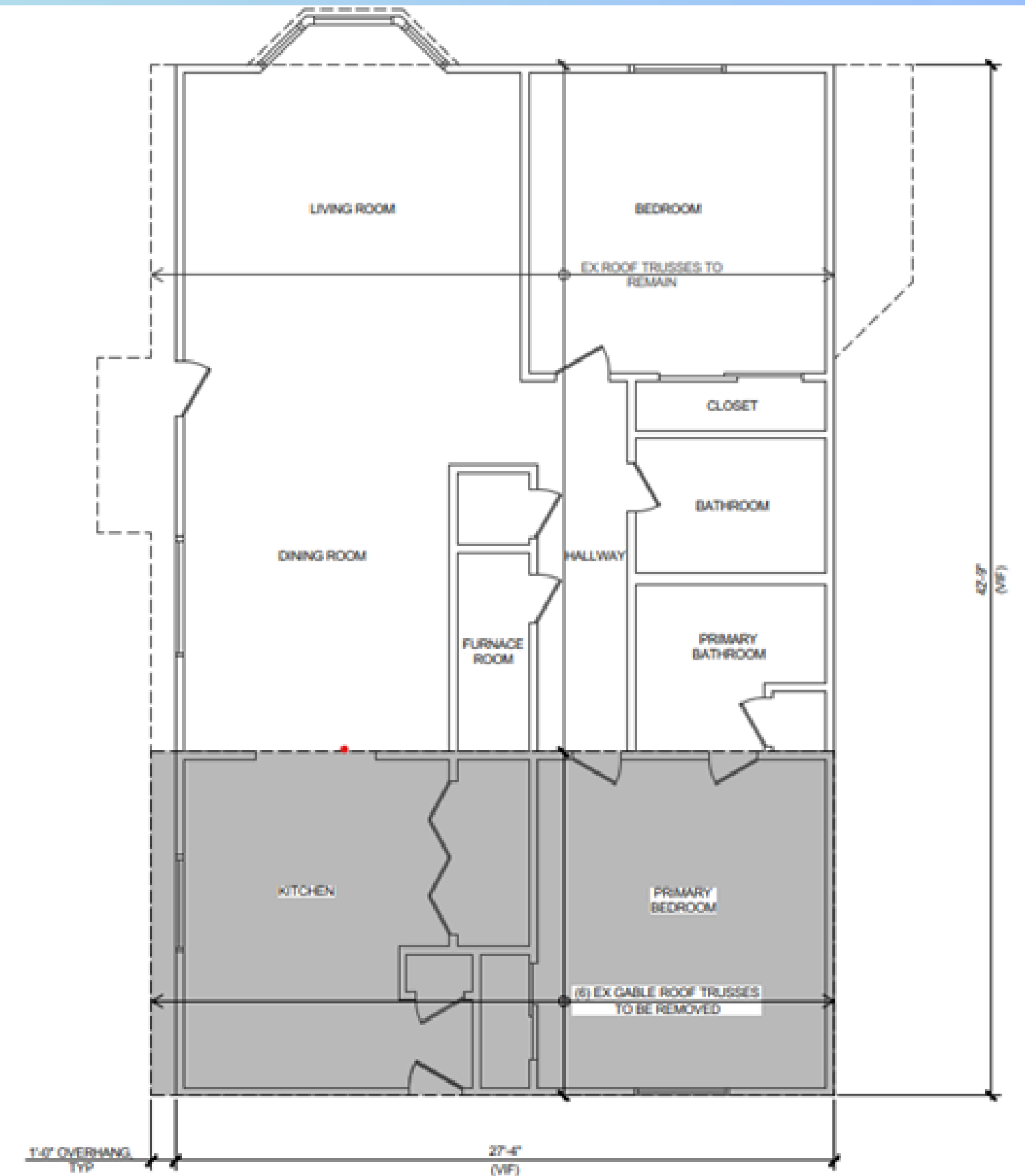


RESIDENTIAL PROJECT REDEVELOPMENT

STRUCTURAL REMEDIATION | 3638
CHURCH STREET, CINCINNATI, OH 45244

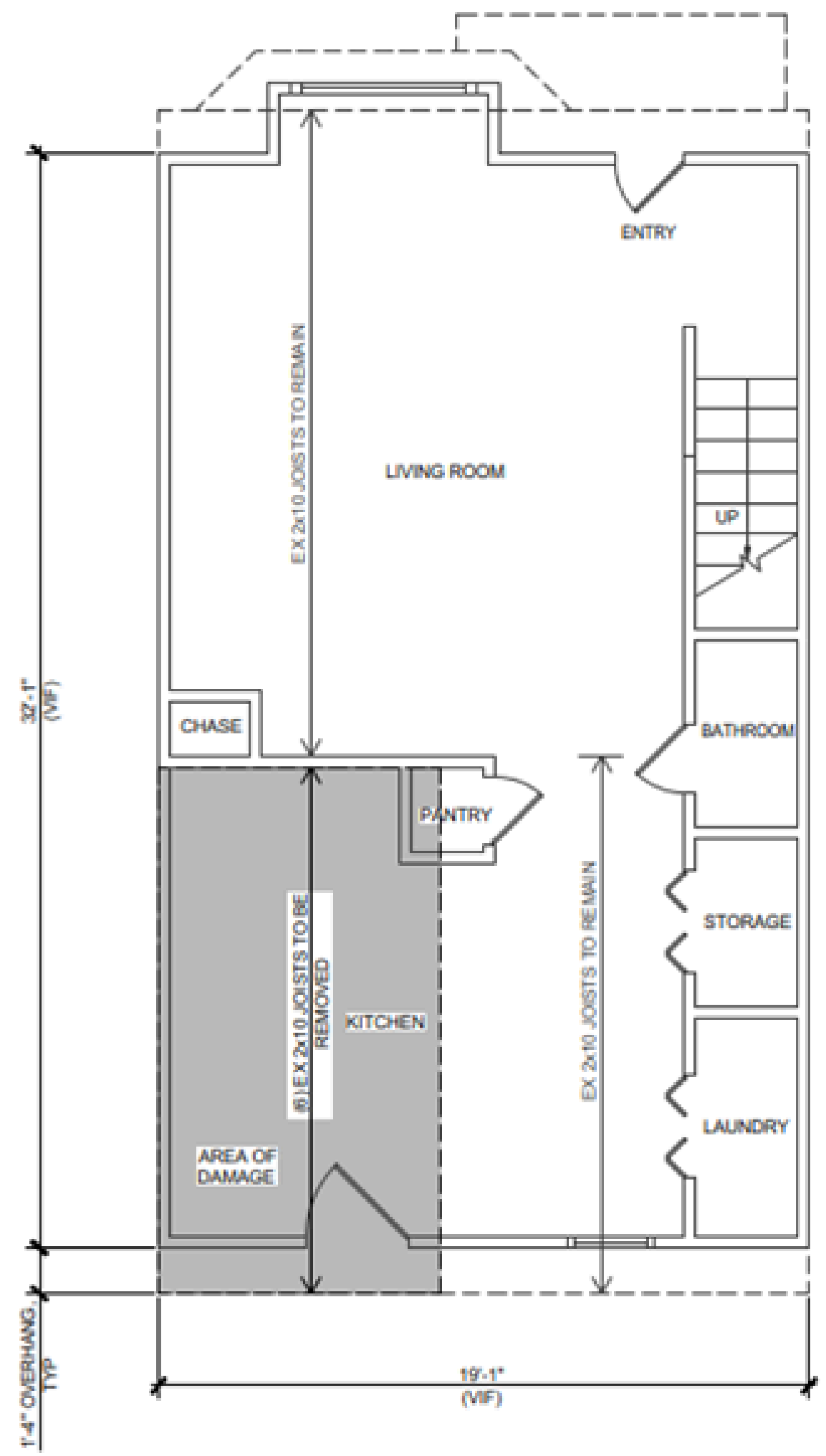
Presented by Roots BIM LLC

Output Plan



Renovation of the Existing
structure due to damage in fire

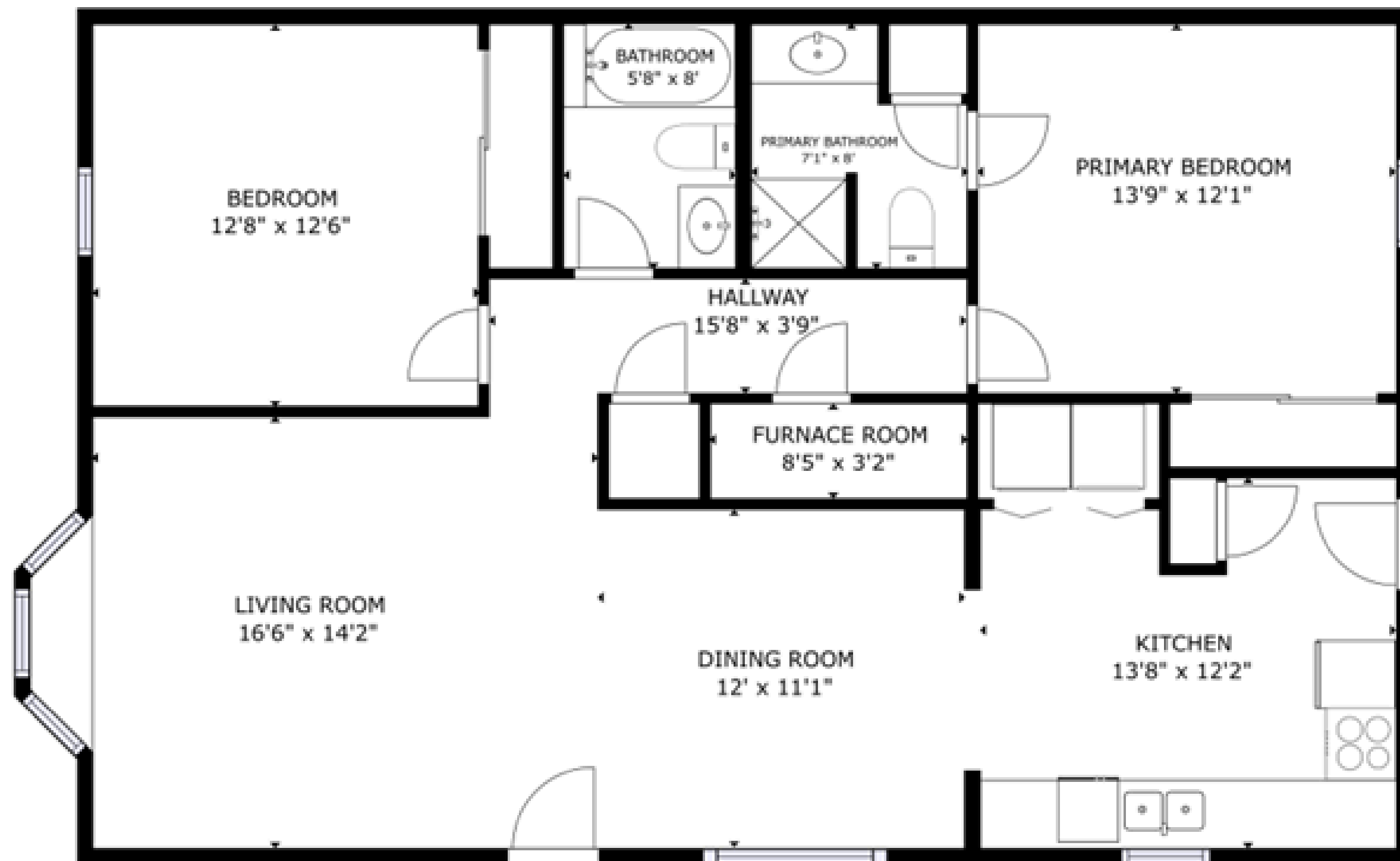
Output Plan



SCOPE:

Renovation of an existing fire-damaged structure





Input Plan

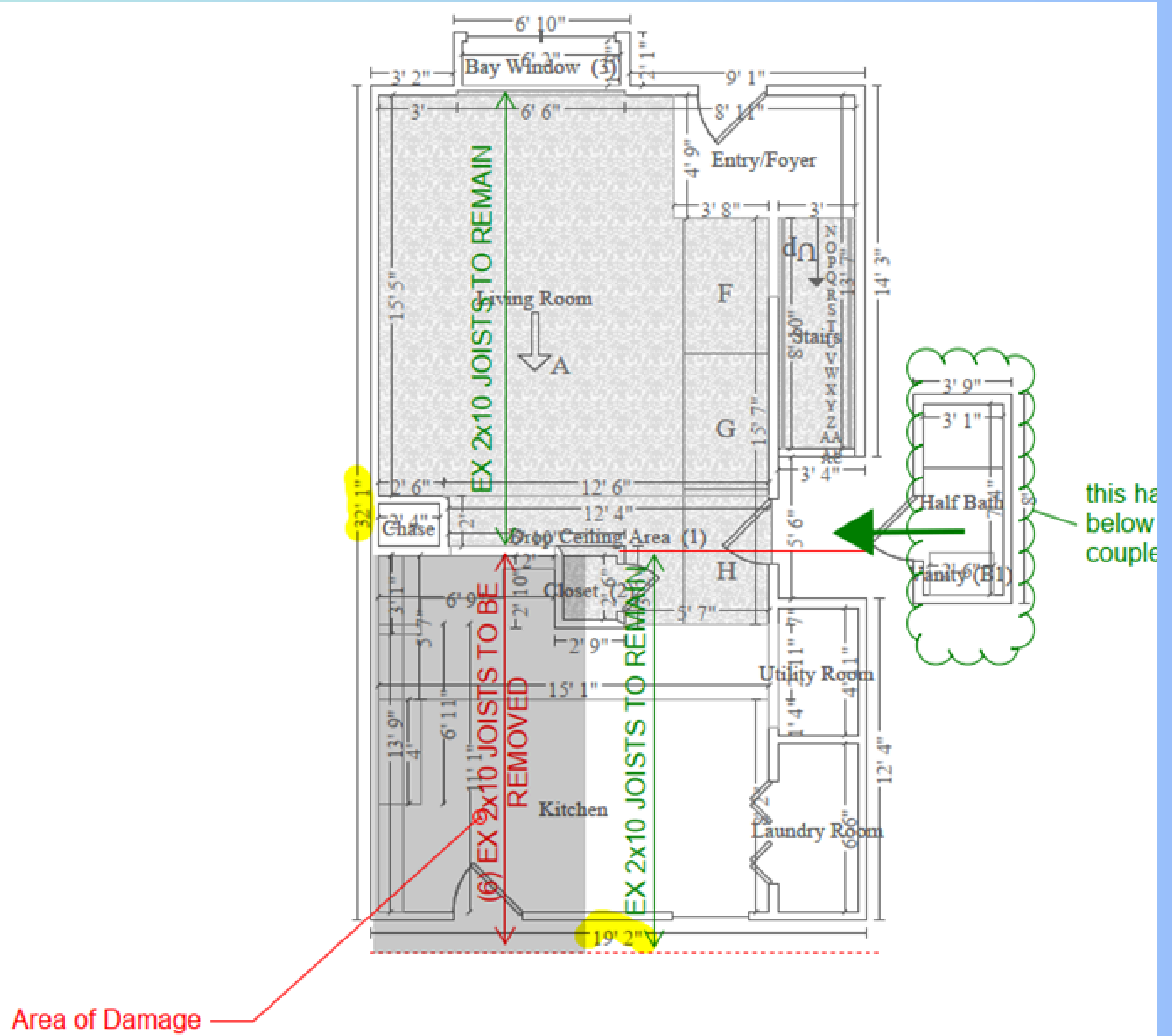
DOMAIN:

2D Structural Drafting |
Scan-to-CAD



CLIENT:

Structural Engineering Firm



Input Plan

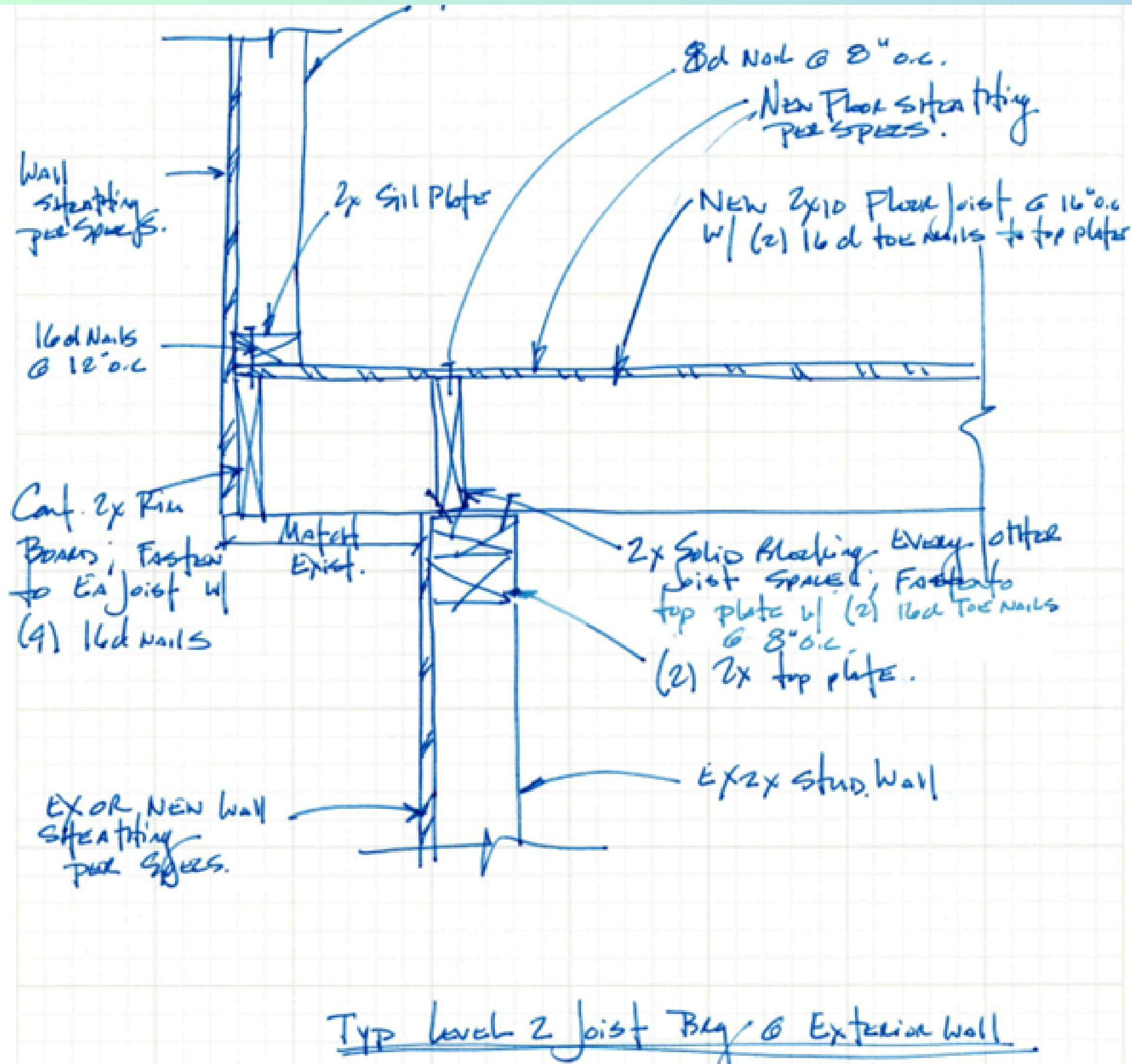


At Roots BIM LLC, the structural remediation of 3638 Church Street demanded a high-precision digital reconstruction of a fire-affected building where legacy geometry, material loss, and deformation posed significant modeling challenges.

Using high-resolution laser scans, our team generated an accurate as-built dataset to capture charred framing and displaced members. This point-cloud data was converted into precise 2D structural drawings and Scan-to-BIM models, enabling engineers to perform reliable structural assessment, capacity checks, and retrofit planning.

INTRODUCTION





OUR WORKFLOW ENSURED:

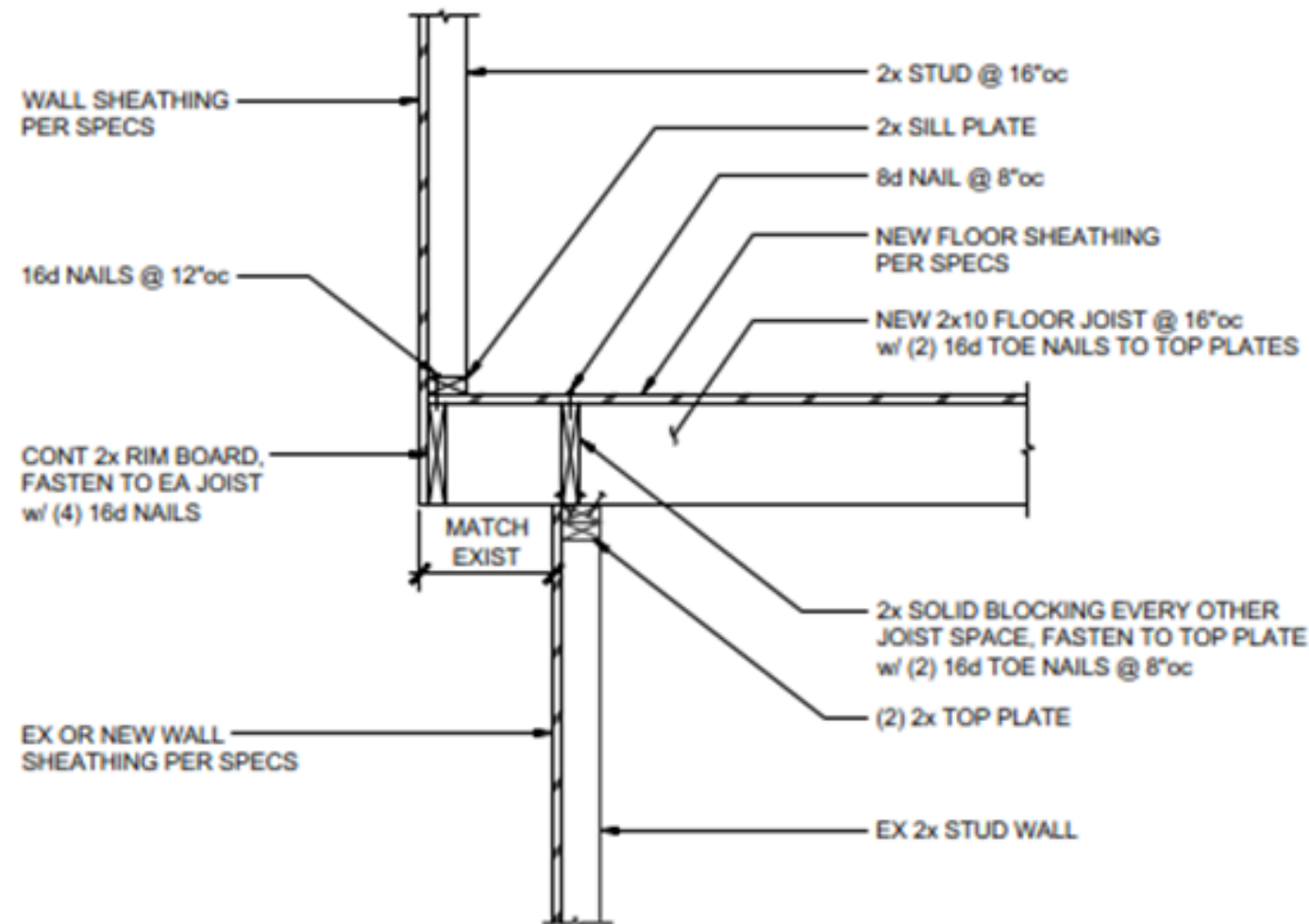
- True-condition documentation of damaged joists, beams, walls, and roof geometry

Input and Output details



WORKFLOW:

- Deviation mapping to compare pre-damage design intent vs. post-fire distortions
- Coordinated 2D structural sheets for remediation planning and permit submissions
- Accurate member extraction for load-bearing studies and replacement sequencing
- Model-ready CAD outputs for downstream engineering calculations



TYP LEVEL 2 JOIST BRG
AT EXTERIOR WALL

3

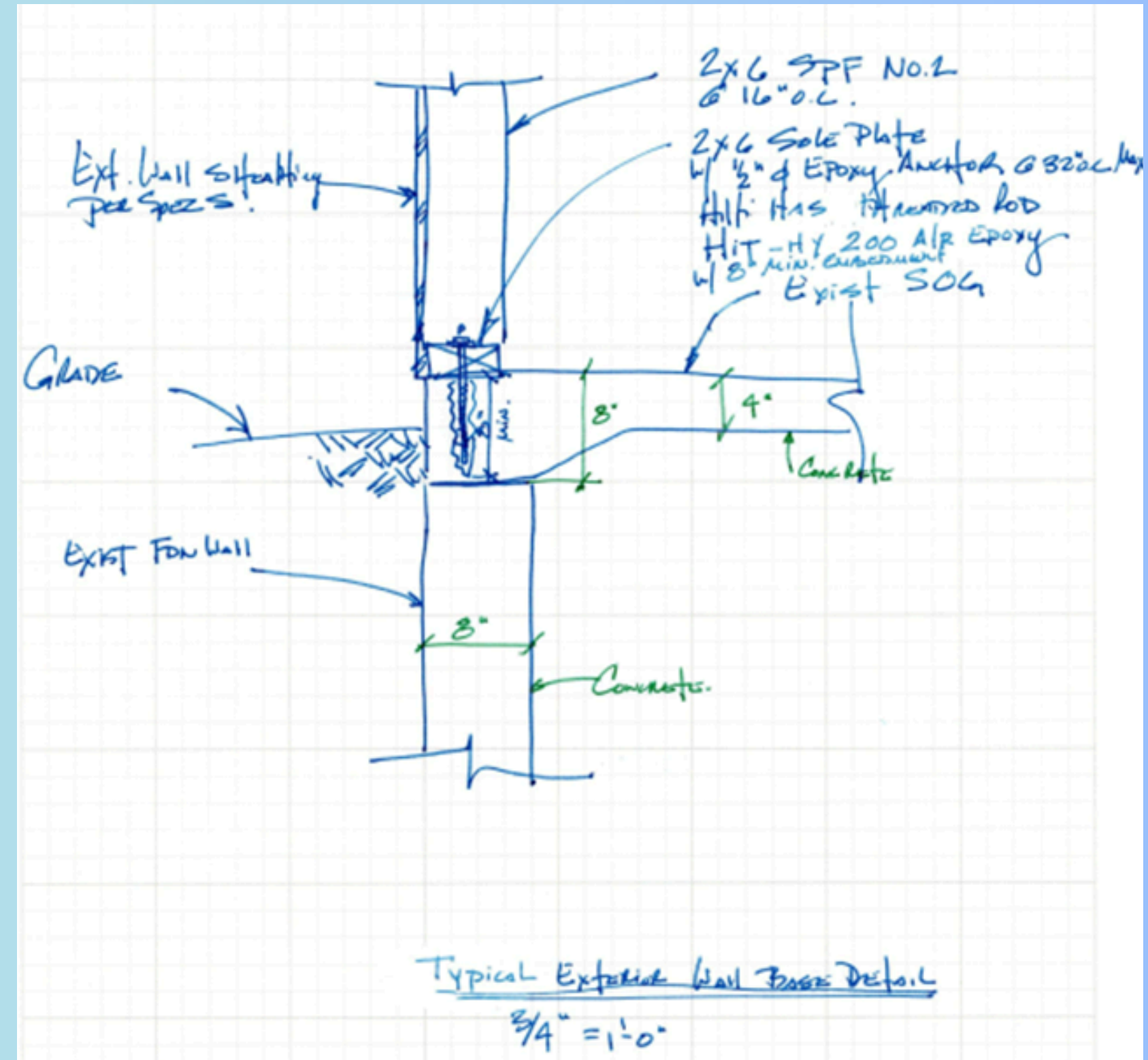
3/4"=1'-0"

Input and Output details



VALUE ADDITION:

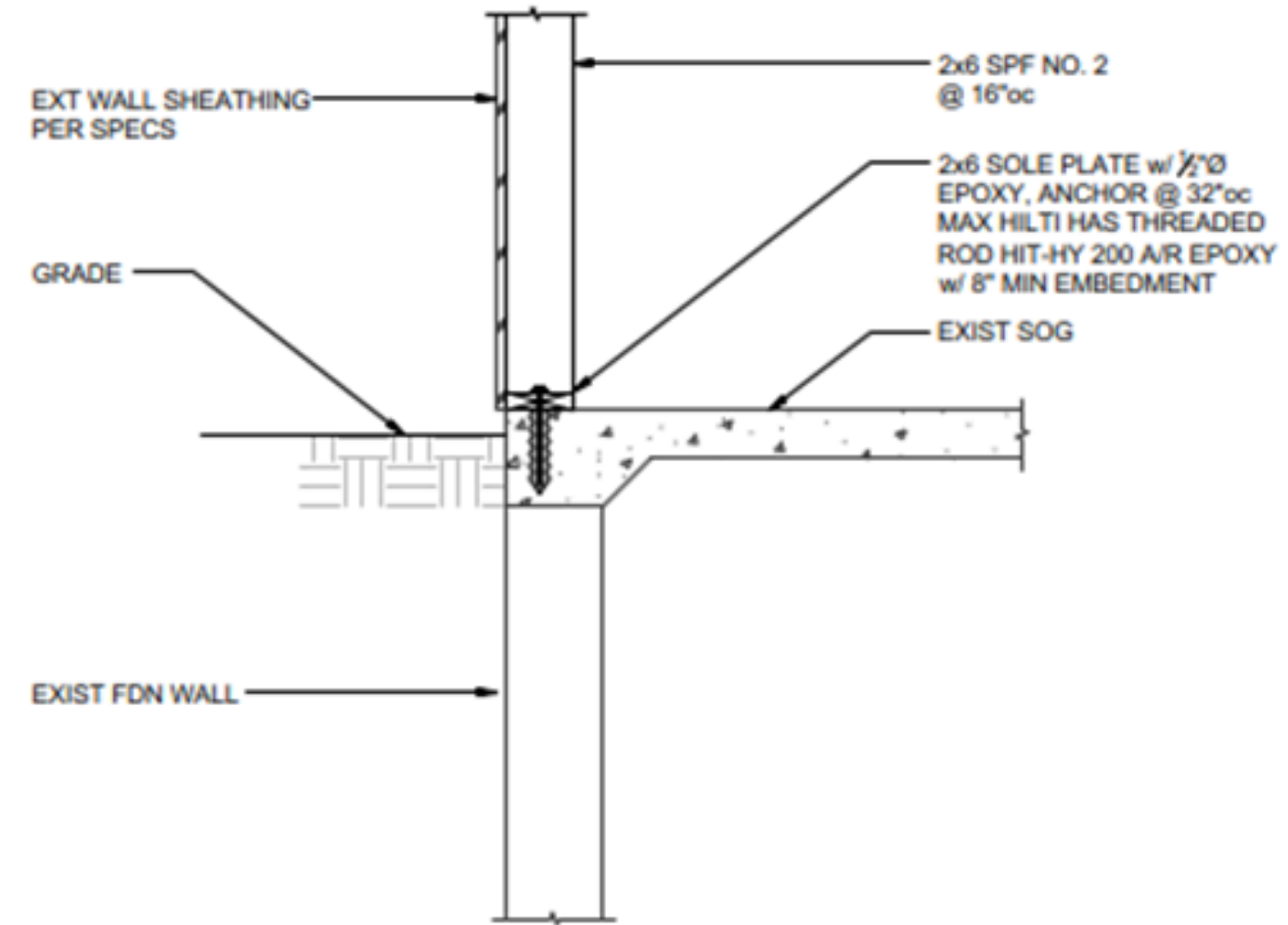
This renovation project restored clarity where field visibility was limited, giving the structural engineering team a dependable digital foundation to design a safe, code-compliant, and resilient rebuild of a local Cincinnati community asset.



Input and Output Details



INPUT AND OUTPUT DETAILS:

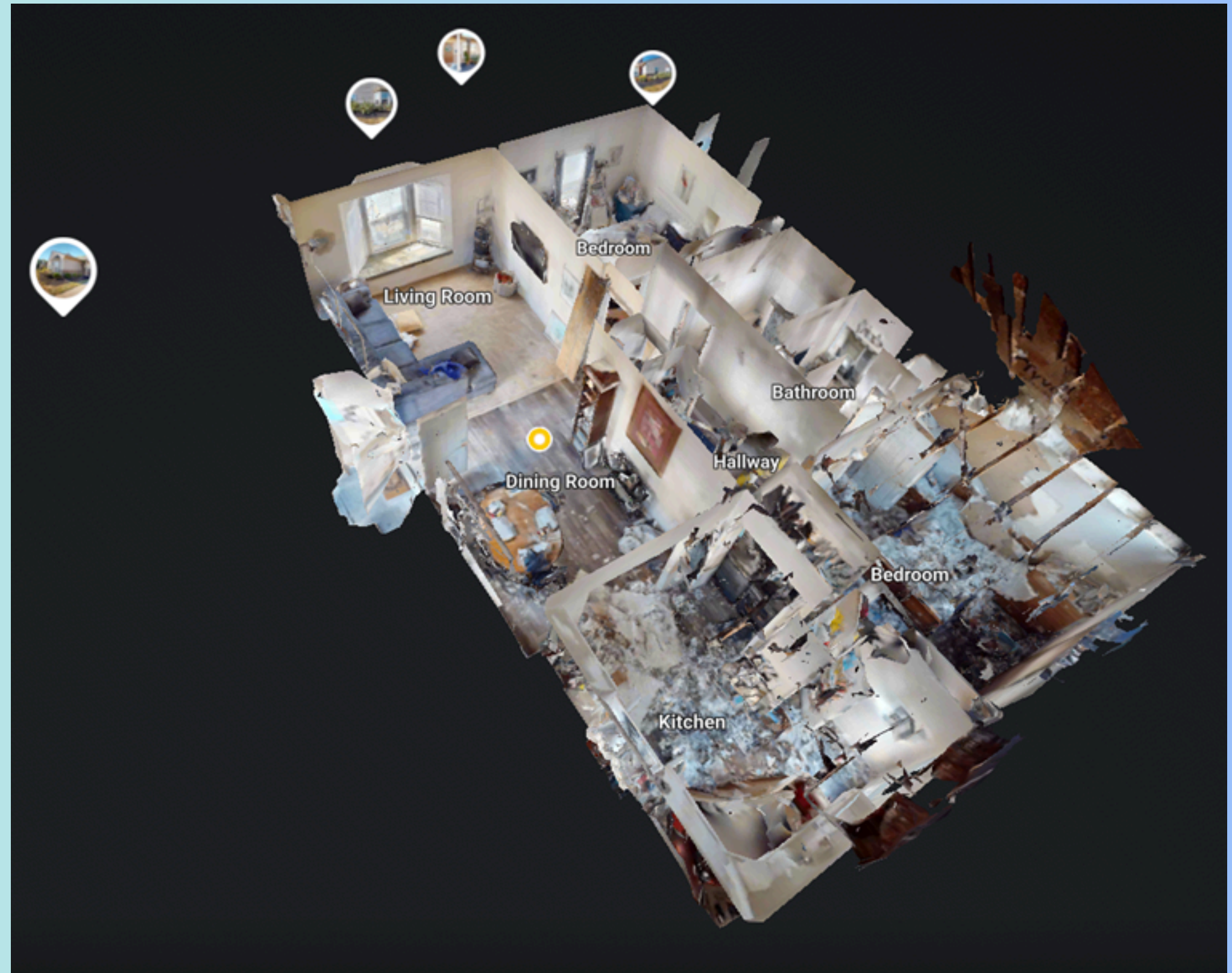


3

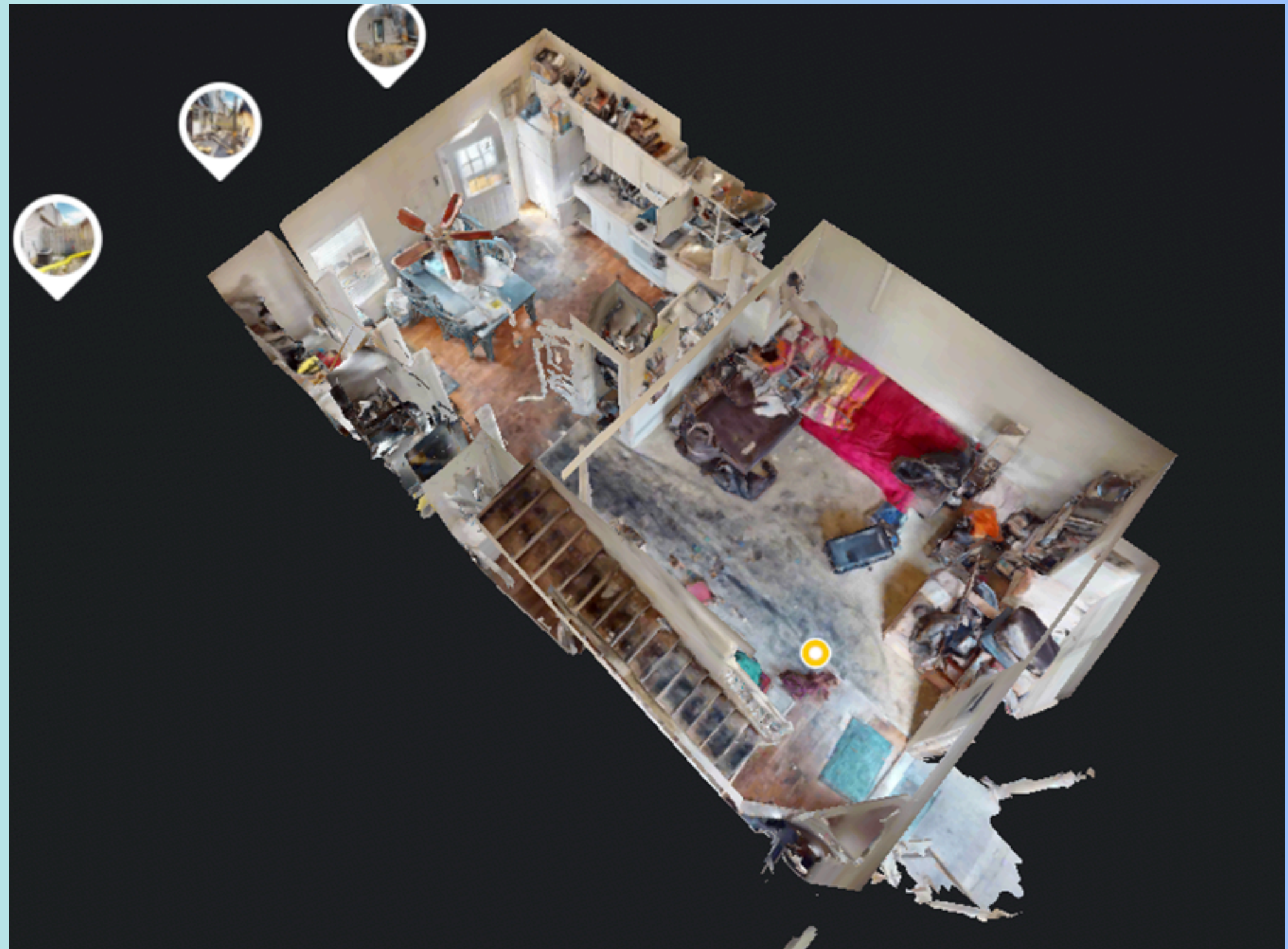
TYPICAL EXTERIOR WALL BASE DETAIL

3/4"=1'-0"

MATTERPORT VIEW OF THE BUILDINGS INVOLVED:



MATTERPORT VIEW OF THE BUILDINGS INVOLVED:



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