# MELROSE FIRE DISTRICT

**Firehouse Project Facts #3**
**November 12, 2025**
**FIREHOUSE PROJECT OPTIONS**

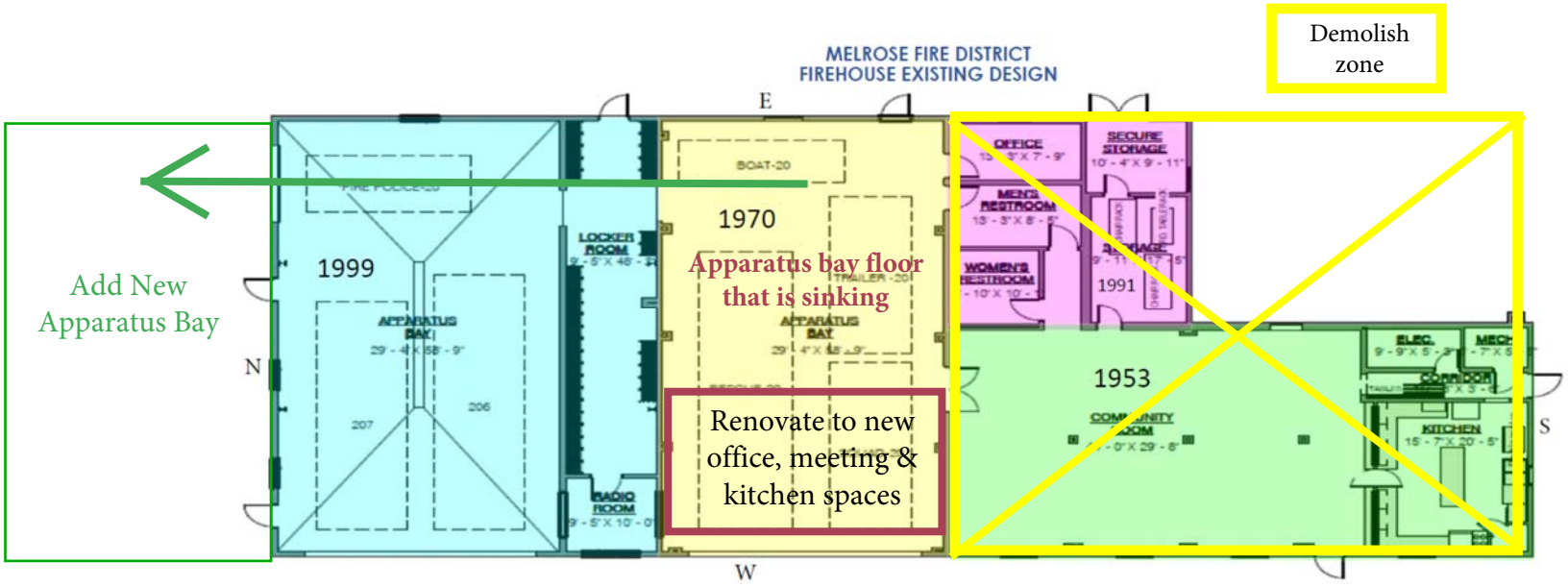
**Is it more effective to renovate an outdated fire station or to rebuild a new fire station in its place?**

*Choosing between a full remodel or a rebuild requires a detailed discussion of the cost-benefit of renovating the shell of what exists, versus the long term functional and operational benefits of a replacement of the current station. In many cases, the cost of renovating can approach the cost of replacement. In those cases, a complete rebuild may make the most sense. Complete replacement provides the benefit of the most logical site layout and accommodates for future growth needs as well. The cost of new construction can be a deterrent to full replacement in some cases and developing creative solutions to work with any existing budget constraints is necessary. Weigh the pros and cons of renovation and rebuilding, make a decision on what will best support service delivery for the next 30-50 years. "COAR Design Group, Renovate/Rebuild Case Study"*

## MELROSE FIRE DISTRICT FACTS

The Melrose Fire Board of Fire Commissioners (Board) evaluated three potential options presented in the Building Condition Survey (BCS) to determine the best approach for resolving the extensive number of conditions identified in BCS, considering the pros and cons of each option:

1. Building all new bays onto the north side of the existing bays. Demolish the entire south non-bay portion of the existing building and create offices, meeting, kitchen and other space within the existing bay space. This would include repair of the existing bay floor and structure where the building is settling.




Major Pros:

- Less expensive than a complete rebuild, estimated $3.5-$4.0 million
- No need to relocate during construction
- Situates all the hot zone apparatus by areas of the firehouse separately away from the office, meeting and kitchen cold zone areas.

Major Cons:

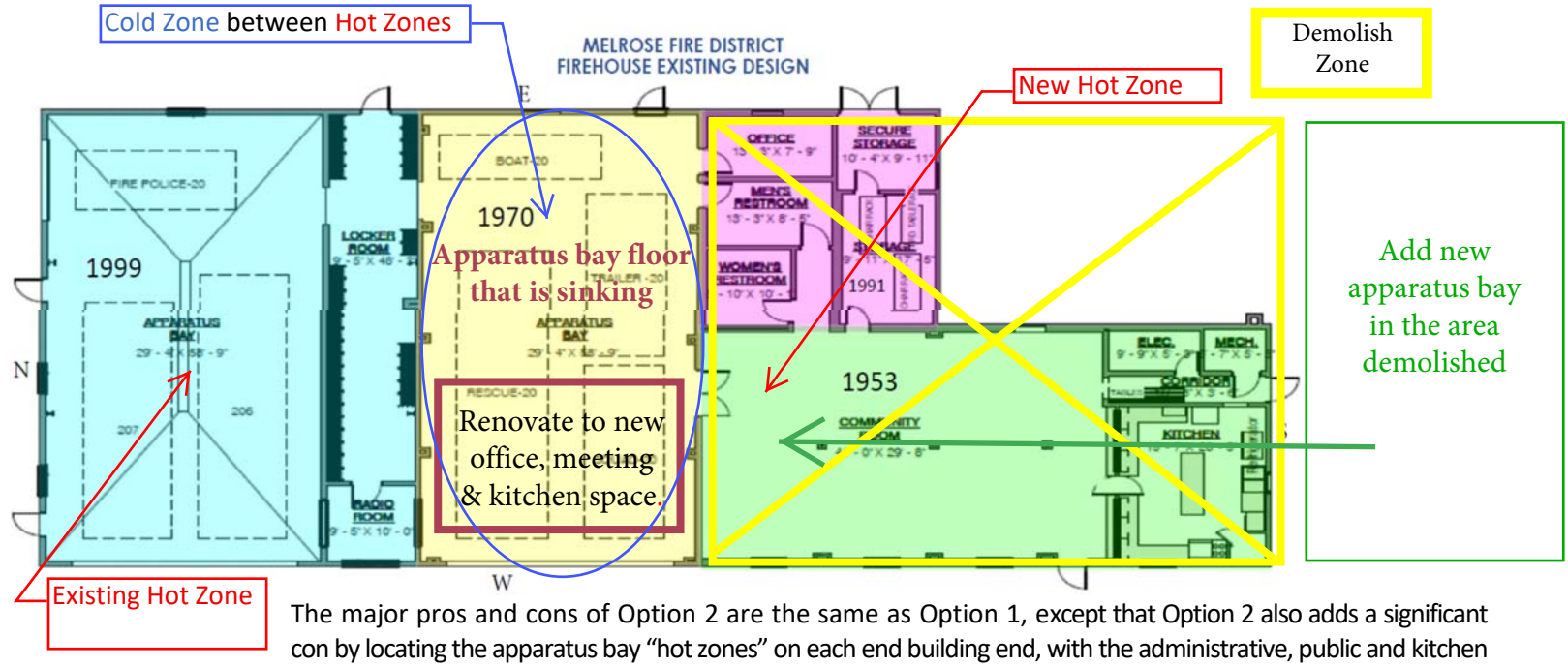
- Extent of condition beneath the sinking slab is unknown making constructing, even office, meeting space and a kitchen susceptible to future slab movement. As noted in the BCS, "While the voids and decay under the slab will continue, the parging and crack healer should last several years because the extreme truck loads and vibration will cease."

"Several years" is a considerably less definitive useful life that would be obtainable through a rebuild which should yield minimally 50 years of useful life.

- Continues the fragmented approach of connecting building wall sections, foundations, and roofs from substantially different construction eras together with differing lifecycles.

- The potential cost of unknown site, structural and other building conditions that could increase renovation costs.

2. Demolish the entire south non-bay portion of the existing building and create and build all new bays onto the south side of the existing bays. Create offices, meeting, kitchen and other space within the existing bay space. This would include repair of the existing bay floor and structure where the building is settling.




The major pros and cons of Option 2 are the same as Option 1, except that Option 2 also adds a significant con by locating the apparatus bay "hot zones" on each end building end, with the administrative, public and kitchen space "cold zone" situated between the two hot zones. The hot zone should be isolated from the cold zone to prevent the firefighting related contaminates from infiltrating the cold zone.

*Building Condition Survey Recommendation:*

*Hot Zone and Cold Zone Cross Contamination: Create zones within the facility to try to limit carcinogens from the apparatus area "hot zones," from administrative and public area "cold zones." Develop "standard operating procedures," various cleaning protocols, special layouts, specially designed "transition zones," and HVAC design to move from zone to zone. The goal is to manage or eliminate the level of exposure to contaminants and ensure carcinogens do not make their way into the cold zones of the facility.*

# MELROSE FIRE DISTRICT

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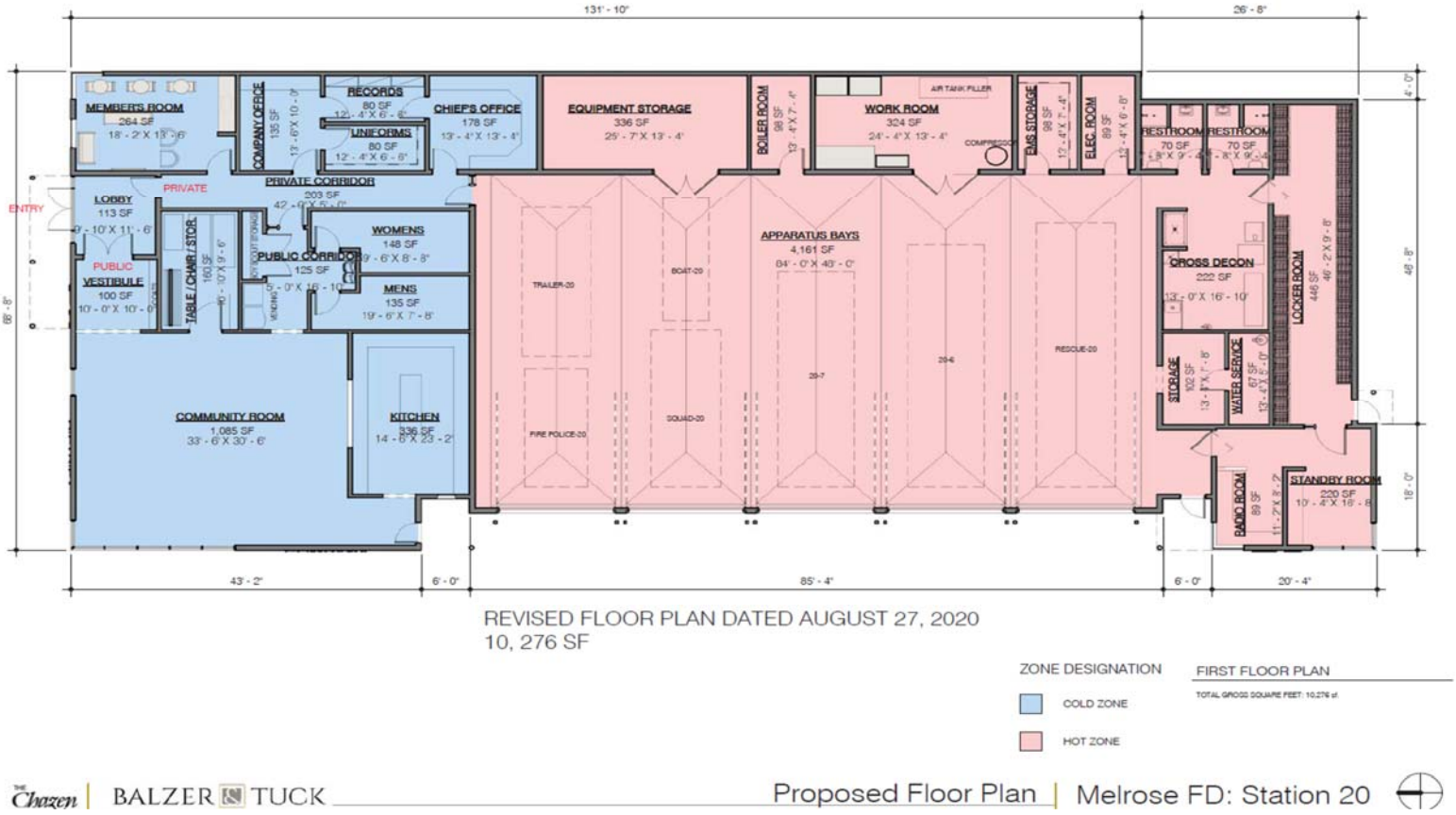
**FIREHOUSE PROJECT - RENOVATE OR REBUILD**

3. Demolish the entire existing building. Create a new building on the site as proposed in the illustration below.




REVISED FLOOR PLAN DATED AUGUST 27, 2020
10, 276 SF

ZONE DESIGNATION
COLD ZONE
HOT ZONE

FIRST FLOOR PLAN
TOTAL GROSS SQUARE FEET: 10,276 sf.

The Chazen | BALZER & TUCK — Proposed Floor Plan | Melrose FD: Station 20

Major Pros:

- Resolves all issues related to the apparatus bay slab conditions, eliminates the possibility that future movement below the slab will cause structural issues.
- Establishes the firehouse as one complete structure with a singular lifecycle, rather than a combination of four structures built in three different decades.
- Incorporates the latest technology and best practices for fire station design, including compliance with new safety and health standards, such as "hot zone/cold zone" separation, accommodate modern fire apparatus size and enhance energy efficiency.
- New construction allows for less costly compliance with current building codes and ADA regulations which can be difficult and costly to achieve in older buildings.
- Provides enhanced firefighter health and safety features like decontamination zones and shower facilities.

Major Cons:

- More expensive than renovation, estimated cost of $6.95 million.
- Tax levy increase needed to fund the project.
- Requires relocation during construction period.

For more information on the Board's firehouse plan, please see Firehouse Project Facts #4, November 17, 2025, New Firehouse Rationale.