

# Vinnies Lounge Rehabilitation Project

### MICHAEL CLUCHEY, BRADLEY BATTERTON, JUSTIN COOKS

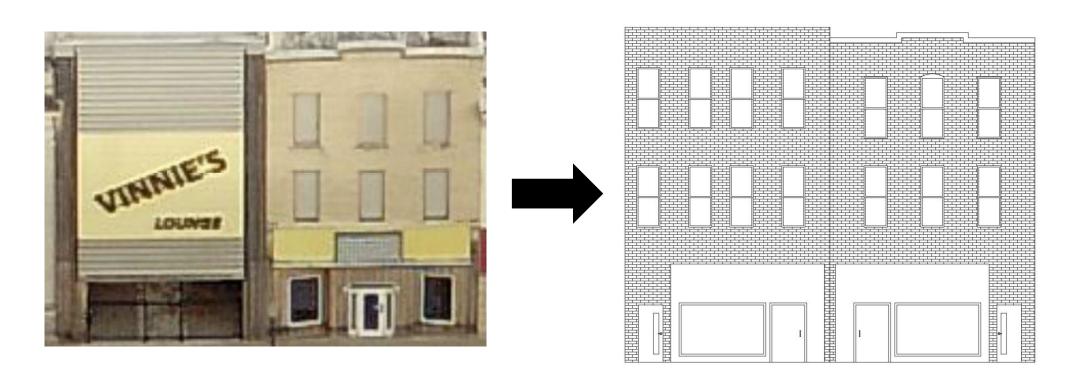
# CIVIL & ENVIRONMENTAL ENGINEERING

## PROPOSED TO THE CITY OF CLINTON IOWA

PROJECT LOCATION: 224 5<sup>TH</sup> AVE S, CLINTON IOWA

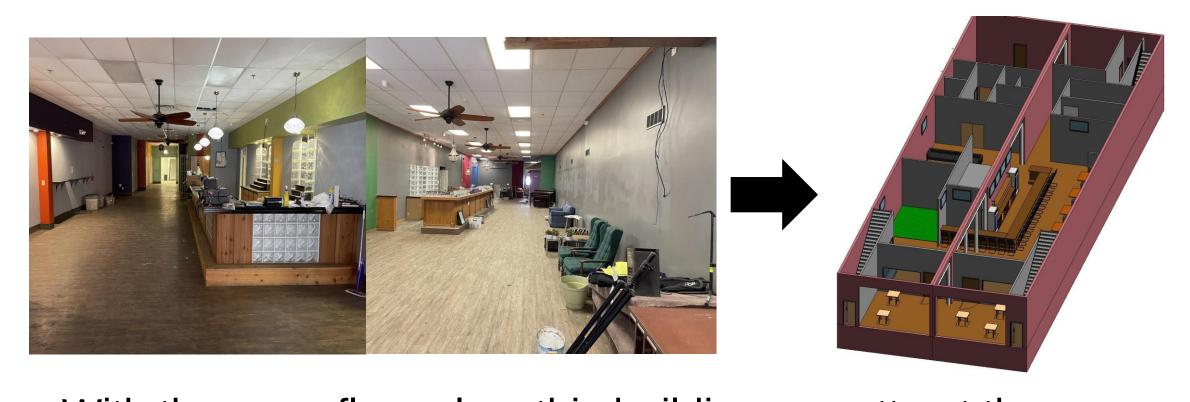
#### REMOVING THE EXISTING FACADE

We are removing the existing façade of the building and restoring the face of the building back to its original brick.



#### CREATING AN UPDATED OPEN FLOOR PLAN

There was a need for this building to feel more open become one building rather than two.



With the open floor plan, this building can attract the younger crowd in town with a more modern, industrial feel to the interior as well as two golf simulator stations for groups of friends to gather and have a good time.





#### RENOVATING THE UPSTAIRS APARTMENTS

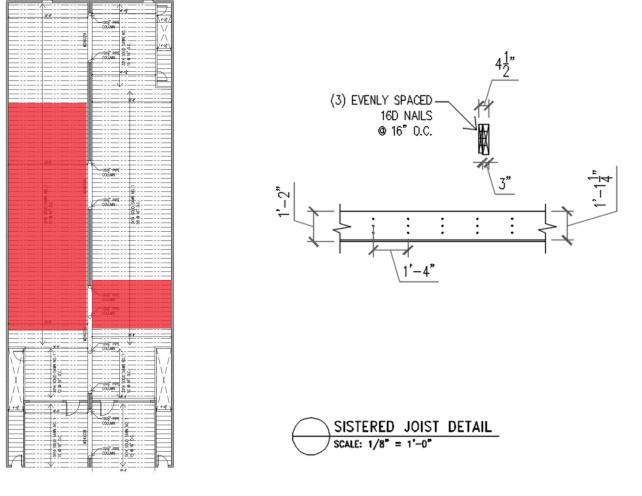
Clinton Iowa wants more of the younger crowd in town. The upper floors of the building are to be renovated into unique updated apartments with many amenities for the tenants to access to.





#### JOIST REINFORCEMENT

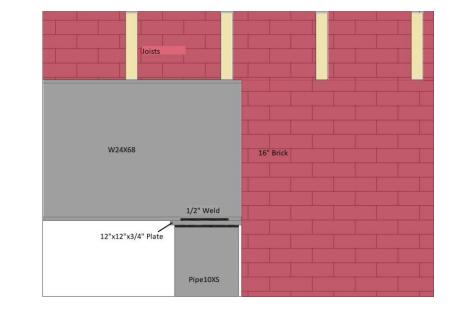
There are heavier additional loads that applied to certain parts of the upper floors. Because of this joists in this area need to be reinforced with more joists, a process called sistering.



#### Wall Opening Supporting Structure

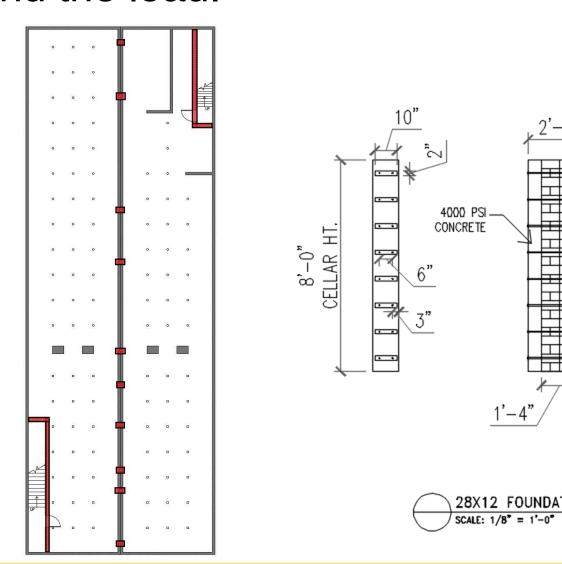
After removing large sections of the middle wall, the load needs to be supported. There are four openings that need support. A W-flange beam with pipe column structure was designed to support the openings.





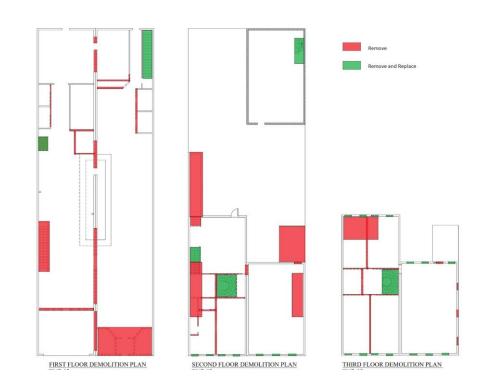
#### **NEW FOUNDATION SUPPORTS**

The loads that the steel columns apply to the foundation brick wall are too large for the wall to support. Foundation concrete reinforcement columns were designed to withstand the load.

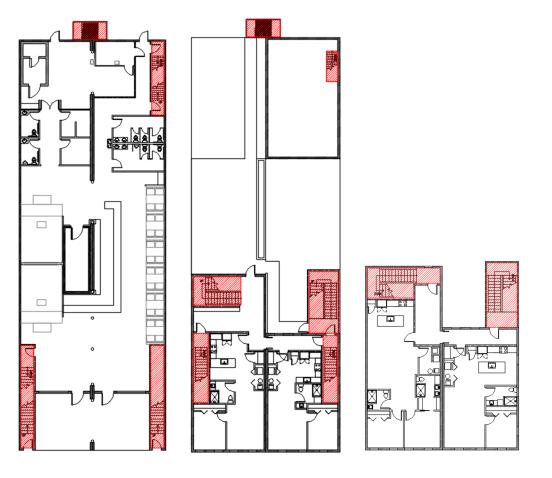


#### DEMOLITION

Most of the existing non-load bearing walls will be removed from the building. All flooring, and ceiling material will be removed and replaced. All windows will be removed and placed as well as the doors. All but one staircase will be removed.



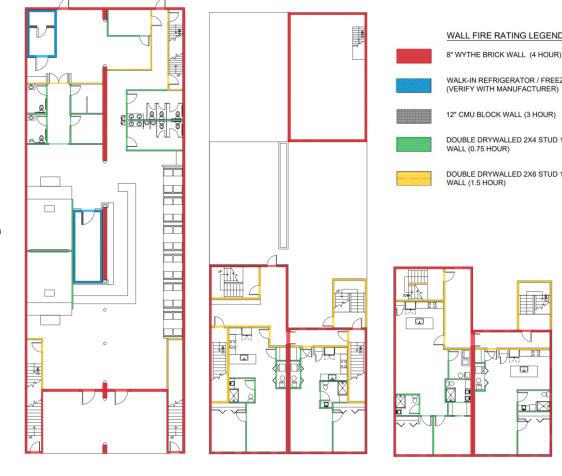
NEW STAIRCASE PLACEMENT



Highlighted in red are the placements of the new staircases in the building.

#### FIRE SAFETY

In pictures to the right, the different wall types are highlighted based on the fire rating hours.



#### CONSTRUCTION ESTIMATE

Demolition: \$47,089

Building Material: \$964,268

Utility Services: \$235,439

Construction Subtotal: \$1,246,796

**Total Project Cost: \$1,683,174**