MAAB Hearing November 30, 2026 11:00 am

Project Name & Address: Millis Middle/High School 245 Plain Street, Millis MA 02054

Docket Number: V26 086

Background:

This variance request is for the Millis Middle High School located at 245 Plain Street in Millis, which will soon undergo renovation and expansion. The project team met on site with the Town's building inspectors and independent living coordinator and several conditions were deemed suitable for variance application due to feasibility and cost when compared to the anticipated benefits to persons with disabilities. The project team submitted an application containing five requests to the Board, three of which were granted. Two requests remain open for review/continuation. Both open items relate to the existing auditorium, which will be largely retained/unchanged as part of the renovation: (1) the existing control booth, which is elevated from the surrounding floor and not on an accessible route and (2) the existing floor slope in the seating area, which exceeds 1:12 in places and does not have handrails at aisles. Related 521 CMR sections are 14.1, 14.9, 20.2.1 as indicated in the Board's Notice of Hearing dated September 30, 2026. The project team previously submitted cost and feasibility studies based on the Board's continuation motions. The Board subsequently moved to schedule a variance hearing. We appreciate the opportunity to review these requests with the Board at the Hearing.

1. Auditorium Control Booth:

The existing control booth is located at the rear of the auditorium seating area. It is elevated above the surrounding floor and reached by traversing three risers. The landing at the door to the booth is also non-conforming. The project team previously requested a variance to retain the booth as-is and provide a new designated wheelchair space outside the booth to serve as an accessible operator location. The designated space would be connected to the booth by electronic means, allowing access to controls within the booth as an alternative means of access to the activities performed within the booth, with similar views of the stage.

However, at this time the project team proposes to demolish and reconstruct the booth to make it accessible. The floor of the reconstructed booth will be lowered to match the elevation of the existing surrounding floor, eliminating the steps and landing to provide an accessible route into the booth. The existing booth is raised on framing/sleepers and enclosed in non-structural partitions, which enables demolition and construction of the new booth without affecting existing structural elements. We believe this will address the current lack of an accessible route to the booth and resolve this variance request.

2. Auditorium Floor Slope:

The existing auditorium floor slopes down from the rear of the seating area to the stage. Floor slope ranges from ~5% at the front to 8-10% at the rear and does not have handrails. While this does not strictly conform to current MAAB standards for an accessible route, it has served the school since its initial 1959-1960 construction, when auditorium planning was typically driven by isacoustic curves for audience sightlines in the absence of current standards. There have been no known issues or accessibility-related complaints to the best of our or the school's knowledge. A variance has been requested for the existing floor to remain in place to avoid modifications to the floor structure and the presently installed seating, which would be proportionally disruptive to the space's function compared to the potential benefits to persons with disabilities. Upon review by the Board, motions for continuation included requests for the project team to furnish cost and feasibility studies for modifying the floor slopes and installing discontinuous railings, which were provided for consideration. The studies entailed:

A. Modification of the Existing Floor Slab: Initial studies were made to chip and feather the existing floor at the rear of the seating area to reduce the floor slope where it is greatest. While feasibility and cost estimates were provided, the project team regards these as base-lines due to the nature of the work and the existing conditions. The existing slab is indicated to be ~4" thick in existing drawings dating to 1959. Chipping to meet the target floor slopes faces technical challenges and concealed conditions that could entail the demolition and reconstruction of the auditorium space on a much greater scale, significantly increasing costs and impacting larger areas of the auditorium.

   Further studies for a follow-up continuation entailed additive measures: pouring on top of the slab at the rear of the auditorium instead of chipping to provide level floor surfaces for circulation and wheelchair seating. This would eliminate technical demolition issues but still affect rows of existing seats, which share ganged supports and can be difficult to selectively modify. These studies also provided options for accommodating an accessible control space at the rear of the auditorium near the control booth. However, this accessible control space would no longer be required as the booth will be reconstructed as outlined in Item 1.

B. Railings At Aisles: A feasibility study for the addition of handrails at the seating aisles was made in concert with the floor leveling study noted above. Non-continuous railings were considered based on the existing aisles and seats in the auditorium. New railings would have to start and stop at each row to avoid obstructing access to

the seats. This would reduce clearances in the existing aisles once the railing thicknesses and gripping clearances are factored in, and would introduce new potential circulation obstructions, affecting general functionality of the existing space.

Chipping/feathering the slab and adding railings in the aisles poses a combination of technical infeasibility and cost that outweigh the potential benefit to persons with disabilities. The existing floor slab is 4" thick and dates to the 1960's. Chipping could well entail substantial added demolition and reconstruction of the auditorium floor along with removal and replacement of further seating assemblies to reduce the slope by several degrees. Installing non-continuous handrails at either side of the aisles would reduce available clearance for egress and circulation. The existing aisle clearances vary between ~3'-7" (43") and ~3'-9 ½" (45.5"). Adding 1 ¼" handrails with 1 ½" gripping clearance on both sides would reduce aisle clearances by a cumulative 5 ½." The resulting aisle clearances would be ~3'-1 ½" (37.5") and ~3'-4" (40"), reducing the available area for egress and adding obstructions. Railings installed at aisle seats with accessible fold-up arms would block access to such seats.

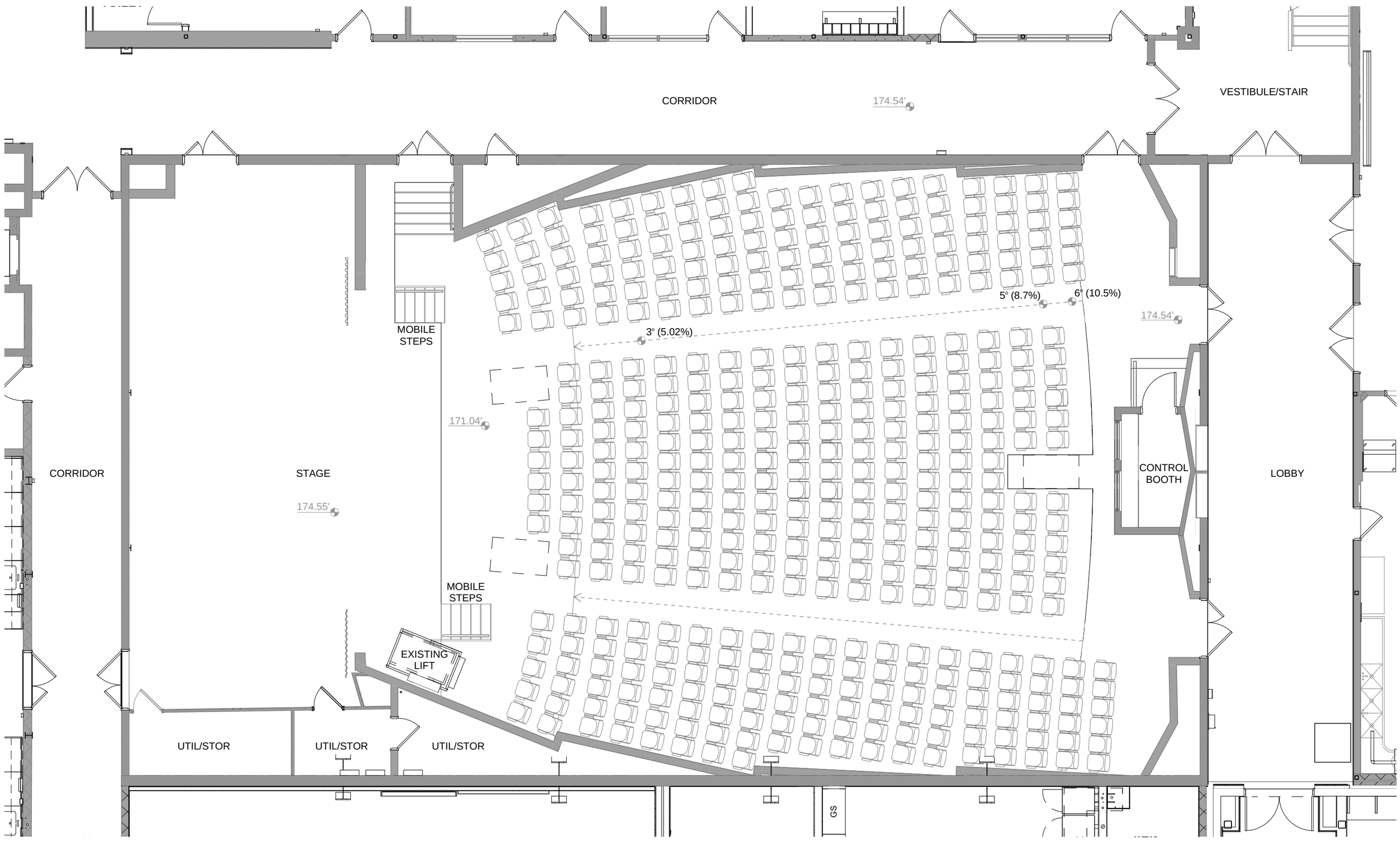
These modifications to the existing conditions would substantially impact the functionality and seating of the auditorium and involve significant demolition and reconstruction, outweighing the potential benefit to persons with disabilities. As an alternative to these measures and their impacts on the auditorium, the project team proposes to extend the level area at the rear of the auditorium to improve diversity of accessible seating and modify the front of the auditorium with a supplemental accessible route between the auditorium side doors and the existing wheelchair lift, which links the stage to the lower level as follows:

I. Extend the level area at the rear of the auditorium in front of the new control booth by means of adding onto, rather than chipping into, the existing slab. This would provide additional clearance for wheelchair and companion seats with improved sightlines. It would also eliminate the existing cross-slope at the route in front of the booth. The existing plinth in the middle of this area could remain in place for use by the theater department or audience. While these modifications would still entail disruption to and replacement of the existing seating assemblies and flooring, it would eliminate the technical aspects of chipping the existing concrete slab.

II. Modify the landing and route at the front of the auditorium near the side doors. The landing at the door would be enlarged for maneuvering clearance, the route to the stage widened and provided with a guardrail for accessible passage, and the stair shifted and provided with new handrails on both sides. This would offer an additional

accessible route to the stage for all users and another route to/from the existing wheelchair lift, with increased optionality for access to the front of the auditorium seating area. The modifications would be technically feasible- constructed on and adjacent to the existing landing, steps, and stage structures- avoiding intrusive and technically infeasible modifications to the existing concrete floors, stem walls, and footings that support the nearby columns and walls. The supplemental route would be connected to the main school corridor which is presently accessible. Some nearby existing seats in the auditorium would have views of the stage partially impacted by the extended steps and railings.

The Board also noted the number and configuration of accessible seats during a prior meeting. The proposed modifications are intended to include the required number of wheelchair spaces, oriented for shoulder alignment with companion seats. The plans will also maintain the required number of aisle seats with fold-up arms for accessible use.



FIXED SEATS: 435
AISLE FOLD-UP ARM: 5
WHEELCHAIRS: 3

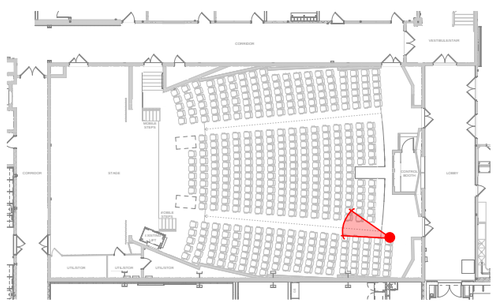
AUDITORIUM: EXISTING FLOOR PLAN

1/8" = 1'-0"

MILLIS MIDDLE/HIGH SCHOOL
245 PLAIN STREET MILLIS, MA 02054

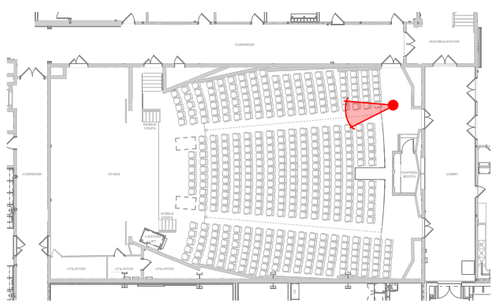
HEARING FIGURE 01



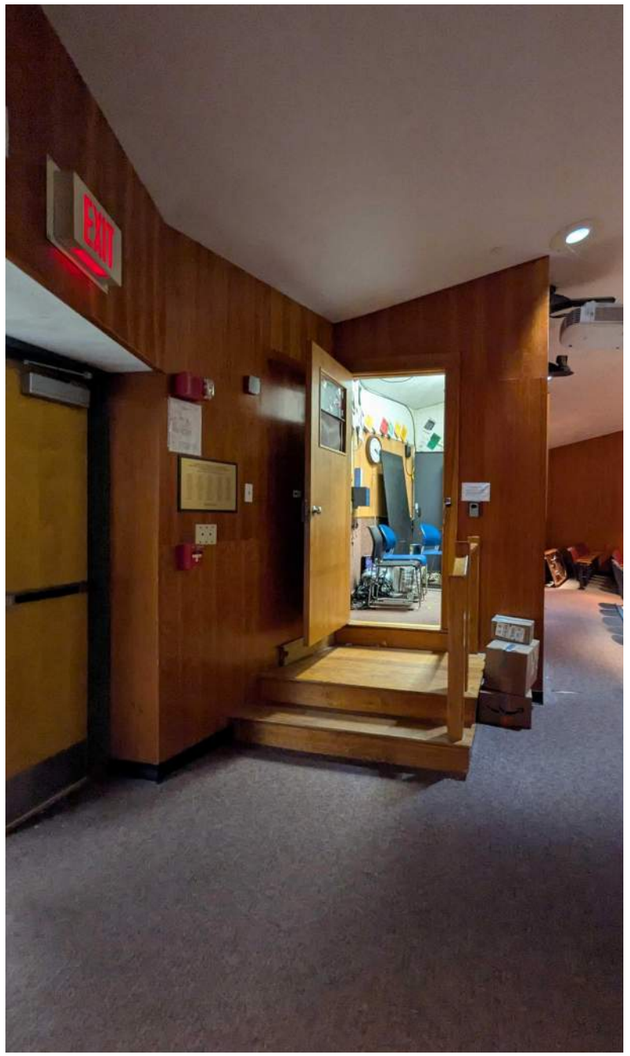


EXISTING AUDITORIUM, BACK LEFT

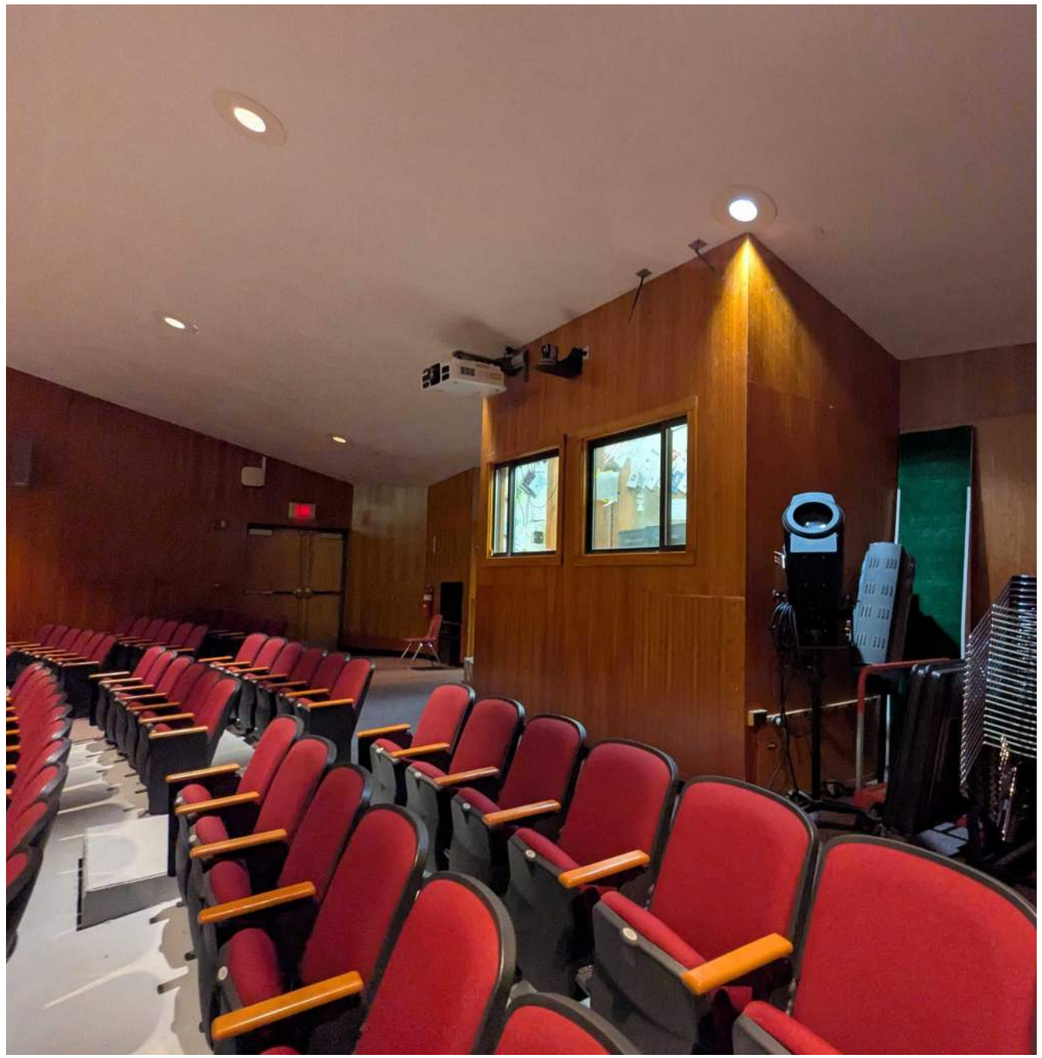




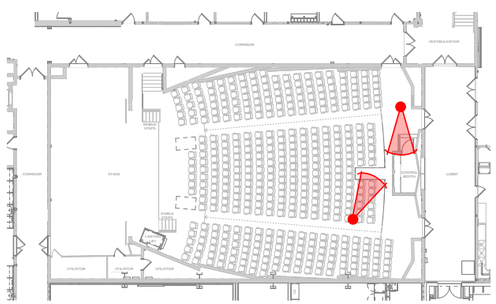
EXISTING AUDITORIUM, BACK RIGHT



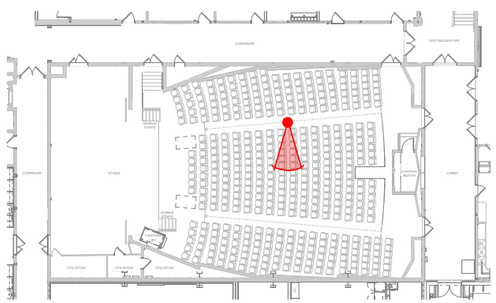
EXISTING BOOTH DOOR



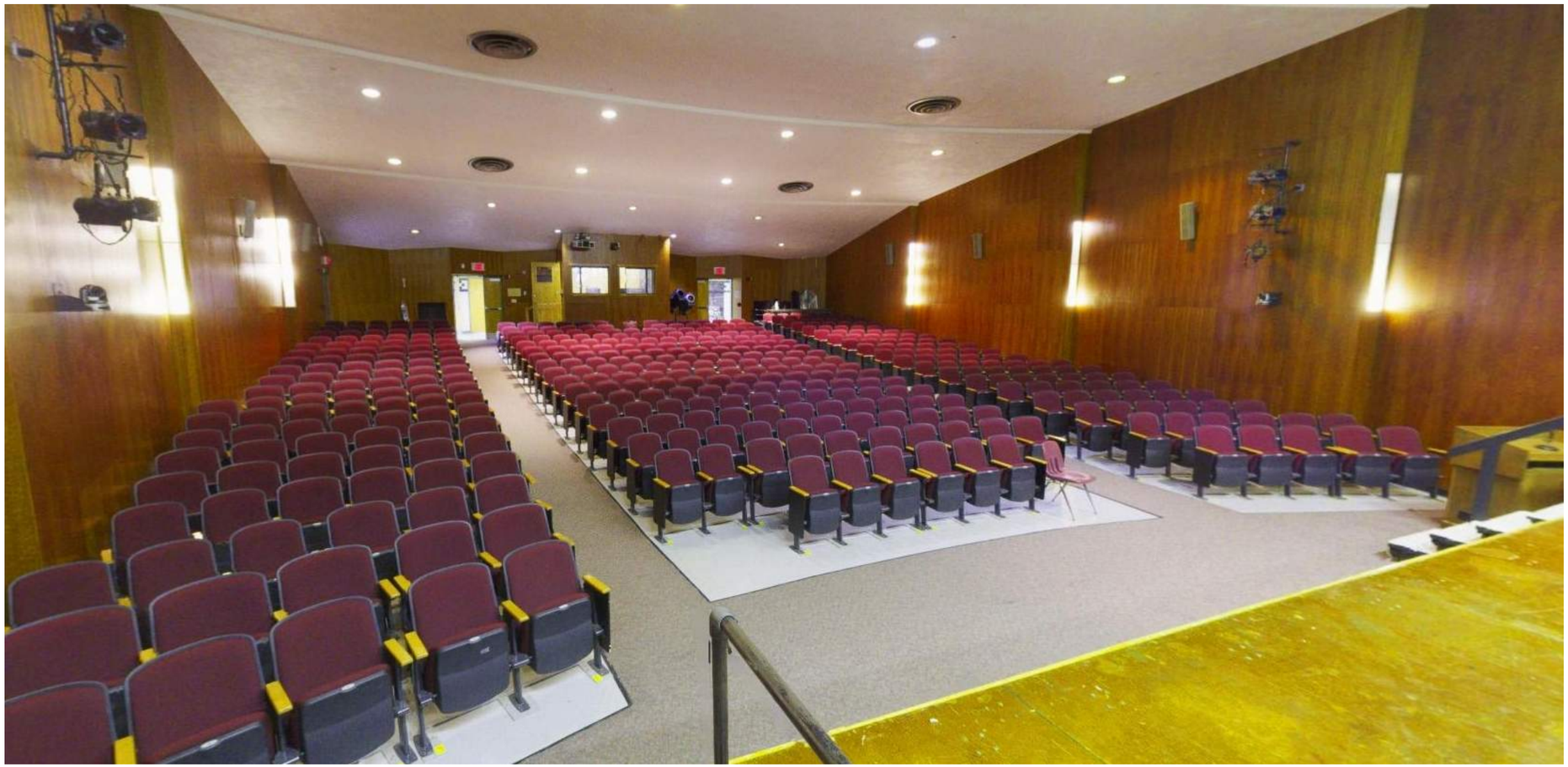
EXISTING BOOTH

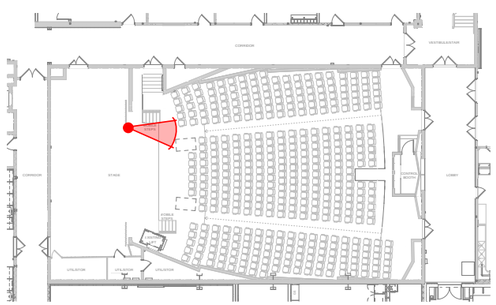




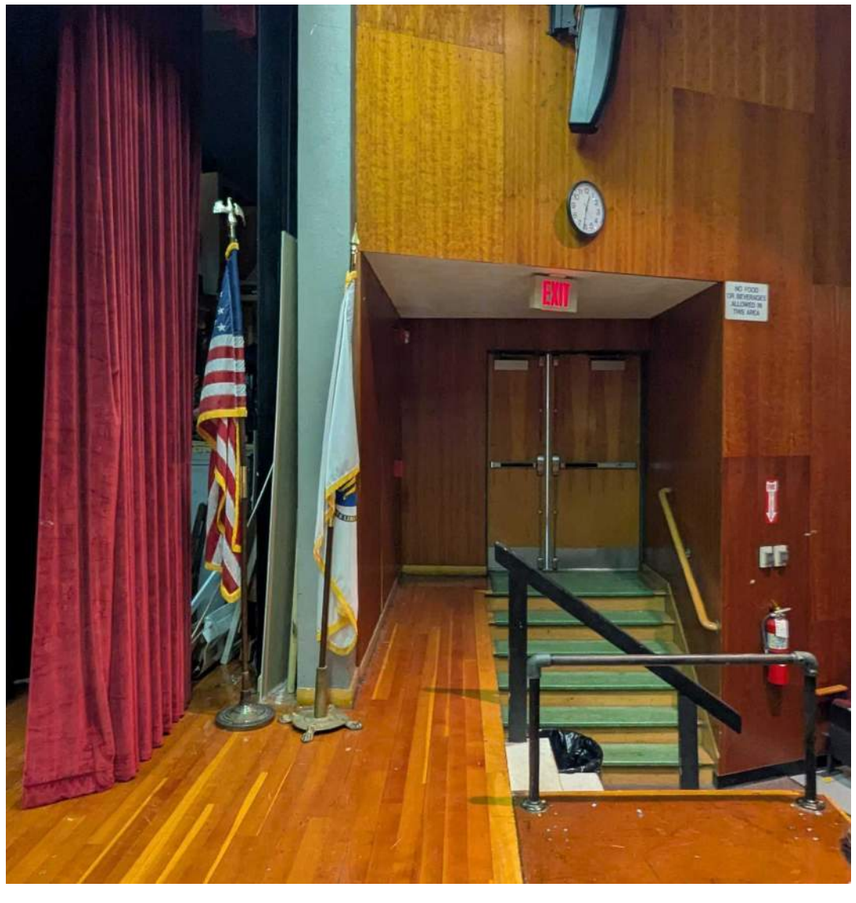


EXISTING AUDITORIUM, RIGHT AISLE

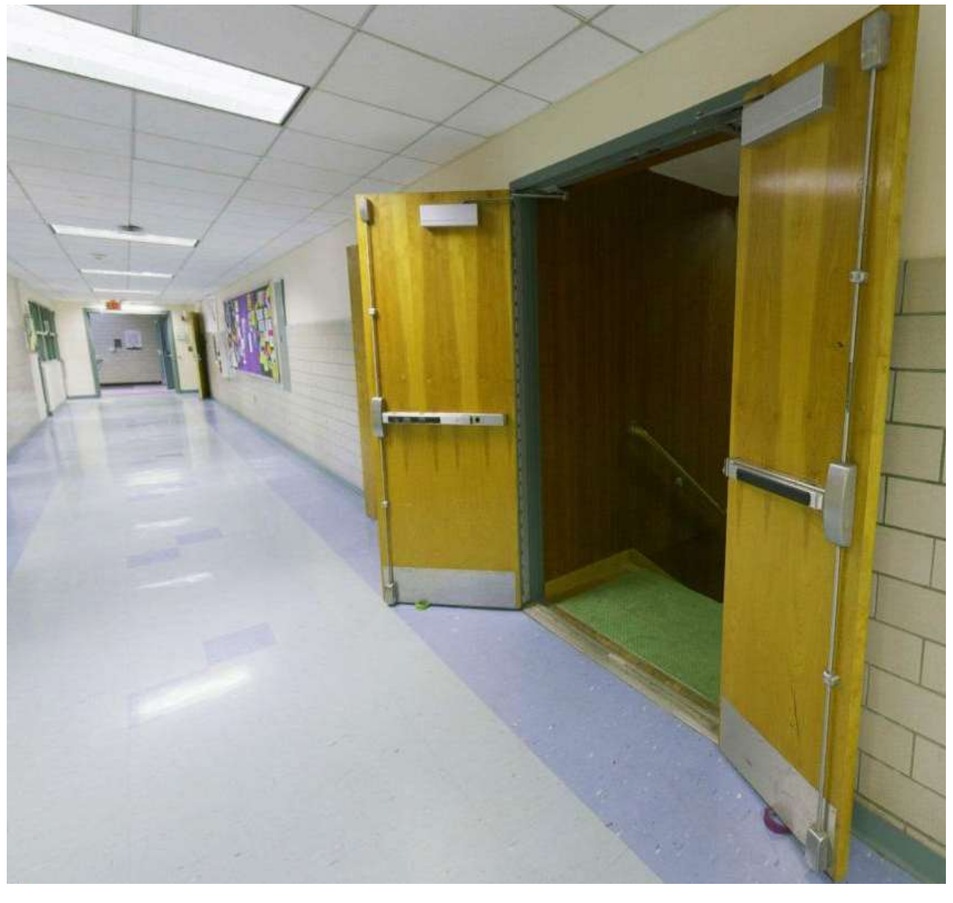




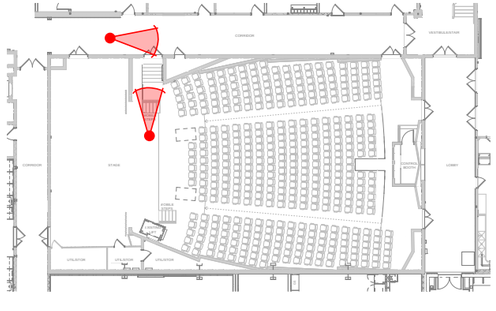
EXISTING AUDITORIUM, FRONT

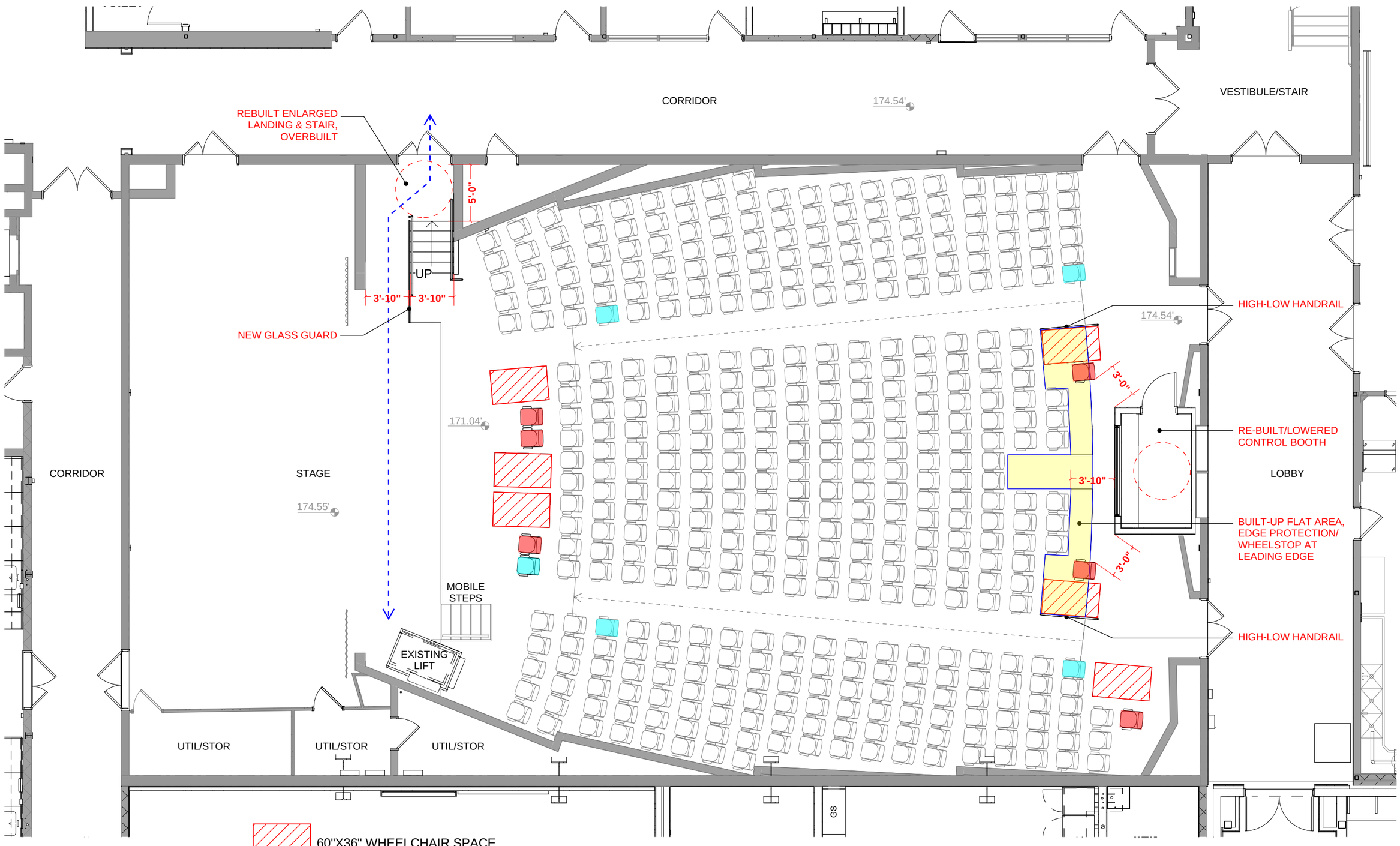


EXISTING SIDE DOOR -STAGE



EXISTING SIDE DOOR -CORRIDOR





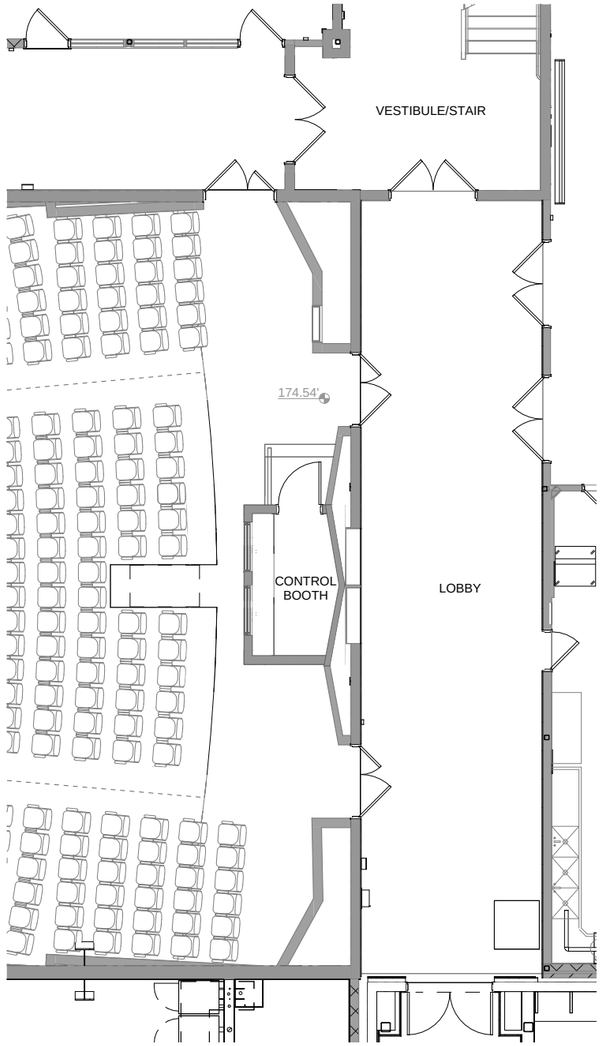
FIXED SEATS: 427
AISLE FOLD-UP ARM: 5
WHEELCHAIRS: 6

AUDITORIUM: MODIFIED FLOOR PLAN

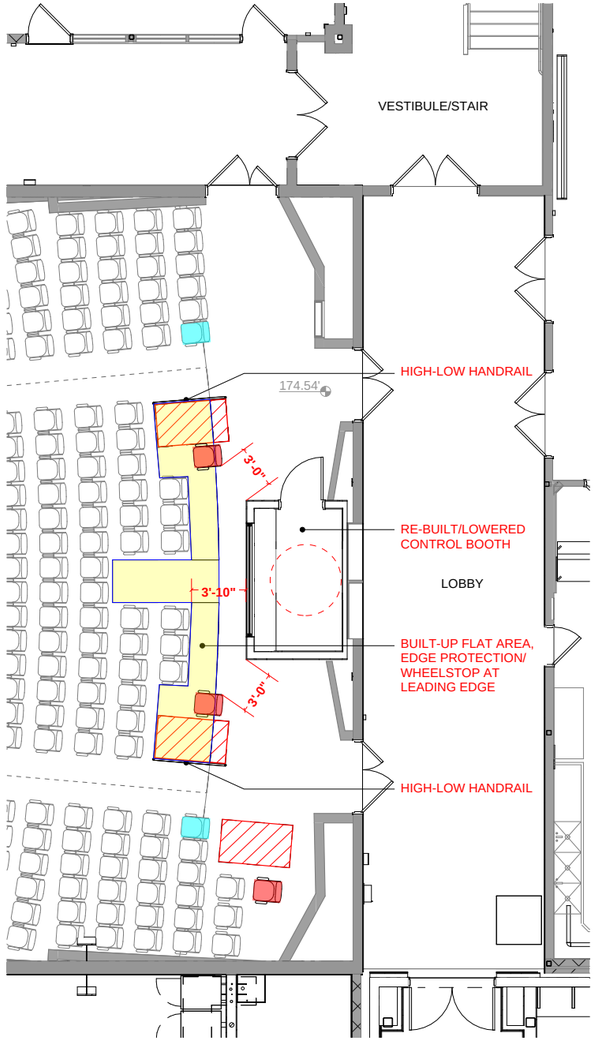
1/8" = 1'-0"

MILLIS MIDDLE/HIGH SCHOOL
245 PLAIN STREET MILLIS, MA 02054

HEARING FIGURE 08



BEFORE

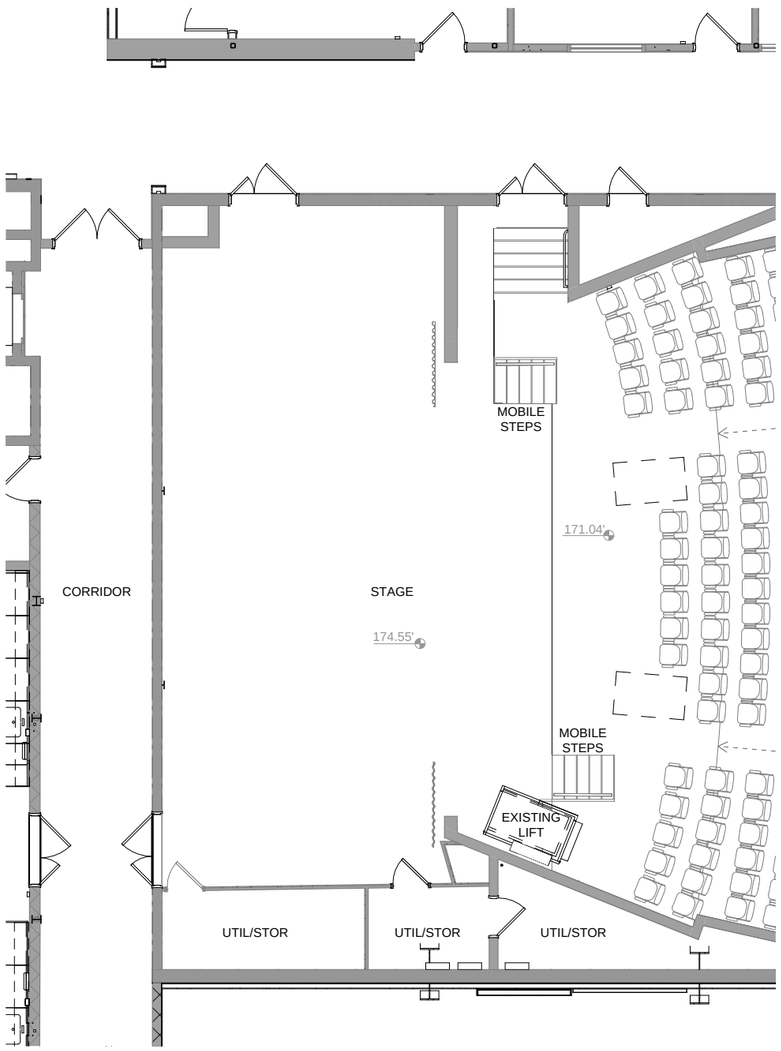


AFTER

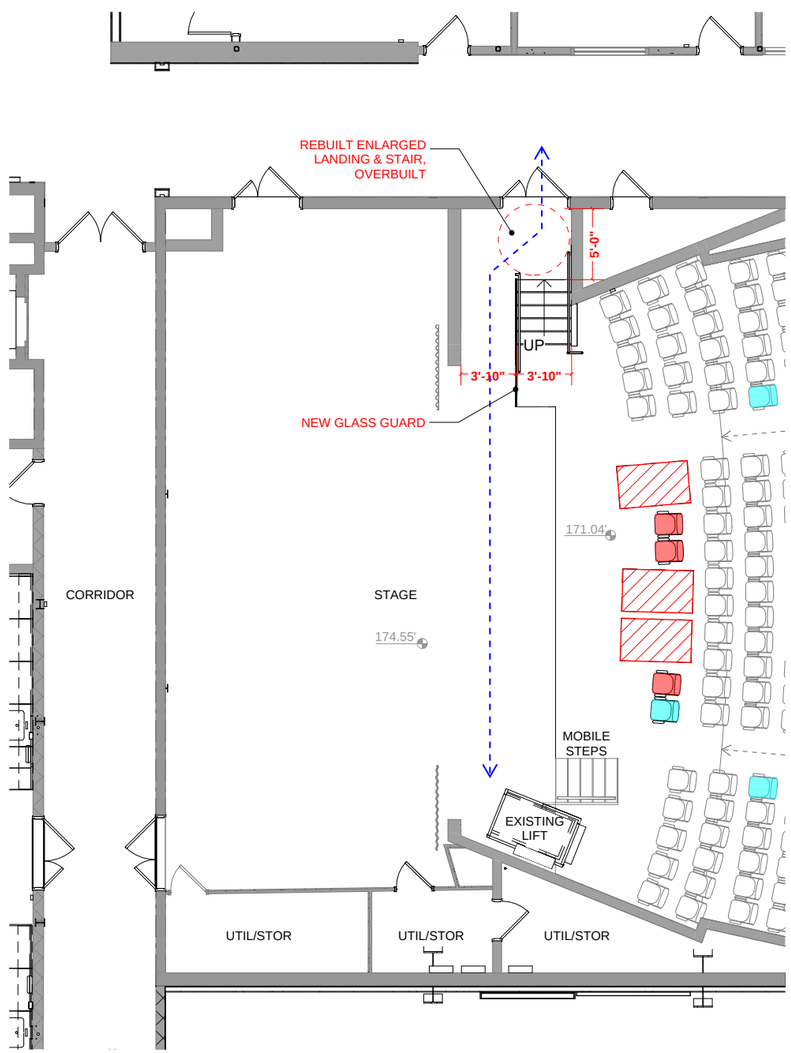
- RECONSTRUCTED/LOWERED CONTROL BOOTH ON ACCESSIBLE ROUTE WITHOUT STEPS
- ENLARGED LEVEL/FLAT FLOOR AREA WITH SIDE HANDRAILS & EDGE GUARDS
- WHEELCHAIR SPACES WITH COMPANION SEATS

COMPARISON PLANS : BACK/BOOTH

3/32" = 1'-0"



BEFORE



AFTER

- ENLARGED LANDING WITH REBUILT STAIR AND HANDRAILS
- WIDER ACCESSIBLE ROUTE TO/FROM STAGE WITH SIDE GUARD
- ALTERNATIVE ACCESS TO/FROM AUDITORIUM VIA EXISTING WHEELCHAIR
- WHEELCHAIR SPACES WITH COMPANION SEATS

COMPARISON PLANS : FRONT/STAGE

3/32" = 1'-0"