an equal opportunity employer. It maintains an Affirmative Action Plan as required by Executive Order 11246, as amended, and by applicable implementing regulations issued by the Secretary of Labor (41-CFR 60-1). The Contractor selected for the contract anticipated by the RFP will be expected to maintain similar policies and procedures, and to comply with all applicable notice and regulations.

B. MINORITY AND WOMEN-OWNED BUSINESSES. It is the policy of the National Trust for Historic Preservation, and each of its subsidiaries, to promote and encourage contracting and subcontracting opportunities for minority and women-owned businesses enterprises (M/WBEs) in all contracts. Accordingly, the National Trust will give special consideration to those bids that contain commitments to subcontract with M/WBEs.

11. Federal Regulations

This RFP process is subject to 2 CFR §200 (<https://www.ecfr.gov/current/title-2/subtitle-A>) and IMLS terms and conditions (<https://www.imls.gov/grants/manage-your-award/grant-administration>).

EXHIBIT A
Scope of Work

SECTION 105626 - HIGH DENSITY STORAGE & SHELVING SYSTEM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Basement drawing Sheet 1/A1.1 and general provisions of the contract, including general and supplementary conditions and related specification sections, if any, apply to this section.

1.2 SUMMARY

- A. This section includes the following:
1. Mechanically assisted, carriage mounted high-density mobile storage units, support rails, fabrication, and installation including leveling of support rails.
- B. Related Work Furnished by others:
1. Structural floor system capable of supporting live and dead loads required by prevailing building codes, including rolling loads of storage units to be installed.
 2. Finish floor covering materials and installation on raised floors and ramp.

1.3 REFERENCES

- A. American National Standards Institute (ANSI) Standards:
1. Applicable standards for fasteners used for assembly.
- B. American Society for Testing and Materials (ASTM) Standards:
1. Applicable standards for steel materials used for fabrication.
- C. American Institute of Steel Construction (AISC) Standards:
1. Applicable standards for steel materials used for fabrication.

1.4 SYSTEM DESCRIPTION

- A. General: The system consists of manufactured mobile storage units mounted on wheeled carriage assemblies on manufacturer's track-guided carriages to form a compact storage system. The purpose is to allow multiple ranges of storage housings to be accessed by means of one roving aisle System design permits access to any single aisle by manually moving units until the desired aisle is opened. The carriage/rail system provides uniform carriage movement along the total length of travel, even with unbalanced loads. For clarification, the term storage housing shall refer to the shelving, rack, or cabinets which are a component of the high-density mobile system herein specified.
- B. Carriage System Design and Features: The carriage system consists of a formed structural steel frame with machined and balanced wheels riding on steel rails. Rails shall be types selected by the manufacturer to ensure smooth operation and self-centering of mobile storage units during travel without end play or binding. Rail types, quantities and spacing shall be selected by the manufacturer to suit installation conditions and requirements. All bearings used in the drive mechanism shall be permanently shielded and lubricated.
- C. Movement Controls: Each moveable carriage shall have a triple arm operating wheel with rotating hand knobs provided on the accessible (drive) ends of shelf units, centered on the end panel, located 40-44 inches (1051-1118

mm) from the base of each unit to permit units to be moved to create a single aisle opening. Turning the handle transmits power through chain drive to drive wheels on each carriage.

- D. Drive System: The system shall be designed with a positive-type mechanically assisted drive that minimizes end play and ensures there is no play in the drive handle and that carriages will stop without drifting.
 - 1. System shall include a chain sprocket drive system for each movable carriage to ensure that carriages move uniformly along the total length of travel, even with unbalanced loads. All system components shall be selected to ensure smooth, even movement along the entire carriage length. Drive system gearing shall be designed to permit 1 lb. of force applied to the drive handle to move a minimum of 4,000 lbs. of load.
 - 2. A chain tensioning device shall be provided on each chain drive with provision for adjusting tension without removing end panels.
 - 3. All bearings used in the drive mechanism shall be permanently shielded and lubricated.
- E. Safety Features:
 - 1. Color-coded visual indicators shall provide verification that carriages are in a locked or unlocked mode.
 - 2. A single safety lock button, mounted on each operating wheel hub, will permit moving a carriage in either direction to create a new access aisle when pulled out (unlocked), or locking the carriage when pushed in.
- F. Finishes:
 - 1. All fabricated Metal Components and Assemblies: Manufacturer's factory-applied antimicrobial powder coat paint finish that shall hinder the growth of gram-positive and gram-negative bacteria. This shall also include molds and yeasts. The antimicrobial properties shall be present and fully active for the life of the finish.

1.5 PERFORMANCE REQUIREMENTS

- A. Design Requirements:
 - 1. See plans for layouts and elevations.
 - 2. Finished ceiling height is approximately 87-11/16 inches. Top of cabinets to be a minimum of 18' below finished ceiling. Verify actual dimensions in field.
- B. Ease of Movement: Provide mechanically assisted units capable of being moved by exerting a maximum horizontal force of 5 pounds (2.3 kg) on the operating wheel.
- C. Seismic Performance: Provide high-density mobile (compact) storage units capable of withstanding the effects of earthquake motion as required by applicable building codes. Site-specific third-party evaluation shall be provided by structural engineer licensed to practice in Massachusetts.

1.6 SUBMITTALS

- A. Product Data: Submit manufacturer's product literature and installation instructions for each type of shelving, track, and installation accessory required. Include data substantiating that products to be furnished comply with requirements of the contract documents.
- B. Shop Drawings: Show fabrication, assembly, and installation details including descriptions of procedures and diagrams. Show complete extent of installation layout including clearances, spacings, and relation to adjacent construction in plan, elevation, and sections. Indicate clear exit and access aisle widths; access to concealed components; assemblies, connections, attachments, reinforcement, and anchorage and deck details, edge conditions, and extent of finish flooring within area where units are to be installed.
 - 1. Show installation details at non-standard conditions. Furnish floor layouts, technical and installation manuals for every unit shipment with necessary dimensions for rail layout and system configuration at the project site. Include installed weight, load criteria, furnished specialties, and accessories.

2. Provide layout, dimensions, and identification of each unit corresponding to sequence of installation and erection procedures. Specifically include the following:
 - a. Location, position, and configuration of tracks on all floors.
 - b. Plan layouts of positions of carriages, including all required clearances.
 - c. Details of shelving, indicating method and configuration of installation in carriages.
 3. Provide location and details of anchorage devices to be embedded in or fastened to other construction.
 4. Provide installation schedule and complete erection procedures to ensure proper installation.
- C. Selection Samples: For initial selection of colors and textures, submit manufacturer's color charts consisting of actual product pieces, showing full range of colors and textures available.
- D. Samples: Provide minimum 3-inch (76 mm) square example of each color and texture on actual substrate for each component to remain exposed after installation.
- E. Warranty: Submit draft copy of proposed warranty for review.
- F. Reference List: Provide list of at least eight recently installed similar type high-density mobile installations.
- G. Maintenance Data: Provide in form suitable for inclusion in maintenance manuals for mobile storage units. Data shall include operating and maintenance instructions, parts inventory listing, purchase source listing, emergency instructions, and related information.
1. Submit manufacturer's instructions for proper maintenance materials and procedures.
 2. Submit manufacturer's printed instructions for maintenance of installed work, including methods and frequency recommended for maintaining optimum condition under anticipated use conditions. Include precautions against using materials and methods which may be detrimental to finishes and performance.

1.7 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Engage an experienced manufacturer who is ISO 9001 certified for the design, production, installation, and service of carriage mounted high-density mobile storage units and support rails. Furnish certificate attesting manufacturer's ISO 9001 quality system registration.
- B. Installer Qualifications: Engage an experienced installer who is a manufacturer's authorized representative for the specified products for installing carriages and anchoring shelving units to carriages.
1. Minimum Qualifications: 5-years' experience installing systems of comparable size and complexity to specified project requirements.
 2. Guaranteed 24-hour service response time.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Follow manufacturer's instructions and recommendations for delivery, storage, and handling requirements.

1.9 PROJECT CONDITIONS

- A. Field Measurements: Verify dimensions before fabrication. Indicate verified measurements on Shop Drawings. Any variations shall be addressed by the general contractor or designated project representative prior to manufacture. Coordinate fabrication and delivery to ensure no delay in progress of the Work.
- B. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating mobile storage units. Coordinate construction to ensure actual

dimensions correspond to established dimensions. It is the sole responsibility of the general contractor or designated project representative to coordinate verified field dimensions with the manufacturer in a timely fashion.

1.10 SEQUENCING AND SCHEDULING

- A. Sequencing: Coordinate storage shelving system installation with work by others to minimize possibility of damage and soiling during remainder of construction period.
- B. Scheduling: Plan installation to commence after finishing operations, including painting have been completed by others.
- C. Built-In Items: Provide components that must be built-in at a time that causes no delays in the general progress of the work.
- D. Pre-installation Conference: Schedule and conduct conference on project site to review methods and procedures for installing mobile storage units including, but not limited to, the following:
 - 1. Review project conditions and levelness of flooring and other preparatory work performed under other contracts.
 - 2. Review and verify structural loading limitations.
 - 3. Recommended attendees include:
 - a. Owner's Representative.
 - b. Prime Contractor or representative.
 - c. The Architect.
 - d. Manufacturer's representative.
 - e. Subcontractors whose work may affect, or be affected by, the work of this section.

1.11 WARRANTY

- A. Provide a written warranty, executed by contractor, installer, and manufacturer, agreeing to repair or replace units which fail in materials or workmanship within the established warranty period. This warranty shall be in addition to, and not a limitation of, other rights the owner may have under the general conditions provisions of the contract documents.
- B. Warrant the entire movable compact shelving installation against defects in materials and workmanship for a period of five (5) years from date of acceptance by the owner.

1.12 MAINTENANCE

- A. Provide manufacturer's extended maintenance agreement for four (4) years, commencing on the day the standard maintenance warranty ends.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. General: Only those manufacturers that meet the specifications stated herein for high-density compact mobile storage systems and that have been continuously manufacturing this type of product without interruption for a minimum of 15 years are acceptable bidders.

2.2 BASIC MATERIALS

- A. General: Provide materials and quality of workmanship that meet or exceed established industry standards for products specified. Fabricate units from ASTM Class 1, cold-rolled commercial grade sheet or coil steel of thickness no less than 20-gauge material with all bends and radiuses consistent and true.

2.3 GROUT

- A. General: Provide non-shrink, non-corrosive, non-metallic hydraulic cement compound conforming to the following requirements, based on the performance of the test specimens at room temperature and in laboratory air:
1. Linear Movement: No shrinkage while setting; maximum expansion limited to .002 inches per linear inch.
 2. Compressive Strength: Based on two-inch cubes made following ASTM standards, tested on a Balding-Southward machine of 60,000 pounds capacity, meet or exceed the following:
 - a. Age: 1 hour ---- 4,500 psi; 7 days ---- 8,000 psi

2.4 MANUFACTURED COMPONENTS

- A. Rails:
1. Rail shall be ASTM/AISI Type 1045 steel of manufacturer's selection designed and manufactured to carry a load of 1000 pounds per lineal foot (1488 kg/M) of carriage length.
 2. Rail surface shall be parkerized with a zinc phosphate solution to prevent rust and minimize wear. Rail surfaces that make contact with wheels that are simply painted or powder coated are unacceptable
 3. Minimum Contact Surface: 5/8 inch (16 mm) wide.
 4. Provide rail sections in minimum 6-foot (1.83 M) lengths.
 5. Rail configuration shall permit attachment to top of structural floor system with provision for leveling rails to compensate for variations in floor surface level.
 6. Provide rail connections designed to provide horizontal and vertical continuity between rail sections, to gradually transfer the concentrated wheel point load to and from adjoining rail sections. Butt joints are not permitted.
 7. Rail Form Covers: Manufacturer shall provide for protection if required to prevent damage to rails during concrete back pours.
 8. Rail shall be designed to be anchored to a structurally sound base floor capable of supporting fully loaded system and exhibiting a maximum deflection not to exceed L/480.
 9. Rail shall be positioned, leveled, and grouted in accordance with the manufacturer's instructions, providing a minimum of 7/16 inch (11 mm) of grout under the rail from the high spot on the floor. Void under leveled rail shall be completely filled with a non-shrink grout.
 10. Shimming of rail is not acceptable either as a means of support or for leveling. Rail shall be drilled and tapped to accommodate leveling screws adjacent to all anchor holes. Each rail shall have a minimum width of 2-3/8 inch (60 mm) and all rails must extend completely under all stationary ranges.
 11. Rail shall be level not to exceed 1/16 inch (1.6 mm) maximum variation from true level within module and 1/16 inch (1.6 mm) maximum variation between adjacent rails perpendicular to rail direction. Each section of rail shall be a minimum of 12 inches (305 mm) and a maximum of 120 inches (3.05 M) with shorter length used only to terminate each individual rail assembly.
 12. Each end of the rail shall be connected by means of twin stainless steel dowels pinned between the rail splice. The splice shall be designed for the most severe operating conditions. Connection joints shall demonstrate vertical and horizontal continuity and provide a transfer of load to and from the adjoining rail sections. Butt splice joints and tongue and groove rail splice joints that only prevent movement in one direction are unacceptable.

B. Carriages:

1. Provide manufacturer's design movable carriages fabricated of welded or bolted steel construction. Galvanized structural components and/or riveted carriages are unacceptable.
2. Provide fixed carriages of same construction and height as the movable carriages, anchored to rails. Setting fixed shelving directly on floors is not permitted.
3. When required, provide bolted carriage splices designed to maintain proper unit alignment and weight load distribution.
4. Design carriages to allow the shelving uprights to recess and interlock into the carriages a minimum of 3/4 inch (19 mm). Top mount carriages are unacceptable.
5. Carriages shall be designed for a capacity of 1000 pounds per lineal foot (1488 kg/M)

C. Four-Post Shelving:

- a. Design: Wedge-lock type consisting of uprights, shelves, and shelf supports, designed to be assembled without fasteners or clips. Shelves shall not have any holes on exposed surfaces. Front and back flanges shall be flush with outside faces of posts. Design shall permit individual shelf adjustment and/or removal anywhere along the entire height of uprights.
- b. Materials and Workmanship: Fabricate units from Class 1, cold-rolled steel sheet with all bends sharp and true and no exposed "knife" edges.
 - i. All units shall be free of burrs, sharp edges and projecting hardware with smooth, non-abrasive surfaces and edges.
 - ii. After fabrication, shelving shall exhibit no dents, "oil canning", buckling or other surface irregularities.
- c. Uprights: Formed from steel sheet to a hollow "tee" shape for intermediate supports and formed angles for end supports. Uprights shall have keyhole slots on inner wall only. Provide with sheet steel panels full height and depth of end uprights. Provide intermediate "tee" uprights between adjacent units. All uprights on project to be "closed".
- d. Shelves: Form from sheet steel with flanges on all sides and return hem on front and back flanges. Ends shall be formed to clear inside of upright offset panels. Shelves shall be independently adjustable.
- e. Shelving Units:
 - i. Provide two (2) stationary, wide-span open shelving units, 62" wide by 36" deep, with three shelves spaced as shown on drawings
 - ii. Provide one (1) mobile four-post open storage unit, 36" wide by 36" deep, with no internal shelf
 - iii. Provide five (5) mobile four-post four-shelf units, 36" wide by 36" deep, with single shelf mid-way in the opening
 - iv. Provide ten (10) mobile four-post four-shelf units, 48" wide by 36" deep, with clear openings as shown on drawings
 - v. Provide two (2) mobile four-post single-shelf units, 48" wide by 36" deep, with shelf placed mid-way to create equal openings
- f. Canopy Tops: Same construction as shelf units.
- g. Shelf Supports: Form from heavy gauge steel sheet with four solid steel shoulder rivets, two per ear, that interlock with inner wall of uprights.
- h. Nominal Shelf Dimensions:
 - i. Standard Width: 36-inch (914 mm) or 48-inch (1219 mm) sections to meet project requirements.
 - ii. Shelf-edge Vertical Profile: 3/4-inch (19 mm) maximum.
 - iii. Vertical Adjustment Increment: 1-1/2 inches (38 mm).
 - iv. Width Of Intermediate Uprights: 2 inches (51 mm).

- v. Clearance Between Uprights: Nominal shelf section width minus 2 inches (51 mm).
- vi. Levelness of completed shelf units: Maximum 1/8 inch (3.2 mm) between bottom shelf and canopy top, measured along the edge of any upright in any direction.
- vii. Number of vertical shelf spaces: As indicated above.
- viii. Vertical shelf-to-shelf spacing: As indicated on the drawings.

- i. Load Carrying Capabilities: Provide shelf units capable of supporting 40 pounds per lineal foot (18kg/305 mm) with maximum deflection of L/140. Shelves shall exhibit no permanent deflection under fully loaded conditions.

D. Drive / Guide System:

- 1. Design: Provide drive system which prevents carriage whipping, binding, and excessive wheel/rail wear under normal operation.
- 2. Shaft Connections: Secured couplings.
- 3. Bearing Surfaces: Provide rotating load bearing members with ball or roller bearings. Provide shafts with pillow block or flanged self-aligning type bearings.
- 4. A minimum of 3 guide rails shall be required to ensure precise carriage tracking alignment.
- 5. All guide rails shall have a convex top surface to provide friction-free self-centering alignment with the carriage guide wheels.
- 6. All carriage guide wheels shall have a concave load surface which aligns with the guide rail to provide precise carriage tracking.
- 7. Roller guide and dual flange wheel methods of guidance which have play between the guide points and the rail sides shall be unacceptable.

E. Wheels:

- 1. Capacity: Dynamic load rating on wheel bearings shall be a minimum of 4400 lbs (1996 kg).
- 2. Size: Wheels shall be a minimum of 5 inches (127 mm) in diameter, constructed of cast ductile iron, and precision machined for smooth operation and to ensure compatibility to the corresponding rail.

F. Guides:

- 1. A minimum of 3 guide rails shall be required to ensure precise carriage tracking alignment.
- 2. All guide rails shall have a convex top surface to provide friction-free self-centering alignment with the carriage guide wheels.
- 3. Roller guide and dual flange wheel methods of guidance that have play between the guide points and the side rails shall be unacceptable.

G. Face Panels:

- 1. Materials: ASTM Class 1, cold-rolled commercial grade sheet or coil steel of thickness no less than 20-gauge material with all bends and radiuses consistent and true with factory-applied antimicrobial powder coating.

2.5 FABRICATION

- A. General: Coordinate fabrication and delivery to ensure no delay in progress of the Work.
- B. Wheels: Provide precision machined and balanced units with permanently shielded and lubricated bearings.
- C. Carriages: Fabricate to ensure no more than 1/4 inch (6.4 mm) maximum deviation from a true straight line. Splice and weld to ensure no permanent set or slippage in any spliced or welded joint when exposed to forces encountered in normal operating circumstances.

D. Shelving, Supports and Accessories: See individual descriptions in “Shelving” paragraphs.

2.6 FINISHES

A. Colors: Selected from manufacturer’s standard available colors.

B. Paint Finish: Provide factory applied electrostatic antimicrobial powder coat paint that meets or exceeds specifications of the American Library Association.

PART 3 - EXECUTION

3.1 EXAMINATION

A. With installer present, examine floor surfaces for compliance with requirements for installation tolerances and other conditions affecting performance of mobile storage units.

B. With installer present, examine mobile carriages for proper sizing, proper placements of support members for the shelving, and to ensure that mounting surface is square and level.

C. Verify that building structural system is adequate for installing mobile storage units at locations indicated on approved shop drawings.

1. Ensure that recesses for rails in floors are at proper spacing and depths, with allowance for grouting.

D. Verify that intended installation locations of mobile storage units will not interfere with nor block established required exit paths or similar means of egress once units are installed.

E. Prepare written report, endorsed by installer, and submitted to owner’s representative listing conditions detrimental to proper performance of mobile storage units, once installed.

F. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. General: Follow all manufacturer’s documented instructions and procedures for installation of rail, floor and ramp if applicable, fixed and moveable carriages, shelving, panels, and related accessories.

B. Rails:

1. Lay out rails using full length units to the maximum extent possible. Use cut lengths only at ends to attain total length required. Locate and position properly, following dimensions indicated on approved shop drawings. Verify thickness of finished floor materials to be installed and install level 1/16 inch (1.6 mm) above finished floor surfaces.

2. Verify level, allowing for a minimum 7/16 inch (11 mm) of grout under high points. Position and support rails so that no movement occurs during grouting.

3. Set rails in full grout bed, completely filling any voids entire length of all rails including rail connectors. Trim up sides flush with rails to ensure proper load transfer from rail to supporting floor. Using shims in lieu of full grouting is not permitted.

4. Installation Tolerances: Do not exceed levelness of installed rails listed below:

a. Maximum variation from true level within any nodule: 3/32 inch (2.4 mm).

b. Maximum variation between adjacent (parallel) rails: 1/16 inch (1.6 mm), perpendicular to rail direction.

c. Maximum variation in height: 1/32 inch (0.8 mm), measured along any 10 foot (3.05 M) rail

length.

5. Verify rail position and level; anchor to structural floor system with anchor type and spacing as indicated on approved shop drawings.

C. Floors/Ramps:

1. General: Finished elevation shall be 1/16 inch (1.6 mm) below top of rails.
2. Place floors and ramps to the extent indicated on approved shop drawings. Extend ramps under all movable ranges.
3. Construct floors and ramps to prevent warping or deformation of floor panels in a normal operating environment. Support panels on levelers at maximum 16 inches (410 mm) on center.
4. Ramp Slope: Do not exceed the following:
 - a. ADA Accessible Ramps: Maximum 1:12 slope (4.76 degrees).
 - b. Other Ramps: Maximum 9-degree slope (1.9:12).
 - c. Vertical Transition, Ramp edge to floor: Maximum 1/8 inch (3.2 mm).

D. Shelving Units Installation:

1. General: Follow layout and details shown on approved shop drawings and manufacturer's printed installation instructions. Position units level, plumb, and at proper location relative to adjoining units and related work.
2. Carriages:
 - a. Place movable carriages on rails. Ensure that all wheels track properly and centering wheels are properly seated on centering rails. Fasten multiple carriage units together to form single movable base where required.
 - b. Position fixed carriage units to align with movable units.
3. Shelving Units:
 - a. Permanently fasten shelving units to fixed and movable carriages with vibration-proof fasteners.
 - b. Stabilize shelving units following manufacturer's written instructions. Reinforce shelving units to withstand the stress of movement where required and specified.

3.3 FIELD QUALITY CONTROL

- A. Verify shelving unit alignment and plumb after installation. Correct if required following manufacturer's instructions.
- B. Remove components which are chipped, scratched, or otherwise damaged and which do not match adjoining work. Replace with new matching units, installed as specified and in manner to eliminate evidence of replacement.
- C. Verify all fixed and movable carriages are installed and operating square and level. Correct if necessary.
- D. Verify all end or face panels, shelving components and accessories are aligned properly. Correct if necessary.
- E. Replace components that are scratched, dented, or damaged in any manner with new items from the manufacturer. Surface scratches may be touched up but repair must be complete and undistinguishable.

3.4 ADJUSTING

- A. Adjust components and accessories to provide smoothly operating, visually acceptable installation. Perform final visual check that all panels align when aisles are closed, and all gaps are consistent.

3.5 CLEANING

- A. Upon completion of installation, clean all components and surfaces. Cover to protect from dust and environmental fallout as a result of other work continuing in the surrounding area. Remove all packaging material and debris that accumulated as a result of the installation immediately upon completion. Leave area of installation neat, in broom clean condition, and ready to present to appropriate persons.

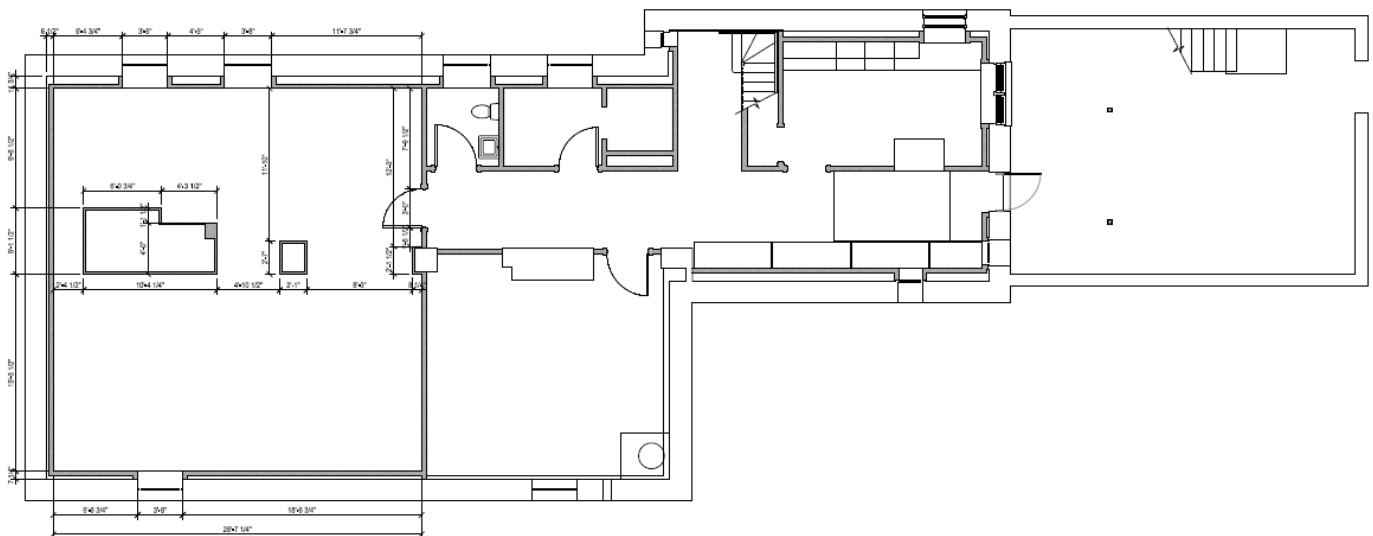
3.6 DEMONSTRATION/TRAINING

- A. Schedule and conduct demonstration of installed equipment and features with Owner's personnel.
- B. Schedule and conduct maintenance training with Owner's maintenance personnel. Training session should include lecture and demonstration of all maintenance and repair procedures that end user personnel would normally perform.

3.7 PROTECTION

- A. Protect system against damage during remainder of construction period. Advise Owner of additional protection needed to ensure that system will be without damage or deterioration at time of substantial completion.

Basement Floor Plan



1 BASEMENT FLOOR PLAN
A1.1 5/8" = 1' = 0"

EXHIBIT B
Insurance Requirements

1. Insurance.

- A. The Contractor shall maintain in effect during the term of this Agreement a policy or policies of insurance providing coverage for the following risks in the following minimum amounts:

Workers' Compensation	Statutory Amount
Employers' Liability	\$1,000,000 per accident \$1,000,000 policy limit \$1,000,000 per person
Commercial General Liability	\$1,000,000 per occurrence \$2,000,000 aggregate \$1,000,000 personal & advertising injury
Motor Vehicle Liability (owned, non-owned and hired vehicles)	\$1,000,000 combined single limit (bodily injury and property damage)
Contractor's Professional Liability	\$1,000,000 per claim \$1,000,000 aggregate

- B. All policies must be written on an "occurrence" and not on a "claims made" basis.
- C. The Contractor shall provide the Owner with a certificate indicating that this coverage is in effect and naming the Owner as an Additional Insured on the CGL policy with a right to notice no less than thirty (30) days prior to cancellation or any material change in coverage. The Contractor shall also provide the Owner with a copy of the Endorsement to the policy naming it as Additional Insured.
- D. Subcontractor Insurance. The Contractor shall include the following provisions as conditions of any subcontract, and require each subcontractor to include the following provisions in any sub-subcontract.
- i. The Subcontractor must maintain liability insurance for the risks and in the amounts indicated in the chart above as if the Subcontractor were the main Contractor.
 - ii. If any individual subcontractor is not covered by Workers' Compensation or Employers' Liability insurance, the Subcontractor must release the Owner from all claims, liabilities, damages, and expenses (including but not limited to reasonable attorney's fees) based upon or arising out of any bodily injury sustained or death that occurs while the Subcontractor is at the Project site.
- E. If a Subcontractor cannot meet these insurance requirements, the Contractor shall immediately notify the Owner's Representative. The Subcontractor shall not commence work unless its insurance coverage is approved in writing by the Owner.

EXHIBIT C
CERTIFICATION REGARDING DEBARMENT AND SUSPENSION

(Before completing certification, read instructions on the next page)

1. Contractor certifies to the best of its knowledge and belief that it and its principals:
 - a) Are not presently debarred, suspended, proposed for disbarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal, State or Local government entity;
 - b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and paragraph (1)(b) of this certification; and
 - d) Have not within a three-year period preceding this application had one or more public transactions (Federal, State, or local) terminated for cause or default.
2. Where the Contractor is unable to certify to any of the statements in this certification, it shall attach an explanation to this proposal.

ADDITIONAL CERTIFICATIONS

*I certify that we **do/do not** have a DEIA policy. We take steps to subcontract with WMBEs by:

_____.

*I certify that to the best of my knowledge, there are no potential or actual conflicts of interest with the National Trust or IMLS.

*I certify we will disclose in writing to the Trust any violations of Federal criminal law involving fraud, bribery, or gratuity violations (2 CFR 200.113) and there are none to date.

*I certify that we will make domestic preferences for purchasing/using materials.

*I certify that no contract funds shall be used for lobbying any federal, state or local officials.

Business Name: _____

Date: _____ By: _____
Name and Title of Authorized Representative

INSTRUCTIONS FOR DEBARMENT/SUSPENSION CERTIFICATION

1. By signing and submitting this proposal, the Contractor is providing the certification set out below.
2. The inability of a Contractor to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The Contractor shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the National Trust's determination whether to enter into this transaction. However, failure of the to furnish a certification or an explanation shall disqualify such Contractor from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when the National Trust determined to enter into this transaction. If it is later determined that the Contractor knowingly rendered an erroneous certification, in addition to other remedies available to the National Trust may terminate this transaction for cause or default.
4. The Contractor shall provide immediate written notice to the National Trust if at any time the Contractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The Contractor agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any subcontract with a person/company who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the National Trust.
6. The Contractor further agrees by submitting this proposal that it will include a clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion," in all transactions and in all solicitations for Subcontractors or Consultants.
7. The National Trust may rely upon a certification of a Contractor or Subcontractor in a transaction that it is not debarred, suspended, ineligible, or voluntarily excluded, unless it knows that the certification is erroneous. The National Trust may decide the method and frequency by which it determines the ineligibility of all Contractors. The National Trust may, but is not required to, check the Non-procurement List.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a Contractor/Subcontractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 6 of these instructions, if a Contractor in a knowingly enters into a transaction with a person/Subcontractor/Consultant who is suspended, debarred, or ineligible, from participation in this transaction, in addition to other remedies available to the National Trust may terminate this transaction for cause or default.

EXHIBIT D SUPPLEMENTAL TERMS AND CONDITIONS FOR FEDERALLY FUNDED PROJECTS

[eCFR :: Title 2 of the CFR -- Grants and Agreements](#); 2 CFR § 200.218-230.

Appendix II to Part 200 Contract Provisions for Non-Federal Entity Contracts Under Federal Awards

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

(A) Contracts for more than the simplified acquisition threshold, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by [41 U.S.C. 1908](#), must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

(B) All contracts in excess of \$10,000 must address termination for cause and for convenience by the non-Federal entity including the manner by which it will be effected and the basis for settlement.

(C) Equal Employment Opportunity. Except as otherwise provided under [41 CFR Part 60](#), all contracts that meet the definition of “federally assisted construction contract” in [41 CFR Part 60–1.3](#) must include the equal opportunity clause provided under [41 CFR 60–1.4\(b\)](#), in accordance with Executive Order 11246, “Equal Employment Opportunity” ([30 FR 12319, 12935, 3 CFR Part, 1964–1965 Comp.](#), p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at [41 CFR part 60](#), “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.”

(D) Davis-Bacon Act, as amended ([40 U.S.C. 3141–3148](#)). When required by Federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act ([40 U.S.C. 3141–3144](#), and [3146–3148](#)) as supplemented by Department of Labor regulations ([29 CFR Part 5](#), “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland “Anti-Kickback” Act ([40 U.S.C. 3145](#)), as supplemented by Department of Labor regulations ([29 CFR Part 3](#), “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or subrecipient must be

prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

(E) Contract Work Hours and Safety Standards Act ([40 U.S.C. 3701–3708](#)). Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with [40 U.S.C. 3702](#) and [3704](#), as supplemented by Department of Labor regulations ([29 CFR Part 5](#)). Under [40 U.S.C. 3702](#) of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of [40 U.S.C. 3704](#) are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

(F) Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of “funding agreement” under [37 CFR § 401.2 \(a\)](#) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of [37 CFR Part 401](#), “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

(G) Clean Air Act ([42 U.S.C. 7401–7671q](#)) and the Federal Water Pollution Control Act ([33 U.S.C. 1251–1387](#)), as amended—Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act ([42 U.S.C. 7401–7671q](#)) and the Federal Water Pollution Control Act as amended ([33 U.S.C. 1251–1387](#)). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

(H) Debarment and Suspension (Executive Orders 12549 and 12689)—A contract award (see [2 CFR 180.220](#)) must not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at [2 CFR 180](#) that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), “Debarment and Suspension.” SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

(I) Byrd Anti-Lobbying Amendment ([31 U.S.C. 1352](#))—Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by [31 U.S.C. 1352](#). Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

(J) See [§ 200.323](#). Not Applicable

(K) See [§ 200.216](#). Prohibition on certain telecommunications and video surveillance services or equipment.

(L) See [§ 200.322](#). Domestic preferences for procurements.

(a) As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a Federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.

(b) For purposes of this section:

(1) “Produced in the United States” means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

(2) “Manufactured products” means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.