# SCOPE OF WORK
# CARL PMIS #344715

## Repair Maintenance Shed

## Carl Sandburg Home National Historic Site

**PROJECT LOCATION**

Carl Sandburg Home National Historic Site, Henderson County, Flat Rock, North Carolina 28731

**OVERVIEW**

On September 28th, the equipment storage shed sustained significant damage due to Hurricane Helene. Two large trees fell through the roof of the building, completely cutting through the entire roof structure resulting in damage to three garage bay doors, electrical wiring, and causing substantial structural damage to the asphalt shingle roof. The trees have been removed but some debris and all damage to the structure remain and now this project will replace the entire roof and repair the remaining damaged areas of the shed.

The shed was constructed in 1985 to support park operations as part of the maintenance yard complex. The shed provides storage space for vehicles and materials out of the elements, but the structure is not a conditioned space. The overall dimensions of the building are 146-feet long by 25-feet wide by 18-feet high and the wood framed structure sits on a concrete slab.

This contract encompasses the removal and replacement of approximately 4500 square feet of asphalt architectural 30-year shingles and #30 underlayment. It includes the repair or replacement of damaged plywood sheeting, flashing, and drip edge, as well as the installation of roof underlayment. Additionally, the contract covers the removal and replacement of approximately 150 linear feet of gutter with downspouts and the installation of approximately 150 linear feet of gutter guards on the maintenance equipment storage shed. Furthermore, this contract will address the repair of three commercial garage bay doors, including hardware, and the restoration of all wiring damaged by fallen trees.

This contract pertains to the repair and restoration of an equipment storage shed damaged by Hurricane Helene. The work includes three main areas:

- Complete replacement of the asphalt shingle roof and gutters
- Replacement of three commercial garage bay doors
- Electrical repairs to light fixtures, wiring, and junction boxes
- Repairs to exterior walls, siding, and windows.

**SUMMARY OF SCOPE OF WORK**

**Task 1 – Remove and replace roof**

This item consists of:

1. Remove and dispose of all existing asphalt shingles and underlayment off-site.

2. Replace all damaged plywood roof decking/sheathing.
3. Install new roofing underlayment, drip edge, flashing, vent collars, and new 30-lb asphalt shingles on the entire roof.

**Task 2 – Replace damaged roof trusses and fascia boards and install new gutters and downspouts**

This item consists of:

1. Remove and replace all damaged and missing prefabricated wood trusses.
2. Remove and replace all additional roof framing wood boards and blocking including ridge beam spacing boards, and longitudinal bracing boards.
3. Remove all damaged fascia boards and install new wood fascia boards.
4. Remove all gutters and downspouts and install new galvanized steel gutters including new hangers and gutter guards and new downspouts.

**Task 3 – Replace and repair structural beams, wall framing, exterior siding, window,**

This item consists of:

5. Remove damaged header beams between steel columns and replace with new wood joists.
6. Replace damaged wall framing along east (rear) wall of shed to include framing for window.
7. Install new window in east wall to match existing.
8. Replace damaged siding along east wall with new T1-11 siding to match existing siding.
9. Replace damaged exterior cedar tongue-and-groove siding on the front of the shed above the garage bay doors.

**Task 4 – Remove and replace garage bay doors, overhead lighting, and repair electrical**

This item consists of:

1. Remove and haul away three damaged sectional doors, hardware, and operators.
2. Furnish and install three (3) new Sectional Steel Doors and three (3) new medium-duty trolley operators.
3. Install three (3) new photo eye systems on each new door system for enhanced safety.
4. Repair the damaged electrical conduit and electrical boxes and outlets and test electrical circuits to confirm functionality.
5. Install new LED overhead light to match existing interior overhead bay lighting.

**WORK AND PRODUCT REQUIREMENTS**

1. GENERAL: All work must be meet the requirements of the most recent editions of the International Building Code, National Electric Code, and the National Fire Protection Association codes. See Photos section at the end of this document for photos of the existing conditions.
2. Existing site condition photos and drawing sheets are provided at the end of this scope.
3. ROOF
    a. The existing roof is a gabled roof measuring approximately 146 feet long by 25 feet wide. The roof has a 4:12 pitch. Remove and dispose of all existing shingles and

underlayment. Remove and dispose of all skylights. New or existing skylights will not be reinstalled. Existing roofing sheathing that is undamaged may be reused and must be protected in place while other construction activities occur. Remove existing damaged trusses nineteen (19) while preserving adjoining structure. Install nineteen (19) new roof trusses (replicate the existing trusses in terms of truss shape and size of wood elements). Install 2x6 wood spacers at ridge line between trusses. Install new wood 2x4 longitudinal bracing (lateral restraints) at rafter level to match existing undamaged wood bracing Install new fascia boards to replace damaged sections of fascia boards (fascia boards are 1x8 pine and approximately 150 lineal feet need to be replaced). Install new 1/2" thick plywood to replace the damaged or missing roof sheathing. Nails used and nailing patterns for new sheathing shall meet all current IBC codes. Install a metal drip edge around the entire perimeter of the roof.

b. Roof Trusses:
    i. Prefabricated wood Fink trusses, nominal size 2x6 top and bottom chords, with webbing consistent with standard Fink truss design to match existing trusses.
    ii. Spacing: 24 inches on center to match existing truss spacing.
    iii. Lumber Grade: Minimum #2 SPF (Spruce-Pine-Fir) or better.
    iv. Metal Connectors: Galvanized steel truss plates meeting ANSI/TPI 1 standards
    v. Contractor shall stabilize trusses until work is completed.
    vi. Provide manufacturer's certification for trusses
c. Roof Decking:
    i. Inspect entire roof deck for damage or rot. Assume 10% of the existing roof deck will need to be replaced due to water damage or rot. This does not take into account the area where the trees fell through the shed or the patches where the existing skylights are not being reinstalled.
    ii. Install new ½" plywood roof decking in damaged locations and where trees fell through the roof.
    iii. Patch plywood roof decking where 8 skylights were removed.
        1. Ensure damaged decking is removed back to clean edges and new decking is secured to trusses.
d. Shingle roof requirements:
    i. Architectural shingles with interlocking tabs, ridge cap shingles, and starter strip shingles.
    ii. Color: Dark Gray. Contractor must submit the color options and a physical sample of the roof color for approval by the contracting officer.
    iii. Roofing fire rating: UL class A, Listed to ANSI/UL 790
    iv. Wind-Resistance-Test Characteristics: ASTM D 3161 or UL 997, passed.
    v. Use hot-dipped galvanized roofing nails, minimum 1 ¼" length or per manufacturer's instructions. Do not use staples.
    vi. 30-year warranty: Provide standard manufacturer's written warranty, signed by manufacturer agreeing to promptly repair or replace asphalt shingles that fail in materials within 30 years from date of Substantial Completion, prorated, with first 5 years non-prorated. Contractor must submit all warranty paperwork as part of the closeout submittals. The contract will not be deemed complete until all documentation is received.
e. Underlayment: Asphalt saturated felt roofing underlayment.
    i. Must meet or exceed all requirements of ASTM D226 and ASTM D4869
    ii. Weight: Type II (30-pound felt)

iii. Moisture vapor permeance: Maximum of 0.1 perms per ASTM E96

f. Flashing and waterproof vent collars
   i. Install new flashing along roof ridge and around roof penetrations.
   ii. Flashing to be minimum 26-gauge galvanized steel or equivalent corrosion-resistant metal.
   iii. Integrate flashing with underlayment to ensure watertight seal.
   iv. Install new waterproof vent collars.

g. Drip Edge
   i. Install new galvanized steel drip edge along the entire perimeter of the roof.
   ii. Drip edge to extend at least 2 inches over fascia board and overlap minimum 2 inches at joints.
   iii. Color: Brown to match existing.
      1. COR shall approve color selection.

h. Fascia Boards:
   i. Replace approximately 150-feet of damaged or rotted 1x8 pine fascia board.
   ii. Use an exterior rated 100% acrylic paint. Paint must be self-priming, UV resistant, and mildew resistant. VOC content must be less than 50 grams/liter. Volume of solids must be a minimum of 42% and weight of solids must be a minimum of 58%. Apply 2 coats. Select color to match the existing fascia color.

4. GUTTERS AND DOWNSPOUTS
   a. Remove the existing gutters and downspouts from the front of the maintenance shed. No materials will be reused.
   b. Install approximately 150 linear feet of new galvanized steel gutters with hangers at 3-ft on center.
      i. Size: 5-inch, K-style
      ii. Color: Brown to match existing color scheme
         1. COR shall approve color selection
   c. Install approximately 150 ft of galvanized steel gutter guard screens.
      i. Size: Fit 5-inch, K-style gutters
      ii. Color: brown or black
         1. COR shall approve color selection
   d. Install four (4) new galvanized steel downspouts along the front of the shed to drain new gutters. Locations for the downspouts are one downspout on either corner of the front of the maintenance shed and then one each at approximately ¼ inward from each corner. The location and configuration is to match the existing layout.
      i. Size: 3x4-inch rectangular
      ii. Color: Brown, same coating and finish as gutters.
         1. COR shall approve color selection
      iii. Downspouts will be secured to round metal and concrete columns. Secured using galvanized or stainless-steel straps and brackets at maximum 5-foot intervals.

5. STRUCTURE AND FRAMING
   a. Header Beam
      i. Replace two (2) 12-foot sections of damaged or missing header beams. One is located above the opening to one of the garage bays and one is at the back of the building
      ii. Beams consist of 2x6” double floor joists. Pressure treated pine.
   b. Exterior wall framing

i. Replace a 6-ft section (floor to roof) of exterior wall framing along back of shed. Include framing for window. Rough opening size for window is approximately 55 ¼" x 48" to match existing windows.
ii. Pressure treated pine lumber

c. Install new T1-11 siding on back wall over new framing. Replace damaged portion of siding will full size T1-11 sheet.
i. Use an exterior rated 100% acrylic paint. Paint must be self-priming, UV resistant, and mildew resistant. VOC content must be less than 50 grams/liter. Volume of solids must be a minimum of 42% and weight of solids must be a minimum of 58%. Apply 2 coats. Select color to match the existing exterior siding.
ii. Install trim board where T1-11 sheets join to match existing trim board.

d. 1x6" cedar tongue-and-groove siding
i. Replace damaged sections above garage bay doors. Cedar siding is on front of shed.

6. GARAGE DOORS
a. Remove three (3) damaged garage doors including all tracks and openers. Equipment and materials will not be reused.
b. "Overhead Door" Sectional Steel Doors, Model 432, or approved equal.
c. Install three (3) new sectional steel garage doors to match existing doors. Garage doors shall meet the following salient characteristics:
i. 2" panel thickness
ii. Nominal 24-gauge ribbed galvanized steel exterior
iii. Polystyrene insulation (R-value: 7.35)
iv. Standard 2" track
v. 10,000 cycle springs

d. Install new track and bracing for each new garage door system.
e. Install three (3) new Commercial protector system photo electric eyes for each new garage door
i. NEMA 4 rated
ii. Meet or exceed UL 325 safety standards

f. Install three (3) new Lift Master, or equal, garage door openers
i. Medium duty, commercial grade, including all necessary brackets, supports, and wiring for reliable operation.

g. Adjust and test all doors and operators to ensure proper operation and safety compliance.

7. ELECTRICAL
a. Remove all damaged wiring, conduit, boxes, and light fixture
b. Install new junction boxes at accessible ceiling points.
c. Run new wiring from junction boxes to fixture locations.
d. Install one (1) new overhead LED light fixture to match existing.
i. Optilumen LED Driver Model YHOU-40-C960A1, or equal
1. Voltage: 90-277v, 50-60Hz

e. Perform function and safety testing of all electrical circuits. All work shall be performed by a licensed electrician.
f. Ensure compliance with local electrical codes.

8. WINDOW
a. Install new window along back wall to match existing windows.

b. Window shall be a wood double casement style and have a white vinyl clad exterior and pine interior with stone colored hardware.
c. Rough opening size is approximately 55 ¼" x 48".
d. Install new framing to support window.
e. The Contractor is required to field-verify and match the existing window dimensions prior to installation.

**SUBMITTALS**

1. Submittal Procedures

    a. Prepare and submit the required submittals (see lists below) plus any additional submittals that are necessary for the execution of this project. Transmit each submittal using National Park Service transmittal form CM-16, which can be obtained from the Contracting Officer. Note: submittals must be delivered electronically (except for physical submittals such as product samples). The transmittal form must be filled out and signed by the Contractor before being submitted. For product data sheets and other submittals that include information on various models or product lines, the Contractor must highlight, redline or clearly indicated which specify product the Contractor is proposing to use. The submittals that fail to comply with the above information will be rejected and returned without review.

    b. Processing Time: Allow enough time for submittal review, including time for re-submittals, as follows. Time for review shall commence on Contracting Officer's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including re-submittals.

        i. Initial Review: Allow 15 business days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required.

        ii. Re-submittal Review: Allow 15 business days for review of each re-submittal.

2. Approved Equals

    a. For each item proposed as an approved equal, submit supporting data, including:
        i. Drawings and samples as appropriate.
        ii. Comparison of the characteristics of the proposed item with that specified.
        iii. Changes required in other elements of the work because of the substitution.
        iv. Name, address, and telephone number of vendor.
        v. Manufacturer's literature regarding installation, operation, and maintenance.
    b. A request for approval constitutes a representation that Contractor:
        i. Has investigated the proposed item and determined that it is equal or superior in all respects to that specified.
        ii. Will provide the same warranties for the proposed item as for the item specified.
        iii. Has determined that the proposed item is compatible with interfacing items.
        iv. Will coordinate the installation of an approved item and make all changes required in other elements of the work because of the substitution.
        v. Waives all claims for additional expenses that may be incurred as a result of the substitution.
3. Contractors Review: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions.

4. Contracting Officer's Action: Contracting Officer or his/her authorized representative will review each submittal, make marks to indicate corrections or modifications required, and return one copy.
5. Shop Drawings, Product Data, and Samples

    a. As specified in the individual sections, forward submittals to the Contracting Officer at least fifteen (15) business days before need for approval.
    b. After approving submittals, Contracting Officer will return one copy to the Contractor.
    c. If submittals are not approved, Contracting Officer will return one copy to Contractor with reasons for rejection. Resubmit and identify changes.
6. Manufacturer's Installation Instructions - When contract documents require compliance with manufacturer's printed instructions, provide one complete set of instructions for Contracting Officer and keep another complete set of instructions at the project site until substantial completion.

**Submittals Due Before the Pre-Construction Meeting:**

1. Letter designating the Project Superintendent
2. Proposed construction schedule
3. Schedule of values
4. Accident prevention plan
5. A list of Subcontractors for this project
6. Written statements from subcontractors certifying compliance with applicable labor standard clauses
7. Satisfactory evidence of liability insurance coverage and workman's compensation for the Contactor and all subcontractors
8. Waste management plan
9. Quality control plan
10. Temporary Storm Water Pollution

**Required Construction Submittals:**

1. Roof Trusses
2. Asphalt shingles
3. Underlayment
4. Roof accessories – Ridge cap, flashing material, drip edge, vent collars
5. Proof of Required Experience of Roofing Installer
6. Gutters and downspouts
7. Gutter guard
8. Garage doors
9. Garage door trolley operators
10. Garage door photo eyes
11. Window
12. Overhead LED light
13. T1-11 Siding
14. Wood paint product data sheet
15. Wood paint sample
16. Wood sealer/stain product data sheets
17. Wood stain/sealer sample

**CONTRACTOR'S USE OF PREMISES**

1. Construction Camp: Establishment of a camp within the park will not be permitted.
2. Storage of Materials: All materials, equipment, and vehicle parking shall be staged within the staging area designated by Contracting Officer at the time of the preconstruction meeting.
3. Keep job site clear of trash and debris. Dispose of any trash, debris and other unusable material legally at authorized facilities on non-Federal land.
4. Use of Site: Do not disturb portions of project site beyond areas in which the work is indicated.
5. Government Occupancy: Allow for Government occupancy of Project site.
6. Driveways and Entrances: Keep driveways and entrances serving premises clear and available to Government, Government's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials. The maintenance complex driveways and parking areas will remain in active use during the construction project.
7. Use of Existing Building: Maintain existing building in a weathertight condition throughout construction period. Protect all portions of the building that are not part of the work of this contract. Contractor must repair damage caused by construction operations at no cost to the government. The maintenance shed houses equipment, vehicles, and materials that personnel will need to access on a daily basis. Ensure that proper safety measures are in place throughout construction to protect occupants and visitors during construction period.
8. Hauling Restrictions: Comply with all legal load restrictions in the hauling of materials. Load restrictions on park roads are identical to the state load restrictions with such additional regulations as may be imposed by the Park Superintendent. Information regarding rules and regulations for vehicular traffic on park roads may be obtained from the Office of the Park Superintendent. A special permit will not relieve Contractor of liability for damage which may result from moving of equipment.
9. Access to the site is on a historic gravel driveway. Vehicles shall stay on the driveway and not drive onto the shoulder or damage the driveway in any way. Damage must be repaired immediately in coordination with the Contracting Officer at no cost to the government.

**PRESERVATION OF NATURAL RESOURCES**

1. Prevent damage to natural surroundings. Restore damaged areas, repairing or replacing damaged trees and plants, at no additional expense to the Government. If revegetation is necessary due to construction activities, contact the Contracting Officer and Chief of Resource Management regarding the seed that must be used. Seeds must be weed free. No hay can be used in the park.
2. Provide temporary barriers to protect existing trees and plants and root zones.
3. Do not remove, injure, or destroy trees or other plants without prior approval. Consult with Contracting Officer and remove agreed upon roots and branches that interfere with construction.
4. Do not fasten ropes, cables, or guys to existing trees.
5. Carefully supervise excavating, grading, filling, and other construction operations near trees to prevent damage.
6. Care shall be taken not to disturb any wildlife species. Contractor shall immediately notify the Contracting Officer if removal of wildlife from the project area is required, and the park will handle the relocation of wildlife.
7. Work area shall be cleaned daily, and all debris and litter shall be properly secured in an appropriate receptacle.
8. Prior to moving equipment to Project Area and starting construction operations, the Contractor must ensure that all equipment has been pressure washed and is free of soil, seeds, vegetative

matter, or other debris that could contain or hold seeds Equipment shall be considered free of soil, seeds and other such debris when a visual inspection does not disclose such material. Disassembly of equipment components or specialized inspection tools is not required. Contractor must notify the Contracting Officer at least 2 days prior to moving any equipment onto the Project Area. Notification will include identifying the location of the equipment's most recent operations. The Contractor must arrange for the Contracting Officer Representative, Ryan Williams, at (828) 699-0264, to inspect each piece of equipment prior to it being placed into service. The Contractor is required to provide a minimum of five (5) days' advance notice to schedule the inspection.

9. Workers must ensure that work in the landscape around the building does not lead to erosion. If ground disturbance may cause erosion, workers must deploy erosion control measures.

**WORK RESTRICTIONS**

1. On-Site Work Hours: Work shall be generally performed during normal business working hours of 7:00 am to 5:00 pm, Monday through Friday, except as otherwise arranged with Contracting Officer. Ten-hour workdays may be allowed with written approval from the Contracting Officer. Weekend and holiday work shall be avoided and will only be allowed with written approval from the Contracting Officer.
2. Roof Loads: When placing materials or equipment on the roof, Contractor shall not impart loads on the roof in excess of 40 pounds per square foot unless approved by the Contracting Officer or his authorized representative in advance.
3. Avoid Soil Compaction
    a. Avoid compaction from heavy equipment to surrounding area by keeping equipment inside the limits of work specified above. If work outside the limits is necessary, do so only when the soil is dry.
    b. Compacted soils must be ripped or decompacted post construction to enable vegetation.
    c. All disturbances must be returned to grade and any tracks from equipment must be raked out.
4. Existing Utilities
    a. Notify Contracting Officer and utility companies of proposed locations and times for excavation.
    b. Contractor shall be responsible for locating and preventing damage to known utilities. If damage occurs, repair utility at no additional expense to the Government.
    c. If damage occurs to an unknown utility, repair utility. An equitable adjustment will be made in accordance with the Changes clause of the contract.
5. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Government or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated.
    a. Notify Contracting Officer not less than two days in advance of proposed utility interruptions.
    b. Do not proceed with utility interruptions without Contracting Officer's written permission.

**FIELD VERIFICATION**

1. Field verify all new and existing dimensions affecting the work of this contract before ordering products.
2. The locations of existing utilities shown on drawings are approximate. Contractor shall field verify location of all existing utilities.

**TEMPORARY FACILITIES AND CONTROLS**

1. Storage and Fabrication Sheds: Temporary weather tight sheds or other covered facilities for storage of materials subject to weather damage. Number and size of structures shall be subject to Contracting Officer's approval.
2. Toilets for Construction Personnel: Provide temporary toilet for use by construction personnel.
    a. Sufficiently lighted and ventilated toilet facilities in weatherproof, sight proof, sturdy enclosures with privacy locks. Maintain and clean at least weekly. The temporary toilet shall be located within the contractor's staging area in a location approved by the Contracting Officer.
3. Temporary Utilities
    a. General: Install temporary service or connect to existing service. Arrange with utility company, National Park Service, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.
    b. Potable water is available on site within the maintenance yard area, but the maintenance shed does not have water. Make connections to existing facilities as needed. Facilities must be cleaned and maintained in a condition acceptable to the National Park Service. At Substantial Completion, restore these facilities to condition existing before initial use.
        i. Water from existing water system is available for use without metering and without payment of use charges. Contractor must provide connections and extensions of services as required for construction operations.
    c. Electric Power Service: Use of existing electric power service will be permitted, as long as equipment is maintained in a condition acceptable to the National Park Service. When temporary connections are removed, restore existing utility services to their original condition.
        i. Electric Power Service: The electrical system within the maintenance shed project site is locked out due to the damage to the system. There is currently no power at the project site and the contractor will need to provide a generator for temporary power until electricity can be safely restored to the site.
        ii. Once restored, electric power from existing system is available for use without metering and without payment of use charges. Contractor must provide connections and extensions of services as required for construction operations.
        iii. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
    d. Telephone Service: No telephone service is available on site for Contractor's use. Contractor is responsible for confirming whether reliable cell phone coverage is available at the project site. Cell phone coverage is generally semi-dependable within the boundary of the park.
4. Security and Protection of Facilities
    a. Tree and Plant Protection: Install temporary fencing outside the drip line of trees to protect vegetation from damage from construction operations. Protect tree root systems from damage, flooding, and erosion.

b. Site Enclosure Fence: Furnish and install orange safety barrier fencing with T-posts around the construction area and staging area in a manner that will prevent people from easily entering construction area.
c. Barricades, Warning Signs, and Lights: Comply with requirements of MUTCD, part IV, 2003 edition for erecting structurally adequate barricades, including warning signs and lighting.
d. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations, and similar activities. Provide temporary weathertight enclosure for building exterior.
e. Temporary Fire Protection: Install and maintain temporary fire-protection controls of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
    i. Responsible Person: A capable and qualified person shall be placed in charge of fire protection. The responsibilities shall include locating and maintaining fire protective equipment and establishing and maintaining safe torch cutting and welding procedures.
    ii. Smoking: Smoking within buildings or temporary storage sheds is prohibited.
    iii. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of National Park Service and any Authorities Having Jurisdiction. Check with park; many require burn permits for welding.
    iv. Hazard Control: Take all necessary precautions to prevent fire during construction. Provide adequate ventilation during use of volatile or noxious substances.
    v. Spark Arresters: Equip all gasoline or diesel-powered equipment used during periods of potential fire hazards or in potential forest and grass fire locations with spark arresters approved by the USDA Forest Service.
f. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
    i. Buildings: Furnish a minimum of one extinguisher for each 1,500 square feet of area or major fraction thereof.
    ii. Travel distance from any workstation to the nearest extinguisher shall not exceed 75 feet.
    iii. Vehicles and Equipment: Provide one extinguisher on each vehicle or piece of equipment.
g. Spill Protection
    i. Contractor shall store hazardous materials in accordance with manufacturers and OSHA 29CFR1926 Subpart D requirements. Maintain readily available, on site, MSDS/Safety Data Sheets (SDS) for each chemical.
    ii. Immediately report all spills of hazardous materials to the park.
    iii. Maintain a spill emergency response kit.
    iv. Train employees how to respond to a spill and use the emergency response kit.
    v. Equipment must be free of any fluid leaks (fuel, oil, hydraulic fluid, etc.) upon arrival to the work site and shall be inspected by the Contractor at the beginning of each shift for leaks. Leaking equipment shall be moved off site for necessary repairs.

5. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations.

a. Contractor must provide construction debris dumpsters for the project. No construction debris shall be left on site.

**PROJECT MEETINGS**

1. Pre-construction Conference: Before start of construction, Contracting Officer may arrange an on-site or conference call meeting with Contractor. The following submittals shall be provided before the Preconstruction Conference:
    a. Letter designating the Project Superintendent.
    b. Proposed construction schedule.
    c. Schedule of values.
    d. Accident prevention plan.
    e. A list of Subcontractors for this project.
    f. Written statements from subcontractors certifying compliance with applicable labor standard clauses.
    g. Satisfactory evidence of liability insurance coverage and workman's compensation for the Contactor and all subcontractors.
    h. Waste management plan.
    i. Quality control plan.
2. Progress Meetings: The Contracting Officer may schedule weekly meetings with the Contractor and subcontractors. The meeting agenda may include the following:
    a. Submittal status.
    b. Review of off-site fabrication and delivery schedules.
    c. Requests for information (RFI) and other issues.
    d. Modifications.
    e. Work in progress and projected.
    f. Construction Schedule update.
    g. Status of Project Record Drawings and O&M manuals.
    h. Other business relating to work.

**SCHEDULES**

After contract award and before the Pre-Construction Conference submit:

1. Schedule of Values
    a. Breakdown each lump-sum item into component parts of work for which progress payments may be requested. The total costs for the component parts of work shall equal the contract price for that lump-sum item. The Contracting Officer may request data to verify accuracy of dollar values. Include mobilization, general condition costs, overhead and profit in the total dollar value of unit price items and in the component parts of work for each lump-sum item. Do not include mobilization, general condition costs, overhead or profit as a separate item.
    b. Do not break down unit price items. Use only the contract price for unit price items.
    c. The total cost of all items shall equal the contract price. The Schedule of Values will form the basis for progress payments.

d. An acceptable Schedule of Values shall be agreed upon by the Contractor and Contracting Officer before the first progress payment is processed.

2. Construction Schedule
    a. Prepare a list of all activities required to complete the Work. Prepare a skeleton network to identify probable critical paths.
    b. Identify milestones in schedule including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion.
    c. Upon acceptance of the Construction Schedule by the Contracting Officer, the Construction Schedule will be used to evaluate the Contractor's monthly applications for payment.

**SAFETY REQUIREMENTS**

1. Description: The work consists of establishing and implementing an effective accident prevention program and providing a safe environment for all personnel and visitors. Contractors shall maintain activities and site in accordance with OSHA regulations, NFPA 241, as well as other applicable local and state requirements for safety. Adequate egress shall be maintained at all times in accordance with NFPA 241 (Standard for Safeguarding Construction, Alteration, and Demolition Operations).
2. Submittals
    a. Accident Prevention Plan - The Plan shall be written to comply with OSHA and project requirements including but not limited to the following:
        i. Name of responsible supervisor to carry out the program.
        ii. Weekly safety meetings.
        iii. First aid procedures.
        iv. Outline the work and associated hazards, and the methods proposed to ensure property protection and safety of the public, National Park Service personnel, and Contractor's employees.
        v. Planning for possible emergency situations.
        vi. Fire Protection.
        vii. Fall protection plan.
        viii. Measures planned for the protection of park visitors and employees from objects falling from the roofs.
        ix. Crane and or lift plans for hoisting prefab roof trusses.
3. Qualification of Employees
    a. Ensure that employees are physically qualified to perform assigned duties in a safe manner.
    b. Do not allow employees to work whose ability or alertness is impaired because of drugs, fatigue, illness, intoxication, or other conditions that may expose themselves or others to injury.
    c. Operators of vehicles, mobile equipment, hoisting equipment, and hazardous plant equipment shall be able to understand signs, signals, and operating instructions, and be capable of operating such equipment. Provide operating instructions for all equipment.
4. Accident Reporting
    a. Reportable Accidents: A reportable accident is defined as death, occupational disease, traumatic injury to employees or the public, fires, and property damage by accident in excess of $100. Notify Contracting Officer immediately in the event of a reportable accident. Within 7 days of a reportable accident, fill out and forward to Contracting

Officer an Accident/Property Damage Report (Form CM-22). Form may be obtained from the Contracting Officer.

b. All Other Accidents: The Contractor shall report all other accidents to the Contracting Officer as soon as possible and assist the Contracting Officer and other officials as required in the investigation of the accident.

5. Personnel Protective Equipment: Meet requirements of National Institute for Occupational Safety and Health (NIOSH) and OSHA.
6. Emergency Instructions: Post telephone numbers and reporting instructions for ambulance, physician, hospital, fire department, and police in conspicuous locations at the work site.
7. Protective Equipment
    a. Inspect personal protective equipment daily and maintain in a serviceable condition. Clean, sanitize, and repair, as appropriate, personal items before issuing them to another individual.
    b. Inspect and maintain other protective equipment and devices before use and on a periodic basis to ensure safe operation.
    c. It is the Contractor's responsibility to require all those working on or visiting the site to wear hard hats and other necessary protective equipment at all times.
        i. Post a sign at the project site that identifies that the area is a “Hard Hat Area.”
        ii. Keep 2 additional hard hats on site for visitors to the project site.

**QUALITY REQUIREMENTS**

1. Testing and inspecting services are the responsibility of the Contractor and are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements. The quality of all work shall be the responsibility of the Contractor.
2. Submittals
    a. Quality Control Plan
        i. A list of personnel responsible for quality control and assigned duties.
        ii. Names, qualifications, and descriptions of laboratories to perform sampling and testing, and samples of proposed report forms.
        iii. Methods of performing, documenting, and enforcing quality control of all work.
    b. Contractor's Quality Control Daily Reports: Submit showing all inspections and tests on the first workday following the date covered by the report.
    c. Test Reports
3. Quality Assurance
    a. The Contractor's Quality Control Supervisor may also perform the duties of Project Superintendent.
    b. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
    c. Testing Agency Qualifications: An NRTL or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 329; and with additional qualifications specified in individual Sections; and where required by Contract, is acceptable to the Contracting Officer.

**TEMPORARY STORM WATER POLLUTION PREVENTION**

1. Implement measures to prevent storm water pollution during construction activities in the event there is ground disturbance from the project.
2. Before commencing construction activities, such as grading, excavation or filling in any part of the site, Contractor shall install sediment and erosion control measures. The measures shall consist of any Best Management Practices (BMPs) for storm water discharges, including but not limited to silt fencing, wattles, temporary soil retention blankets, drainage filters, sediment traps and berms.
3. Ensure erosion and sediment control structures remain effective throughout construction operations. Contractor shall perform weekly checks to ensure control structures are in proper working order.
4. Submit product data of all erosion control products the contractor plans to use on the project for approval by the Contracting Officer.

**PRODUCT REQUIREMENTS**

1. Product Delivery, Storage, and Handling: Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
2. Packaging: Where Contractor has the option to provide one of the listed products or equal, preference shall be given to products with minimal packaging and easily recyclable packaging as defined in ASTM D5834.
3. Protection After Installation: Provide adequate coverings as necessary to protect installed materials from damage resulting from natural elements, traffic, and subsequent construction. Remove when no longer needed.

**EXECUTION**

1. Examination: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Investigate and verify existence and location of utilities and other construction.
2. Coordination with Utility Service Providers: Contact utility service providers to coordinate the work, testing requirements, and inspections.
3. Preparation: Take field measurements as required to fit the work properly. Where portions of the work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication.
4. Construction Layout: Verify layout information shown on drawings. If discrepancies are discovered, notify Contracting Officer promptly.

**CONSTRUCTION AND DEMOLITION WASTE MANAGEMENT AND DISPOSAL**

1. The project shall minimize the creation of construction, deconstruction, and demolition waste to protect and restore natural habitat and resources. Factors that contribute to waste such as over

packaging, improper storage, ordering error, poor planning, breakage, mishandling, and contamination shall be minimized.

2. Dispose of excess excavated material that cannot be used in the construction outside the park.
3. Unless otherwise specified, all removed material becomes the property of the Contractor and shall be disposed of outside the park in a legal manner.
4. Required Submittal: Waste Management Plan
    a. Develop plan consisting of waste identification and waste reduction work plan. List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator.
        i. Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.
        ii. Salvaged Materials for Sale or Donation: Include a list of local receivers for materials that will be sold or donated to individuals and organizations.
        iii. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept.
        iv. Disposed Materials: Indicate how and where materials will be disposed of.

**CLOSEOUT REQUIREMENTS**

1. Submit specific warranties, guarantees, workmanship bonds, final certifications, and similar documents.
2. Submit Project Record Drawings.
    a. Maintain one complete full-size set of contract drawings and one full-size set of vendor-supplied drawings. Clearly mark changes, deletions, and additions using National Park Service drafting standards to show actual construction conditions. Show additions in red, deletions in green, and special instructions in blue.
3. Submit Operation and maintenance manuals and data.
    a. Manuals: Include a title page which includes project title, location, contract number, prime contractors name and address, and date of substantial completion. Organize each manual with a separate section for each system or product.
    b. Include manufacturer's data, vendor furnished drawings, equipment data sheets, schedules, emergency instructions, etc.
    c. Include operational requirements such as operating standards, procedures, controls, etc.
    d. Include maintenance requirements such as maintenance procedures, repair materials, warranties, reordering information, environmental requirements, etc.
4. Posted Operating Instructions: As specified in the individual sections. Furnish operating instructions attached to or posted adjacent to equipment. Include wiring diagrams, control diagrams, control sequence, start up, adjustment, operation, lubrication, shut down, safety precautions, procedures in the event of equipment failure, and other items of instruction recommended by the manufacturer.
5. Deliver tools, spare parts, and extra materials.
6. Keys and Keying Schedule: Submit all keys including duplicates.
7. Submit test and balance report.
8. Terminate and remove temporary facilities from Project site.
9. Complete final cleaning requirements, including touchup painting.
10. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

11. Instruct National Park Service personnel in operation, adjustment, and maintenance of products, equipment, and systems.

**SUBSTANTIAL COMPLETION AND FINAL INSPECTION**

1. When project is substantially complete, request, in writing, a final inspection. Upon receipt of written request that project is substantially complete, the Contracting Officer will proceed with inspection within 10 days of receipt of request or will advise the Contractor of items that prevent the project from being designated as substantially complete.
2. If, following final inspection, the work is determined to be substantially complete, Contracting Officer will prepare a Punch List to be corrected before final acceptance and issue a Letter of Substantial Completion. Contractor shall complete the work described on the Punch List within 30 calendar days, as weather permits. If the Contractor fails to complete the work within this time frame, the Contracting Officer may either replace or correct the work with an appropriate reduction in the contract price.
3. If, following final inspection, the work is not determined to be substantially complete; Contracting Officer will notify Contractor in writing. After completing work, Contractor shall request a new final inspection.
4. After all deficiencies have been corrected, a Letter of Final Acceptance will be issued.

**FINAL CLEANING**

1. Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
2. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
3. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Government property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from project site and dispose of lawfully.

**POST CONSTRUCTION INSPECTION**

1. Before expiration of warranty period, Contracting Officer will inspect project and notify Contractor in writing of all deficiencies.

# Site Map

Little River Road
Carl Sandburg Ln
Visitor Parking
(Hiker's Lot)
Employee Parking
HQ Building
Maintenance Shed
Google Earth
© 2025 Google
N
300 ft

**Maintenance Shed Roof**

**Damaged Garage Bay #1**

**Damaged Garage Bay #2**

**Damaged Garage Bay #3**

**Damaged Trusses**

**Exterior rear wall damage – location for window**

**Existing Window**

**Existing undamaged garage bays**

**Damaged header beam and cedar siding**

**Back of Maintenance Shed**

# Electrical Panel