

## **ITEM 599.2732 10 – OPERATOR HOUSE ROOF WOOD FRAMING- FIXED PRICE**

### **DESCRIPTION:**

This work shall consist of inspecting and replacing in kind the wood roof framing of the Operator/ Control Houses during reconstruction of the houses as directed by the Engineer. Work under this item shall include the installation of treated dimension framing, lumber, and other miscellaneous lumber including plywood decking, bridging, and wood shims.

The work under this item shall also include furnishing and installing all hardware including, machine bolts, lag screws, nails, and other incidental metals necessary for a complete framing system.

### **MATERIALS:**

#### A. Framing Lumber

All timber used for the Operator House framing shall be Douglas Fir, No. 2 and shall be in conformance with the requirements of Subsection 712-14. All framing shall be fire treated as specified by the current APA Standard.

Required sizes of framing lumber shall be in kind to existing structure, or as directed by the Contractor's Engineer performing the inspection, as approved by the Engineer.

#### B. Plywood Decking

All plywood shall be fire retardant, exterior grade.

The Engineer reserves the right to inspect all lumber at the manufacturer's plant before shipment. Upon arrival at the site, the lumber will be inspected by the Engineer and any members that do not comply with the specifications will be rejected and shall be removed from the site by the Contractor.

The Contractor shall furnish certification for all lumber, providing information on grades and treatments, subject to the approval of the Engineer.

Unless otherwise specified, all dimension lumber shall be cut square and surfaced on four sides and shall not be smaller in any dimension affected by the surfacing than shown on the Shop Drawings.

#### C. Hardware

Machine bolts, nuts, washers, lag screws, and nails shall be in accordance with the requirements of ASTM A307 and shall be galvanized conforming to the requirements of Type II for Subsection 719 - 01. The weight of zinc coating per square meter of actual surface shall average not less than 610 grams.

The Contractor shall submit certifications on all materials to be used in this item.

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### **CONSTRUCTION DETAILS:**

#### **A. General**

1. The roof framing shall be inspected by a New York State Licensed Professional Engineer employed by the Contractor. The Contractor's Engineer shall prepare a brief letter report detailing the condition of, replacements necessary and repair cost for the roof framing of all eight Operator/ Control Houses shown on the contract drawings. Shop Drawings of each of the House's Roof Framing Shall be included in this report. Separate reports may be provided for each house or group of houses to maintain the Contractor's schedule, as approved by the Engineer. The Contractor should take note that there is Asbestos present in the ceiling tile backer board of the North Bound Operator House that must be abated prior to beginning this work. Refer to the Contract plans for details.
2. The Engineer will review the report and approve of the findings. The Contractor may not begin any replacement work on the roof framing until he has received an approval of the report for that structure.
3. The roof framing shall be replaced in kind as needed, and modified to meet current local building codes, as shown on the approved Shop Drawings.
4. Shop drawings shall be submitted for review and approval by the Engineer. Shop drawings format shall follow all requirements given in the New York State Steel Construction Manual and shall include large scale plans, elevations, sections and details noting dimensions, materials, anchoring means and methods, rough hardware and other details to clearly describe the work to be provided. Location and spacing of decking screws shall also be included.
5. Erect framing members true to line, levels and dimensions required, squared, aligned, plumbed and securely fastened in place. Install to a tolerance of 3 mm in 2400 mm for plumb and level and with a 1.5 mm maximum offset in flush adjoining surfaces and 3 mm maximum offsets in revealed adjoining surfaces. Provide temporary bracing as required to maintain lines and levels until permanent supporting members are in place.
6. Shim as required and as approved by the Engineer using concealed shims. If shimming is required for installation of hardware, use metal or fiber shims. Cardboard shims will not be permitted.
7. Do all cutting, fitting, drilling and tapping of other work as required to secure in place and to perform the work included herein.
8. Coat cross cuts with end sealer.  
Where treated members must be cut during erection, apply a heavy brush coat of the same treatment complying with American Wood Preservers Association Standard M4.
9. Handle and temporarily support members to prevent visible surface damage.
10. Protect members from damage from weather and water during construction. Replace damaged members, as directed by the Engineer, where damage is beyond satisfactory repair.

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**METHOD OF MEASUREMENT:**

Payment for each of these Items shall be made on a lump sum basis for work completed in accordance with this specification, the contract documents and as directed by the Engineer.

**BASIS OF PAYMENT:**

The amount set forth in the proposal is a fixed price for all bidders. Any bid other than the specified amount shown on the itemized proposal will be adjusted to reflect the indicated fixed price and the Contractor shall only be entitled to payment for this item strictly in accordance with this paragraph. Actual payment for the work performed under this item will be made in accordance with Section 109-05B of the Standard Specifications for the cost of labor, material and equipment submitted by the contractor subject to review and approval by the Engineer.