Martin Lake Cabin Reconstruction Supply and Design
Request for Quote
Chugach National Forest, Alaska

Background and Statement of Work: The National Forest Foundation (NFF), in partnership
with the Forest Service on the Chugach National Forest, is reconstructing the Martin Lake cabin
near Cordova, Alaska. This request for quotes is for the design, purchase, and delivery of the
cabin materials.

Information Requested
If interested in this project, please provide a quote for the above statement of work by providing
approach, work experience, and cost. Please also include your capacity for this project and
efficiency in the design and purchase of cabin materials for projects in the past, if any.

This is a request for quotes only and quotations furnished are not offers. This request does not
commit the National Forest Foundation to pay any costs incurred in the preparation of
submission of the quotation or to contract for supplies or services.

General Specifications
(a) Description of Work – This Request for Quotes is for the design, fabrication, and supply
of a 16’ x 20’ cabin. This includes:

1. Design from the provided conceptual level to 100% for construction.
2. Specifications and instructions for the installation of the cabin.
3. Fabrication of complete cabin kit, excluding furniture.
4. Shipping and handling for all cabin materials to Cordova, Alaska.

The Contractor shall identify which they can supply in terms of materials, labor, equipment,
supplies, supervision, quality control, and incidentals required to complete the work
described. The Contractor shall perform all work in a safe and conscientious manner. The
Contractor shall abide by all specifications and guidelines detailed in Appendix A and B.

(b) Project Delivery Location - 913 LeFevre Street, Cordova, AK, 99574.

(c) Work Schedule - All cabin materials shall arrive in Cordova by May 31, 2024.
Other Project Requirements and Specifications

(a) **Utilities** – There will not be any sanitation, water, electrical or housing services available. The Contractor shall make its own arrangements for temporary facilities if needed.

(b) **Specifications** – Project work shall be accomplished in accordance with the specifications listed in Appendix A and B.

Contractor Qualifications

(a) **Past Experience** – Please provide a brief explanation of previous work experience with land management agencies.

Insurance Requirements

Upon selection of the winning bid, the Contractor agrees that it has and shall maintain the following insurance coverage indicated below. The effective date of all coverage shall precede the start of any work.

a. State minimum workers’ compensation insurance coverage for its employees, if any.

b. Broad form general liability, property damage, and automotive liability insurance in the minimum amount of $1,000,000 for bodily injury, death, or damage to property of any person and $2,000,000 for bodily injury, death, or damage to property of more than one person. The Contractor shall name NFF an Additional Named Insured and provide NFF with a certificate of insurance evidencing such coverages, prior to the initiation of the Scope of Services.

(c. Contractor shall provide professional errors and omissions liability insurance if its Scope of Services includes professional services. Professional services for purposes of this section include, but are not limited to performing: architecture, engineering, landscape architecture, land surveying or planning, geological investigation, interior design/space planning, preparation and signing or stamping of drawings, maps, surveys or construction specifications, consulting, or design and development of computer software, programs or websites by the Contractor or by subcontractors on behalf of the Contractor. The minimum coverage limits required are $1,000,000 for each claim and $1,000,000 annual aggregate.

Payment/Performance Security

Contractor shall post cash, a letter of credit, bond, or other financial security that is easily convertible into cash in a form acceptable to the NFF, in its sole determination, to assure completion of the work required under any subsequent agreement and payment of all amounts lawfully due to all persons supplying or furnishing to the Contractor or Contractor's subcontractors with labor, laborers, materials, rental machinery, tools or equipment used or to perform the work. Contractor may incorporate required associated costs into mobilization costs or other approved expenses.

a. Work that is classified as construction in accordance with the Miller Act or Little Miller Act or if required per conditions of the funding source, payment and performance bonding will be required in the full amount of any Agreement. For
the purposes of this Request for Proposal, construction is defined as “any contract greater than $100,000 for the construction, alteration, or repair of any public building or public work where the federal government is the owner”, or

b. If Contractor is not self-performing at least 85% of the total contract value or if the cost of materials is in excess of the larger of $100,000 or 50% of the contract total, payment and performance bonding will be required in the full amount of the agreement, or

c. If the value of the agreement is in excess of $250,000, Contractor will be required to post financial security in a form acceptable to the NFF in the amount of 5% of the total agreement value up to $250,000 in total financial security.

American Made Products. The work associated with this RFP is subject to Build America, Buy America Act. P.L. 117-58, Secs 70911-70917, and as such, domestic content procurement preference requires all iron and steel, manufactured products and construction materials used within the scope of this Agreement, be produced in the United States.

Federal Exclusion Verification
The selected Contractor will be required to affirm that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

Pricing Schedule
Contactor shall price work according to the schedule below. Prevailing wages are required per conditions of funding sources.

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Quantity</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design from the provided conceptual level (Appendix B) to 100% for construction.</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specifications, instructions and shop drawings for the installation of the cabin.</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Fabrication of complete cabin kit, excluding furniture.</td>
<td>1</td>
<td></td>
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<tr>
<td>Shipping and handling for all cabin materials to Cordova, Alaska.</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Quote Submission
Submit bids via email to mbarnwell@nationalforests.org by October 15, 2023.

Contractor Selection Process
The NFF will use the Evaluation Factors below to review each submitted bid. Based on the outcomes of that selection process, the NFF will notify successful and unsuccessful bidders by November 15, 2023, and will prepare a separate contract document.

- Price
- Previous Work History
- References

Point of Contact
For questions about the details of producing the bid, please contact:

Kenzie Barnwell
National Forest Foundation Chugach Stewardship Coordinator
907-416-1064
mbarnwell@nationalforests.org
APPENDIX A

Specifications

FOR

US Forest Service Alaska Region
Martin Lake Public Use Cabin

August 14, 2023
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<td>SUBMITTALS/DESIGN AFTER AWARD</td>
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<td>TERMS, ABBREVIATIONS, ACRONYMS, AND DEFINITIONS</td>
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## DIVISION 6 - WOOD AND PLASTICS

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<td>FASTENERS AND SUPPORTS</td>
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<td>06100</td>
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<td>06200</td>
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<td>07412</td>
<td>PREFORMED METAL ROOFING</td>
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<td>07610</td>
<td>SHEET METAL FLASHINGS AND TRIM</td>
</tr>
<tr>
<td>07900</td>
<td>JOINT SEALERS</td>
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<th>Description</th>
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<td>FLUSH WOOD DOORS</td>
</tr>
<tr>
<td>08550</td>
<td>VINYL WINDOWS</td>
</tr>
<tr>
<td>08710</td>
<td>DOOR HARDWARE</td>
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<th>Description</th>
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<tbody>
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<td>09625</td>
<td>RESILIENT FLOORING</td>
</tr>
<tr>
<td>09930</td>
<td>STAINING AND TRANSPARENT FINISHING</td>
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</tbody>
</table>
SECTION 00015

LIST OF DRAWINGS

PART 1 - DRAWING SET

G-01  COVER SHEET
S-01  CONCEPTUAL STRUCTURAL PLANS AND DETAILS
A-01  CABIN FLOOR PLAN AND SECTION
A-02  CABIN EXTERIOR ELEVATIONS
A-03  DECK AND RAMP LAYOUT
A-04  CABIN FURNITURE LAYOUT
A-05  FURNITURE DETAILS - BUNKS
A-06  FURNITURE DETAILS - SHELVING
A-07  FURNITURE DETAILS - TABLE
A-08  FURNITURE DETAILS - BENCHES
SECTION 01110

SUMMARY OF WORK

PART 1 - GENERAL

1.01 DESCRIPTION

A. The National Forest Foundation (NFF), in partnership with the Forest Service on the Chugach National Forest, is reconstructing the Martin Lake cabin near Cordova, Alaska. This specification is for services related to the design and purchase of the cabin materials, including the following:

Base Bid work includes the design, fabrication, and supply of a 16’ x 20’ cabin. This includes:
   a. Design from the provided conceptual level to 100% FOR CONSTRUCTION.
   b. Specifications and instructions for the installation of the cabin.
   c. Fabrication of complete cabin kit, excluding furniture.
   d. Shipping and Handling for all cabin materials to Cordova, Alaska.

B. Provide shop drawings, construction details, assembly instructions and other submittals to illustrate all aspects of the proposed cabin design and assembly procedure. The submittal for review and approval by NFF or approved designee will be made prior to commencing fabrication of the cabin kit.

C. Base the submittals upon the attached drawings for a standard Forest Service cabin, with modifications made where necessary to accommodate design requirements. All suggested modifications to the standard Forest Service cabin plans are subject to review and approval by NFF. The design will comply with all applicable current building codes.

1.02 QUALITY ASSURANCE

A. Shop drawings shall bear the stamp of an Alaska registered Architect or Professional Engineer. Calculations shall be prepared and stamped by a Professional Engineer registered in the State of Alaska.

B. The proposed shop drawings shall conform substantially with the design drawings provided for bid by the Government. All proposed variations shall conform with applicable design codes and are subject to approval by NFF.

C. Ensure that all aspects of the finished structures and site improvements meet International Building Code of the International Code Council requirements and the applicable standards of accessibility as outlined in the Forest Service Outdoor Recreation Accessibility Guidelines (FSORAG) and Architectural Barriers Act Accessibility Standards (ABAAS).

PART 2 - PRODUCTS

2.01 DEFINITIONS

A. "Material" includes all lumber, windows, doors, hardware, fasteners, millwork, roofing, flooring, etc.

2.02 CABIN DESCRIPTION: This section describes the cabin elements that are included in this contract. See also Specification Sections and Drawings.

US FOREST SERVICE

01110 - 1
A. Cabin Configuration

1. Cabin Kit Style
   T&G Timbers, Alaska Yellow Cedar (acceptable), Alaska Cedar (acceptable), Western Red Cedar (acceptable), Port Orford Cedar (acceptable) ___X____

   Alaska Yellow Cedar shall be dried and graded in accordance with Western Wood Products Association (WWPA).
   Alaska Cedar shall be dried and graded in accordance with West Coast Lumber Inspection Bureau (WCLIB).
   Western Red Cedar shall be dried and graded in accordance with WWPA (Western Cedars).

2. Floor Plan (for determining locations and sizes of windows and doors) As Shown on drawings A-01 and A-02.

3. (select one) No Loft ___X__  Half Loft _____  Full Loft ___

B. Structural Design Values

<table>
<thead>
<tr>
<th>Design Parameter</th>
<th>Value</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>Risk Category</td>
<td>II</td>
<td>ASCE 7-22, Table 1.5-1 for All other buildings</td>
</tr>
<tr>
<td>Ground Snow Load</td>
<td>160 psf</td>
<td>Estimated using SEAA snow data</td>
</tr>
<tr>
<td>Floor Live Load</td>
<td>40 psf</td>
<td>Per ASCE 7-22, Table 4.3-1 for Residential Areas</td>
</tr>
<tr>
<td>Wind</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic Wind Speed</td>
<td>159 mph</td>
<td>Per ASCE 7-22 Hazard Tool, for Risk Category II</td>
</tr>
<tr>
<td>Exposure Category</td>
<td>D</td>
<td>ASCE 7-22, 26.7</td>
</tr>
<tr>
<td>Seismic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Class</td>
<td>D</td>
<td>ASCE 7-22, Table 20.1 for little known soil data</td>
</tr>
<tr>
<td>$S_{MS}$</td>
<td>1.89</td>
<td>ASCE 7-22, ASCE 7 Hazard Tool</td>
</tr>
<tr>
<td>$S_{M1}$</td>
<td>2.26</td>
<td>ASCE 7-22, ASCE 7 Hazard Tool</td>
</tr>
<tr>
<td>$S_5$</td>
<td>1.78</td>
<td>ASCE 7-22, ASCE 7 Hazard Tool</td>
</tr>
<tr>
<td>$S_1$</td>
<td>0.80</td>
<td>ASCE 7-22, ASCE 7 Hazard Tool</td>
</tr>
<tr>
<td>Presumptive Soil Bearing Capacity</td>
<td>2,000 psf</td>
<td>IBC 2021, Table 1806.2 for GM/SM.</td>
</tr>
</tbody>
</table>

C. Cabin First Floor Material

1. Cabin flooring, first floor (select one)
   Tuf Tread Industrial Panel or Skid Guard Industrial Panel X__
   2x6 T&G SPF (Spruce, Pine or Fir) __________
E. Windows and Doors

1. Window frame type (select one) Wood _____ Vinyl _X_

2. Window glazing type (select options) Low E X____ Double Pane X____ Tempered X____

2. Door material (select one) Wood _X____ Fiberglass w/ wood texture____

   Door style (select one) Standard _X_ Dutch ____

   Window on top of door? Yes X (picture window – no dividers) No ____ (except where shown as “required” on elevation view drawings)

F. Roof Color

1. Roof color (select one) Forest Green ____ Brown _X_ (Submit color sample to NFF for approval prior to purchasing)

G. Insulation

1. Floor insulation Yes _X_ If yes, give R-value _R-20 (equivalent to 4” XPS foam board)_

   No _____

2. Ceiling insulation Yes _X_ If yes, give R-value _R-20 (equivalent to 4” XPS foam board)_

   No _____

H. Government Furnished Property. The Forest Service will provide the furniture, site work, and installation services.

PART 3 - EXECUTION

3.01 PREPARATION OF MATERIALS FOR SHIPMENT

A. Package all materials to protect from damage, including inclement weather.

END OF SECTION
SECTION 018113
DESIGN AFTER AWARD

PART 1 – GENERAL

1.01   DESCRIPTION

A.   Major submittal items include:

1) Cabin shop drawings based on the provided design drawings and specifications.

   Cabin shop drawings and specifications approved by NFF or approved designee during
   performance of this contract shall supersede any conflicting government-supplied design
   specifications for same structures.

   Note that a cabin “kit” meeting specified design requirements may be acceptable.

2) Product certifications of type, quality, and color as specified herein.
3) Complete instructions for the assembly and construction of the cabin in its entirety.

Submittals shall be approved by NFF or approved designee. The Contractor shall not purchase,
order, ship, install, or otherwise incur costs for a product or other work subject to submittal approval
until after approval is granted by NFF or approved designee. The government or NFF shall not be
responsible for payment for any work, product, design, etc., not approved.

Rejection of any submittal by NFF or approved designee constitutes notice that a resubmittal is
required for the same purpose; rejections shall be explained.

PART 2 – PRODUCTS

2.01   STAMPED SHOP DRAWINGS

A.   Within three weeks of receipt of Notice to Proceed, the Contractor shall submit to NFF
preliminary drawings to establish the style, layout, size, materials, and initiate design
customization.

B.   Following initial submission of the preliminary drawings, the Contractor shall provide unlimited
iterations and customization to NFF and USFS to ensure the final layout/design is satisfactory.

C.   Within six weeks of a preliminary plan being approved, the Contractor shall submit to NFF final
shop drawings, structure calculations and other instructions for review. These submissions shall
clearly illustrate, at minimum, the following:

1) Scaled drawings showing the elevation views of each side of each structure and associated
   elements (decks, porch, etc.).

2) Scaled drawings of floor plans.

3) Scaled structural drawings to include floor and roof framing plans.

4) A complete list of materials to be supplied by the Contractor.

5) Manufacturer’s specification sheets for all products and materials including windows, doors,
   roofing, and insulation.

6) Assembly instructions and construction detail drawings for all cabin elements such as walls,
window installations, insulation, deck with guardrail, porch deck and roofing with roof supports, structural accommodations for wood and oil stoves.

7) Structural design values
8) Structural calculations
9) Proposed method of shipment and delivery date.

D. The contractor's proposed shop drawings shall conform substantially to the conceptual Drawings and project specifications provided by NFF; however, the contractor's proposed interior cabin wall dimensions may be increased slightly to conform to kit requirements if a cabin kit is proposed. If cabin width increases, propose a matching width increase for front deck. Proposed deviations from the drawings and specifications shall be highlighted in the proposed shop drawing submittal.

E. All proposed variations shall conform to applicable building codes.

F. Shop drawings shall bear the stamp of an Alaska registered Architect or Professional Engineer. Calculations shall be prepared and stamped by a Professional Engineer licensed in the state of Alaska.

G. NFF shall review the submittal and within 21 calendar days provide a written response to the contractor outlining any corrections to the proposed working drawings. The Contractor shall then have 14 calendar days to submit the corrected shop drawings to the NFF for approval.

PART 3 – NOT USED

END OF SECTION
SECTION 014200

TERMS, ABBREVIATIONS, ACRONYMS, AND DEFINITIONS

PART 1 – GENERAL

1.01 ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AASHTO</td>
<td>American Association of State Highway and Transportation Officials</td>
</tr>
<tr>
<td>ABA</td>
<td>Architectural Barriers Act</td>
</tr>
<tr>
<td>AGGR</td>
<td>Aggregate</td>
</tr>
<tr>
<td>AQ</td>
<td>Actual Quantities</td>
</tr>
<tr>
<td>AS</td>
<td>Aggregate Surfacing</td>
</tr>
<tr>
<td>ASTM</td>
<td>American Society for Testing and Material</td>
</tr>
<tr>
<td>AWPA</td>
<td>American Wood Preservers Association</td>
</tr>
<tr>
<td>CL</td>
<td>Centerline</td>
</tr>
<tr>
<td>CO</td>
<td>Contracting Officer</td>
</tr>
<tr>
<td>DQ</td>
<td>Design Quantities</td>
</tr>
<tr>
<td>EA</td>
<td>Each</td>
</tr>
<tr>
<td>FFE</td>
<td>Finished Floor Elevation</td>
</tr>
<tr>
<td>FSORAG</td>
<td>Forest Service Outdoor Recreation Accessibility Guidelines</td>
</tr>
<tr>
<td>HR</td>
<td>Hour</td>
</tr>
<tr>
<td>LF</td>
<td>Linear Feet</td>
</tr>
<tr>
<td>LS</td>
<td>Lump Sum</td>
</tr>
<tr>
<td>LSQ</td>
<td>Lump Sum Quantities</td>
</tr>
<tr>
<td>MW</td>
<td>Miscellaneous Work</td>
</tr>
<tr>
<td>NFF</td>
<td>National Forest Foundation</td>
</tr>
<tr>
<td>NW</td>
<td>No Work</td>
</tr>
<tr>
<td>NBS</td>
<td>National Bureau of Standards</td>
</tr>
<tr>
<td>PS</td>
<td>Product Standard issued by the U.S. Department of Commerce</td>
</tr>
<tr>
<td>SHT</td>
<td>Sheet</td>
</tr>
<tr>
<td>WCLIB</td>
<td>West Coast Lumber Inspection Bureau</td>
</tr>
<tr>
<td>WWPA</td>
<td>Western Wood Products Association</td>
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</table>

END OF SECTION
SECTION 05500
METAL FABRICATIONS

PART 1 GENERAL

1.01 SECTION INCLUDES
   A. Miscellaneous Metals

1.02 REFERENCES
   A. American Society for Testing and Materials (ASTM)
      1. ASTM A36 – Structural Steel
      2. ASTM A153 – Zinc Coating (Hot-Dip) on Iron and Steel Hardware
   B. Steel Structures Painting Council (CCPC)

1.03 FIELD MEASUREMENTS
   A. Verify that field measurements are correct.

PART 2 PRODUCTS

2.01 MATERIALS
   A. Plates: ASTM A283
   D. Shop and Touch-Up Primer: SSPC 15, Type 1, red oxide.
   E. Touch-Up Primer for Galvanized Surfaces: Zinc rich type.

PART 3 EXECUTION

   A. NOT USED

END OF SECTION
SECTION 06050

FASTENERS AND SUPPORTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. This section includes, tie down fasteners, miscellaneous connectors for rough carpentry and miscellaneous fasteners for structural connections.

1.02 CODES AND STANDARDS

A. IBC - International Building Code

PART 2 PRODUCTS

2.01 CONNECTORS

A. Acceptable Manufacturer: Simpson “Strong-Tie” or approved equal.

B. Finish: Hot Dip Galvanized. When applied against pressure treated lumber, ensure galvanization is designed for the corrosive properties of the specific chemicals used in the treated lumber.

2.02 NAILS AND BOLTS

A. In accordance with manufacturer’s recommendations.

B. Use stainless steel or Galvanized nails, bolts, and connectors in association with treated wood. When applied against pressure treated lumber, ensure galvanization is designed for the corrosive properties of the specific chemicals used in the treated lumber.

C. Provide all necessary spikes, nails, screws, and bolts for proper installation of heavy timber and rough carpentry; sizes and quantities as indicated on shop drawings. Where not indicated, provide sizes and quantities as required by International Building Code. Accessories shall include bolts with necessary nuts and washers, timber connectors, drift pins, dowels, nails, screws, spikes, straps and other metal fasteners.

D. Bolts and nuts shall conform to the specifications of ASTM A307, grade A. Washers shall be malleable iron or medium steel. Bolts shall be provided with washers under nut and head. Washers shall be provided under lag screw heads.

E. Common nails shall be round wire of standard form.

F. All hardware shall be galvanized with a minimum requirement to be in accordance with ASTM A153. Where hardware is used in wood treated with a waterborne preservative, use stainless steel hardware or hardware with extra heavy galvanizing (Z-Max).

PART 3 EXECUTION

A. NOT USED

END OF SECTION
SECTION 06100
ROUGH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Structural framing and sheathing
B. Subflooring.
C. Interior Stairs and Rails.
D. Exterior Stairs, Deck, and Ramp.
E. Woodshed.

1.02 RELATED SECTIONS
A. Section 05500 – Metal Fabrications
B. Section 06200 – Finish Carpentry

1.03 REGULATORY REQUIREMENTS
A. Conform to International Building Code (IBC).

1.04 REFERENCES
B. PS1 – Construction and Industrial Standards
C. PS 20 – American Softwood Lumber Standard

PART 2 – PRODUCTS

2.01 MATERIALS
A. Lumber standards: Manufactured lumber to comply with PS 20 “American Softwood Lumber Standards” and with applicable grading rules of inspection and agencies certified by American Lumber Standards Committee’s (ALSC) Board of Review.
B. Factory-mark each piece of lumber with grade stamp of inspection agency evidencing compliance with grading rule requirements and identifying agency, grade, species, moisture content at time of surfacing, and mill.

2.02 DIMENSIONAL LUMBER
A. Nominal sizes are indicated, except as shown by detail dimensions. Provide actual sizes as required by PS20, for moisture content specific for each use.
B. Floor beams and other critical structural members that may become in contact with the ground shall be pressure treated to AWPA UC4B standards. Other exterior structural members shall be pressure treated to UC4A standards, at a minimum.

2.03 CONSTRUCTION PANELS
A. Construction Panel Standards: Comply with PS 1 “US Product Standard for Construction and
Industrial Plywood” for plywood panels and, for products not manufactured under PS1 provisions, with American Plywood Association (APA) “Performance Standard and Policies for Structural-Use Panels”, Form No E445.

B. Trademark: Factory-mark each construction panel with APA trademark evidencing compliance with grade requirements.

2.04 EXTERIOR DECK, STAIRS AND RAMP

A. Cedar or pressure treated (UC3B) lumber shall be used for the deck boards, stairs, and/or bullrails. Ground-contact (UC4A) pressure treated lumber with Simpson joist hangers shall be used for the deck joists and beams and stair and ramp structural members.

PART 3 EXECUTION

A. NOT USED

END OF SECTION
SECTION 06200
FINISH CARPENTRY

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Finish carpentry items
B. Wood Trim
C. Wood Door Frames
D. Wood Casings and Mouldings
E. Cabin Furniture

1.02 RELATED SECTIONS
A. Section 06100 - Rough Carpentry
B. Section 08211 - Flush Wood Doors

1.03 QUALITY ASSURANCE
A. Perform work in accordance with AWI Architectural Woodwork Quality Standards Illustrated, Custom Grade.
B. All millwork shall be kiln dried to a moisture content not to exceed 8%.

PART 2 PRODUCTS

2.01 LUMBER MATERIALS
A. All exterior trim, fascia, and soffit material will be the same as the main cabin material.
B. All interior trim, fascia, and soffit material will be the same as the main cabin material.

2.02 FASTENERS
A. Nails for trim, door jambs, window jambs, baseboard, soffits, and millwork shall be hot dipped galvanized or stainless steel, casing nails. Nailing shall be in an organized pattern.
B. Blind nail interior work insofar as possible.
C. Interior finish work shall be secured to studs, nailing blocks, grounds, etc.
D. Trim head screws with non-corrosive phosphate finish shall be used for attaching shelving, cabinets, wood trim, etc., to light gauge studs, metal door jambs or other metal backing.
E. Use galvanized nails for exterior work. Blind nail exterior work insofar as possible.

2.03 FABRICATION
A. Run trim and moldings true to profile detailed.
B. All edges of finish pieces shall be slightly eased and sanded smooth.

PART 3 EXECUTION
A. NOT USED

END OF SECTION
SECTION 07412
PREFORMED METAL ROOFING

PART 1 GENERAL

1.01 SECTION INCLUDES
   A. All labor, material, tools, equipment and services for all preformed metal roofing as indicated, in accord with the provisions of the Contract Documents.

1.02 RELATED SECTIONS
   A. Section 06100 - Rough Carpentry
   B. Section 07610 - Sheet Metals Flashings and Trim
   C. Section 07900 - Joint Sealers

1.03 REFERENCES
   D. Cold-Formed Steel Design Manual, American Iron and Steel Institute, Washington D.C., 1996.

1.04 QUALITY ASSURANCE
   A. Manufacturer's Qualifications:
      1. Manufacturer shall have a minimum of 5-years experience in manufacturing metal roofing/wall systems. Panels specified in this section shall be produced in a permanent factory environment with fixed-base roll-forming equipment.

1.05 SYSTEM PERFORMANCE REQUIREMENTS
   A. Performance Testing:
      1. Metal roofing systems shall be designed in accordance with latest release of AISI. Metal roof system shall be designed to meet loading conditions per the applicable building code.

1.06 SUBMITTALS
   A. Provide manufacturer's data and installation instructions for Arctic conditions.
   B. Provide manufacturer's color samples for color selection. Color selection shall be made by NFF designated project representative.
   C. Submit shop drawings showing plan and all details and installation methods. Show engineered attachment schedule to match wind velocity and exposure as recommended per manufacturer.

1.07 DELIVERY, STORAGE AND HANDLING
   A. Deliver materials in manufacturer’s original unopened containers and rolls with labels intact and legible showing type and specifications of material.

PART 2 PRODUCTS

2.01 METAL ROOF
Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the work include, but are not limited to the following:
1. Metal Sales Manufacturing Corporation: www.metalsales.us.com

B. Roofing panels shall be formed from 24-gauge steel.

C. Provide compatible metal preformed sheet flashings and trims as required for complete installation of roofing as required by the manufacturer.

D. Provide enclosures as recommended by the manufacturer. Flashing shall be fabricated from the same material and finish.

E. Provide gasket fasteners, sealant tapes, composition washers and all accessories and appurtenances as recommended by the manufacturer for the specific installation.

PART 3 EXECUTION

A. NOT USED

END OF SECTION
SECTION 07610
Sheet Metal Flashings and Trim

Part 1 General

1.01 Section Includes
   A. Roof flashing.
   B. Counterflashings at roof vent stacks.
   C. Counterflashings for roof penetrations.
   D. Wall flashings.

1.02 Related Sections
   A. Section 06100 Rough Carpentry
   B. Section 07412 Preformed Metal Roofing
   C. Section 07900 Sealants

1.03 References
   A. ASTM A525 - Steel Sheet, Zinc Coated, (Galvanized) by the Hot-Dip Process.

1.04 System Description
   A. Work of this Section is to physically protect membrane roofing and base flashings, from damage that would permit water leakage to building interior.
   B. Flashing where required around door, window, or mechanical openings.

1.05 Submittals
   A. Submit shop drawings and product data.
   B. Provide manufacturers color samples for color selection. Color selection shall be made by NFF designated project representative.
   C. Manufacturers installation instructions.

1.06 Storage and Handling
   A. Store and handle products in accordance with manufacturer's recommendations.
   B. Stack preformed material to prevent twisting, bending, or abrasion, and to provide ventilation.
   C. Prevent contact with materials during storage which may cause discoloration, staining, or damage.
   D. Factory apply self-adhering, strippable, non-staining protective film to all flashing materials.

Part 2 Products

2.01 Sheet Materials
   A. Galvanized Steel: ASTM A525, 22 gage core steel, except minimum 20 gage at roof penetrations, shop prefinished to match metal roof finish and color or siding color as per
drawings.

2.02 ACCESSORIES

A. Fastener: Galvanized steel with soft neoprene washers at exposed fasteners. Finish exposed fasteners same as flashing metal.

B. Protective Backing Paint: Bituminous, conforming to ASTM D1187, type A.

C. Sealant: Silicone type as recommended by manufacturer.

D. Bedding Compound: Approved by roofing manufacturer.

E. Plastic Cement: FS SS-C-153, type 1 asphaltic base cement.

2.03 FABRICATION

A. Form sections true to shape, accurate in size, square, and free from distortion or defects.

B. Fabricate cleats and starter strips of same material as sheet, minimum 18 inches wide, interlockable with sheet.

C. Form pieces in longest practical lengths.

D. Hem exposed edges on underside ½ inch; miter and seam corners.

E. Fabricate corners from one piece with minimum 18 inch long legs; solder for rigidity, seal with sealant.

F. Back paint concealed metal surfaces with protective backing paint to a minimum dry film thickness of 15 mils.

PART 3 EXECUTION

A. NOT USED

END OF SECTION
SECTION 07900
JOINT SEALERS

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Sealants and joint backing.

1.02 REFERENCES

1.03 SUBMITTALS
A. Product Data: Provide data indicating sealant chemical characteristics, performance criteria, substrate preparation, limitations, and color availability.

1.04 QUALITY ASSURANCE
A. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.

1.05 ENVIRONMENTAL REQUIREMENTS
A. Weather Conditions: Do not proceed with installation of sealants under adverse weather conditions, or when temperatures are below manufacturer's recommended limitations for installation. Proceed with the work only when forecast weather conditions are favorable for proper cure and development of high early bond strength. Wherever joint width is affected by ambient temperature variations, install elastomeric sealants only when temperatures are in the lower third of manufacturer's recommended installation temperature range.

PART 2 PRODUCTS

2.01 MANUFACTURERS
A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the work include, but are not limited to the following:

2.02 SEALANTS
A. Sealants and Primers - General: Provide only products having lower volatile organic compound (VOC) content.
B. Sealant shall be specifically designed for application to the surfaces as shown on the drawings, and shall be nonsag with integral nonfading colors.
C. Interior silicone sealants shall be synthetic silicone rubber base component type conforming to Federal Specifications TT-S-1543 (a) Class A.
D. Pro-Seal 34 polycarbonate, single component, non-sag elastomeric copolymer sealant is to be used as an exterior sealant.

PART 3 EXECUTION
A. NOT USED

END OF SECTION
SECTION 08211

FLUSH WOOD DOORS

PART 1  GENERAL

1.01 SECTION INCLUDES

A. Flush solid wood doors; flush and flush glazed configuration; non-rated.

B. Option for Dutch Door

1.02 RELATED REQUIREMENTS

A. Section 06100 - Rough Carpentry

B. Section 06200 - Finish Carpentry.

C. Section 08710 - Door Hardware.

D. Section 09930 – Staining and Transparent Finishing

1.03 REFERENCE STANDARDS

A. AWI/AWMAC (QSI) - Architectural Woodwork Quality Standards Illustrated; Architectural Woodwork Institute and Architectural Woodwork Manufacturers Association of Canada.

B. ICC (IBC) - International Building Code.


1.04 SUBMITTALS

A. Product Data: Indicate door materials and construction; wood species, type and characteristics.

B. Identify wood preservation treatment

1.05 QUALITY ASSURANCE

A. Manufacturer: Company specializing in manufacturing the products specified in this section with minimum five years of experience.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Furnish doors poly-wrapped.

B. Accept doors on site in manufacturer’s packaging. Inspect for damage.

C. Doors shall not be subjected to extremes of heat, dry or humid conditions. Relative humidity should not be less than 30 percent or more than 55 percent.

D. When handling doors, always lift and carry. Do not drag across other doors or surfaces. Handle with clean hands or gloves.

E. Comply with requirements in AWI section 1300-G-23 and NWWDWA 1.S 1-A How to store, handle, finish, install and maintain wood doors.

PART 2  PRODUCTS

2.01 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the work include, but are not limited to the following:

B. Wood Doors:

2.02 DOORS

A. All Doors: See drawings for locations and additional requirements.
   1. Quality Level: Premium Grade, in accordance with AWI/AWMAC/WI Architectural Woodwork Standards.
   2. Quality Level: Premium Grade, Heavy Duty performance, in accordance with WDMA I.S.1-A.

B. Exterior Doors: Flush solid construction.
   1. Thickness: 1-3/4 inches (44 mm), unless otherwise indicated.
   2. Windows: Include half-lite picture window in upper half of door. No dividers in window.

PART 3 EXECUTION

A. NOT USED

END OF SECTION
SECTION 08550

VINYL WINDOWS

PART 1 - GENERAL

1.01 SECTION INCLUDES
   A. Vinyl windows.

1.02 RELATED REQUIREMENTS
   A. Section 06100 - Rough Carpentry: Rough opening framing.
   B. Section 07900 - Joint Sealers

1.03 SUBMITTALS
   A. Product Data: Show component dimensions.

1.04 QUALITY ASSURANCE
   A. Manufacturer Qualifications: Company specializing in manufacturing residential vinyl windows with minimum three years of documented experience.

1.05 DELIVERY, STORAGE, AND HANDLING
   A. Protect factory finished surfaces with wrapping. Do not use adhesive papers or sprayed coatings that bond when exposed to sunlight or weather.

1.06 WARRANTY
   A. Provide five year manufacturer warranty for insulated glass units from seal failure, interpane dusting or misting, and replacement of same.

PART 2 - PRODUCTS

2.01 MANUFACTURERS
   Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the work include, but are not limited to the following:
   A. PlyGem: https://www.plygem.com/windows-doors/
   B. Pella Corp: www.pella.com
   C. Alpine Window Systems: https://www.alpinewindowsystems.com/
   D. Milgard: https://www.milgard.com/

2.02 VINYL WINDOWS
   A. Windows: Vinyl frame and sash, factory fabricated and assembled.
      2. Glazing: Double Pane Low E, Tempered Glass.
      3. Exterior Finish: Factory colored brown/tan vinyl (color to be selected by NFF from manufacturer's full pallet).
      4. Interior Finish: Same as exterior.
      5. Screens: Provide for all opening windows.
      6. Configuration: As indicated on drawings.
7. Weather Stop Flange: Continuous at perimeter of unit.
8. Clearances and Shim Spacing: Minimum required for installation and dynamic movement of perimeter seal.

PART 3 – EXECUTION

A. NOT USED

END OF SECTION
PART 1  GENERAL

1.01 SECTION INCLUDES
   A. Hardware for exterior doors
   B. Thresholds.
   C. Weatherstripping, seals and door gaskets.

1.02 SUBMITTALS
   A. Door Hardware Schedule: Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, and, function and finish of door hardware.
   B. Maintenance Data: Include data on operating hardware, lubrication requirements and inspection procedures related to preventative maintenance.

1.03 QUALITY ASSURANCE
   A. Hardware Supplier Qualifications: Company specializing in supplying commercial door hardware with three (3) years of experience.
   B. Source Limitations: Obtain each type and variety of door hardware from a single manufacturer, unless otherwise indicated.
   C. Regulatory Requirements: Comply with provisions of the following:
      1. Architectural Barriers Act (ABA) Standards, including section for Operable Parts: “Shall be operable with one hand and shall not require tight grasping, tight pinching, or twisting of the wrist. The force required to activate operable parts shall be 5 lbs maximum.”

1.04 DELIVERY, STORAGE, AND PROTECTION
   A. Deliver materials in manufacturer's original containers with identification labels intact.
   B. Package hardware items individually; label and identify each package with door opening code to match hardware schedule and include basic installation instructions with each item or package.

1.05 WARRANTY
   A. Warranty Period: One year from the date of Substantial Completion, unless otherwise indicated.

1.06 MAINTENANCE PRODUCTS
   A. Furnish the following materials, if applicable, which shall be delivered directly to the Owner prior to substantial completion:
      1. One (1) set of special wrenches and tools applicable to each different or special hardware component.

PART 2  PRODUCTS

2.01 SCHEDULED DOOR HARDWARE

2.02 HINGES
   A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the work include, but are not limited to, the following:
      1. Hager Companies: www.hagerhinge.com (Referenced Mfr. -HAG)
      2. Stanley Hardware: www.stanleyworks.com (STA)
   B. Material & Quantity: Provide the following, unless otherwise indicated:
1. Stainless Steel
2. Three Hinges: For doors with heights 60 to 90 inches (11524 to 2286 mm)

C. Size: Provide the following, unless otherwise indicated with hinge widths sized for door thickness and clearance required:
   1. Maximum Door Size 36" by 84" by 1-3/4":
      a. Hinge Height: 4-1/2"
      b. Standard Weight Hinge Thickness: 0.134"
      c. Heavy Weight Hinge Thickness: 0.180"

D. Hinge Options: Comply with the following where indicated on the Door Hardware Schedule or on the Drawings:
   1. Nonremovable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed.

2.03 MECHANICAL LOCKS, LATCHES & DOOR PULLS

A. Door pull shall be an exterior rated lever-style entry door knob with satin stainless steel or chromium plated finish. Door knob shall not be keyed. Dead bolt shall be installed with thumb turn installed on door interior. Dead bolt shall not be keyed and shall only be lockable from inside the cabin.

B. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the work include, but are not limited to, the following:
   1. Schlage: www.schlage.com
   2. Yale-Corbin U.S.: www.yalesecurity.com

2.04 GASKETING

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the work include, but are not limited to, the following:
   1. Pemko Manufacturing Co: www.pemko.com
   2. National Guard Products, Inc: www.ngpinc.com

B. Standard: Comply with BHMA A156.22

C. General: Provide continuous weather-strip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated or scheduled. Provide noncorrosive fasteners for exterior applications and elsewhere as indicated.

2.05 WALL AND FLOOR STOPS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the work include, but are not limited to, the following:
   1. Rockwood Manufacturing Company: www.rockwoodmfg.com

2.06 THRESHOLD

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the work include, but are not limited to, the following:
   1. Pemko Manufacturing Co: www.pemko.com
   2. National Guard Products, Inc.

2.07 FINISHES

A. Finish in general - Satin Chromium Plated
B. Locksets - Satin Stainless Steel
C. Push Plates & Door Pulls - Satin Stainless Steel
D. Weatherstrip - Clear Anodized Aluminum
PART 3  EXECUTION
   A.  NOT USED

END OF SECTION
SECTION 09625
RESILIENT FLOORING

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Treated industrial wood panels.

1.02 RELATED REQUIREMENTS
A. Section 06100 - Rough Carpentry
B. Section 06200 - Finish Carpentry

1.03 SUBMITTALS
A. Product Data: Manufacturer's printed data sheets for products specified.

1.04 DELIVERY, STORAGE, AND HANDLING
A. Deliver materials to project site in unopened containers clearly labeled with manufacturer’s name and identification of contents.

PART 2 PRODUCTS

2.01 TREATED INDUSTRIAL WOOD PANELS
A. Products:
   1. Tuf Tread Industrial Panel
   2. Skid Guard Industrial Panel
   3. Thickness shall be a minimum of ¾” and be rated for installation without subflooring

PART 3 EXECUTION
A. NOT USED

END OF SECTION
SECTION 09930

STAINING AND TRANSPARENT FINISHING

PART 1 GENERAL

1.01 SUMMARY

A. Transparent wood finish systems for field application.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Base Manufacturers:
   1. Duckback Superdeck [https://www.superdeck.com/product-category/superdeck/]

B. Products of other manufacturers may be used if prior approval is obtained from NFF or designee.

2.02 TRANSPARENT FINISH SYSTEMS

   1. Preparation as specified by manufacturer.

B. Exterior Wood - Natural Clear Finish: Oil-based Superdeck Transparent Stain, Natural.
   1. Preparation as specified by manufacturer.

PART 3 EXECUTION

A. NOT USED

END OF SECTION
TRAVEL DIRECTIONS:
ACCESS IS VIA FLOAT PLANE ON MARTIN LAKE OR JET/AIR BOAT ACROSS THE COPPER RIVER DELTA AND UP THE MARTIN RIVER TO THE CONFLUENCE WITH MARTIN LAKE. HEADING UPSTREAM, THE CABIN IS ON THE RIGHT BEFORE ARRIVING AT THE MAIN PORTION OF MARTIN LAKE.

60°47'4.74"N 148°50'28.87"W
2x10 deck joists @ 16" O.C. on Simpson HU28TF flange hanger (or equal), Simpson EPB

2x8 floor joists @ 16" O.C. on Simpson HU28TF flange hanger (or equal), Simpson EPB

12" x 8" concrete piers, 42" depth

4x10 beams

3/4" skidguard up-tied to 2x10 decking

2x8 floor joists @ 16" O.C. on Simpson EPB (see detail C)

2x6 or 2x8 decking, cedar or UC3B P.T.

2x10 deck joists @ 16" O.C. on Simpson HU28TF flange hanger (or equal), see details

2x8 floor joists @ 16" O.C. on Simpson HU28TF flange hanger (or equal), see details

3" min. for uplift loads set at or cast in place required

Washer shall directly bear on concrete

2 1/2" max.

4x10 beams

4x10 beam

12" dia. concrete pier (12 total)

12" dia. concrete pier (20 total)

4x10 beam

12" dia. concrete pier, 42" depth

2x8 joists on Simpson HU28TF flange hanger (or equal) - see details

4x10 beam

12" dia. concrete pier, 42" depth

4x10 beam

SIMPSON EPB (see detail C)

SIMPSON ECCLQ (see detail E)

2x8 floor joists @ 16" O.C. on Simpson EPB

SIMPSON HU28TF HANGER

CORNER POST BASE - ECCLQ

BEAM TO COLUMN - CCTQ
1. BUILDING PLAN AND ELEVATIONS ARE INTENDED TO DEPICT CONCEPTUAL STRUCTURE AND LAYOUT. FINAL PLANS TO BE DEVELOPED BY THE CONTRACTOR IAW THE PROJECT SPECIFICATIONS, IN COLLABORATION WITH NFF AND THE USFS.

2. FOUNDATION DESIGN TO BE COMPLETED BY THE USFS FOLLOWING ACCEPTANCE OF THE FINAL STRUCTURE DESIGN.

3. RAILING AT DECKS NOT FULLY SHOWN FOR CLARITY, BUT SHALL MEET IBC REQUIREMENTS.

4. RIDGE BEAM STYLE ROOF FRAMING SHOWN, BUT OTHER STYLES MAY BE ACCEPTABLE IF SHOWN TO SUPPORT REQUIRED LOADS AND MEET AESTHETIC AND FUNCTIONAL REQUIREMENTS ON THE INTERIOR OF THE CABIN. FINAL DETERMINATION OF ACCEPTABILITY LIES WITH NFF AND THE USFS.
STANDING SEAM METAL ROOF

DECK AND STAIR RAILINGS NOT SHOWN FOR CLARITY

1/2" TRIM @ WINDOWS AND DOORS

GROUND CONTACT LUMBER (UC4B)

18" GROUND TO FF

APPROX GRADE

CEXAS FASCIA

T&G TIMBER WALLS

DECK, RAMP, AND STAIR RAILINGS NOT SHOWN FOR CLARITY

CONCEPTUAL PLANS
NOT FOR CONSTRUCTION
NOTES:

1. RAILINGS ARE NOT SHOWN FOR CLARITY. ALL STAIRS AND DECKS WILL RECEIVE IBC COMPLIANT RAILINGS, AND THE RAMP AND ASSOCIATED LANDING WILL RECEIVE ABA COMPLIANT RAILINGS.

2. RAMP LENGTH SHOWN IS APPROXIMATE AND WILL VARY BASED ON FINAL SITE TOPOGRAPHY.
CONCEPTUAL PLANS
NOT FOR CONSTRUCTION

CONCEPTUAL FURNITURE LAYOUT
SCALE: 1" = 20'

SHELF 1
SHELF 2
TABLE & BENCHES
OIL & WOOD STOVES
BUNK 1
BUNK 2
ACCESSIBILITY CLEAR SPACE

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

ALASKA REGION
MARTIN LAKE
CABIN REPLACEMENT
CHUGACH NF
CORDOVA RANGER DISTRICT

DRAWN
DESIGNER
STAMPS, LOGOS, AND SEALS
PROJECT NAME
DRAWING TITLE
CHECKED
ARCHIVE NO.
DATE

06 10

CONCEPTUAL PLANS
NOT FOR CONSTRUCTION
Wheelchair accessibility: This bunk was designed for wheelchair use. Changing the dimensions or materials may preclude this use.

**Bunks Material List**

<table>
<thead>
<tr>
<th>QTY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 EA</td>
<td>1&quot;x8&quot;x8' UNTREATED DIM LUMBER #1 OR BTR, S4S</td>
</tr>
<tr>
<td>15 EA</td>
<td>2&quot;x6&quot;x8' UNTREATED DIM LUMBER #1 OR BTR, S4S</td>
</tr>
<tr>
<td>3 EA</td>
<td>4x4x8' SHT. 3/4&quot; AC PLYWOOD, A SIDE UP</td>
</tr>
<tr>
<td>4 EA</td>
<td>4x8x4' SHT. 3/4&quot; AC PLYWOOD, A SIDE UP</td>
</tr>
</tbody>
</table>

**Bunk Details**

- **Top Bunk Framing Plan (A)**
- **Bottom Bunk Framing Plan (B)**
- **Front Elevation (C)**
- **Side Elevation (D)**

CONCEPTUAL PLANS

NOT FOR CONSTRUCTION
SHELVING MATERIAL LIST

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<th>QTY</th>
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</thead>
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<tr>
<td>9</td>
<td>EA. 2x4x8' UNTREATED 2X4 LUMBER #1 OR BET, S4S</td>
</tr>
<tr>
<td>1</td>
<td>EA. 2x2x8' UNTREATED 2X2 LUMBER #1 OR BET, S4S</td>
</tr>
<tr>
<td>2</td>
<td>EA. 4X8 SHEET 3/4&quot; AC PLYWOOD</td>
</tr>
</tbody>
</table>

*4x4 POSTS WILL BE CUT FROM LEFTOVER BUNK LUMBER

CONCEPTUAL PLANS
NOT FOR CONSTRUCTION
TABLE MATERIAL LIST

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<th>QTY</th>
<th>DESCRIPTION</th>
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<td>EA. 2x4x8' UNTREATED DIM LUMBER #1 OR BTR, S4S</td>
</tr>
<tr>
<td>3</td>
<td>EA. 4x4x8' UNTREATED DIM LUMBER #1 OR BTR, S4S</td>
</tr>
<tr>
<td>1</td>
<td>EA. 4x8x8' 1/4 AC PLYWOOD</td>
</tr>
</tbody>
</table>

CONCEPTUAL PLANS
NOT FOR CONSTRUCTION
NOTE: THERE WILL BE TWO 6' LONG AND ONE 3' LONG BENCHES.

BENCHES MATERIAL LIST

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<th>QTY</th>
<th>DESCRIPTION</th>
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</thead>
<tbody>
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<td>12</td>
<td>2x4x8' UNTREATED DIM LUMBER #1 OR BTR, S4S</td>
</tr>
<tr>
<td>5</td>
<td>2x6x8' UNTREATED DIM LUMBER #1 OR BTR, S4S</td>
</tr>
<tr>
<td>3</td>
<td>4x4x8' UNTREATED DIM LUMBER #1 OR BTR, S4S</td>
</tr>
</tbody>
</table>

NOTE: THERE WILL BE TWO 6' LONG AND ONE 3' LONG BENCHES.