

Lansing Old Stone School

IOWA

Civil and Environmental
Engineering



Team Composition

- Chad Johnson – *Project Manager*
- Ben Amelon
- Devon Liebe
- Yusef Igram



Overview



Project Scope



Site Findings



Architectural Layout



Site Plan



Structural Remedies



Cost Breakdown



Conclusion

Project Scope

- Existing structural analysis
- Architectural planning
- Structural improvements
- Revised parking plan
- Addition of retaining wall

5TH ST.

Site Visit Findings

Wood Structure

Interior Clean-up Needed

Foundation Issues

Bearing Wall Deterioration

North Facing Wall



Wood Components



Clean up



Foundation





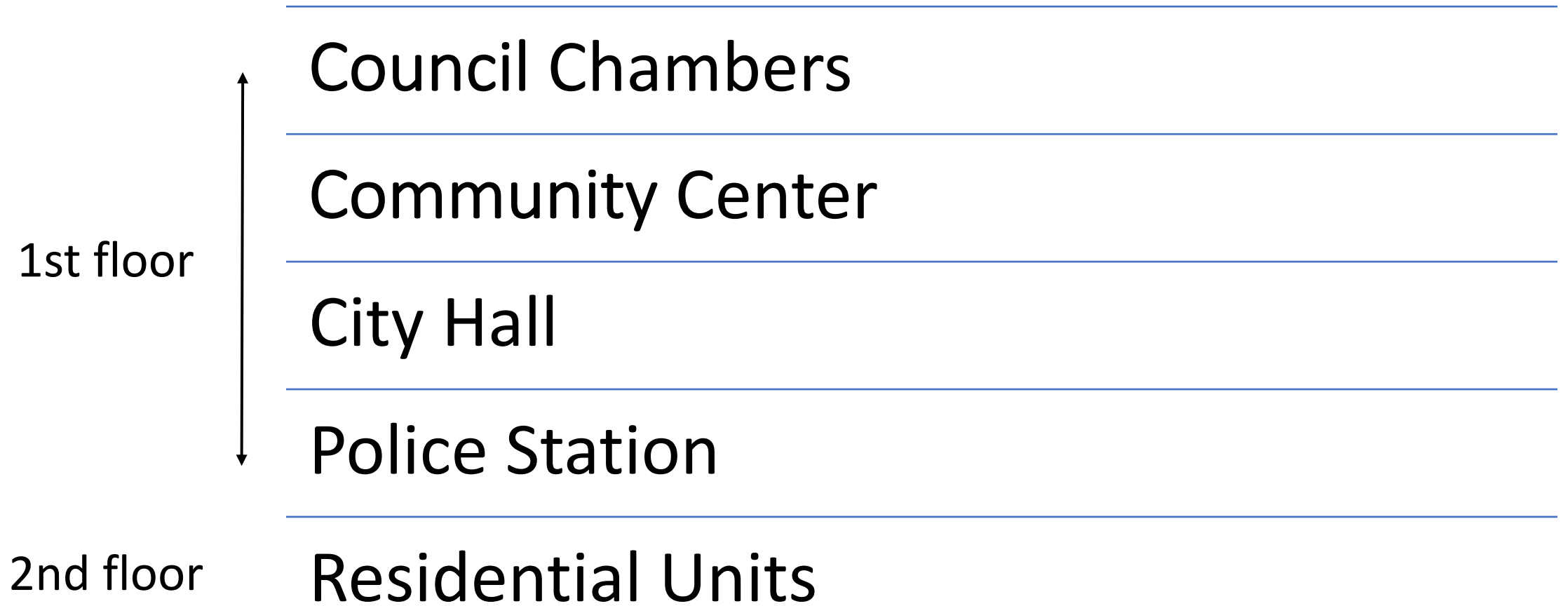
Bearing Wall



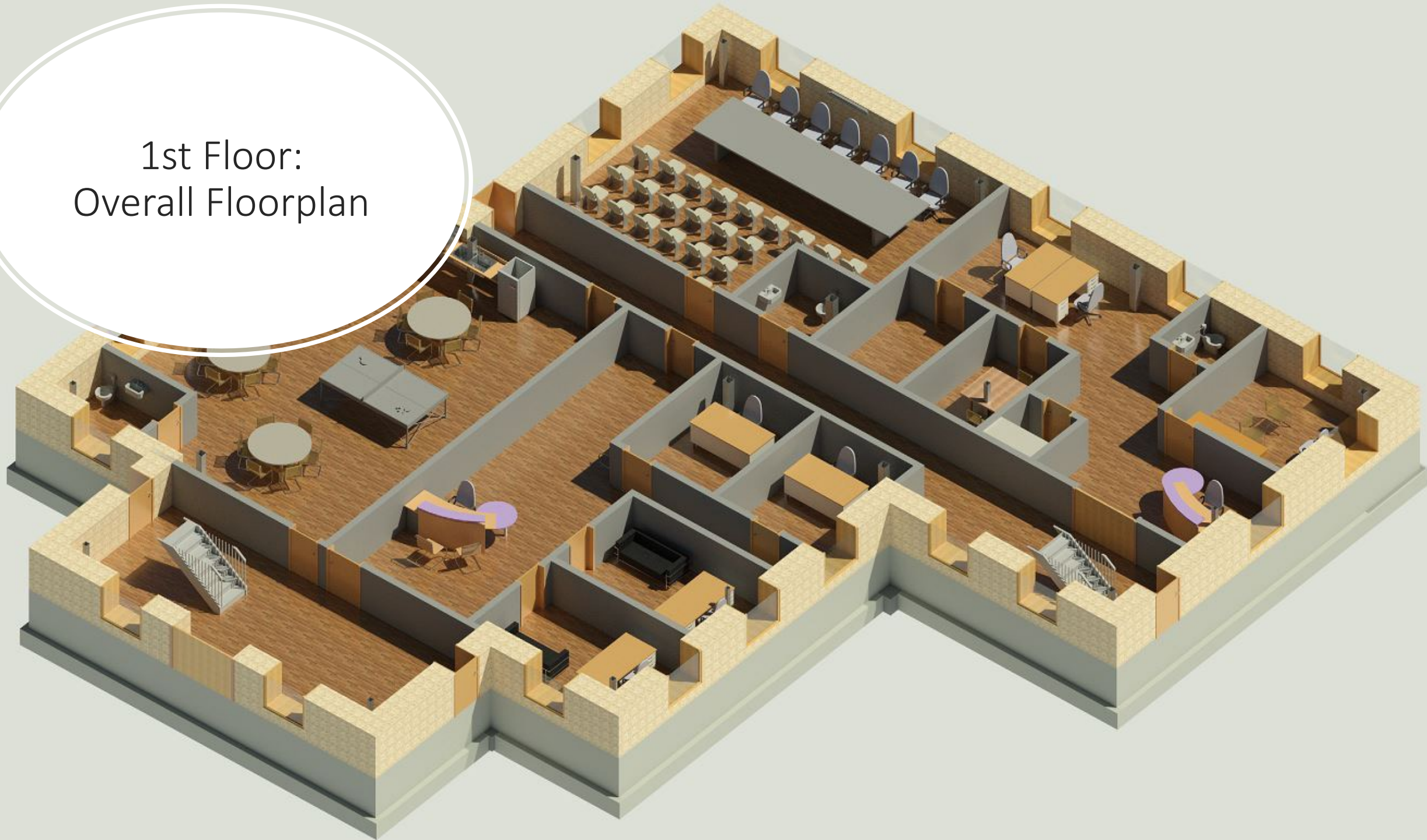
North-facing wall

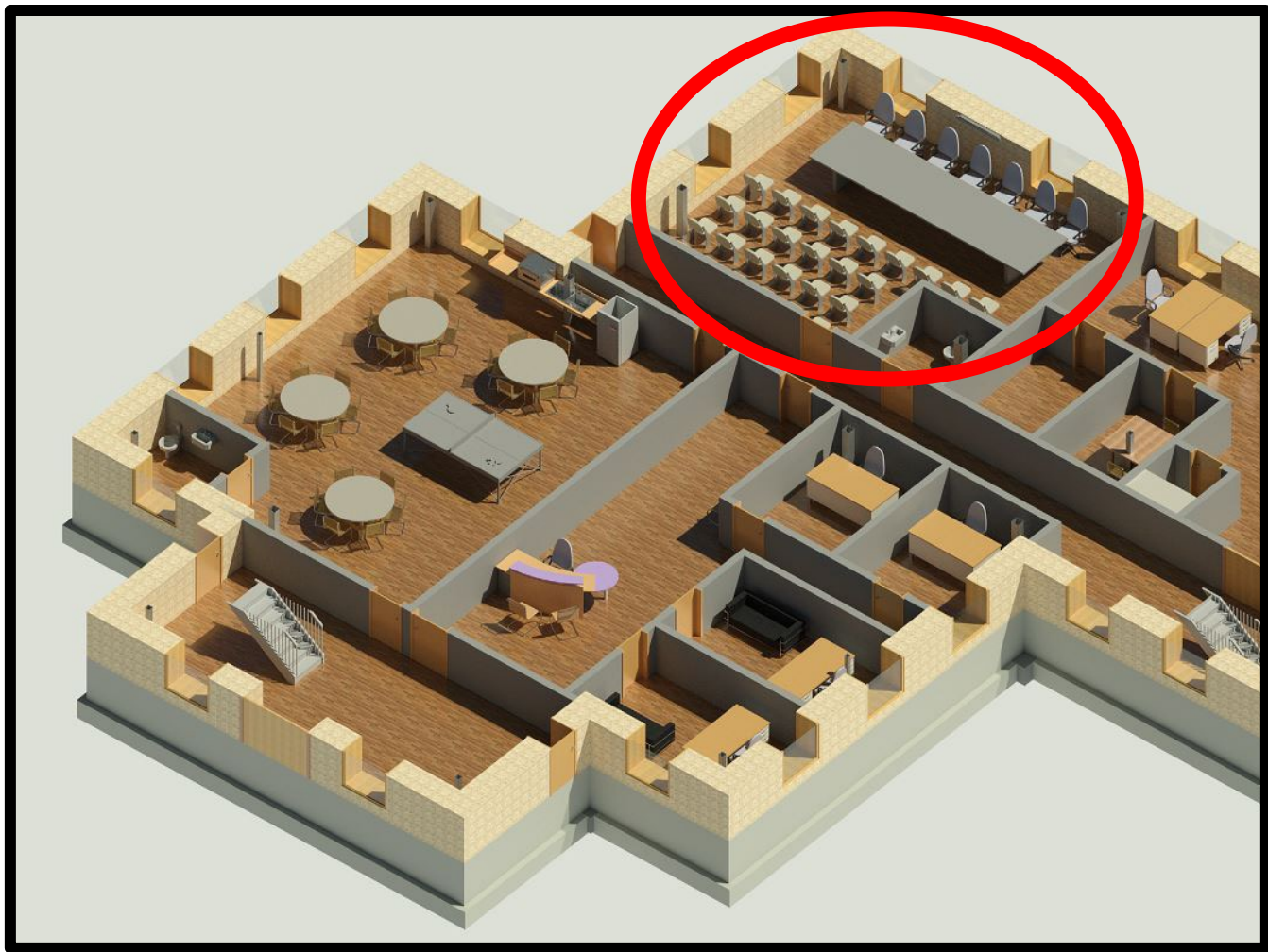


Mixed Use Building



1st Floor:
Overall Floorplan





1st Floor:

Council chambers:
600 SF

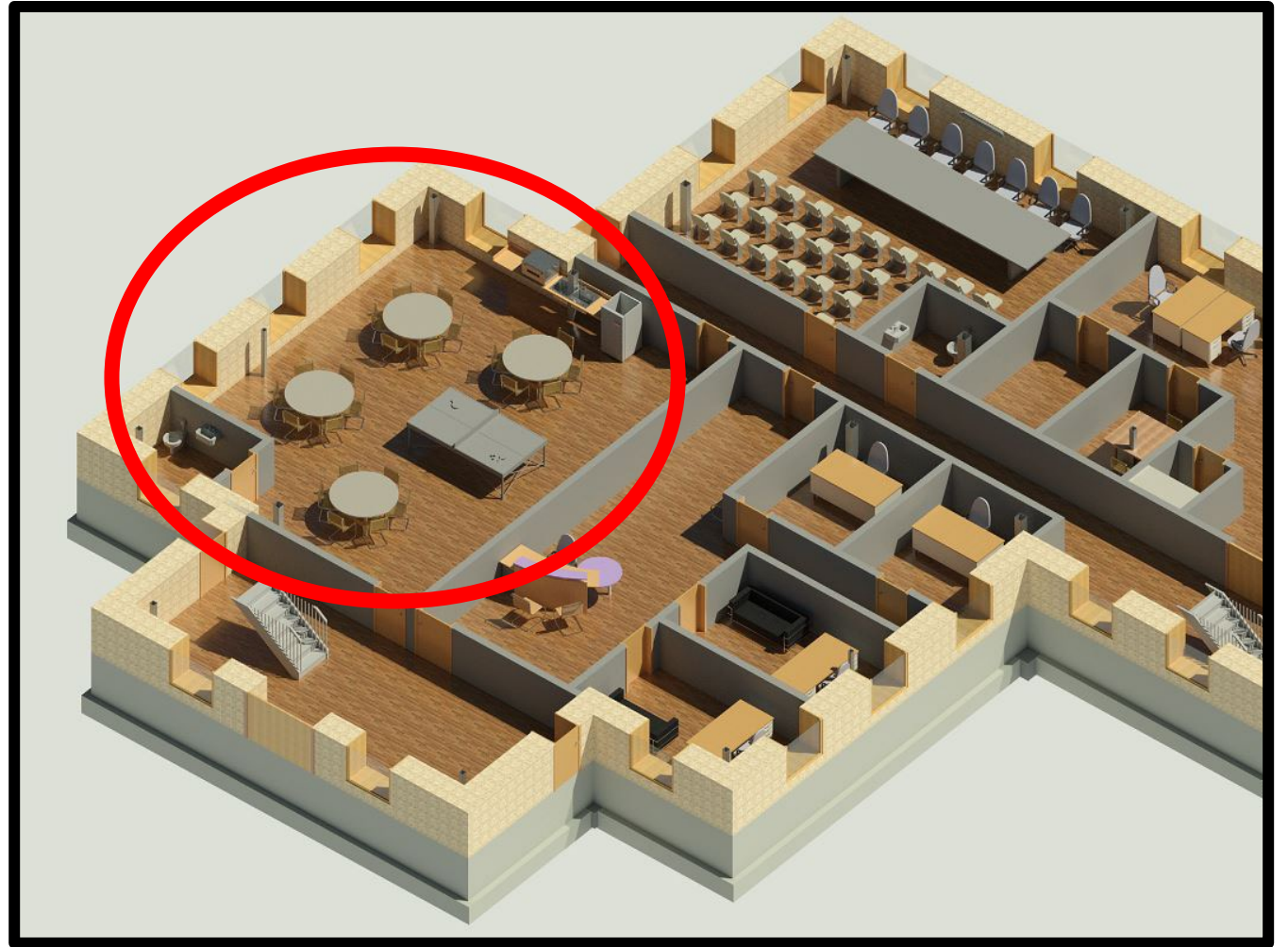
1st Floor:

Council chambers:



1st Floor:

Community
Center: 900 SF

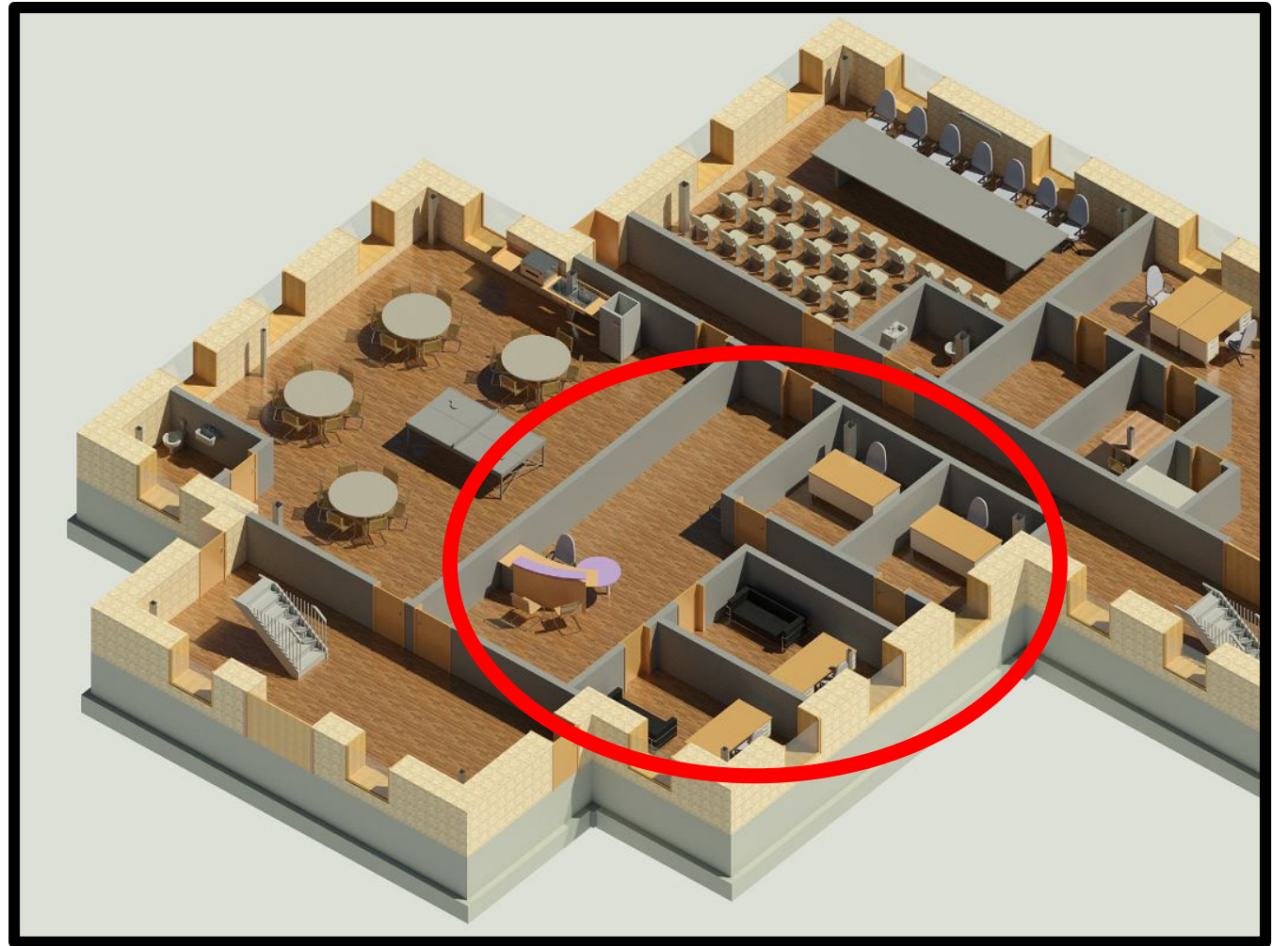


1st Floor:
Community Center



1st Floor:

City Hall: 900 SF

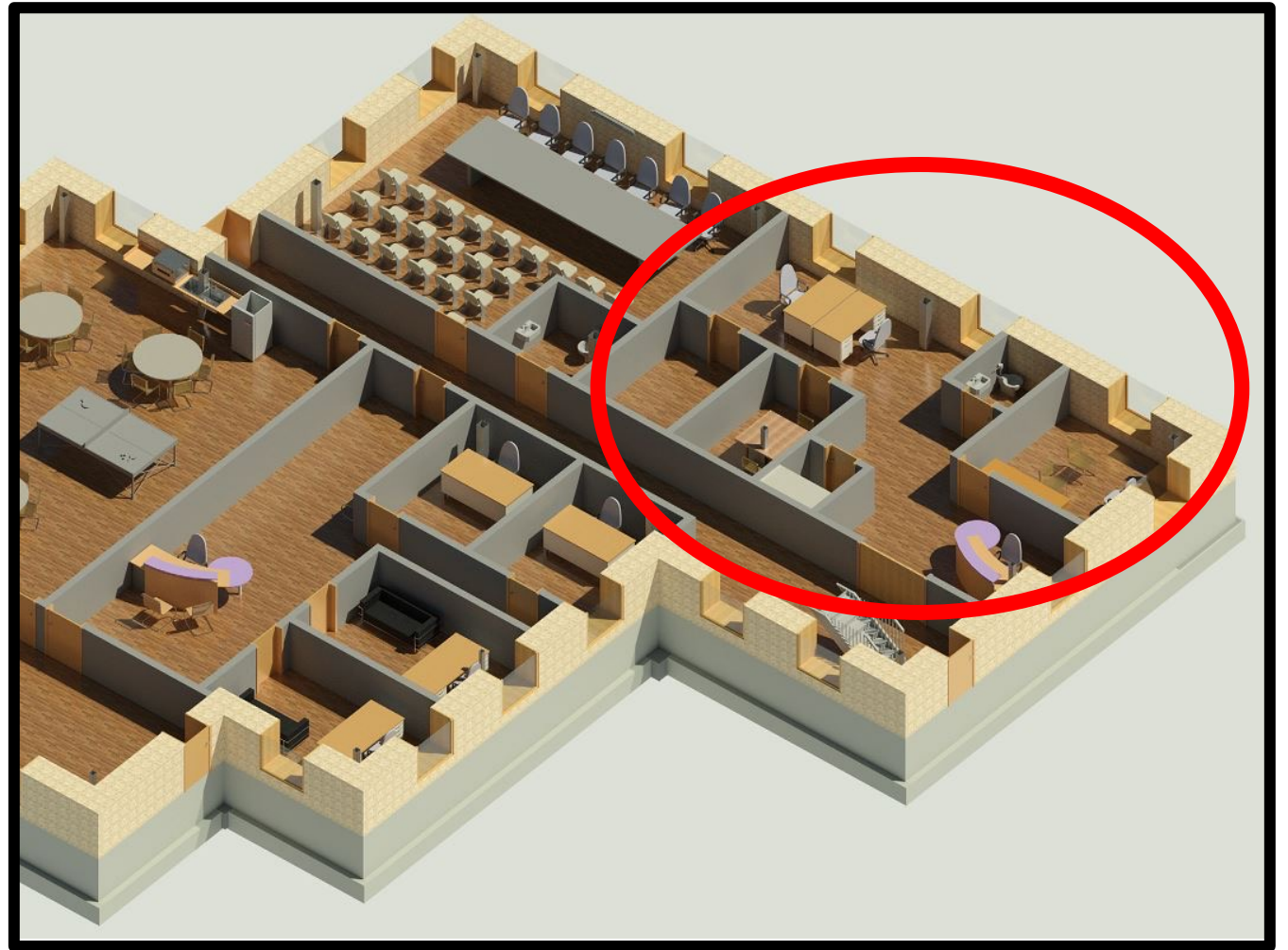


1st Floor: City Hall



1st Floor:

Police Station:
850 SF



1st Floor: Police Station

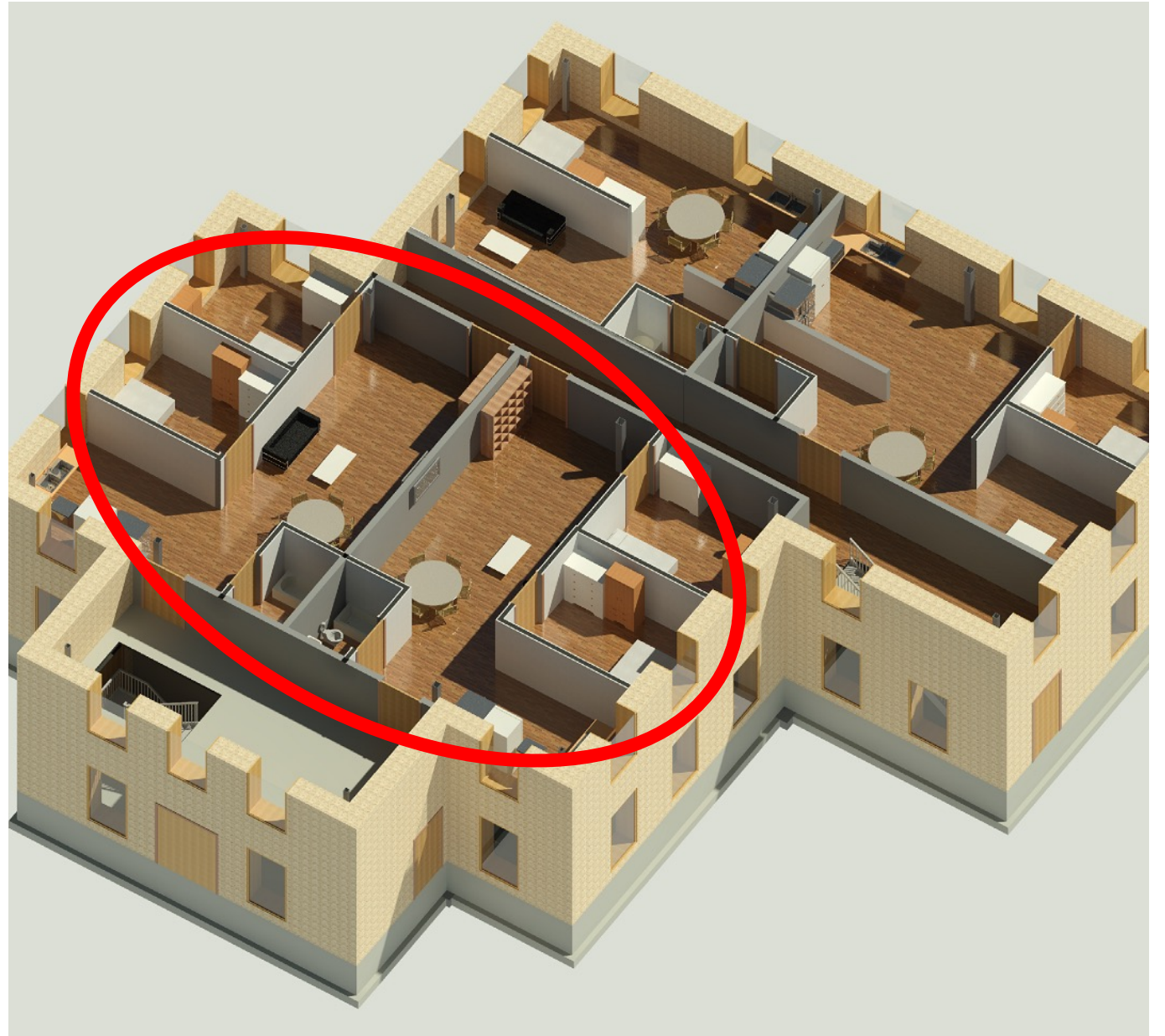


2nd Floor:
Residential Units



2nd Floor:

2 Bedrooms: 900 SF each

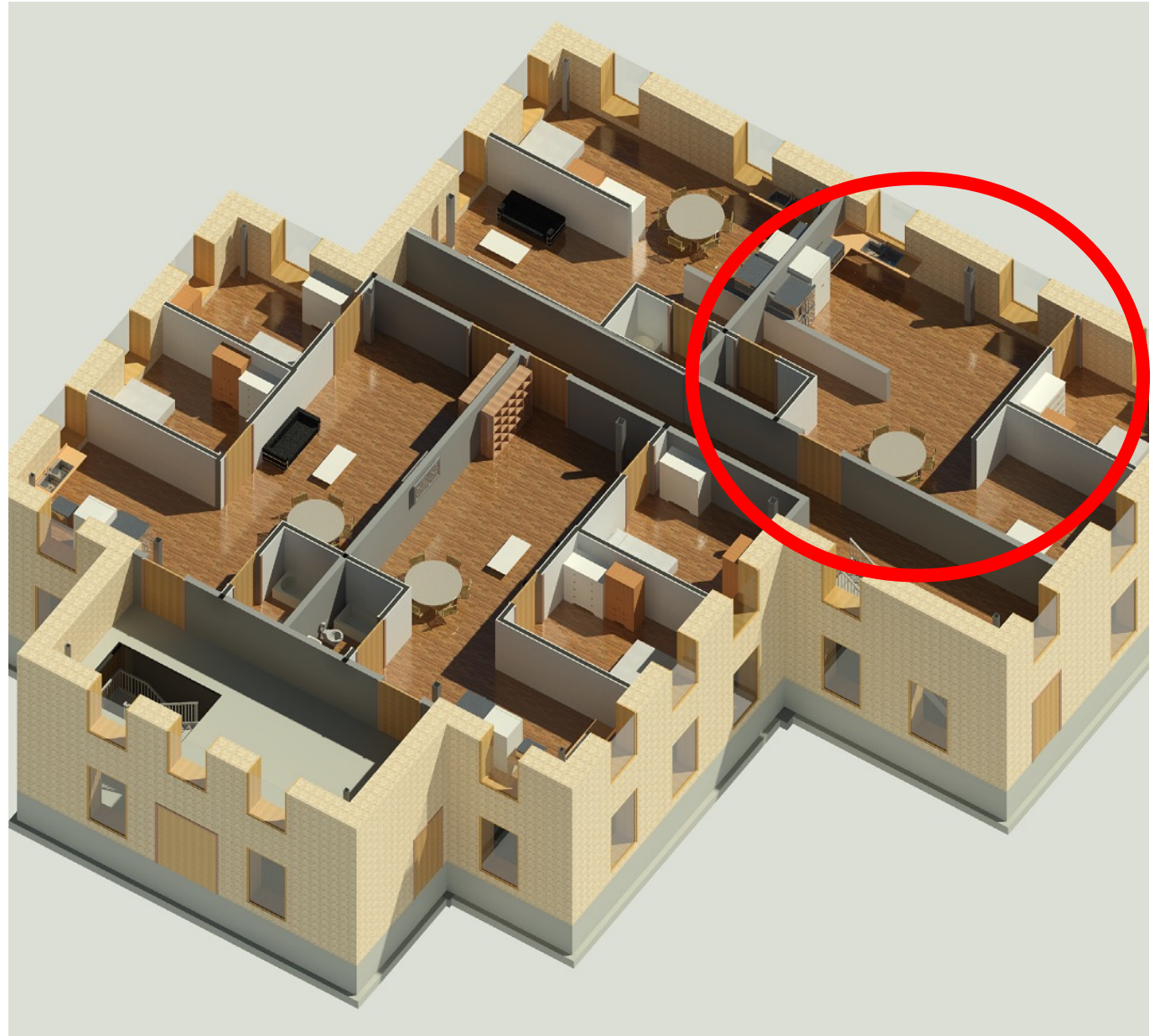




Two Bedroom

2nd Floor:

1 Bedroom: 850 SF

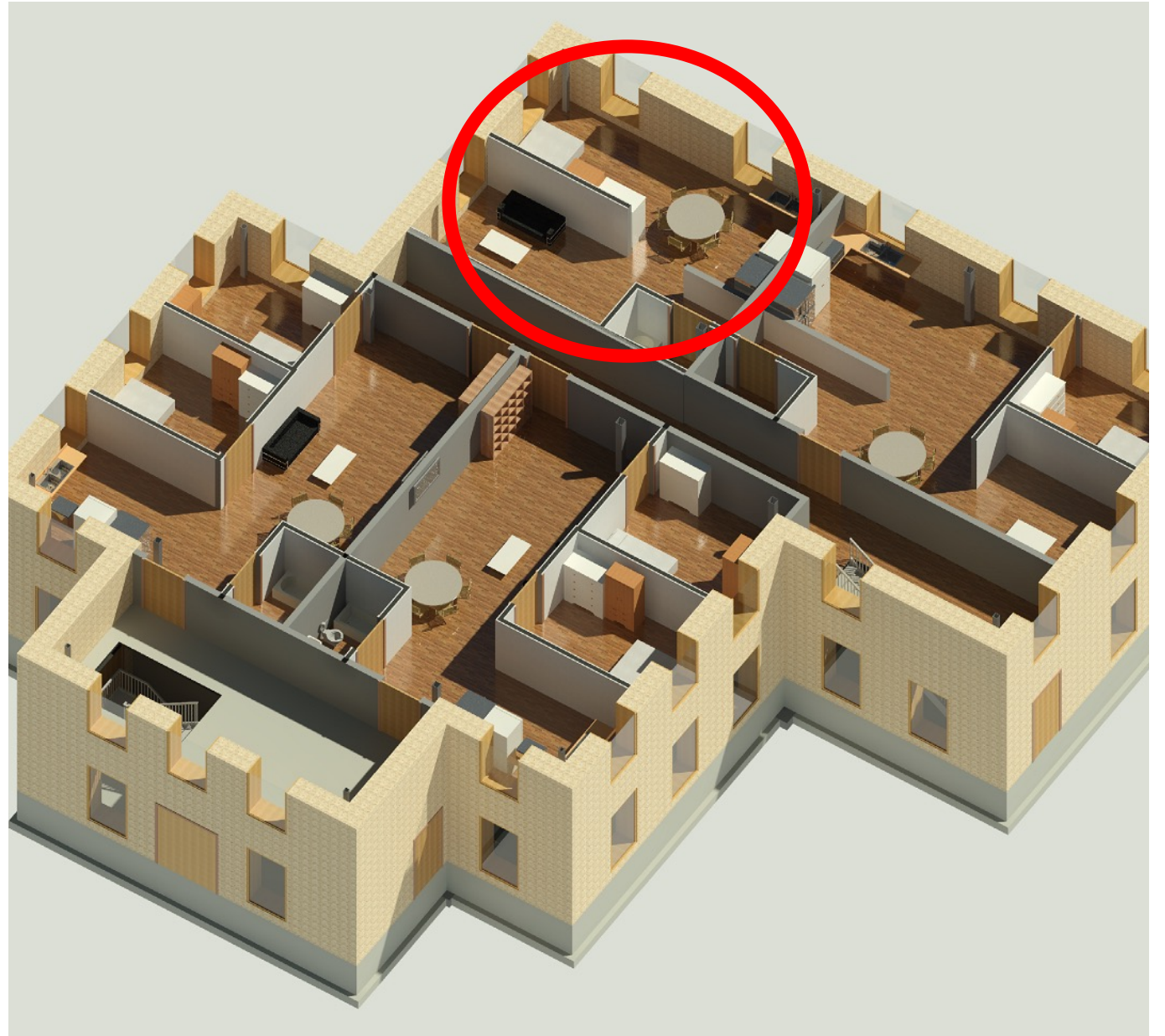




One Bedroom

2nd Floor:

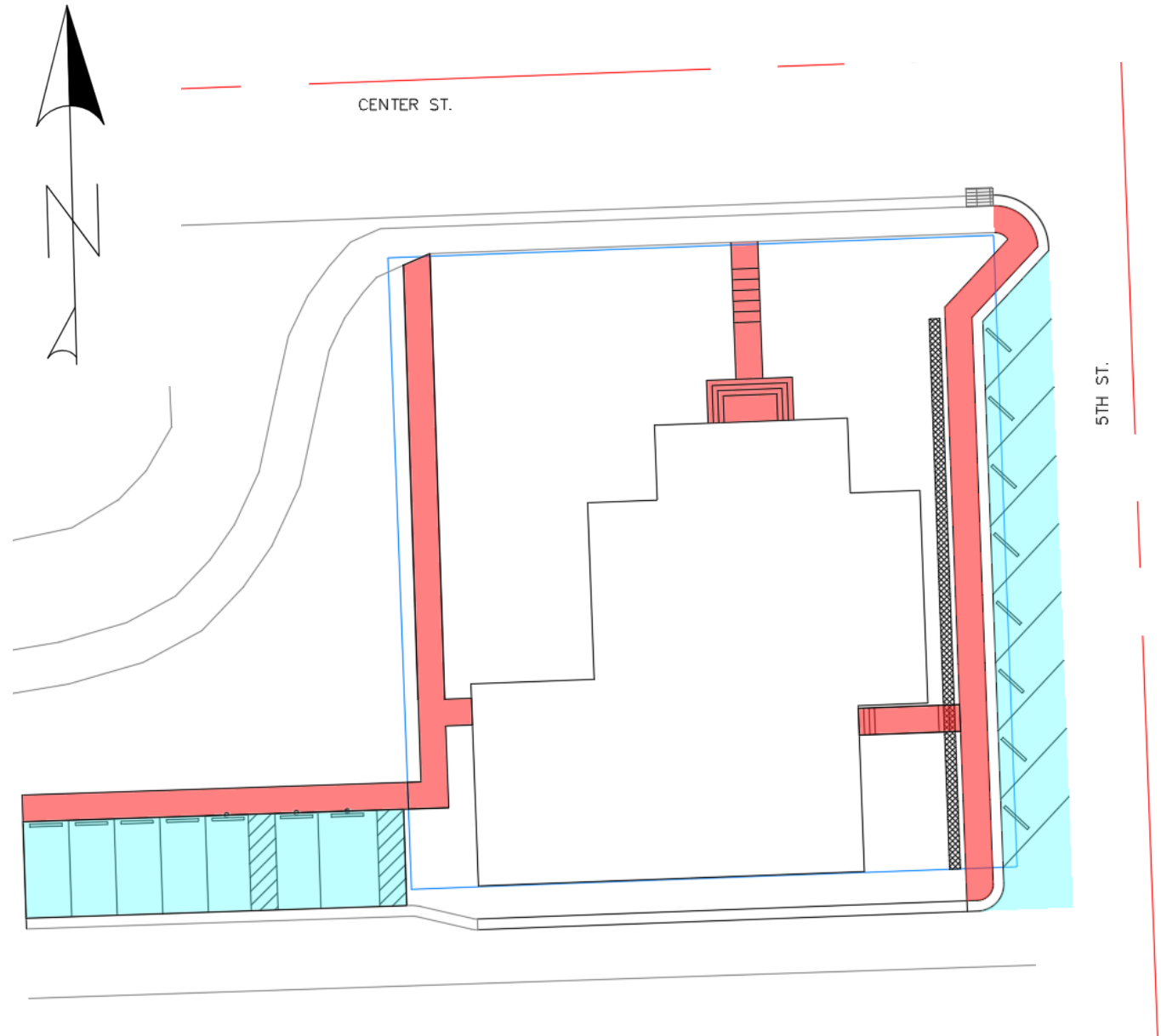
Studio: 600 SF

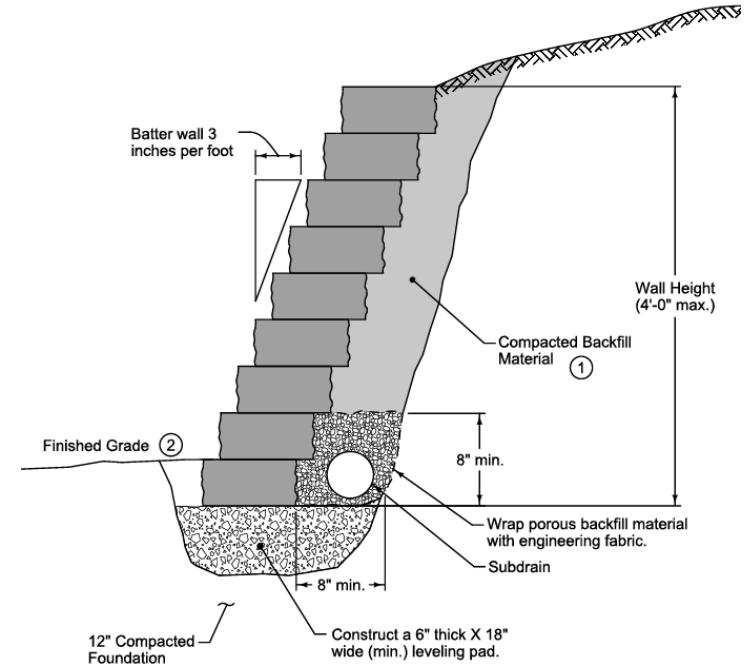
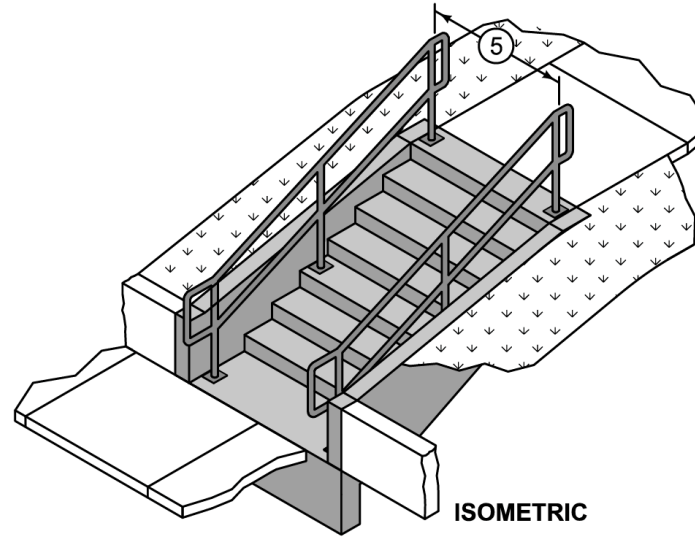




Studio

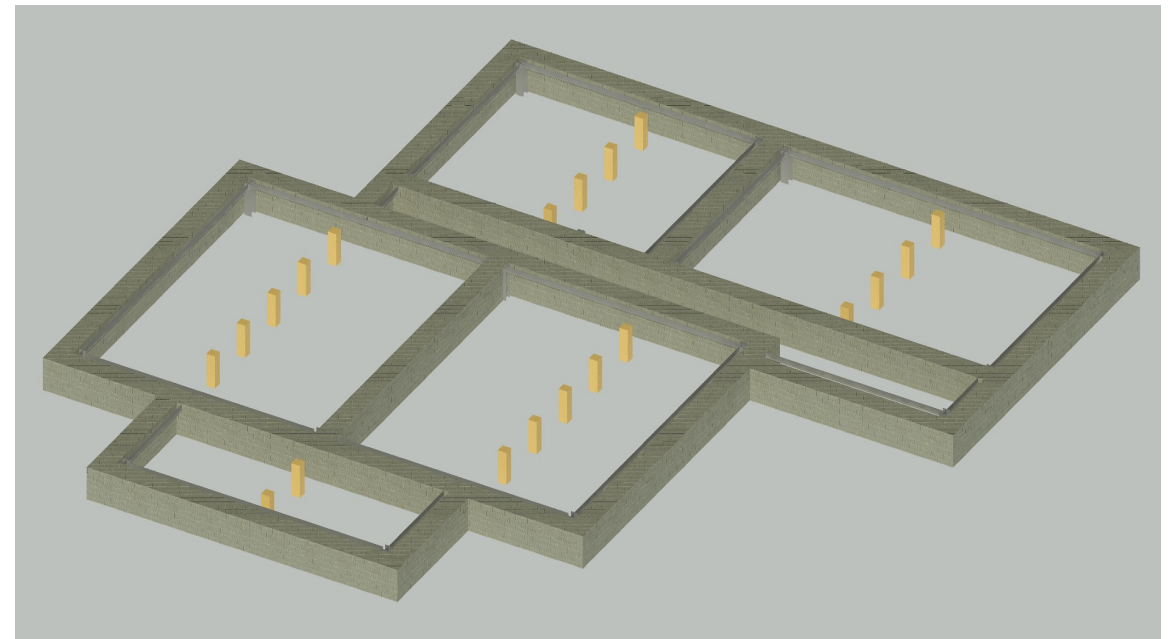
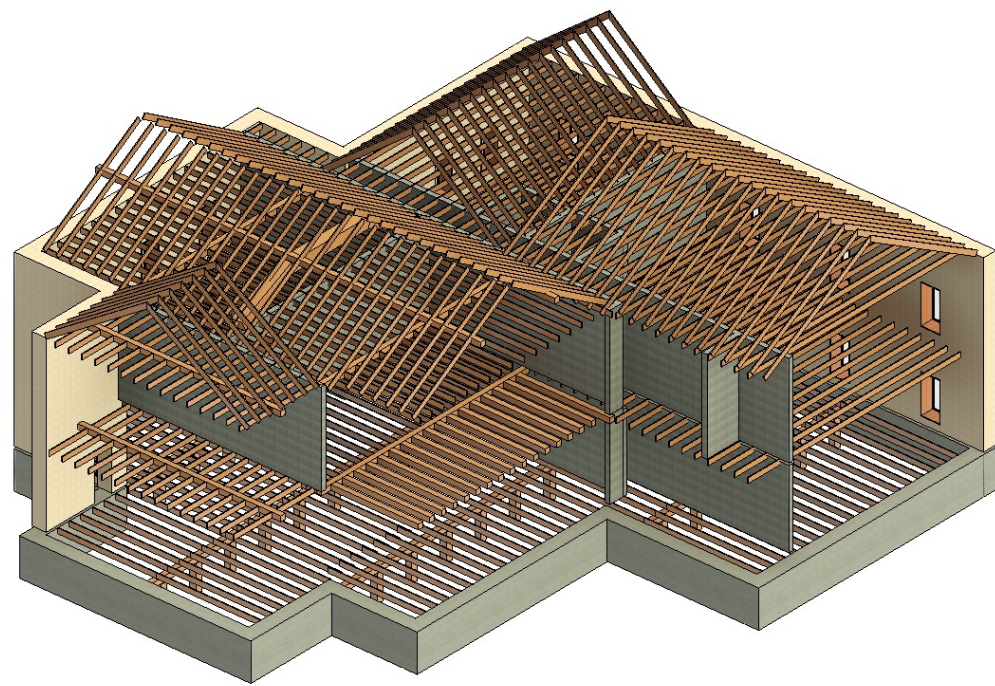
Site Plan: Parking & Sidewalks





Site Plan: Retaining wall

Existing Structure



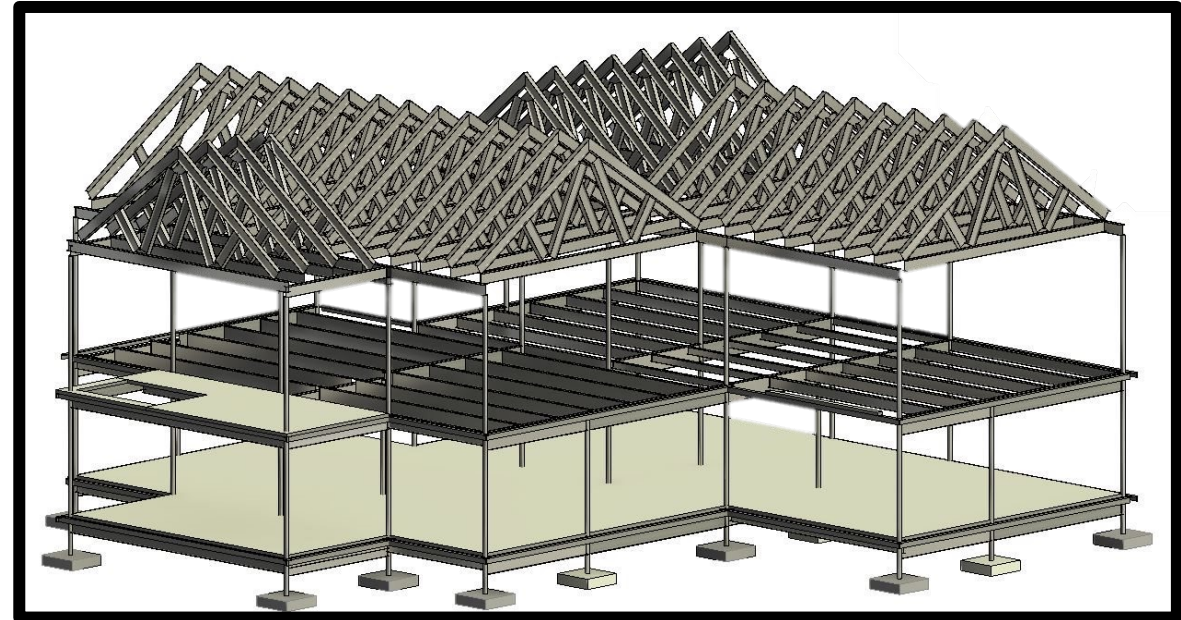
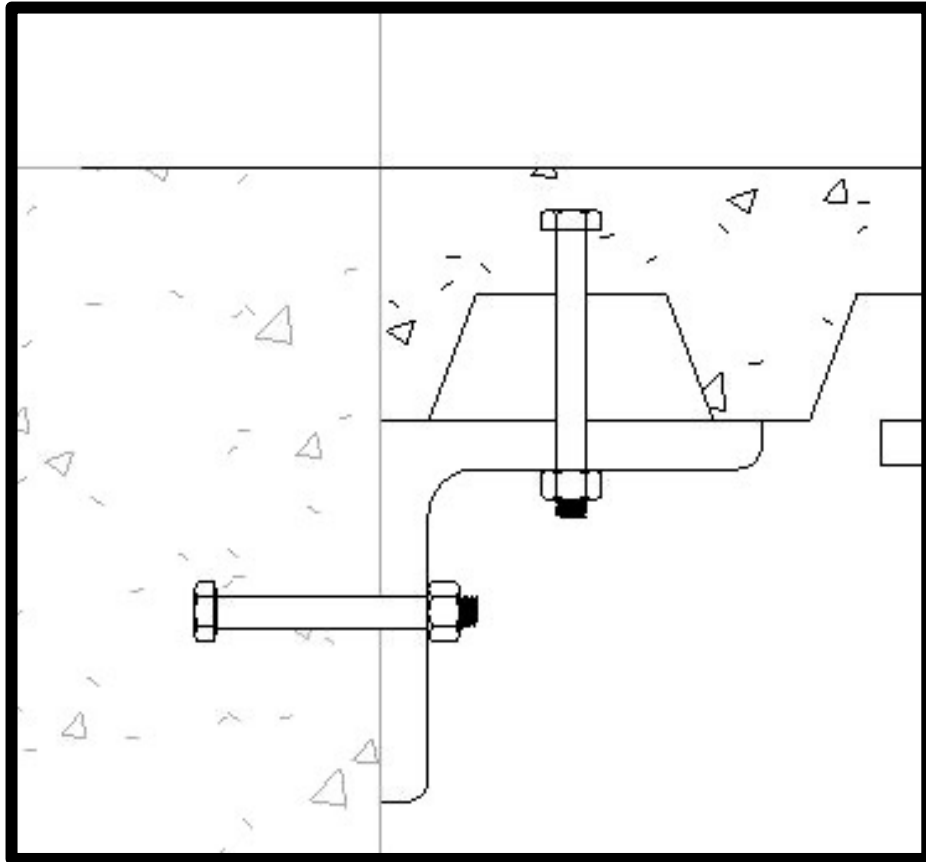


Foundation Improvements



Foundation Improvements

Steel Skeleton Model



Phase 1: Prepare Building for Construction

- Total Cost: **\$63,000.00**
 - Clean Building
 - Gut Building Interior
 - Asbestos Abatement



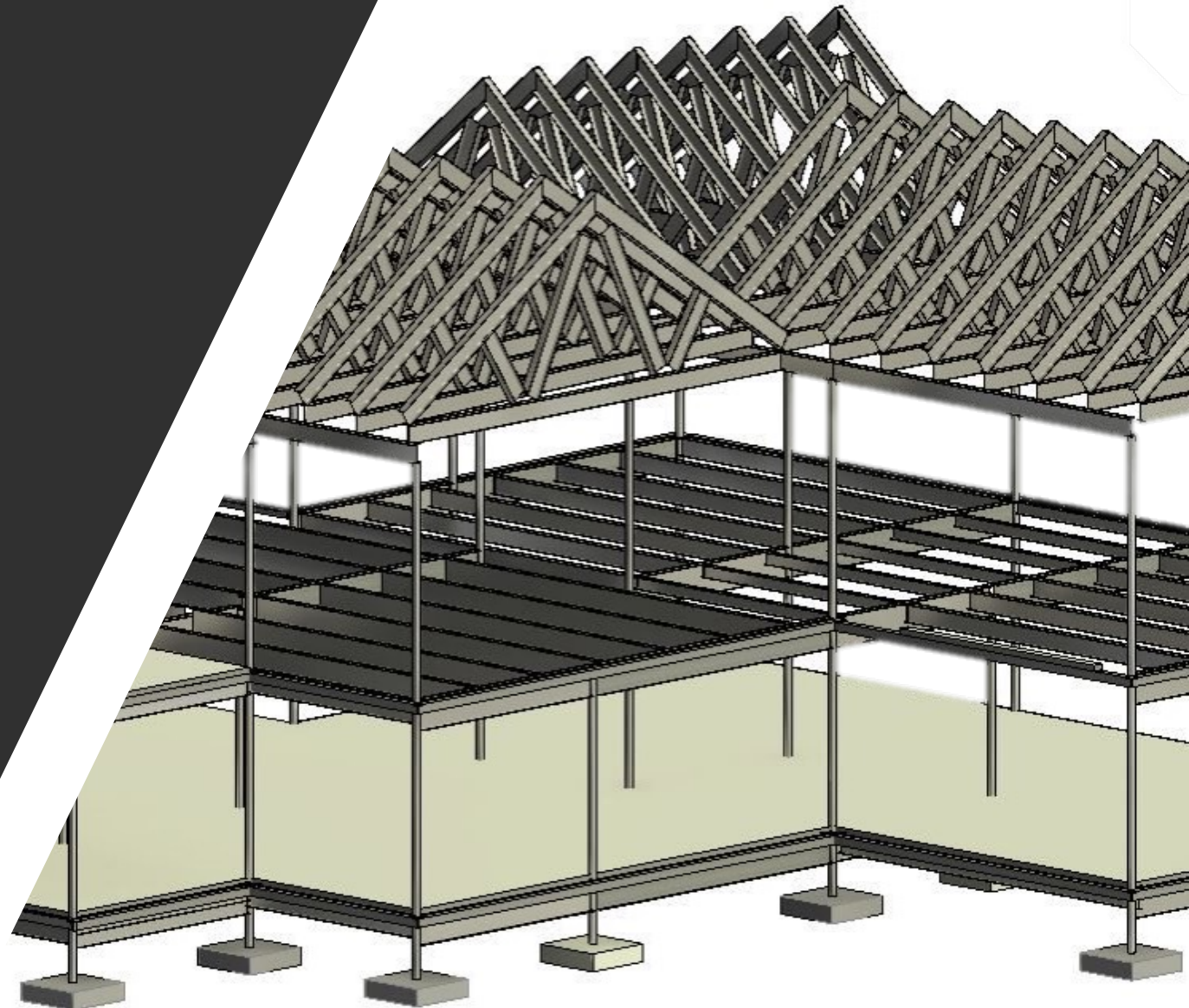
Phase 2: Critical Building Improvements

- Total Cost: **\$373,000.00**
 - Remove and replace north foundation wall
 - Reconnect north wall to existing structure
 - Improve building insulation and moisture protection
 - Repair existing limestone wall and replace openings



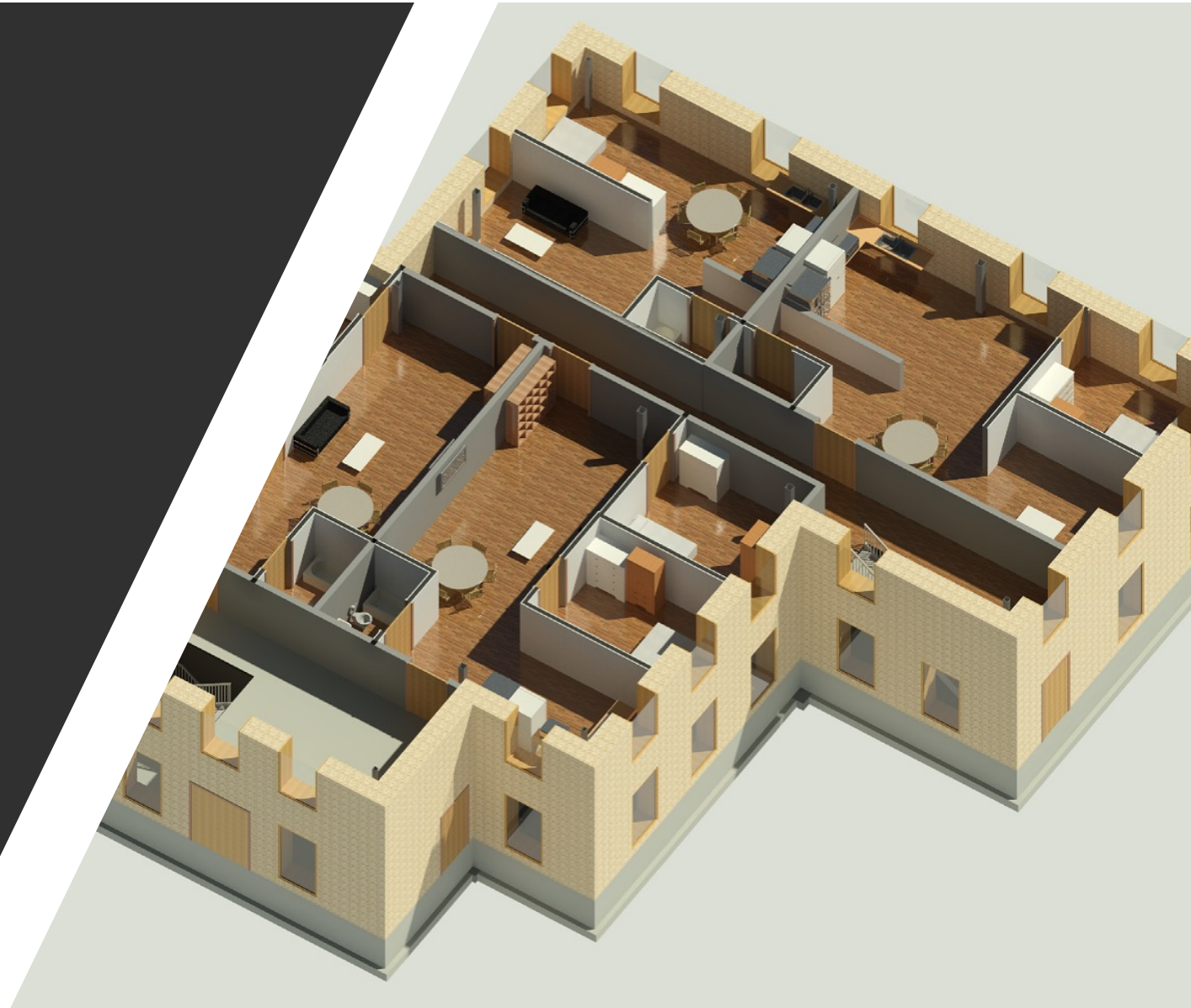
Phase 3: Structural Improvements

- Total Cost: **\$743,000.00**
 - Demolish existing interior structure
 - Construct new interior foundation system
 - Install steel structure
 - Install concrete slabs



Phase 4: Architectural Improvements

- Total Cost: \$1,253,000.00
 - HVAC
 - Plumbing
 - Electrical
 - Fireproofing
 - Interior Walls
 - Interior Openings
 - Furnishings
 - Specialty Equipment



Cost for Each Element

Project Phasing and Total Cost Estimate	
Phase 1	\$63,000.00
Phase 2	\$373,000.00
Phase 3	\$743,000.00
Phase 4	\$1,253,000.00
Site	\$130,000.00
Contingency	\$300,000.00
Total	\$2,862,000.00

Possible Government Grants

- The Historic Preservation Fund
- Save America's Treasures Grant
- Kinsman Foundation Historic Preservation Grant
- Housing Preservation Grants

Final Deliverables



Project Report



Preliminary Design Drawings



Project Poster



Presentation Slides



Lansing Old Stone School

IOWA

**Civil and Environmental
Engineering**