

## **THE OLDEST HOUSE/ WRECKER'S MUSEUM**

**FIELD INVESTIGATION - July 8, 1992**

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### **Objective:**

The intent was to determine the condition of the existing roof structure in order to assist the architects in the preliminary approach to the restoration portion of the Master Plan.

### **Procedure:**

Exploratory holes were cut into the existing fabric at four different locations, in order to see the condition of the framing members, and the underside of the roof sheathing in these areas.

The locations were selected to:

- A. Provide a view of several different conditions
- B. Minimize disruption to the Museum by exploring two spaces, one of these was not typically accessible to the public.

See the attached diagram for these locations on the floor plan.

Location #1: Under the main gable of the house, in the area of flat ceiling just west of the door into room 204.

Location #2: In the sloped ceiling in the display area, adjacent to the west gable end of the house.

Location #3: In the wall, below the window in the east wall of the large rear dormer.

Location #4: In the sloped ceiling of the roof just to the west of the middle dormer, in Room 203.

Several existing boards were carefully removed at each location. The boards were reinstalled after a visual survey of the visible structural members.

Note: This step provided some preliminary information that will be used in determining the basic condition of the existing framing. We will review the basic roof configuration and loading to determine if perhaps some of the visible problems are inherent in the existing design. However, a thorough study of all roof framing will be undertaken during the course of the Construction Phase, as many of the existing conditions cannot be ascertained from this necessarily limited survey.

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**Findings:**

**Location #1:**

Several of the wide ceiling boards with batten trim were pulled away from the rafters. From this location the framing of the main gable was visible. The walls were built up to the underside of the ceiling joists, so the attic space is continuous, in the east-west direction. There was a small space visible that opened into the framing of the large south dormer, but the dormer framing is set onto the existing roof in this location.

Three of the nearest sets of rafters were measured, the sloping rafters typically were 4" x 3", with 1' x 3-7/8" ceiling joists, and a 1' x 4" ridge board. Spacing was approximately 2'-10" on center.

The overall condition of the visible framing was good, but there were some dark stains, indicative of either mold or slight charring.

**Location #2:**

Several boards were removed in a location approximately 18" to the east of the west gable end wall. This area represents the typical condition of the main sloped section of the gable. The sloped ceiling in this location is sheathed with the smaller 3" to 3-1/4" boards. From this opening, several generations of roof sheathing were evident, some obviously a replacement from an earlier point in time. The dimensions of these sheathing bands as visible between two of the rafters were as follows:

From south eave to 1'-6" up roof slope: newer narrower boards  
From 1'-6" to 4'-6": older, wider and dark colored boards  
From 4'-6" to 9'-0": newer boards  
From 9' to 11': older boards  
From 11' to the ridge: newer boards.

The rafter closest to the gable end was a 3" x 4" with a cleat nailer that held the ceiling boards approximately 4" below the roof sheathing.

**Location #3:**

Several of the narrow type of boards (3' to 3-1/4") below the window on the east wall of the large rear dormer were removed to expose the diagonal framing member of the main roof continuing past the dormer. There is evidence of water infiltration at this member, that is confirmed by the visual survey of the existing roof condition. The wall cavity is constructed of members almost 2" x 4".

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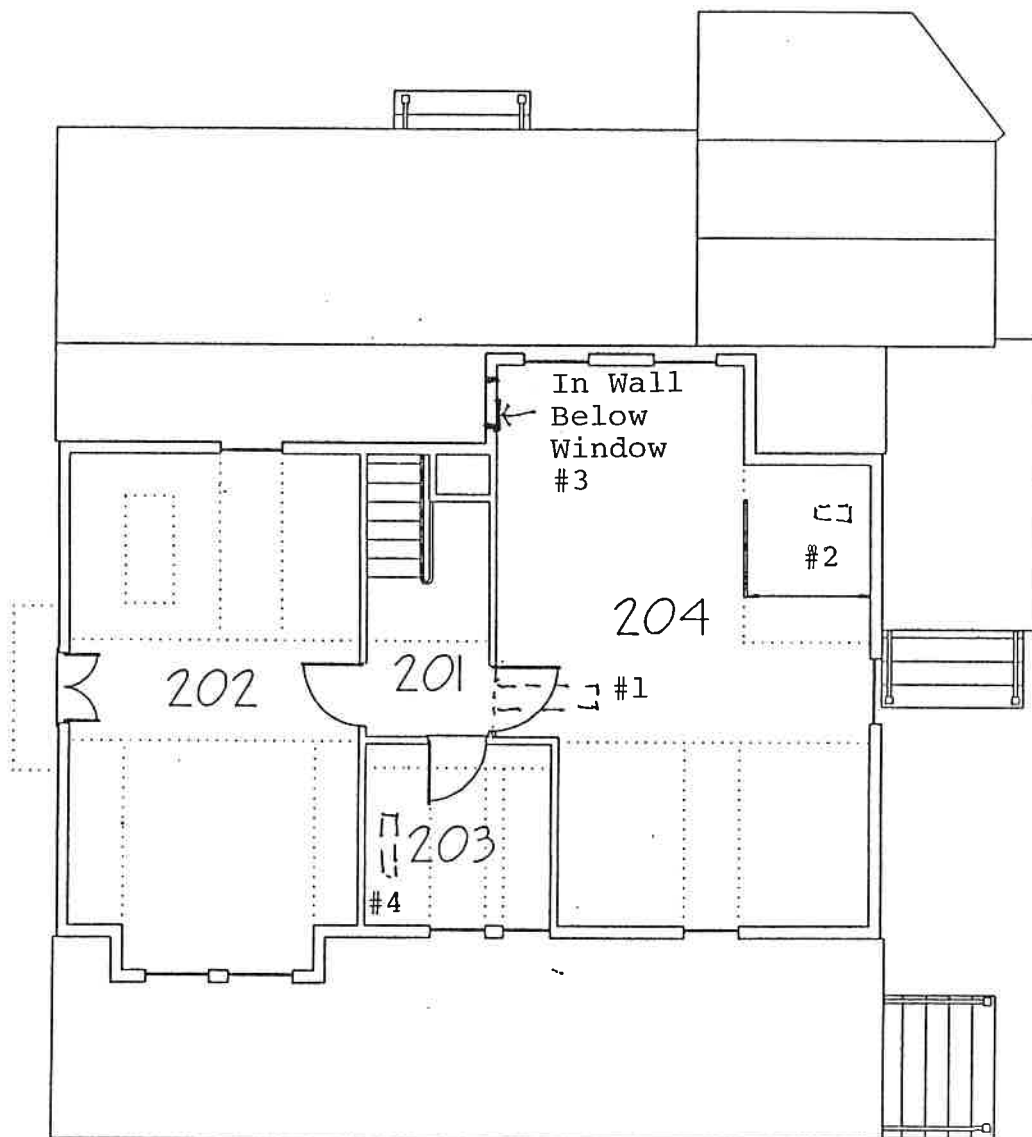
### Location #4:

This location supplied a view of the framing on the north side of the main gable. The exposed rafters measured 2-1/4" x 4" with an attached furring member that created a 5" deep space between roof and ceiling sheathing. The roof sheathing visible from this location is typically 5' to 5-1/2" wide.

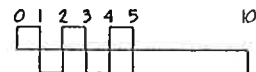
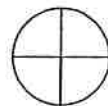
### ROOF CONDITION - EXTERIOR SURVEY

The existing condition of the roof was visually surveyed. In general, the metal shingles and the five V- crimp section over the porch areas were in good condition. The major problem areas appeared to be in two places:

1. The metal flashings, at dormer ridge connections to the main gable, and at valleys and sidewalls of dormers.
2. The deterioration of the clapboards of the dormer sidewalls. In some instances this deterioration is quite severe, and occurs fairly close to the wall/ roof junctures. Areas of particular concern are the north-west and north central dormer, and the large south-west dormer.



# SECOND FLOOR PLAN THE OLDEST HOUSE



Location of Exploratory Openings in Existing  
Walls/Ceilings. 7/8/92