

# *Laurel Building* Rehabilitation

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Council Report-  
2008.12.15

Martin Johansen  
Guests: Wayne Wilson,  
Kelowna Heritage  
Museums



# Laurel Packinghouse

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# Laurel – 1983 Reconstruction

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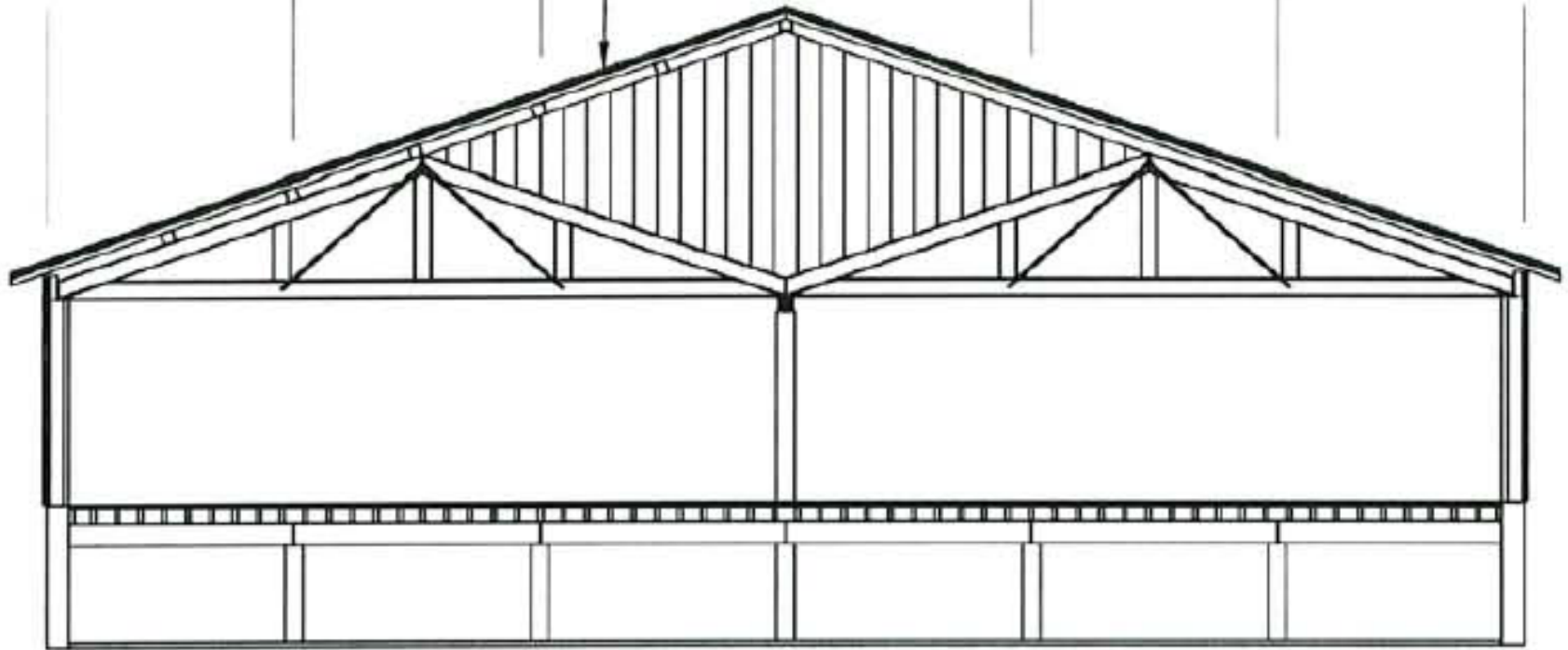


# Consulting Studies

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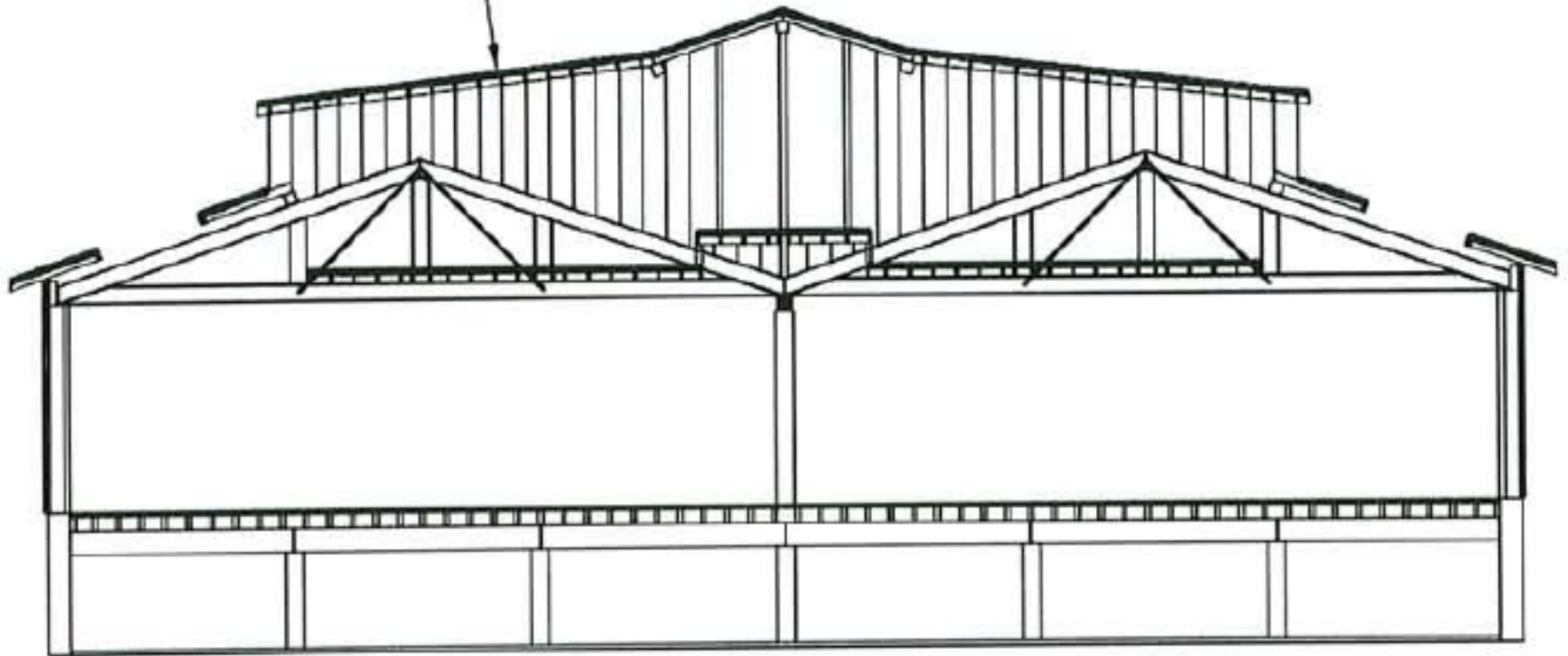
- Preliminary Structural – Elbury Dolan
- Heritage, Mechanical, Electrical – Luxton
- Structural Confirmation – CWMM
- Detailed Structural – Kevin Elbury
- Geotechnical – EBA Engineering
- Peer Review – Hindi Engineering

CONTINUOUS  
ORIGINAL ROOF  
DIAPHRAGM



ORIGINAL CONDITION

DISCONTINUOUS DIAPHRAGM  
SUBSEQUENT TO 1983 RENOVATION



CONDITION AFTER 1983 RENOVATION

# Structural Challenges

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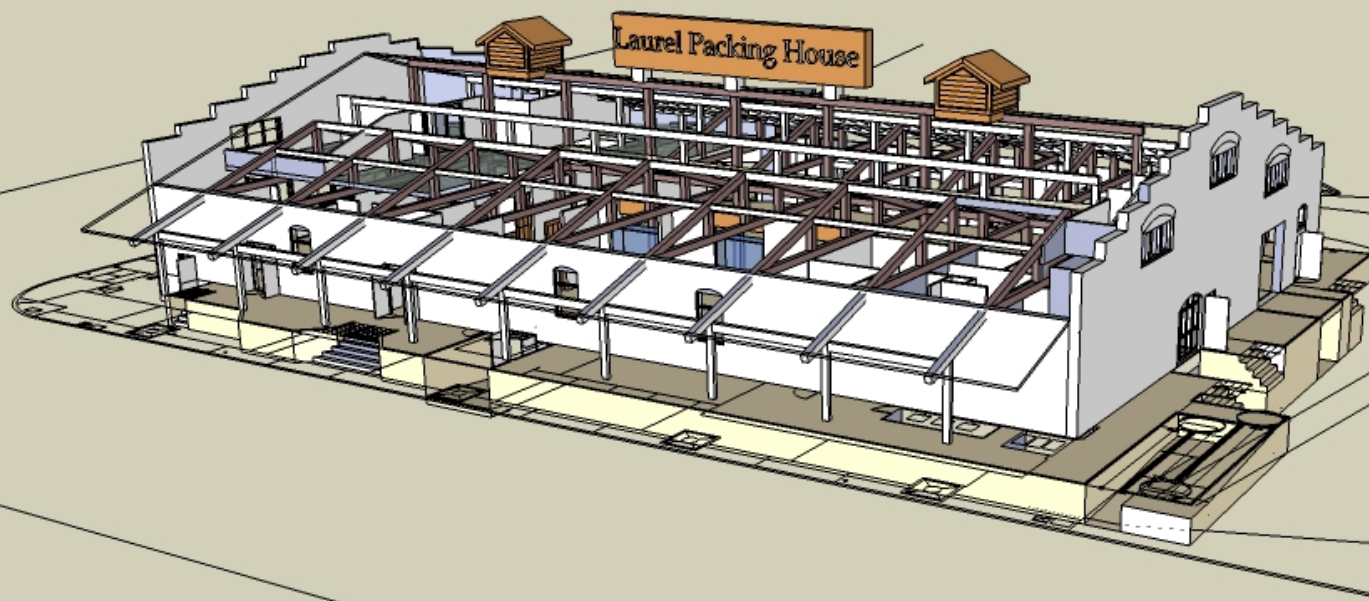
1. Gravity load resisting system.
  - Weight of the structure, occupancy loads and snow loads.
2. Lateral load resisting system.
  - Wood frame floor, roof diaphragms and unreinforced masonry walls.

# Rehabilitation Design Criteria

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1. FEMA 356 “Basic Safety Objective”.
  - 1/475 year return period at a “Life Safety Performance Level”.
  - 1/2500 year return period at a “Collapse Prevention Performance Level”.





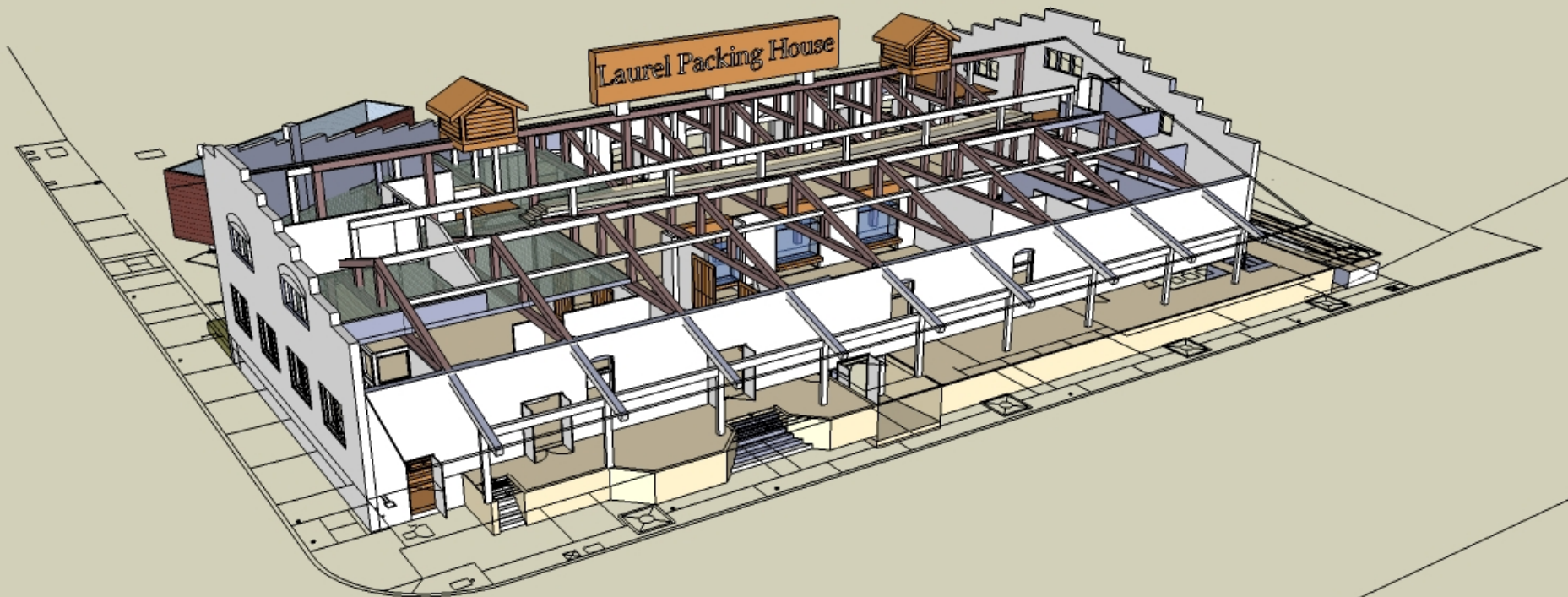
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redevelopment planning

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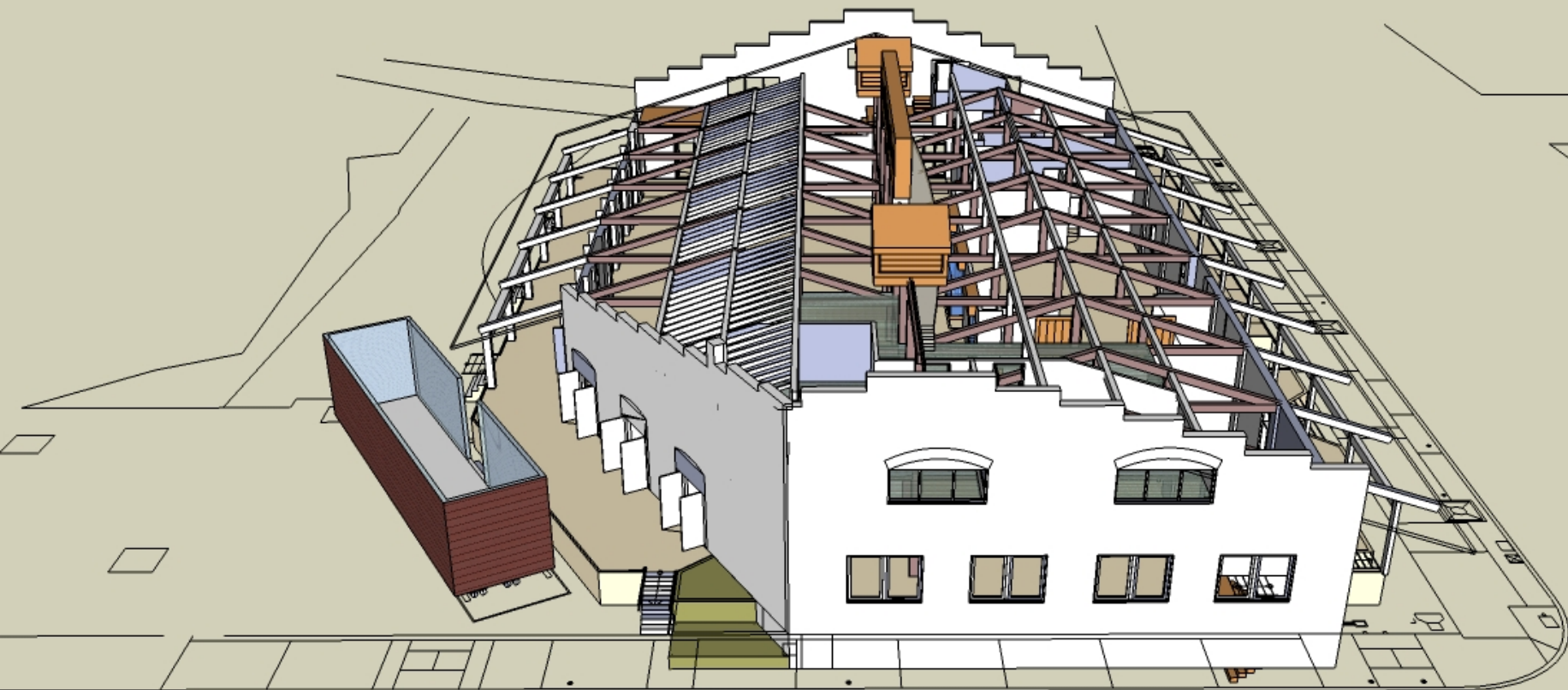
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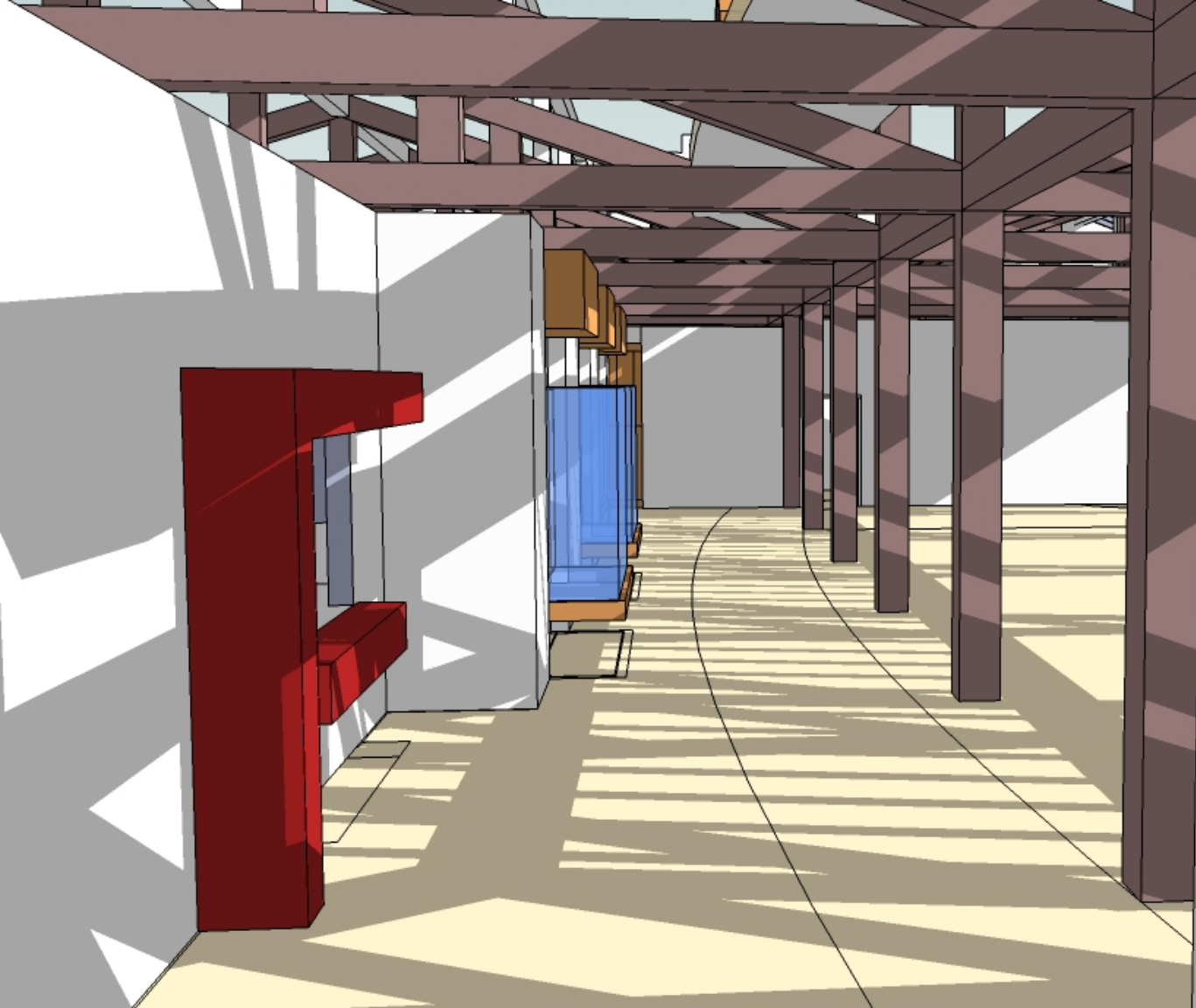


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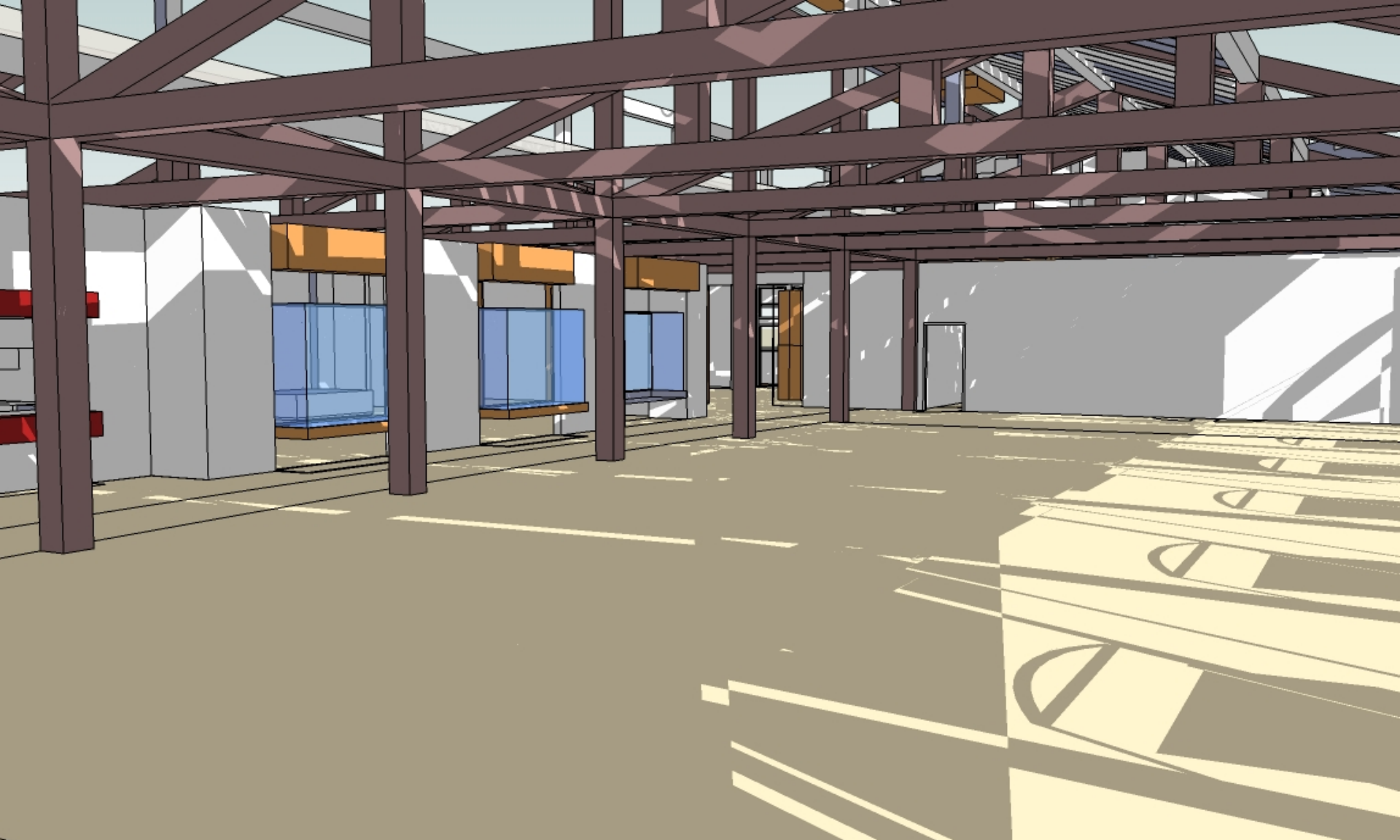
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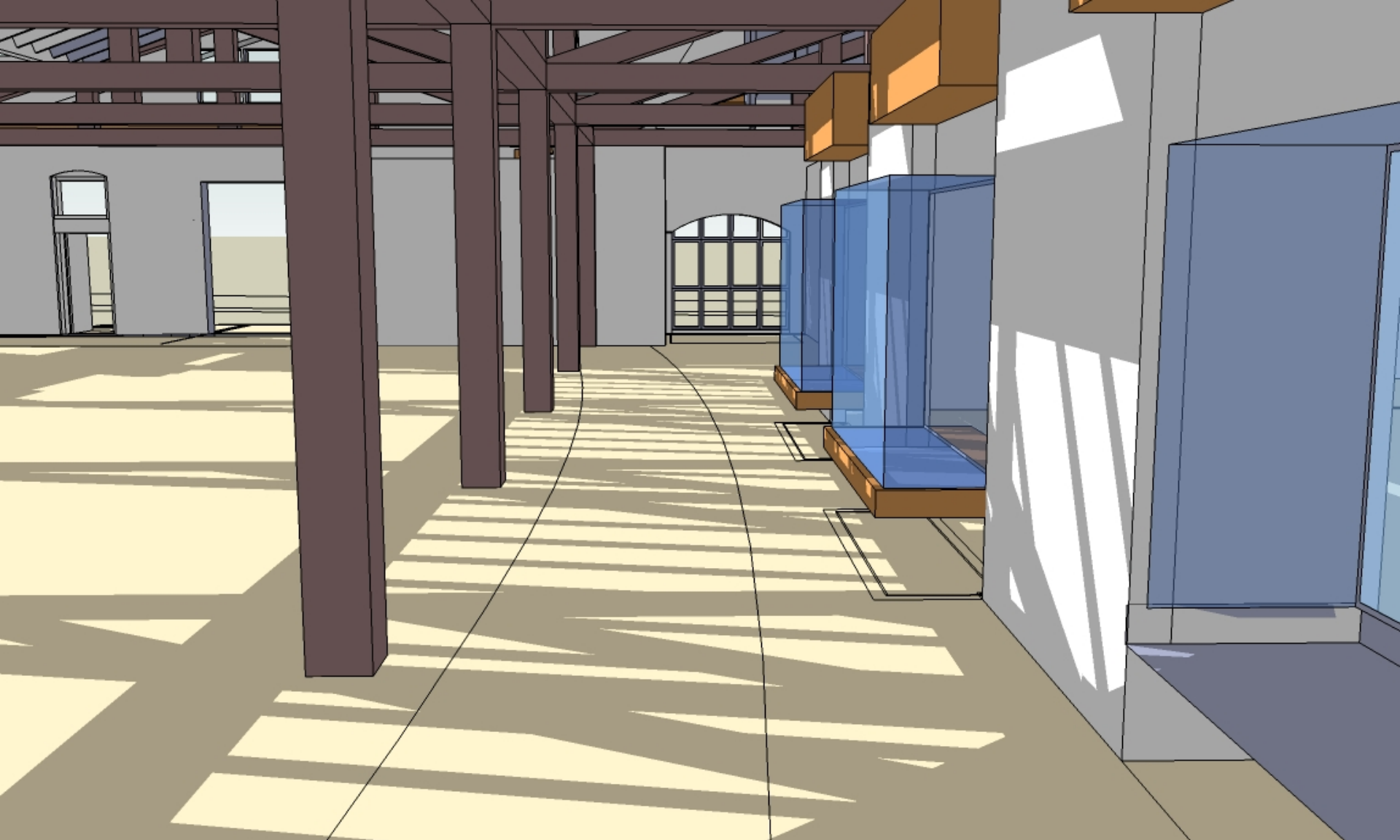
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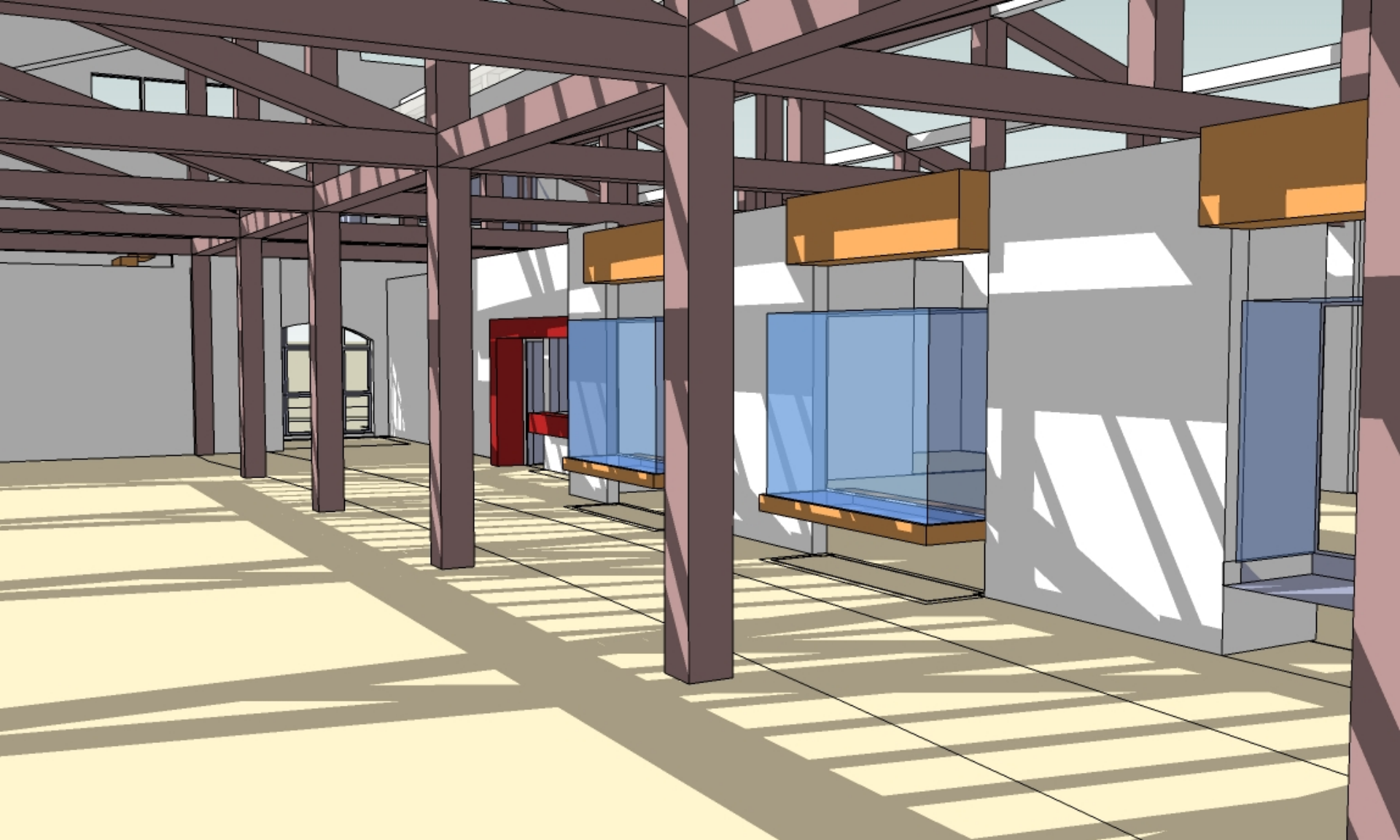


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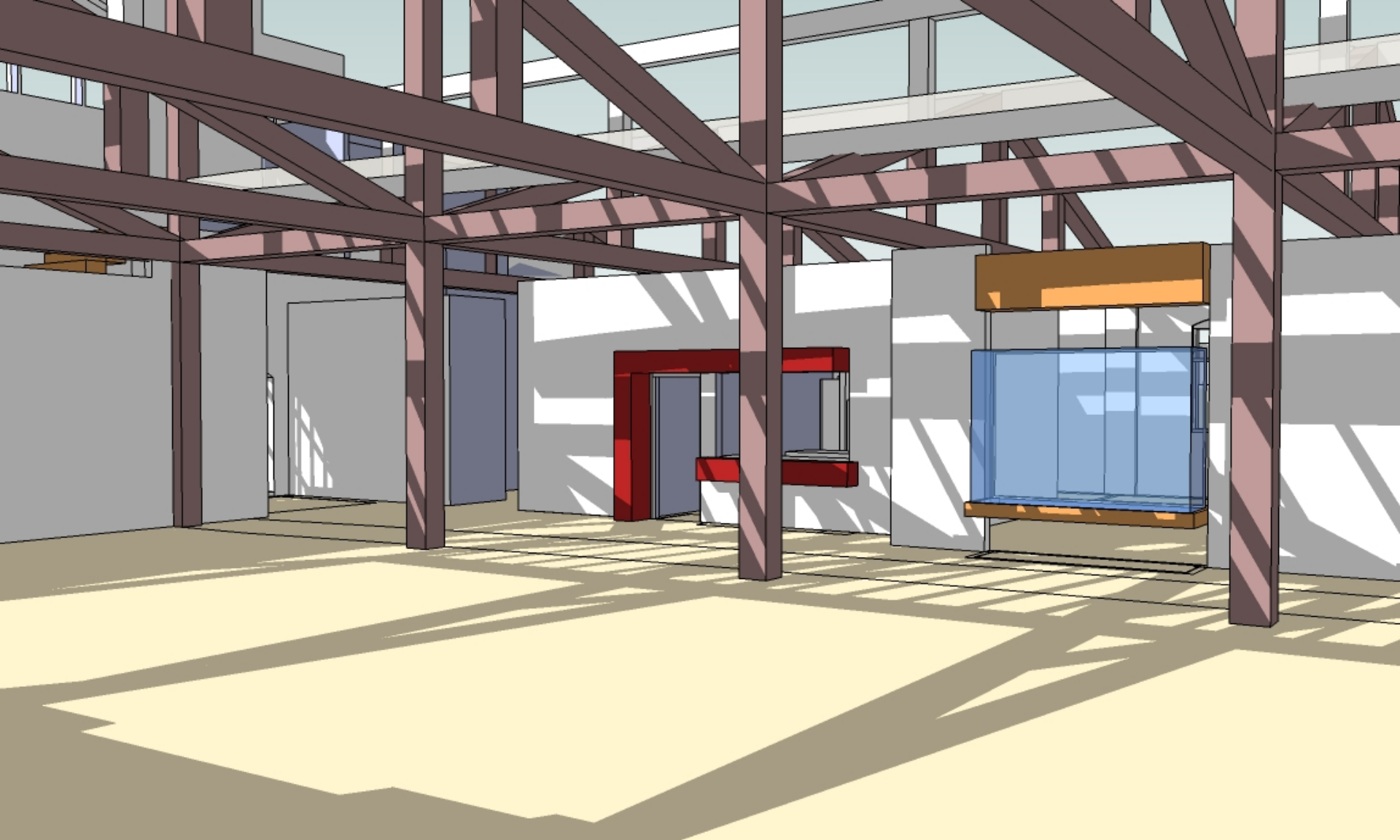


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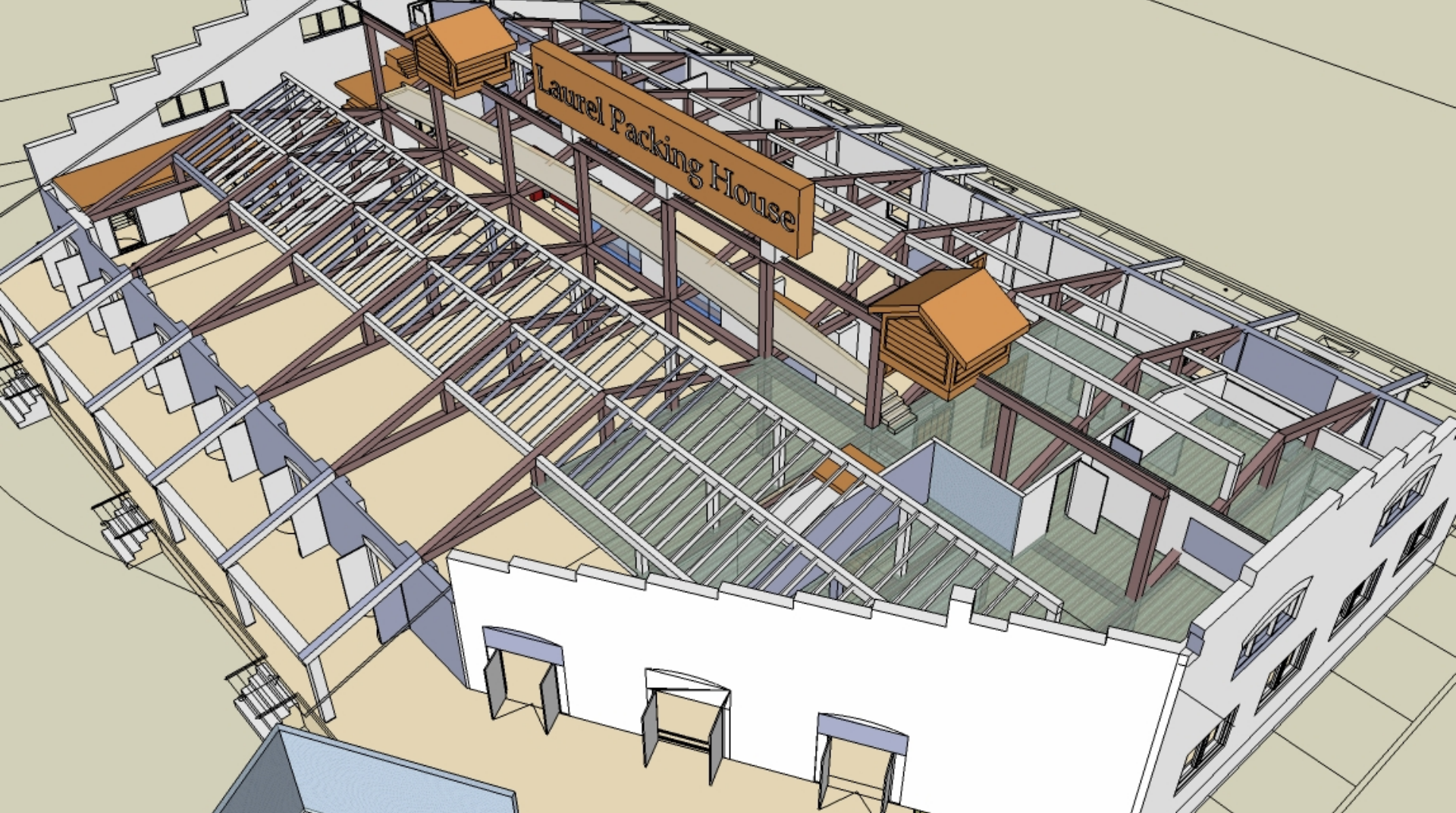
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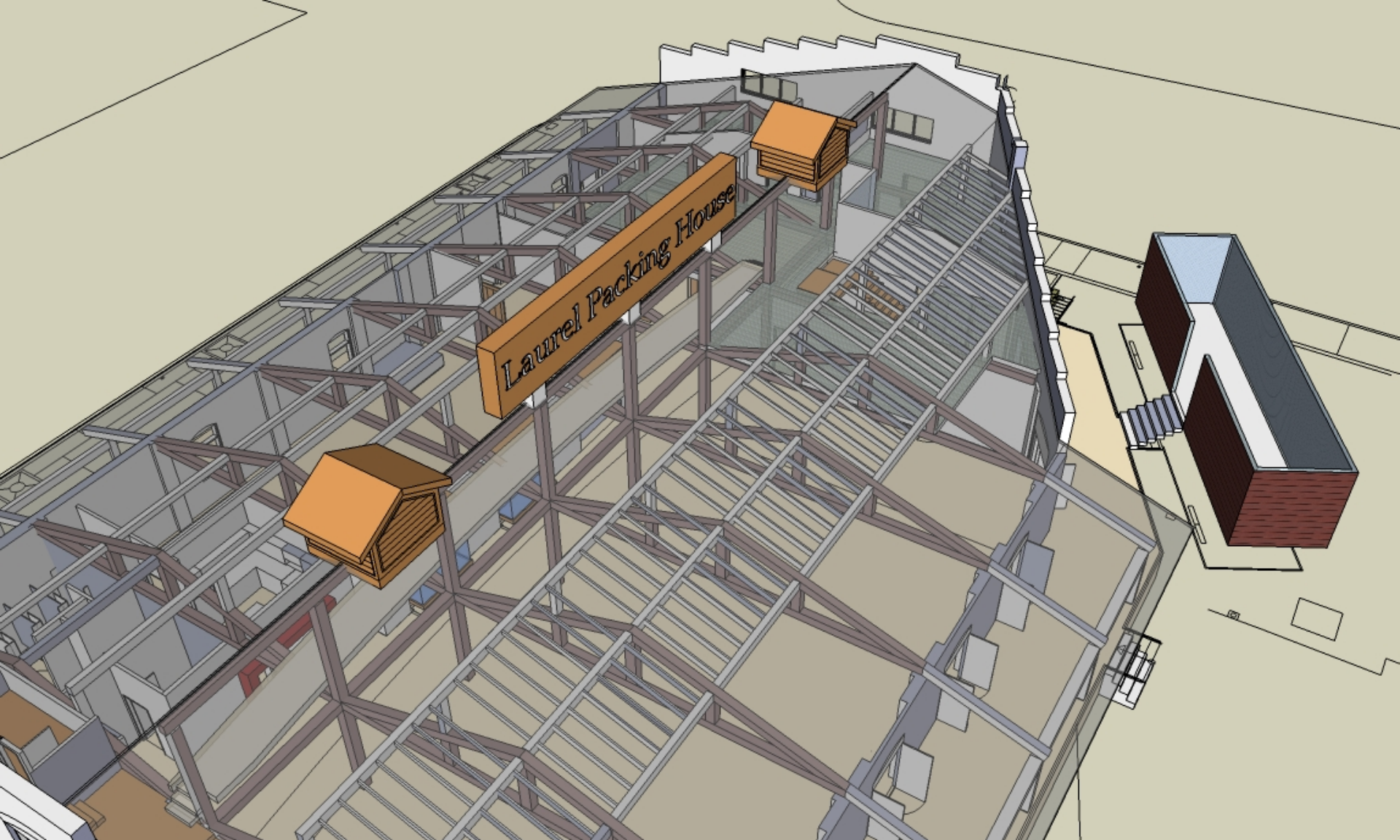


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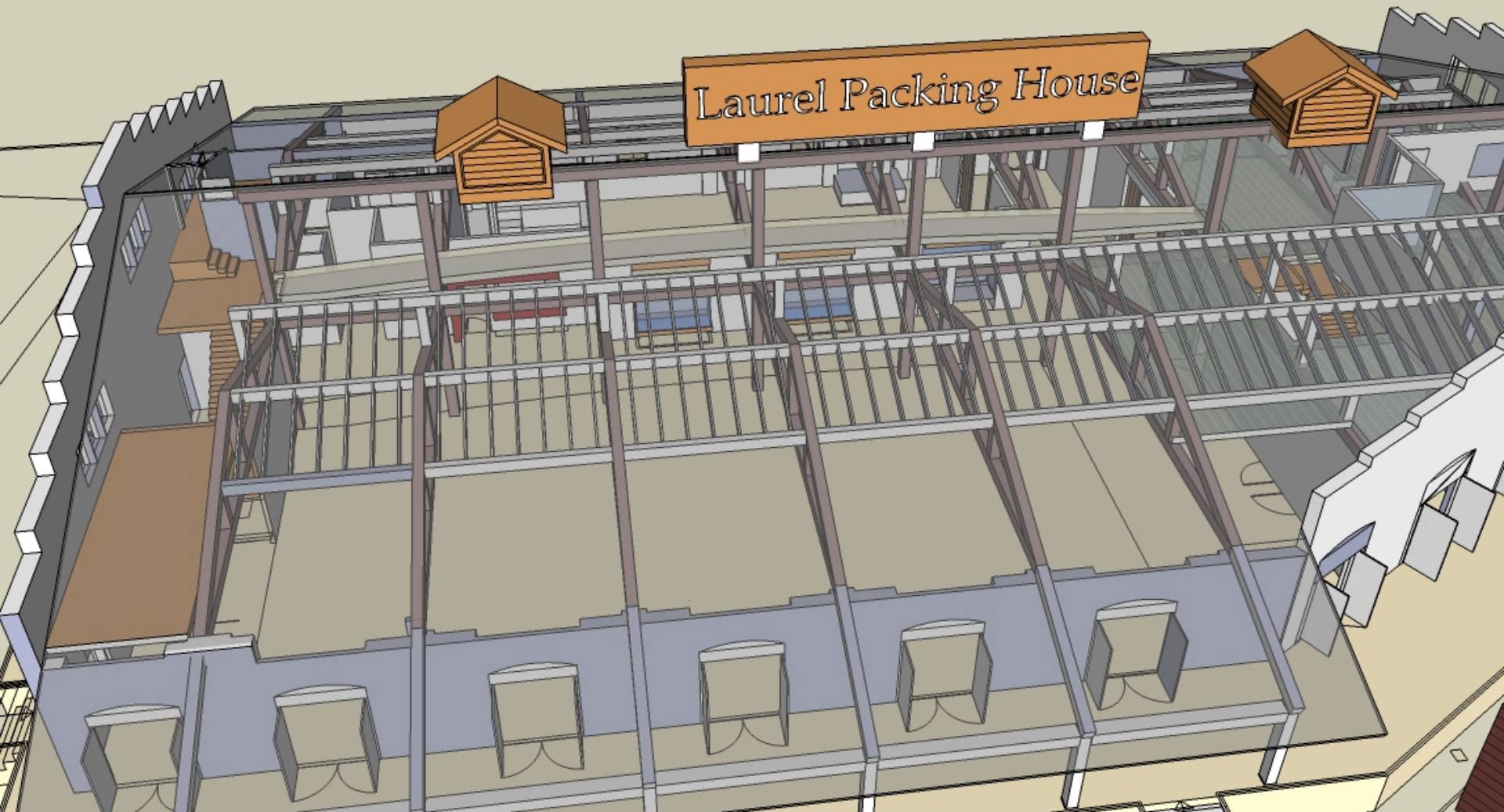


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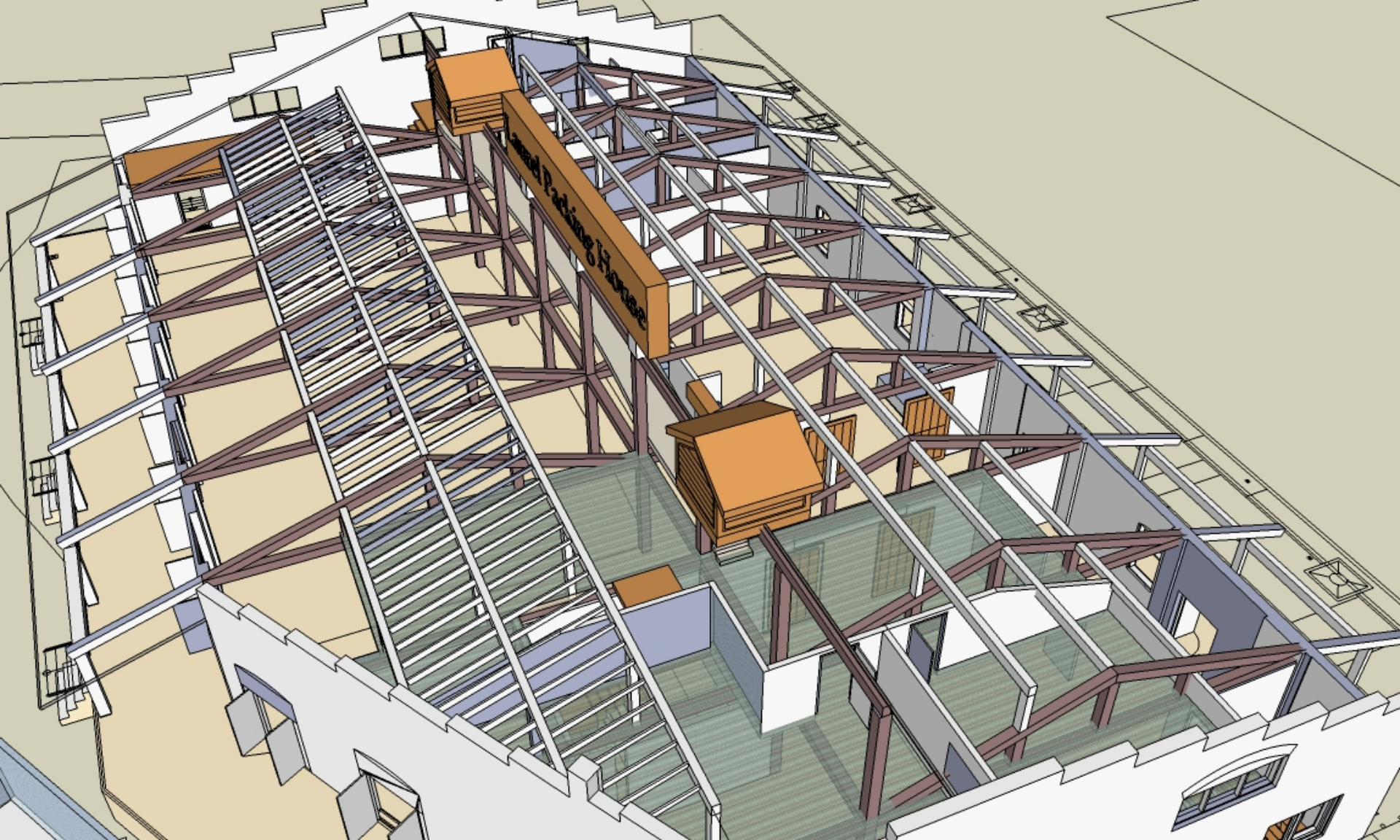


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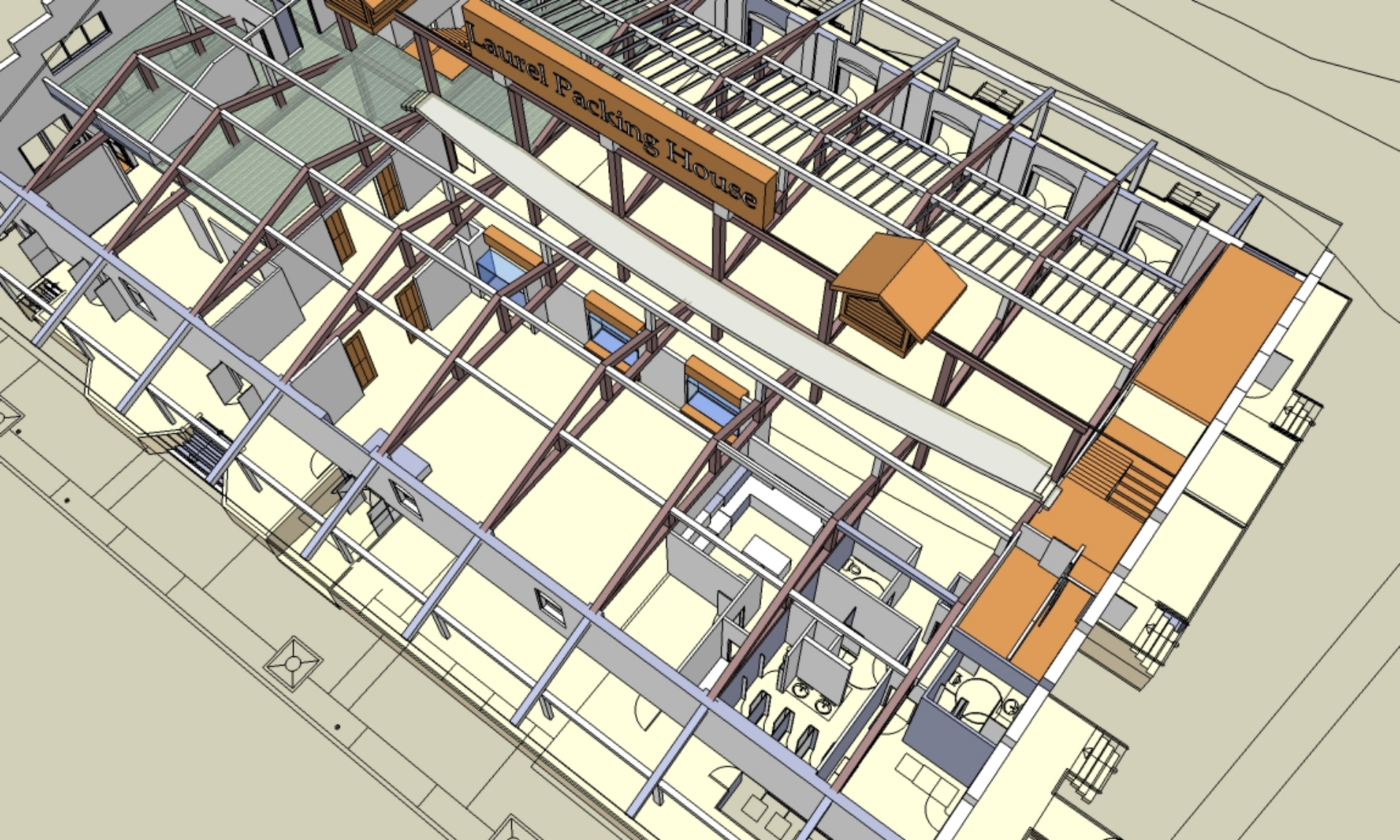
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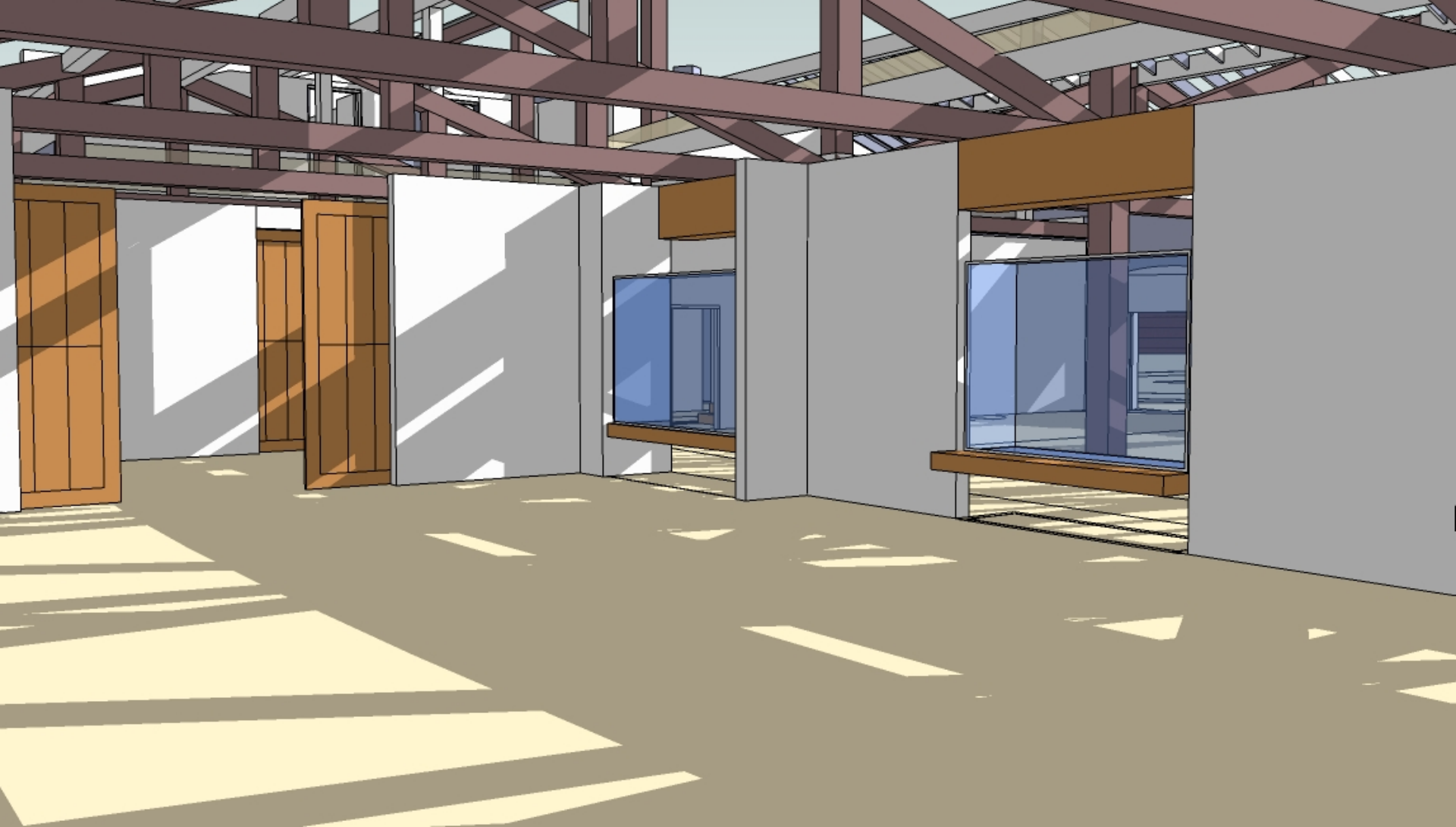




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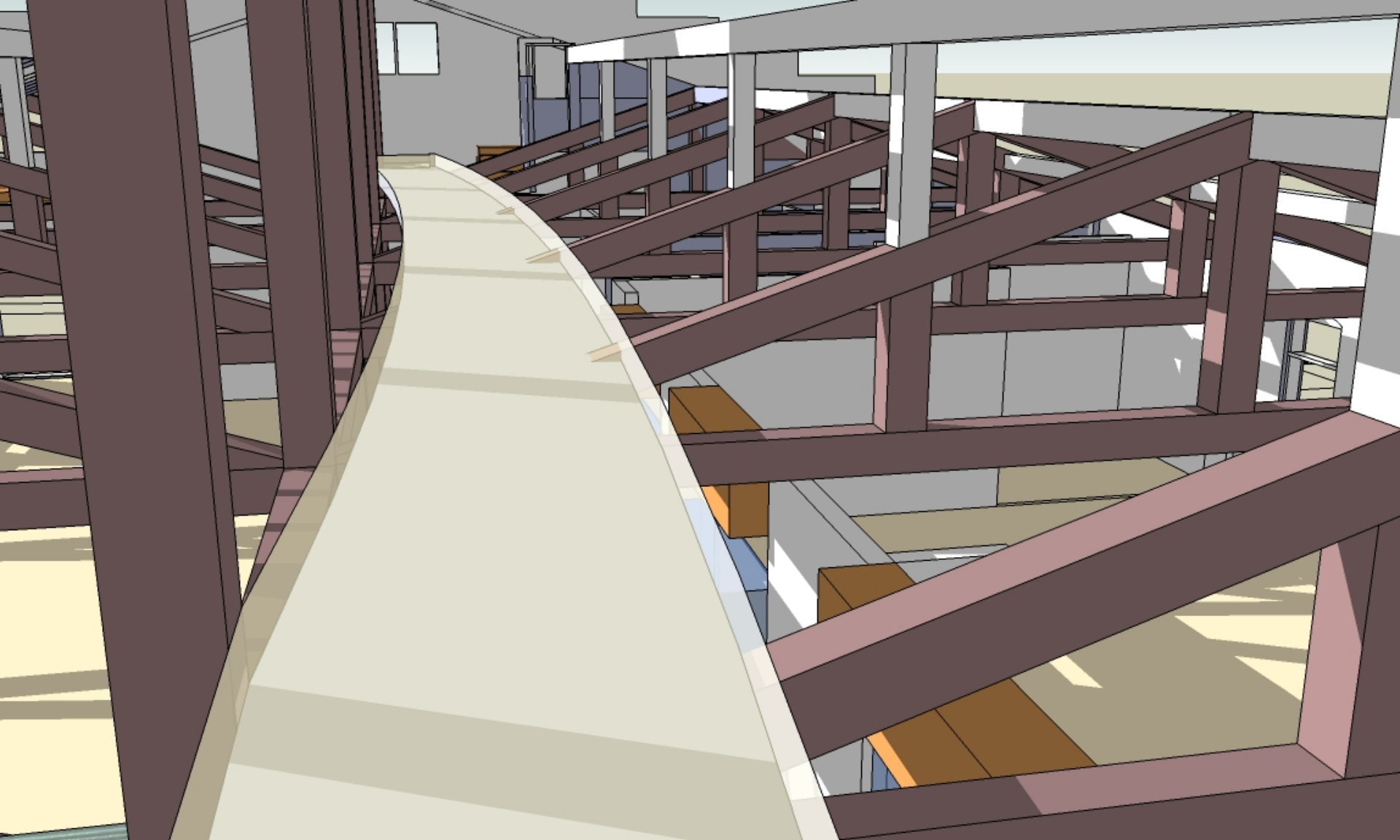


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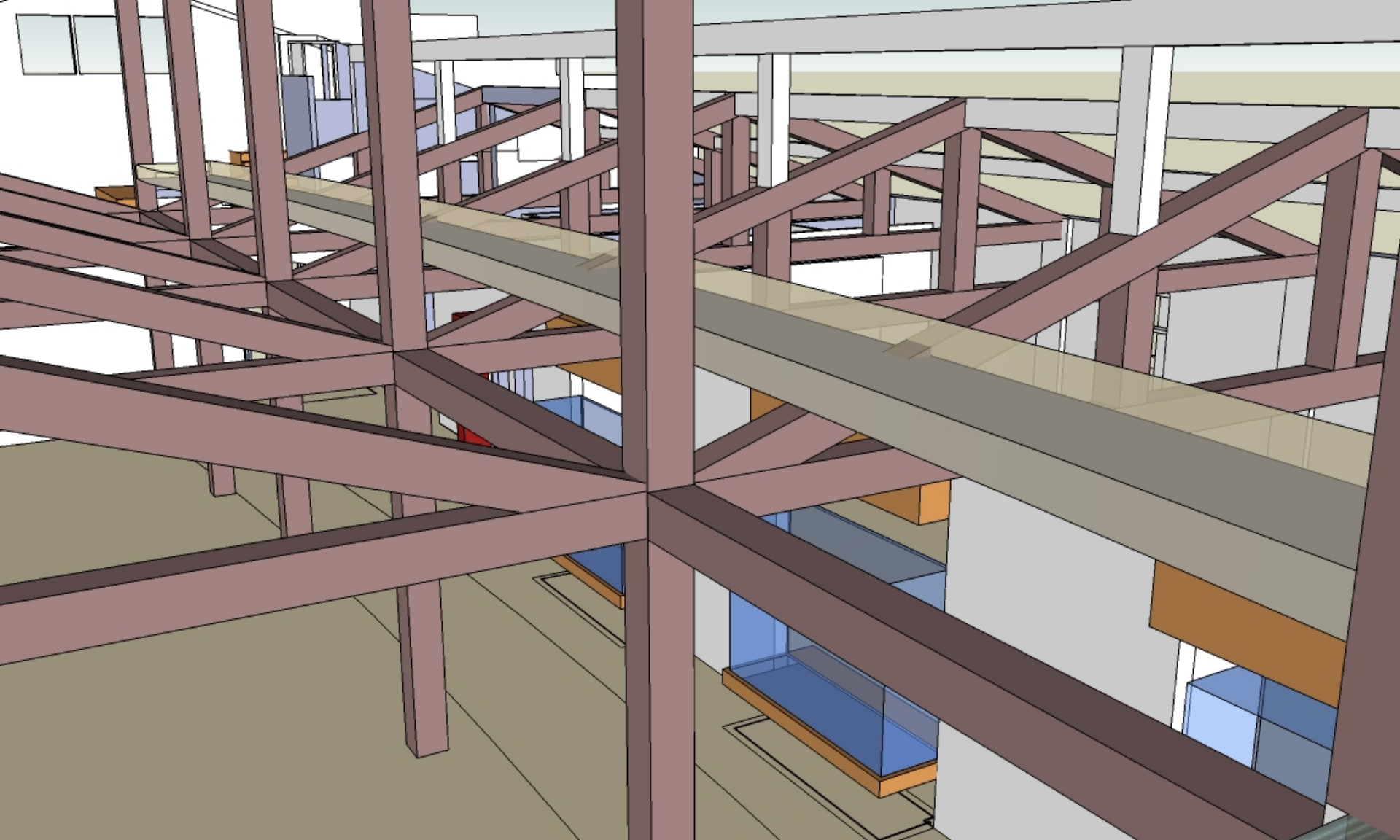


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# Rehabilitation Costs

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1. The full rehabilitation plan includes:
  - All structural repairs to roof and main floor.
  - Architectural design changes interior/exterior
  - Replacement of aging mechanical, electrical and life safety systems.
  - \$3.1 Million to complete.

# Rehabilitation Phasing Options

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1. Address the most significant structural issues and include essential upgrades to the mechanical, electrical and life safety systems.
  - \$1.7 million
2. Complete the rehabilitation repairs to main floor diaphragm, renovate bathroom/kitchen area and restore of the loading docks and railroad ties on the exterior of the building.
  - \$1.4 million