

Appendix J
ARG Hoover Pavilion
Specifications Memorandum

ARCHITECTURAL RESOURCES GROUP, INC.
Architects, Planners & Conservators



TRANSMITTAL

To: Kirsten Jardine
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Project: Stanford Hospital and Shopping Center EIR -
Hoover Pavilion Protection

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Date: September 21, 2009

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Via: Messenger

Remarks:

Kirsten,

Please find enclosed four (4) full-size and four (4) half-size protection drawing sheets as well as one (1) protection specification section for Stanford Hoover Pavilion. Please do not hesitate to call or email with questions or discussion.

Regards,

Jason K. Wright

By: Jason K. Wright

E-mail: jason@argsf.com

CC: file

**STANFORD HOOVER PAVILION
PROTECTION DOCUMENTS**

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SECTION 02100

PROTECTION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification Sections, apply to the Work of this Section.

1.02 SUMMARY

- A. This Section includes special procedures for historic treatment on the Project including, but not limited to, the following:
1. Installation of protection at exterior surfaces to prevent damage to all historic elements due to construction activities.
 2. Removal, cataloging, and storage of selective historic elements as required during construction.
 3. Installation of protection done in a matter that does not damage adjacent surfaces or finishes.

1.03 REFERENCES

- A. Preservation Tech Note. Temporary Protection Number 2, "Specifying Temporary Protection of Historic Interiors During Construction and Repair", National Park Service, Preservation Assistance Division, P.O. Box 37127, Washington DC 20013.
<http://www.cr.nps.gov/hps/tps/technotes/PTN38/introduction.htm>
- B. NFPA 241. Safeguarding Building Construction and Demolition Operations, National Fire Protection Agency, Quincy, MA. (800) 344-3555.

1.04 DEFINITIONS

- A. "Historic Elements" are defined as those materials, finishes, components and areas identified as historic elements on the Contract Documents and as recognized by landmark agencies having jurisdiction on this project.
1. Historic elements include, but are not limited to, all original historic materials and finishes including but not limited to terra cotta, molded concrete, and window frames and sash.
- B. "Salvage Elements" are defined as any Historic Element to be removed from the existing construction and to be retained, mothballed, repaired and/or modified for reinstallation and potential reuse.

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- C. "Off-Site Facility" is defined as the storage facility to be provided by the Contractor or subcontractor for storage of salvage and mothballed elements.
- D. "Artifact Log" is defined as the log form supplied by the contractor and used to catalog historic elements that are removed from the building.
- E. "Renovation": To make possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, or architectural values.
- F. "Preservation": To apply measures necessary to sustain the existing form, integrity, and materials of a historic property. Work may include preliminary measures to protect and stabilize the property.
- G. "Rehabilitation": To make possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features that convey its historical, cultural, or architectural values.
- H. "Restoration": To accurately depict the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and the reconstruction of missing features from the restoration period.
- I. "Reconstruction": To reproduce in the exact form and detail a building, structure, or artifact as it appeared at a specific period in time.
- J. "Stabilize": To apply measures designed to reestablish a weather-resistant enclosure and the structural reinforcement of an item or portion of the building while maintaining the essential form as it exists at present.
- K. "Protect and Maintain": To remove deteriorating corrosion, reapply protective coatings, and install protective measures such as temporary guards; to provide the least degree of intervention.
- L. "Repair": To stabilize, consolidate, or conserve; to retain existing materials and features while employing as little new material as possible. Repair includes patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading materials. Within restoration, repair also includes limited replacement in kind, rehabilitation, and reconstruction, with compatible substitute materials for deteriorated or missing parts of features when there are surviving prototypes.
- M. "Replace": To duplicate and replace entire features with new material in kind. Replacement includes the following conditions:
 - 1. Duplication: Includes replacing elements damaged beyond repair or missing. Original material is indicated as the pattern for creating new duplicated elements.
 - 2. Replacement with New Materials: Includes replacement with new material when original material is not available as patterns for creating new duplicated elements.
 - 3. Replacement with Substitute Materials: Includes replacement with compatible substitute materials. Substitute materials are not allowed, unless otherwise indicated.

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- N. "Remove": To detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and reinstalled.
- O. "Remove and Salvage": To detach items from existing construction and deliver them to Owner.
- P. "Remove and Reinstall": To detach items from existing construction, repair and clean them for reuse, and reinstall them where indicated.
- Q. "Existing to Remain" or "Retain": Existing items of construction that are not to be removed and that are not otherwise indicated to be removed and salvaged, or removed and reinstalled.
- R. "Material in Kind": Material that matches existing materials, as much as possible, in species, cut, color, grain, and finish.

1.05 SUBMITTALS

- A. Submit Contractor Qualifications as listed in Quality Assurance section below.
- B. Work Description. Submit work description detailing proposed methods and operations for removal of elements, cataloging, and transportation of items to off-site storage, protection of elements in storage, and protection of elements to remain on site.
- C. Off-site Storage Facilities. Submit detailed description of building and/or other areas proposed for storage of removed historic elements. Include location, size, physical attributes, security techniques and procedures and other pertinent information relating to the storage of salvaged elements.
- D. Shop Drawings. Submit shop drawings of proposed methods and operations of protection procedures for review prior to the commencement of work.
- E. Mock-up: Prepare on-site mock-up of proposed protection at the following areas for review by the Preservation Architect prior to the commencement of work:
 - 1. Protection at interior wall and floor surfaces.
 - 2. Protection at existing window and door openings following removal of windows and doors.
 - 3. Protective barrier between work area and non-work area.
- F. Alternative Methods and Materials: If alternative methods and materials to those indicated are proposed for any phase of work, provide a written description including evidence of successful use on other, comparable projects, and program of testing to demonstrate effectiveness for use on this Project.
- G. Photographs: Document the condition of all existing historic elements and the adjoining construction and site improvements, including finish surfaces, which might be misconstrued as damage caused by historic treatment operations. All photographs to be taken with 35mm SLR camera and submitted before work begins.

1.06 QUALITY ASSURANCE

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- A. Contractor Qualifications: All work shall be performed by skilled contractors having not less than five (5) years satisfactory experience in comparable protection, salvage and removal operations including work on at least two (2) projects similar in scope and scale to this project.
- B. Contractor is hereby directed to recognize the value and significance of the building and exercise special care during the work to ensure that the existing building, its details, materials and finishes which are to remain are not damaged by the work being performed.
- C. Contractor shall be responsible for protection of all existing materials and components to remain in place throughout the duration of construction. Extent of protection is to cover all historic elements to remain that are in the vicinity of construction activities, or may be harmed by the movement of materials through the building and project site, whether specifically called out on the drawings, or not. It is the Contractor's responsibility to provide any additional protection required to prevent soiling and damage to existing finishes and elements to remain. All questionable protection requirements should be identified for Preservation Architect's review. In the event of damage, such items shall be repaired or replaced by the contractor at his expense, to the satisfaction of the Architect and Owner.
- D. Protection is to be secured adequately so as to maintain a safe environment for workers throughout the duration of the project.

1.07 PROJECT-SITE CONDITIONS

- A. Exterior Cleaning and Repairing:
 - 1. Proceed with the work only when forecasted weather conditions are favorable.
 - a. Wet Weather: Do not attempt repairs during rainy or foggy weather. Do not apply primer, paint, putty, or epoxy when the relative humidity is above 80 percent. Do not remove exterior elements of structures when rain is forecast or in progress.
 - b. Do not perform exterior wet work when the air temperature is below 40 deg F.
 - c. Do not begin cleaning, patching, or repairing when there is any likelihood of frost or freezing.
 - d. Do not begin cleaning when either the air or the surface temperature is below 45 deg F unless approved means are provided for maintaining a 45 deg F temperature of the air and materials during, and for 48 hours subsequent to, cleaning.
 - 2. Perform cleaning and rinsing of the exterior only during daylight hours.
- B. Owner will occupy portions of building immediately adjacent to historic treatment area. Conduct historic treatment so Owner's operations will not be disrupted. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.
- C. Coordinate the performance of work of this section with related or adjacent work. Removal and protection of items shall be completed prior to commencement of demolition or new

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construction activities in each area. At a minimum, install protection in its entirety for a given area prior to commencement of any demolition activities in that given area.

- D. At the end of each working day, or during inclement weather, cover work exposed to weather with waterproof coverings, securely anchored.
- E. Protection of historic elements shall remain in place for the duration of the entire project.
 - 1. Do not store construction materials on or inside of protection.
- F. Ensure safe passage of persons around areas of protection. Conduct operations to prevent injury to adjacent buildings, structures, other facilities and persons.

PART 2 - PRODUCTS

2.01 PROTECTION MATERIALS

- A. Polyethylene sheets: 4 mil.
- B. Lumber: Species to be selected by contractor, sizes to fit field conditions. All lumber to be fire retardant.
- C. Plywood: ½ inch, ¾ inch or 1-inch fire retardant, as required.
- D. Soft Fiberboard: Homasote Company, Box 7240, West Trenton, NJ 08628. (800) 320-5532.
 - 1. ½ inch homasote 440.
 - 2. ½ inch homasote NCFR for applications requiring fire ratings.
- E. Neoprene: ¼ inch or ½ inch strips, stock lengths.
- F. Ethafoam: ½ inch thickness with a density of 2.3 to 3.3 pounds/cubic foot
- G. Semi-rigid polyurethane foam sheets: 2-inch and 4-inch thick, as required.
- H. Brown paper: Kraft paper
- I. Non-abrasive glassine paper
- J. Preservation tape: 3M Scotch brand, number 4811.
- K. Sealant: Removable acrylic sealant.
- L. Accessories: Galvanized or stainless steel (type 304 or 316) fasteners, nails, screws, bolts, anchors or other devices required to complete installation, sizes as required.

PART 3 - EXECUTION

3.01 GENERAL

- A. Historic Elements to remain in-situ:

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1. Install protection in its entirety before commencement of demolition or other work that may harm historic elements.
2. Protect all building elements to remain in place during construction that may be damaged by construction activities. In the event of new damage, Contractor is to notify the Preservation Architect and Owner's Representative immediately as to the nature and extent of damage and the proposed method for repair. Contractor shall be responsible for repairs and replacement of newly damaged items by qualified specialists to the satisfaction of the Preservation Architect and the Owner's Representative, at no additional cost to the Owner. Be aware that the inherent value of an historic original element is higher than the value of a modern replication of that element.
3. Do not attach protection materials directly to building elements.
4. Secure protection adequately so as to maintain a safe environment for workers and other individuals using the building throughout the duration of the project.

B. Elements to be removed for salvage:

1. Disassemble, label, catalog, handle, transport and store building elements which have been identified for salvage. Contractor is responsible for handling, transporting and storage of the items in the storage facility.
2. Catalog all salvage elements that have been removed on an artifact log. At a minimum, document element type, unique number, size, configuration, quantity, condition, original location, disposition and location in storage.
3. Store all salvage elements in a neat, orderly fashion to allow for access and retrieval. Store like type elements together in groups. Store particularly fragile elements in a manner to prevent damage while in storage.

3.02 PREPARATION

- A. Remove all debris and impediments to allow for full access as required to perform protection of historic elements, and for demolition and construction. Protect all historic elements from damage during the removal procedures as specified.
- B. Verify condition of the off-site facility to ensure that there is adequate capacity and access to store and retrieve salvage elements.
- C. Transport items to the off-site facility as often as necessary to avoid stockpiling items on site.

3.03 INSTALLATION OF PROTECTION

A. General:

1. Alternative methods to specified protection may be acceptable if equal or greater protection is provided. Submit alternate methods to the Architect for review. Do not proceed with alternate methods until approvals are secured.

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2. Protection is to be constructed primarily of wood 2 x 4 framing members to box out elements to be protected, or to construct barriers in front of elements to be protected.
 3. Protection may be required to remain in place for the duration of the project. Protection may have to be removed during the project for access to protected elements, etc. If protection is temporarily removed, reinstall after work is complete and maintain protection throughout the duration of the project.
 4. Extent of protection covers all historic elements that will remain during construction, whether specifically called out on the drawings or not. Temporary protection may be required in areas to perform specific work activities. All questionable protection requirements should be identified for the Preservation Architect's review.
 5. All protection assemblies shall be self-supporting and self-bracing. Do not attach protection directly to historic elements.
- B. Floors, all materials in primary path of construction travel. Defined as those areas that will experience a high level of traffic with finish materials that require a high level of protection care.
1. Vacuum floor surface of all loose dust and debris. Cover entire pathway surface with Kraft paper, then with ½ inch fiberboard covered by 1 sheet of polyethylene and ½ inch plywood. Fasten edges to prevent slippage. Tape all polyethylene edges to create a watertight seal. Stagger edges of materials with joints below to provide a uniform flush surface.
- C. Protection at window and door openings.
1. Construct and install a weatherproof barrier at all window and door openings immediately following removal of existing window or door. At each opening, leave protection in place and maintain weatherproof seal until installation of new window or door. Barrier shall be constructed of plywood and lumber and shall not be fastened directly to building.
- D. Plaster wall and horizontal surfaces. Defined as those areas that will experience a high level of traffic with finish materials that require a high level of protection care.
1. Cover with ½" homasote and plywood screwed to shoring braces. Provide neoprene pads glued to braces that are in contact with historic elements. Locate braces out of the path of travel and out of construction areas to the greatest extent possible.
- E. Interior and exterior masonry.
1. Cover concrete and terra cotta with 1/2-inch sheet of ethafoam to absorb impact, 2" thick semi-rigid polyethylene, then 1/2-inch fiberboard or plywood to protect against impact damage. Fasten edges to prevent slippage.

3.04 CLEAN-UP

- A. All residue and debris from protection work is to be removed from existing construction leaving the premises clean and neat.

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END OF SECTION