



March 22, 2022

John Gilbert, AIA
Facilities Branch – Division of District Support
Kentucky Department of Education
Office of Finance and Operations
300 Sower Blvd, 4th Floor
Frankfort, KY 40601

**Re: BG 22-104- Christian Co. - New Consolidated High School
Design Development Review - Response**

Dear John:

The following is our response to your Schematic Design Review Dated 3/7/22, item by item:

RESPONSE ITEM 1: Geotechnical Survey - You shall provide this information with your construction document (CD) set.

RESPONSE: Borings and Geotechnical Report was completed on November 19th, 2021 and will be included in the project manual.

RESPONSE ITEM 2: With plan changes made since SD phase and in brief review of updates coming post DD submittal, provide an update on this information along with or prior to your CD submittal. SD review was compliant at 108%.

RESPONSE: At DD submittal, compliance was still at 108%. At CD submittal, a final statement of confirmation will be included on DD documents.

RESPONSE ITEM 3: With plan changes made since SD phase and in brief review of updates coming post DD submittal, provide an update on this information along with or prior to your CD submittal. SD review was compliant at 68%.

RESPONSE: At DD submittal, compliance was still at 68%. At CD submittal, a final statement of confirmation will be included on DD documents.

RESPONSE ITEM 4A: OCTE review is separate from DFB review. You will need approval from OCTE at all design phases and make sure we receive a copy.

RESPONSE: Plans have been submitted to OCTE, and we are working through an issue with the TV/Video Production Lab. Once this has been addressed to their satisfaction, we will send you the approval.

RESPONSE ITEM 4B: Part 2b.1.1 Standard Classrooms – “Shield from noise producing activities or functions.” The integration of CTE and standard classroom functions is a concern. You are required to demonstrate appropriate mitigation of sound transmission concerns or adjust your plan more to reduce the number of classrooms impacted by high noise areas.

RESPONSE: Between loud CTE spaces in wings H & K, CMU walls will be sand filled to achieve STC Ratings of 55. Acoustical windows with double pane glazing with STC ratings of 50 will be installed, and to reduce sound transmission between the portion of the CTE spaces that are one story and the classrooms above, we will either use 6” mineral wool will fastened to the underside of the decking or install a suspended ceiling with sound attenuation blanket above to achieve an STC rating of 55.

RESPONSE ITEM 4C: Part 2b.1.3 Standard Classrooms – Demonstrate space is available for 2,500-12”x12”x36” lockers for all students. District may request a waiver to install however, space in the building should demonstrate the feasibility to place lockers in the future should the district decide to do so.

RESPONSE: At this time, the school administration stated that their students do not use lockers and would like to omit them from the project. After consideration of your previous questions about the availability and usefulness to have some lockers for students with disabilities, injuries or other conditions, we are installing a minimum of 50 lockers in each academy for a total of 250 lockers during construction to cover 10% of the student population. In the event that the school district would ever want to install additional lockers in the school for the entire student population, this can be achieved due to the corridors being 12” wider than is required by KDE minimum corridor standards. See attached for plans that indicates there is potentials space for 3,120 lockers in the school (Sheet DDR1). A waiver will be submitted for the remainder of the lockers.

RESPONSE ITEM 4D: Part 2b.1.3 (c) Standard Classrooms – Provide “storage space for teaching materials and records.”

RESPONSE: Due to the request by the administration to not have teachers assigned to a classroom, they requested to omit any storage from the classrooms. However, your concerns about teachers who have trouble with mobility or the need to specialized equipment storage in each resource room for items like headphones for speech therapy are understood. To this end, we are planning for a 2’x3’ space in each classroom where a future teacher’s wardrobe or tall storage cabinet can go. This area will be free of all outlets, devices and marker/tack boards to allow for easy installation of storage in the future as part of the owner’s furniture package, if desired. See attached for floor plans indicating the how this will be documented in our construction documents (Sheet DDR3 – Item 4D).

RESPONSE ITEM 4E: Part 2b.1.3 (c) Standard Classrooms – Provide “storage space for teaching materials and records.”

RESPONSE: See response above.

RESPONSE ITEM 4F: Part 2b.4 Special Education (self-contained) Classroom Units – All four classrooms for this program identified do not have any options for windows directly outside. Rooms A109, A110 and A111 require windows to capture borrowed light from a corridor space. Room A112 does not have an adequate opportunity to receive direct or indirect natural light.

RESPONSE: Rooms A109, A110, A111 and A112 will all have windows looking into the corridor to receive borrowed light from the curtainwall system to the east. While A112 has the least opportunity to receive a substantial amount of light, all of these rooms will be provided with tubular daylighting devices that will provide a minimum of 21f.c. on a cloudy day on the solar equinox at 9am and could provide more light in right conditions. Additionally, all Tubular Daylighting Devices shall be equipped with integral dimmers to allow for reduction in the amount of natural light if the teacher desires.

RESPONSE ITEM 4G: Part 2b.7 – Art Room exhibits a Darkroom (A114A) and in some places described as a Storage Room. There are no requirements for a dark room in regulation. Clarify what the room will be used for and verify if kiln requirements will be provided for either Art Room. Is the Darkroom a CTE space?

RESPONSE: This room will be used as a storage room but will house a light table that students can use for tracing images at the request of the art instructor. This double naming was for the purposes of presenting to the art instructor.

RESPONSE ITEM 4H: Part 2b.8 – Confirm Band Room STC ratings per regulation (55 for walls and 35 for doors).

RESPONSE: The band room will have walls with STC ratings of 60 (12” CMU walls grouted fully) and doors with an STC rating of at least 35.

RESPONSE ITEM 4I: Part 2b.8.2 – Band Room storage is not a continuous 300sf room with an entry and exit from opposing ends. Additionally, the Band Room loft area with practice rooms and small instrument storage is only accessible through a single stair. Access is compromised for ADA purposes and for moments with excess students going to retrieve small instruments. Provide practice and small instrument storage for accessibility needs on the main floor as well.

RESPONSE: The band director has requested that instruments be stored in Wingier casework on the ground and second floor. There will be enough spaces set aside for small music storage on the ground floor to allow for a student with mobility issues to use space on the ground floor. In addition, there is a practice room in the vocal room that a student with disabilities can use for instrument practice.

RESPONSE ITEM 4J: Part 2b.9 – Media Center – The District has requested a waiver to break this model program space into multiple centralized open space areas in each wing of the building. The waiver consideration will be addressed under separate correspondence.

RESPONSE: This waiver has been approved, no response required.

RESPONSE ITEM 4K: Part 2b.9 – The central Media Center's A/V Storage has no direct access to the media center. Comply with regulation or provide rationale for non-compliance.

RESPONSE: Due to decentralization of the media centers throughout the building, and at the request of the administration, A/V room C112 was set up so that A/V equipment can be checked out by students and teachers without having to go into the main media center.

RESPONSE ITEM 4L: Part 2b.10.1– Gymnasiums – Access to wrestling in the auxiliary gym is not accessible. In accordance with the regulation, "Provide accessibility by the physically disabled to these spaces from the main building and the exterior. If necessary, provide an elevator."

RESPONSE: While the Auxiliary Gym Mezzanine is indicated for wrestling practice, the main gymnasium and auxiliary gymnasium will be used to host wrestling matches and wrestling pads will be stored on the ground floor. If there is a time when a disabled athlete participates in the wrestling program, either the main or auxiliary gym will be used to host wrestling practices to allow all athletes to participate.

RESPONSE ITEM 4M: Part 2b.10.2 – Support Spaces – Provide a minimum of 5-shower heads per locker room.

RESPONSE: The administration has requested only one shower in each locker room because students no longer dress for or shower after PE class. A waiver will be submitted to allow for each locker room to only have one shower head.

RESPONSE ITEM 4N: Part 2b.10.2 - Confirm locker count is for ¼ of the student population in total for all gym areas.

RESPONSE: The PE Men's and Women's Locker rooms will house 60 lockers each; (18) 2-Tier 12x12x36 Lockers and (38) 6-Tier 12x12x12 Lockers for a total of 528 Lockers in the PE Locker Rooms. The team locker rooms will house a total of (106) 24x24x72 lockers. The total lockers in the PE area will be 634, which is more than ¼ of the student population.

RESPONSE ITEM 4O: Part 2b.10.2(b) – Inserts for volleyball standards are prohibited. You may submit a waiver request for this item.

RESPONSE: A waiver will be submitted.

RESPONSE ITEM 4P: Part 2b.10.2 – The Coach/Instructor Office shall have “a private toilet and shower.”

RESPONSE: The administration has requested that there be no showers for coaches in the main gymnasium, however, here will be showers for the coaches in the Indoor Athletic Facility. The administration has planned to allow one of the Physical Education locker rooms to be used by coaches and referees to use in the Main Gymnasium during game nights to allow them to shower and change out of the presence of children, and offices and facilities at the school districts’ main football / track and field stadium located at 9502 Eagle Way have showers for coaches and referees.

RESPONSE ITEM 4Q: Part 2b.21.3(a) – Kitchen/Cafeteria – Provide a serving line for each 300 students or explain how current layout complies with regulation. Currently there are four (4) lines near the kitchen and one (1) remote serving line for a 2,500- student school.

RESPONSE: This high school will have 5-6 serving lines; four main lines adjacent to the kitchen, and 1-2 flex lines at the kiosk located just outside of the main serving area. Each line will offer hot lunches and a la carte items to avoid bottle necking for a particular item. In addition, the kiosk is set up to offer food for students before, during and after school. After many discussions with Penny Holt, the Christian County District Foodservice Director, and C&T Design, this project’s kitchen consultant, this number of lines has been determined to be sufficient based on the school’s kitchen staffing basis, and the number of students that will be able to go through each line during a given lunch period. There will be 4 or 5 lunch periods each school day. Each lunch period will last approximately 25 minutes, and based on historical data, Penny expects to capture 80% of the student population of 2,500 each day. In total, 400-500 students will eat lunch each period, in turn each line will serve 85-100 students per lunch period, a figure that Penny is confident her staff and this configuration will be able to handle.

RESPONSE ITEM 4R: Part 2c.1.1.3 – “Corridors shall terminate at an approved egress or at a stairway which leads directly to an approved egress.” Corridors A100F, E100C, E100D, F100C, F100D, F200C and F200 D do not comply with this requirement.

RESPONSE: Door A100F has been moved to reduce the dead end at corridor A100F to an ‘alcove’. E100C & E100D have been previously revised to eliminate the dead-end conditions. F100C & F200C will include an additional resource room to eliminate the dead-end corridor condition, and the end of F100D has been revised to include a small janitors closet to eliminate the dead end condition. See attached floor plans for revisions to each location (Sheet DDR3 – Items 4R).

RESPONSE ITEM 4S: Part 3c Windows – “Windows shall be provided in each instructional space located on an exterior wall...” The following instructional areas (by room number) have no options for natural lights and have a waiver request submitted to our office which will be addressed under separate cover: (sheet

10A1.1A) A105, A106, A107; (sheet 1- A1.1C) C103, C104; (sheet 1-A1.1D) D102, (sheet 10A1.1E) E118; and (sheet 1-A1.1K) K112.

RESPONSE: This waiver has been approved; no response is needed. However, tubular daylighting devices have been added to classrooms A105, A106, A107 to help reduce the impact of having no windows in these rooms.

RESPONSE ITEM 4T: Part 3c Windows – “Windows shall be provided in each instructional space located on an exterior wall...” The following instructional areas (by room number) have either no options or options provided through borrowed light situations. Explain how natural light will be provided for compliance to the regulation. Rooms (sheet 1-A1.1A), A 109, A110, A111, A112; (sheet 1- A1.1B) B102, B103, B104, (sheet 1- A1.1C) C110, C111; (sheet 1-A1.1D) D104, D108, D114, D118, (sheet 10A1.1E) E112, , (sheet 1-A1.1F) F112, F116; (sheet 1-A1.1H) H117, (sheet 1- A1.1K) K112; (sheet 1-A1.2G) H202, H204, H206, (sheet 1-A1.2H) H208, H218, H213; (sheet 1-A1.2J) K202, K204; (sheet 1-A1.2K) K206, K208.

Please note wings J and K upon observations of the elevations, show no exterior windows to provide natural light as presented for second floor classrooms to receive borrowed light.

RESPONSE: All rooms with the exception of A112, C110 & C111 will receive adequate borrowed light by way of adjacent curtainwalls and storefronts. In addition, these rooms will be provided with Tubular Daylighting Devices as described in response to item 4F. Rooms H117, H213 & H218 are located on an exterior wall, and have been provided with a window that was absent from the DD review plans but have since been modeled. Rooms H202, H204, H206 H208, K202, K204, K206 & K208 will have borrowed light via high windows in the adjacent CTE spaces that were absent from the DD review plans but have since been modeled as shown in the attached plans (Sheet DDR2).

RESPONSE ITEM 5: The BG-2 notes no lockers. Lockers are provided in accordance with Construction Criteria as referenced in 702KAR 4:170. RESPONSE ITEM 4c is adequate to address this concern.

RESPONSE: At this time, the school administration stated that their students do not use lockers and would like to omit them from the project. After consideration of your previous questions about the availability and usefulness to have some lockers for students with disabilities, injuries or other conditions, we are installing a minimum of 50 lockers in each academy during construction to cover 10% of the student population. In the event that the school district would ever want to install additional lockers in the school for the entire student population, this can be achieved. See attached for plan DDR - #5 that indicates there is potential space for 3,120 lockers in the school.

RESPONSE ITEM 6: The media center is noted to have 75fc for illumination. Is this consistent with every satellite media center shown in corridors?

RESPONSE: Yes, all satellite Media Centers will have 75fc illumination.

RESPONSE ITEM 7: Confirm the work will meet the requirements of KRS 158.162.

RESPONSE: Yes, the work will meet the school safety requirements of KRS 158.162.

RESPONSE ITEM 8: Preschool is not identified in the building however, Daycare is. We will defer to OCTE review concerning this program. One best practice concern upon observation is the need for students to have to passthrough support areas internally to get from room D124 to D122. Students should not have to pass-through work-related spaces to get to instructional areas.

RESPONSE: It is understood that this will be the purview of OTCE. A dedicated passageway has been added between the two rooms children to use. See attached floor plan for revisions (Sheet DDR3 – Item 8).

RESPONSE ITEM 9: Vocal Music Classrooms should be readily accessible to an electric water cooler or water bottle filling station.

RESPONSE: An electric water cooler with water bottle filling station is directly adjacent to the vocal room and is located approximately 25' away from the main vocal room door. However, if a EWC is required to be inside of the vocal room, let us know and we will provide one. See attached floor plan for clarification (Sheet DD3 – Item 9).

Thank you,

A handwritten signature in black ink, appearing to read 'E. Rang'.

Eric Rang, AIA
HAFER

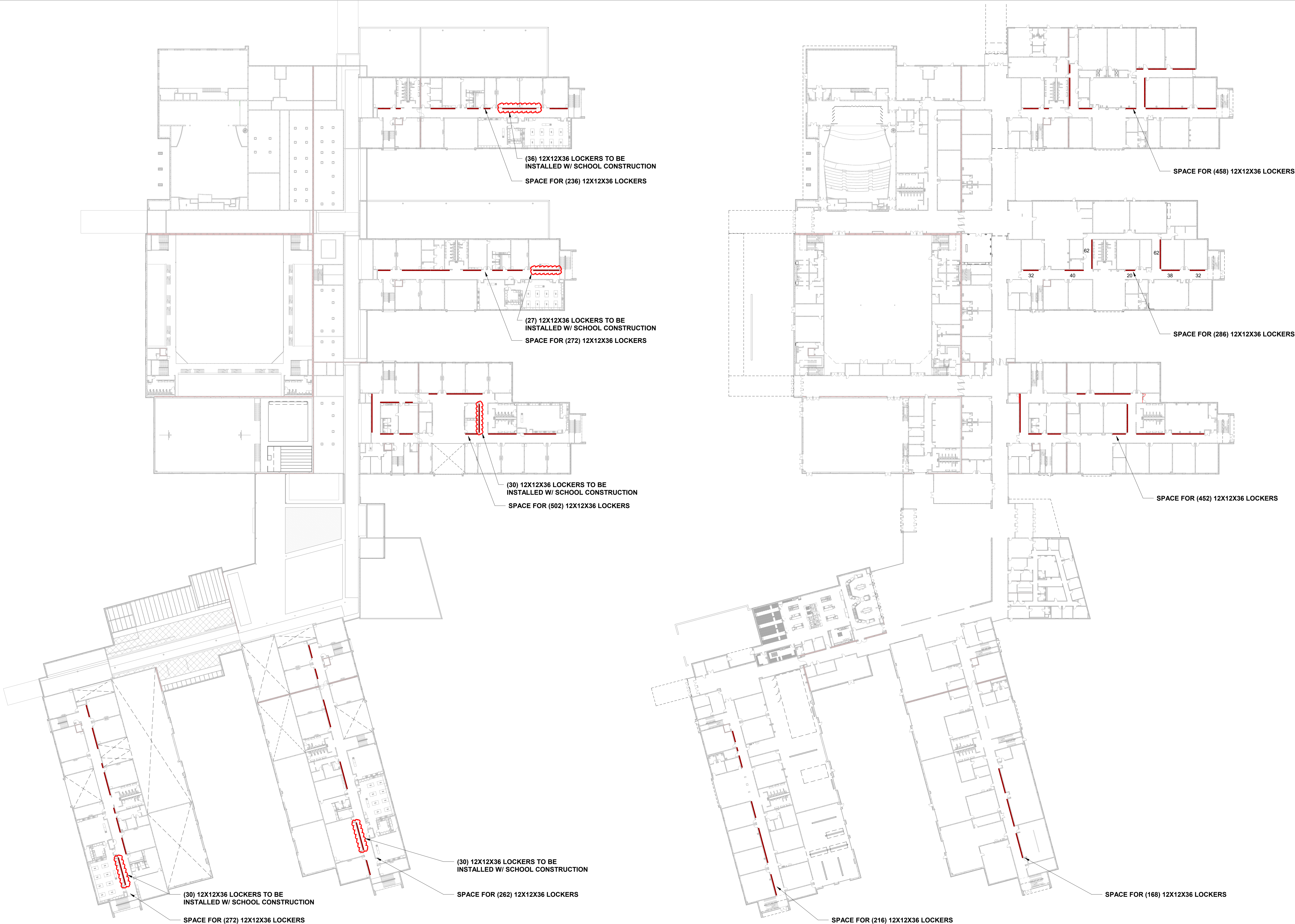
CC: Christopher Bentzel, Christian County Public Schools
Josh Hunt, Christian County Public Schools
Jack Faber, Hafer

Attachments: Design Development Response Sheets DDR-1, DDR-2 & DDR-3.

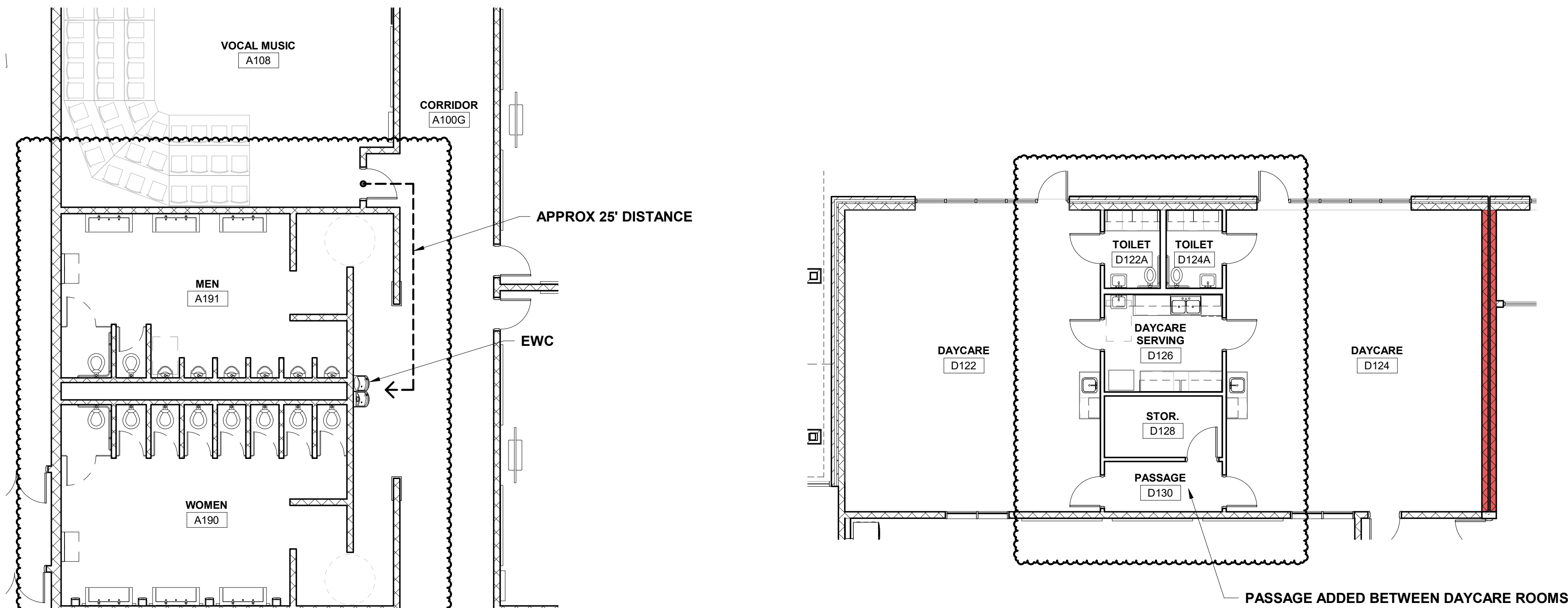


SECOND FLOOR PLAN - Item 4C
1" = 40'-0"

FIRST FLOOR PLAN - Item 4C
1" = 40'-0"

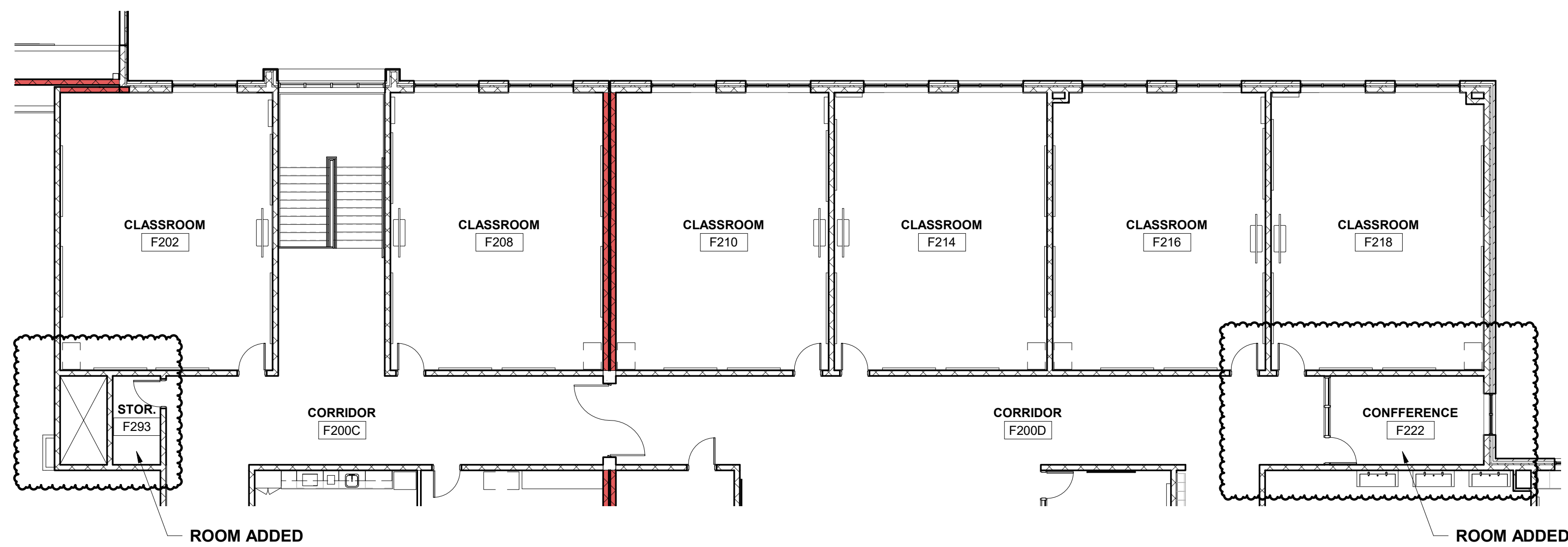




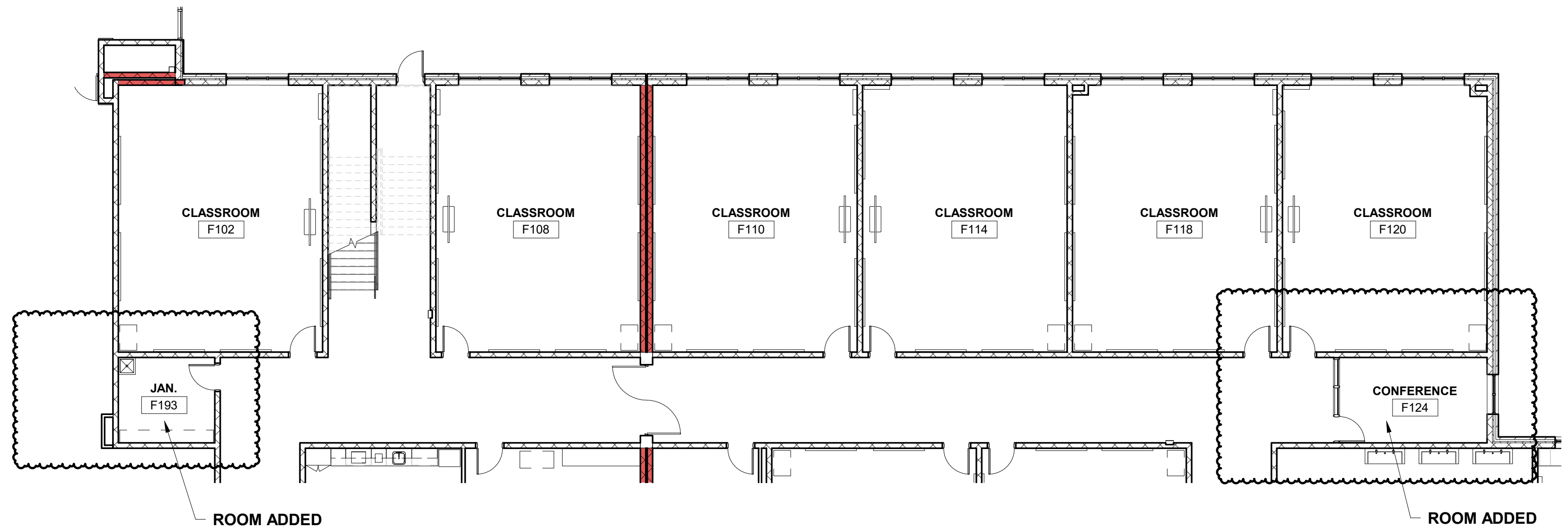


Item 8 - Daycare
1/8" = 1'-0"

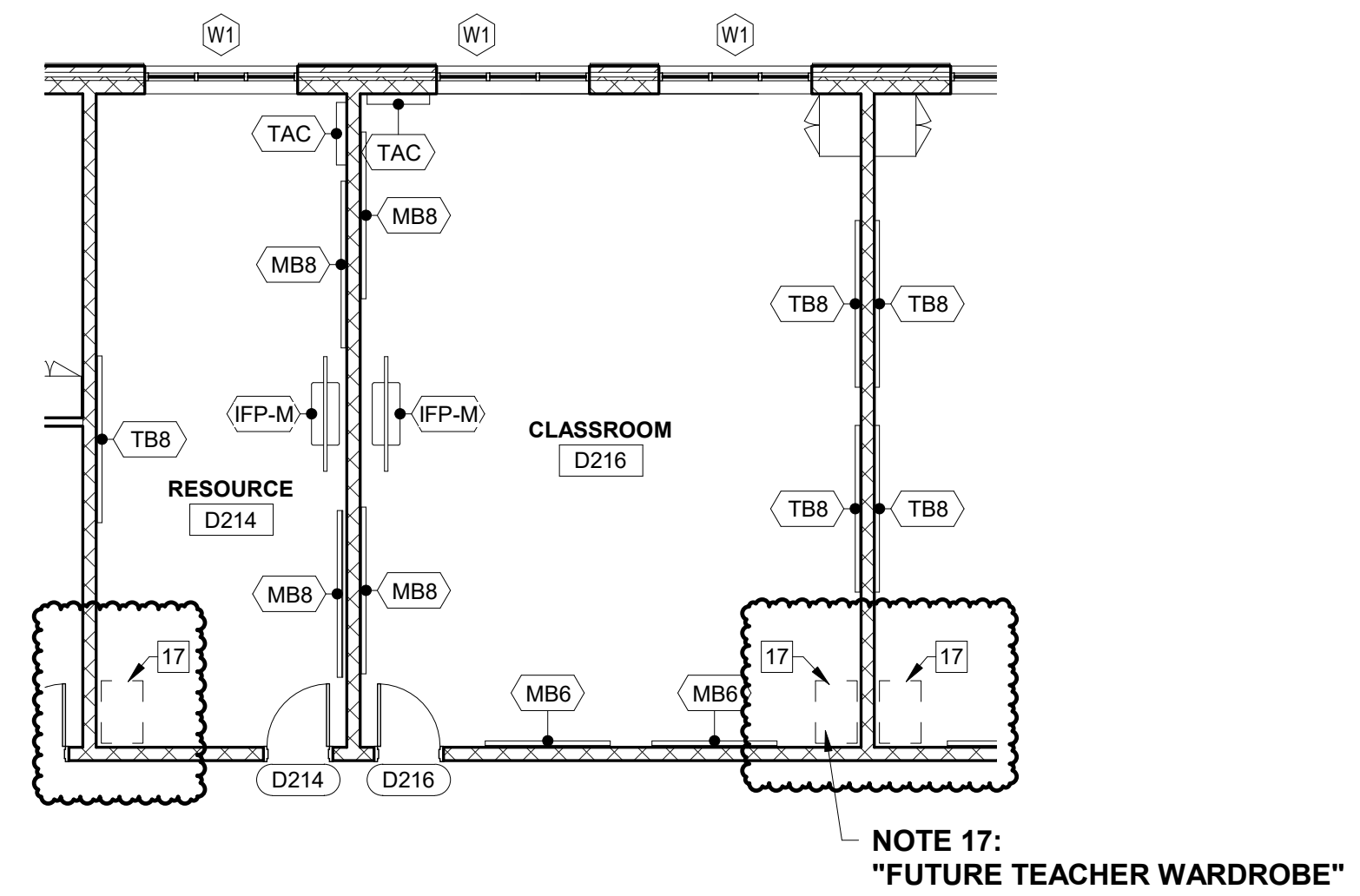
Item 9 - Vocal Room to EWC
1/8" = 1'-0"



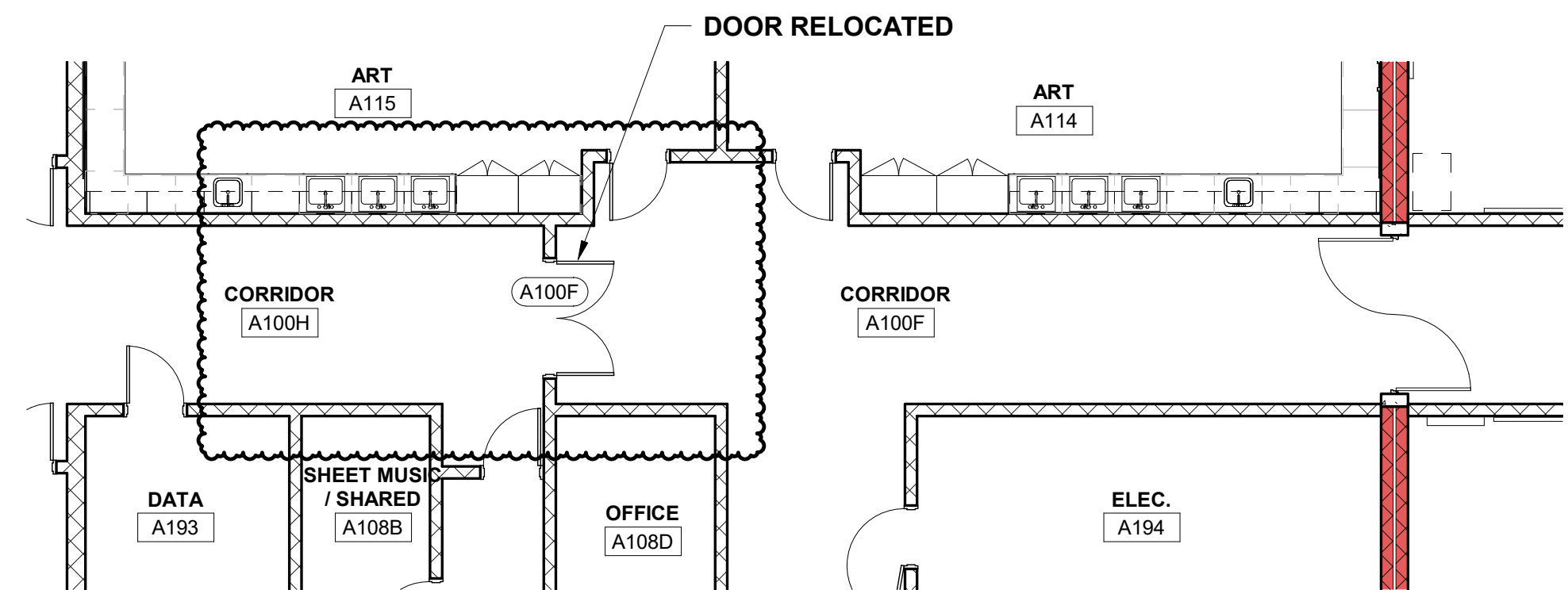
Item 4R - F200C & F200D
3/32" = 1'-0"



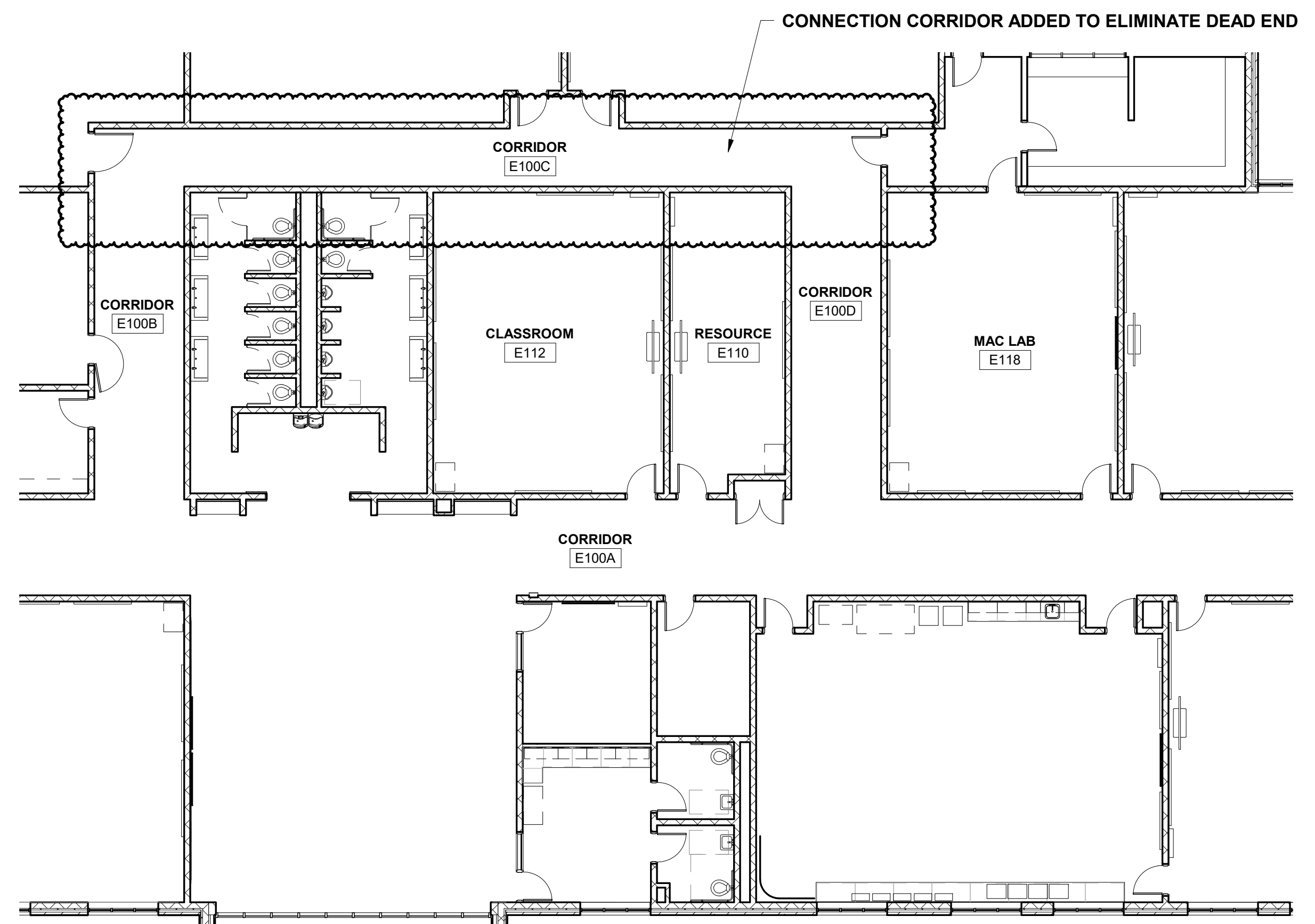
Item 4R - F100C & F100D
3/32" = 1'-0"



Item 4D
1/8" = 1'-0"



Item 4R - A100F
1/8" = 1'-0"



Item 4R - E100C & E100D
3/32" = 1'-0"