

SPECIAL CONDITIONS

1. The Contractor shall examine the site and all conditions thereon and shall take into consideration all such conditions as may affect the work under the contract.
2. The Contractor shall have a valid Montana Contractor's License.
3. The Contractor shall warrant and guarantee all work performed under this Contract for a period of two (2) years from the date of substantial completion, unless the work has been abused by or neglected by the staff of the Montana Fish, Wildlife and Parks.
4. Damage: Any work damaged by failure to provide adequate protection shall be removed and replaced at the Contractor's expense. Any damage to any existing structures or landscaping caused by the Contractor or their negligence shall be their obligation to repair at no cost to the Owner.
5. Toilets: The Contractor may supply their own toilet facilities and can use the Park sanitary facilities with coordination with the Park Manager.
6. Clean-up: The Contractor shall remove all temporary protection and all debris attributed to the execution of the Contract.
7. Demolition and construction waste must be removed from the site each day or placed in Contractor furnished waste receptacles. The Owner's waste receptacles shall not be use by the Contractor. Construction waste includes nails generated by the removal of the old siding.
8. The Contractor shall be responsible for all building permits, fees, and licenses required for the work in this Contract.
9. Telephone: The Contractor shall provide a cellular telephone for the project superintendent's use and provide the Engineer or Project Representative with the phone number.
10. The Contractor or workman shall not park private vehicles or equipment in parking spaces designated for visitor or employee use. Designated parking for the Contractor, workmen, and equipment shall be determined by the Park Manager.
11. The contractor shall not drive vehicles or equipment on the yard areas or off established roads unless approved by the Owner's project representative or Park Manager. Damage to the landscape areas shall be repaired by the Contractor at no cost to the Owner.
12. The Contractor shall use an approved staging and storage area for materials. Materials purchased by the contractor may be compensated on a monthly basis provided the material has been approved through the submittal process, insurance coverage is provided, and an invoice is provided.
13. The contractor shall provide all security measures necessary to assure the protection of equipment, material sin storage, completed work and the project in general.

14. The Contractor shall schedule work between the hours of 7:00 a. m. to 7:00 p.m. on working days Monday through Friday, any adjustments to this schedule must be approved by the Owner's project representative. Saturday and Sunday work may be allowed if approved by the Owner.
15. Undesirable language and other such devices are hereby specifically prohibited on the project site.
16. Radios and loud conversation will not be allowed on the project.
17. Use of tobacco products and other controlled substances on the project site is not permitted.
18. Due to "Bannack Days", a popular event that generates a large amount of visitorship, work will not be allowed from July 12, 2021 through July 25, 2021. Any work underway should be carefully secured to discourage the public from interfering.

END OF SECTION

**Montana Fish, Wildlife & Parks
Bannack Historic Church Siding**

SPECIFICATIONS FOR WORK

SECTION 011000- Summary
SECTION 014121 - Historical Site Work
SECTION 015000 - Temporary Facilities and Controls
SECTION 070150 - Preparation for Re-siding
SECTION 070160 - Exterior Staining and Transparent Finishing
SECTION 073115 - Wood Clapboard Siding

SECTION 011000 - SUMMARY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Project information.
2. Work covered by Contract Documents.
3. Access to site.
4. Coordination with occupants.
5. Work restrictions.
6. Specification and drawing conventions.
7. Miscellaneous provisions.

B. Related Requirements:

1. Division 01 Section "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.
2. Division 01 Section "Historical Site Work" for procedures governing work on historic facilities.

1.2 PROJECT INFORMATION

A. Project Identification: Bannack State Park – Historic Church Siding Project

1. Project Location:

721 Bannack Road,
Dillon, MT 59725

Latitude/Longitude: (45.1606846 / -112.994215)

B. Owner: State of Montana Fish Wildlife & Parks.

1. Owner's Representative:

Randi Rognlie, Project Manager
State of Montana Fish, Wildlife and Parks
Design & Construction Bureau.
1522 Ninth Avenue
Helena, Montana
Phone: (406) 841-4019
Cell: 406-431-9797

WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and consists of the following:
1. The work consists of removing and replacing clapboard wood siding on the historic Methodist Church in Bannack.
 2. All work associated with the re-siding project and included in these specifications shall be considered incidental, including but not limited to: the wood siding, the transparent stain, fasteners, existing siding removal & disposal, new siding installation, site protection, and associated work.
 3. It is the contractor's responsibility to confirm dimensions and layout for quantifying materials. The un-treated siding material will be provided by the contractor. The contractor is responsible for application of the specified transparent stain.
- B. Type of Contract.
1. Project will be constructed under a single prime contract.

1.4 ACCESS TO SITE

- A. General: Contractor shall have limited use of project site for construction operations as indicated by requirements of this Section.
- B. Staging Area: Designated area for Contractor is in the Park maintenance yard or as otherwise approved by Park Management.
- C. Use of Site: Limit use of Project site to work in areas of re-siding. Do not disturb portions of Project site beyond areas in which the Work is indicated.
1. Keep the building entrances clear and available to Owner, Owner's employees, the public, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of this site by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
 - c. Do not drive vehicles or equipment on the grounds around the buildings or off established roads unless approved by the Park Manager. It is understood that pneumatic- wheeled equipment such as a manlift may be necessary to drive onto the site to perform the work. Any damage to the ground area around the buildings shall be repaired by the Contractor at no cost to the Owner.
- D. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair any damage caused by construction operations.

1.5 COORDINATION WITH OCCUPANTS

- A. Owner Occupancy: Owner will occupy site on a part time basis during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate safe Owner and Public usage. Perform the Work so as not to interfere with Owner's day-to-day operations.
 - 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and approval of authorities having jurisdiction.
 - 2. Notify Owner not less than 72 hours in advance of activities that will affect Owner's operations.

1.6 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
- B. On-Site Work Hours: Project work will be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday. Additional hours or working days are subject to Owner approval with prior notice. Contractor must give Owner a minimum of two (2) days' notice for working hours outside of those indicated above.
- C. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.
 - 1. Notify Owner not less than two days in advance of proposed disruptive operations.
 - 2. Undesirable language and other such devices such as excessively loud radios and conversation are hereby specifically prohibited on the project site.
- D. Smoking is not permitted on the site due to fragile wildfire conditions in and around Bannack. Workers may smoke in their vehicles.

1.7 MISCELLANEOUS PROVISIONS

- A. Crews must be supervised at all times by a competent superintendent.
- B. The old siding may be piled in the Park's burn pile at the direction of the Park Manager for burning by the Park at a later date. If anything except *wood siding* and nails are found in the siding waste, the contractor will be required to haul all generated project waste off-site and dispose it at a landfill.
- C. See Special Conditions.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 014121 – HISTORICAL SITE WORK

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Historical Site Preservation.

1.2 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.
- B. Historic items, relics, antiques, and other items of interest or value to Owner that may be uncovered during operations remain the property of Owner.

PART 2 - SITE AREAS

2.1 SITE AREA REQUIREMENTS

- A. Refer to Division 01 – “Summary” for a description of the work and other site requirements.

PART 3 - EXECUTION

3.2 HISTORICAL SITE PRESERVATION

- A. Original Condition: The Contractor shall keep historical sites in original conditions or return to original conditions when applicable at Owners approval. This includes but is not limited to the following:
 1. Historical building(s) shall be kept in as-is condition. Necessary construction in or on those buildings shall be done in a neat and workman like manner. Accumulated debris shall be cleaned each day to the condition the building was found in and to the satisfaction of the Park Management.
 2. It is expected that work on the building will be done with the utmost care. Any damage encountered shall be reported immediately to the Park Management to determine the method and means of repairs.
 3. Contractor is responsible for any damages to historical buildings, sidewalks, fences or any other items of archeological significance. All costs of Contractor caused damage shall be borne by the Contractor. Careless construction will not be tolerated and will be subject to a Stop Work order and evaluation of personnel and methods involved.
 4. Any disturbed ground shall be returned to original surface condition. Contractor is responsible for any seeding. Seeding mix will be specified by Owner.
 5. Contractor is responsible for bracing building rafters/walls to enable access and movement in buildings where building integrity is of concern. Contractor is responsible to bring any integrity issues of buildings to the Owner and Engineer.

6. Contractor is responsible for taking before and after pictures of all areas and buildings where work is done. The Contractor must provide the Owner with a digital copy of both before and after pictures when the job is completed.
- B. Uncovered Artifacts: For historical sites, there is a likely probability that artifacts will be uncovered during Work.
1. If an artifact is uncovered, the Contractor is responsible to immediately notify the Park Management or onsite archaeologist.
 2. In the case of an uncovered artifact, the Contractor is expected to move ahead to another work area after notifying the proper personnel. Onsite archaeologist will need adequate time to carefully examine the artifact.
 3. It is at the archaeologist or Owner's discretion on when work can resume in the area of where the artifact was uncovered.
- C. Temporary Protection: Provide temporary barricades, signs and other protection required to prevent injury to people and damage to adjacent buildings and facilities.
1. The Park will remain open to the public during construction. Park management must be notified and updated on a routine basis as to scheduled closing and reopening of work areas. To the extent practical, Work shall be scheduled to minimize impact to the public.
 2. Provide protection to ensure safe passage of people around selective work area and to and from occupied portions of building.
 3. Protect walls, ceilings, floors, and other existing finish work that are to remain or that are exposed during selective operations. Provide protection to exterior features that are to remain, as well.
- D. Temporary Shoring: Design, provide, and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of the building that is being worked on. Historic buildings are fragile and contractors care is imperative.
- E. Remove temporary barricades and protections where hazards no longer exist.
- F. Remedy property damage: The Contractor shall promptly remedy damage and loss to property caused in whole or in part by the Contractor, a Subcontractor of any tier or level, or anyone employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible.

END OF SECTION 014121

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. Related Requirements:
 - 1. Division 01 Section "Summary" for work restrictions.

1.2 USE CHARGES

- A. General: Installation and removal of and use charges for temporary facilities shall be included in the Contract Sum unless otherwise indicated. Allow other entities to use temporary services and facilities without cost, including, but not limited to Owner and authorities having jurisdiction.
- B. Utilities from Existing System: The existing electrical infrastructure may be utilized by the Contractor at no cost but with coordination with Park Management.

1.3 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service.

1.4 PROJECT CONDITIONS

- A. Temporary Use of Permanent Facilities: The existing electrical infrastructure may be utilized by the Contractor however the Contractor may plan on providing portable generators. Water is available in minor quantity. Propane and other fuel is not available to the Contractor.

PART 2 - PRODUCTS

2.1 TEMPORARY FACILITIES

- A. Field Offices, General: Prefabricated or mobile units. Contractor's option- Field office not required at project site.
- B. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for construction operations. Contractor's option – Storage shed not required at project site.

- C. Toilet Facility: Locate in designated staging area, or as otherwise approved by Park Management. At this site, the Park sanitary facilities may be utilized by the Contractor.

2.2 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures. Due to fragile nature of the structures and location, the contractor must have fire extinguishers on the site daily.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed.

3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Connect to existing service.
- B. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of construction personnel or make arrangements with Park Management to use Park sanitary facilities. Comply with requirements of authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities, including any requirements related to Covid-19.
- C. Electric Power Service: Provide Contractor supplied portable generators if necessary.
- D. Telephone Service: Provide job superintendent with a cellular phone to use on the job site or away from the job site.

3.3 SUPPORT FACILITIES INSTALLATION

- A. Parking: Use area(s) designated by Owner for construction personnel.
- B. Waste Disposal Facilities: Provide covered waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. The Owner's waste receptacles shall not be used by the Contractor.
- C. Lifts and Hoists: Provide facilities necessary for hoisting materials and personnel.
 - 1. Truck cranes and similar devices used for hoisting materials are considered "tools and equipment" and not temporary facilities.

3.4 SECURITY AND PROTECTION

- A. Contractor is solely responsible for security and protection of all temporary facilities, equipment and materials stored on site.
- B. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities, and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities caused by Contractor.
- C. Environmental Protection: Provide protection, operate temporary facilities, and conduct construction as required to comply with environmental regulations and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- D. Tree and Plant Protection: Protect vegetation from damage from construction operations. Replace vegetation damaged from work in this Contract. Replace damaged trees and plants as directed by the Project Representative at no cost to the Owner.
- E. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses.

3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Termination and Removal: Remove each temporary facility when need for its service has ended. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

END OF SECTION

SECTION 070150 - PREPARATION FOR RE-SIDING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Siding tear-off.

1.2 SUBMITTALS

A. Contractor shall submit to the Owner the following information at least 5 business days prior to starting work:

1. Procedures for protecting site features which may be impacted by the re-siding project.
2. Procedures to allow a safe working environment for FWP employees and continued service to the public.
3. Fastener removal management, clean-up procedures, and disposal container locations.

1.3 PERMITS

- A. Contractor will be responsible to obtain and pay for all necessary permits to complete the work.
- B. Copies of the permit(s) shall be provided to the Owner before the start of any work.

1.4 PROJECT CONDITIONS

- A. Conduct re-siding so Owner's operations will not be disrupted. Provide Owner with not less than 72 hours' notice of activities that may affect Owner's operations.
- B. Protect building to be re-sided adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from reroofing operations.
- C. Weather Limitations: Proceed with re-siding preparation only when existing and forecasted weather conditions permit work to proceed without water entering existing wall system or building.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SIDING TEAR-OFF

- A. General: Notify Owner each day of extent of siding tear-off proposed for that day.
- B. Contractor to only remove existing siding materials as specified on the Drawings.

3.2 DECK PREPARATION

- A. Inspect wall system after tear-off of siding.
- B. If broken or loose studs or framing that secure siding are observed or if framing appears or feels inadequately attached, immediately notify Owner's representative. Do not proceed with installation until directed by Owner's representative. Minor work to re-secure framing or support in areas where fasteners are needed is allowed without prior approval.
- C. If siding surface is not suitable for receiving new siding or if structural integrity of the wall framing is suspect, immediately notify Owner's representative. Do not proceed with installation until directed by Owner's representative.

3.3 EXISTING EXTERIOR MATERIALS

- A. Do not remove or replace any soffit, fascia, sill plate, skirting, frieze board, window or door trim or framing or corner boards unless directed by the Owner's Representative.
- B. Notify Owner if any soffit, fascia, sill, skirting, frieze board, window or door trim and framing or corner boards are deteriorated. Removal and replacement may be ordered as additional work if deemed necessary.

3.4 FASTENER REMOVAL AND COLLECTION

- A. Contractor will be required to control the collection of removed fasteners and minimize the amount that may land onto sidewalks, landscaped areas, and gravel/paved parking areas. Control procedures may consist of using tarps or other means to collect the fasteners as the existing roofing materials are removed.
- B. Contractor will be required to inspect the grounds at the end of each workday and at the end of the project completion for stray fasteners. Magnets or other collection devices should be used to properly collect fasteners. Owner will inspect and approve the clean-up areas at the end of the project before final payment will be approved.

3.5 DISPOSAL

- A. All materials removed become the property of the Contractor and therefore is responsible for disposal and removal from the site. Demolition and construction waste must be removed from the site each day or placed in covered waste receptacles furnished by the Contractor. The Owner's waste receptacles shall not be used by the Contractor. See burn pile notes on plans.
- B. The function of the buildings continued use by employees, and service to the public will require the Contractor to clean the grounds on a daily basis, and not allow removed materials to accumulate on the landscaped grounds, sidewalks, or parking areas.
- C. Transport and legally dispose of demolished materials off Owner's property.
- D. Contractor shall remove all temporary protection and all debris attributed to the execution of the Contract subject to Owner's final acceptance.

END OF SECTION

SECTION 070160 – EXTERIOR STAINING AND TRANSPARENT FINISHING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes surface preparation and application of wood stains and transparent finishes.

- 1. Exterior Substrates:

- a. Exposed glued-laminated beams and columns.
- b. Exposed framing.
- c. Wood boards
- d. Wood-based panel products.
- e. Wood decks and stairs.
- f. Wood shingles and shakes (excluding roofs).
- g. Wood siding

1.3 DEFINITIONS

- A. FLP: Forest Products Laboratory
- B. USDA: United States Department of Agriculture
- C. Dovetails and Broad Axes-Hands On Guide to Cabin Preservation: the USDA guide document for historic cabin preservation, publication no. 0E02A43.
- D. MPI: Master Painter's Institute.

1.4 ACTION SUBMITTALS

- A. Product Data: Three product ingredients are needed for the FPL Water-Repellent Log Oil Mix. For each product, include product data from manufacturer.
- B. Samples for Initial Selection: None Needed
- C. Samples for Verification: For the finish system, provide mock-up in-lieu of sample for approval prior to coating and installation.

1.5 MAINTENANCE MATERIAL SUBMITTALS

1. None Needed

1.6 QUALITY ASSURANCE

- A. Formula application must generally maintain consistent visual appearance. Parks management and Project Representative will inspect periodically for conformity.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store materials per manufacturer's requirements in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 degrees and not more than manufacturer's specifications. Flammable products must be stored in a location acceptable to Bannack State Park Management.
 1. Maintain containers in clean condition, free of foreign materials and residue.
 2. Remove rags and waste from storage areas daily. Due to combustibility, do not leave rags and waste on-site unless stored in metal/fireproof container away from other flammable materials.

1.8 FIELD CONDITIONS

- A. Apply finishes only when temperature of surfaces to be finished and ambient air temperatures are above 50 deg F.
- B. Do not apply finishes to damp or wet surfaces.
- C. Do not apply exterior finishes in snow, rain, fog, or mist.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Boiled Linseed Oil: Sunnyside Corporation 872G5, or equal.
- B. Paraffin Wax: Gulf Wax™ or equal.
- C. Solvent/Mineral Spirits: Sunnyside Low Odor Mineral Spirits 803G1, or equal.
- D. Substitutions: Requests for substitution will be considered in accordance with the General Conditions 3.4 "Labor, Wages and Materials". When submitting requests for substitution, provide complete product data specified for each substitute product.

2.2 MATERIALS, GENERAL

- A. SDS information sheets must be kept on-site for FLP ingredients.
- B. Following are applicable excerpts from the USDA publication describing the FLP application and ingredients. When “logs” are referenced, the same application is true for wood siding. The full report can be found at https://www.fs.fed.us/t-d//pubs/pdfpubs/pdf15232802/1523-2802_Dovetails+Broadaxes_Sec508_08-09-17_WEB_150dpi.pdf

Modern wood preservatives and water-repellent coatings aren’t appropriate for treating the wood in a historic log cabin. People sometimes treated the logs or wood roofing of historic cabins with a combination of paraffin wax, plant-based oil, and solvent to help protect the wood. The oil protects the wood and the paraffin wax repels water. The FPL developed an effective formula of this historic log treatment Using Paint, Stain, and Oil during the 1970s that you may use to recoat cabin logs. Although this formula is the most effective treatment for logs that aren’t painted or stained, it has a strong smell and is sticky and extremely flammable. Table 3 shows the formula:

Table 3—Formula for Making FPL Water-Repellent Log Oil Mix.

Ingredients	For 1 gallon	For 5 gallons
Boiled linseed oil	½ gallon	2½ gallons
Paraffin wax	1 ounce	4–5 ounces
Solvent (mineral spirits or turpentine)	Add to make 1 gallon	Add to make 5 gallons

To make the mix, start by grating the paraffin with a cheese grater. Ensure that the solvent is at room temperature. Slowly stir the grated paraffin into the solvent, mixing vigorously to dissolve the wax. Add the linseed oil, again stirring until the consistency is uniform. Then, add the solvent and stir to mix thoroughly.

If possible, mix only as much FPL log oil as you can use in a day to avoid having to store this very flammable mixture. If you must store the FPL log oil at low or freezing temperatures, the ingredients may separate. You can reheat the formula to room temperature and stir it to a uniform mixture once again.

When you apply FPL log oil, wear appropriate PPE that prevents skin and eye contact; the solvents are toxic.

Start by applying a light coat of FPL log oil with a pump sprayer or brush. Apply the FPL log oil the full length of each log in a continuous application. If you stop in the middle of a log and come back later, you will create a visible line where the two applications meet, as occurs with most paints and stains. Unlike with paints and stains, the FPL log oil line fades as the log returns to its normal color. If the FPL log oil doesn’t absorb evenly right away, use a brush to spread the coating evenly over the surface to prevent a splotchy appearance.

If you use a pump sprayer to apply FPL log oil, use a disposable one; the sprayer will gum up within a day and you will have to discard it. If you use brushes to apply FPL log oil, use inexpensive ones and discard them whenever they get too sticky.

Properly discard all brushes, containers, pumps, and rags that you use to apply or clean up FPL log oil mix. Rags soaked with FPL log oil mix can spontaneously combust because the oil releases heat as it oxidizes. Either lay the rags flat in a single layer until they cure (become dry and hard) and then throw them in the trash, or store them in an airtight metal container until you can remove them from the site and dispose of them or have them commercially cleaned.

2.3 SOURCE QUALITY CONTROL

- A. Testing of Materials: Owner reserves the right to invoke the following procedure:
 - 1. Owner may direct Contractor to stop applying wood finishes if test results show materials being used do not comply with product requirements. Contractor shall remove noncomplying materials from Project site, pay for testing, and refinish surfaces finished with rejected materials. Contractor will be required to remove rejected materials from previously finished surfaces before refinishing with complying materials if the two finishes are incompatible or produce results that, in the opinion of the Project Representative, are aesthetically unacceptable.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Exterior Wood Substrates: 19 percent, when measured with an electronic moisture meter.
- C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.
- D. Proceed with finish application only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Manual" applicable to substrates indicated. Provide example to Project Representative if any sanding or brushing of substrate is needed. Due to the historic nature of the wood siding replacement, little substrate preparation is expected.
- B. Remove hardware, covers, plates, and similar items already in place that are removable. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and finishing.
 - 1. After completing finishing operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.

- C. Clean and prepare surfaces to be finished for each substrate condition and as specified.
 - 1. Remove dust, dirt, oil, and grease by washing with a detergent solution; rinse thoroughly with clean water and allow to dry. Remove grade stamps and pencil marks by sanding lightly. Remove loose wood fibers by brushing.
 - 2. Remove mildew by scrubbing with a commercial wash formulated for mildew removal and as recommended by stain manufacturer.

3.3 APPLICATION

- A. Apply finishes according to manufacturer's written instructions and recommendations in USDA publication 0E02A43 for FPL wood treatment.
 - 1. Use applicators and techniques suited for finish and substrate indicated.
 - 2. Finish wood siding and boards on all sides and ends and allow to cure prior to installation.
 - 3. Finish ends of fresh cuts prior to installation.
- B. Apply finishes to produce surface films without cloudiness, holidays, lap marks, brush marks, runs, ropiness, or other surface imperfections.

3.4 ACCESSORIES

- A. Coating Application Accessories: Provide all primers sealers, cleaning agents, cleaning cloths, sanding materials, and clean-up materials required, per manufacturer's specifications.

3.5 CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing finish application, clean spattered surfaces. Remove spattered materials by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces. Do NOT dispose of ingredients onto the ground or in waterways.
- C. Protect work of other trades against damage from finish application. Correct damage by cleaning, repairing, replacing, and refinishing, as approved by Project Representative, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced finished wood surfaces.

END OF SECTION 070160

SECTION 074623 – WOOD SIDING

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Wood Siding Products including the following:

1. Wood siding.
2. Wood boards.

1.2 RELATED SECTIONS

A. Section 070150 – Preparation for Re-siding.

1.3 REFERENCES

A. American Softwood Lumber Standard 20-20

1.4 SUBMITTALS

A. Submit under provisions of Section General Conditions 3.12 – Shop Drawings, Product Data and Samples.

B. Product Data: Manufacturer's data sheets on each product to be used, including:

1. Preparation instructions and recommendations.
2. Storage and handling requirements and recommendations.
3. Installation methods.

C. Selection Sample: provide one 4'-0" length piece of siding representative of the siding product. Provide a sample of the nails to be used. **This is a historical building and the sample must be approved before proceeding with milling.**

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Minimum 5-year experience harvesting and milling forest products.

B. Installer Qualifications: Minimum 2-year experience installing similar products.

C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship. Mock-up may be in-place and remain as part of the finish product.

1. Finish areas designated by Project Representative.

2. Do not proceed with remaining work until workmanship is approved by Project Representative.

1.5 PRE-INSTALLATION MEETINGS

A. Convene minimum two weeks prior to starting work of this section.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation. If custom milled, deliver and store products in packaging and method prescribed by manufacturer.

B. Handling: Handle materials to avoid damage.

1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.8 SEQUENCING

A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturers: Manufacturer must produce material in accordance with these specifications. Local sawmills may be acceptable to manufacturer the siding.

B. Substitutions: Not permitted.

C. Requests for substitutions will be considered in accordance with provisions of General Conditions Section 3.4.2 – Labor, Wages and Materials.

2.2 WOOD SIDING

A. Material: Fir or Larch.

B. Moisture Content: 19% or less.

C. Style: Clapboard, Non-Beveled Siding: Re-sawn Face.

1. 1/2 inch x 6 inches, straight butt
2. Minimize joints and optimize joint arrangements.

3. Grade shall be No. 2 or better, but no holes or bark.
4. Set carpentry work to required levels and line, with members plumb and true to line and cut.
5. Nailed, not joined or glued.
6. Boards that are warped, bowed, cupped, twisted or crooked may not be used.

2.3 WOOD BOARDS

- A. Material: Fir or Larch, 19% or less moisture content.
- B. Boards: Select Knotty or #2 or better. Do not mix grades.
 1. Size to match replacement, straight butt.
 2. Nailed, not joined or glued.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify Project Representative of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions, unless historic restoration dictates differently.

3.3 INSTALLATION

- A. Install in accordance with plans and specification, paying attention to historic restoration details.
- B. Ends exposed due to post-manufacturing field cuts shall be painted or sealed with the same specified wood treatment for all wood on job.
- C. Use specified fasteners: Hardened, ungalvanized, cut or chiseled masonry nails. Size appropriate for use but not less than 2". Nails shall be driven flush without hammer divot.
- D. Joints shall fall over framing lumber and shall be double-nailed. Trim boards of 10 inches (254 mm) or greater in width require 3 nails evenly spaced across the face of

the board. Do not nail any less than 1/2 inch from any edge and fasten at a minimum of every 16 inches on center.

- E. Drive nails perpendicular to the framing lumber and the wood trim product; drive nails flush with the product's surface. Nails shall penetrate at least 1-1/4 inches (32 mm) into the structural framing.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION