



July 9, 2020

Adam Lint
Director of Bond and Facilities
Portola Valley School District
4575 Alpine Road
Portola Valley, CA 94028

RE: NEW BUILDING DESIGN OBSERVATIONS REGARDING COVID-19 PREVENTION

Dear Adam:

As requested, we evaluated the current designs of the new buildings to determine which design features might support the District's health initiatives to prevent the spread of COVID-19 and safely reopen school. Enhanced features already provided in the design include:

1. Large Classroom Sizes:

All newly designed classrooms either meet or exceed the recommended size guidelines from the California Department of Education (CDE). These state guidelines are designed to accommodate approximately 30 students per classroom. The PVSD new general education classrooms are 960 square feet, while the art, science, and maker space rooms range from 1,100 square feet to upwards of 1,500 square feet.

These new classrooms are larger than the existing classrooms on campus, which vary between 850 square feet and 950 square feet. By having larger rooms, coupled with the lower, class sizes that PVSD typically schedules, the new rooms will potentially support more students.

2. Outdoor Learning Spaces and Flex Learning Spaces:

The new design at Corte Madera provides three, dedicated outdoor classroom spaces, with other additional spaces that could support outdoor education. Although they do not replicate the interior classroom environment, they do offer the possibility for classes to spread out and reduce time spent in indoor environments. The center space inside the 6/8 building at Corte Madera, could support 2 classes and practice social distancing.

3. Cleanability of Surfaces:

Many of the new spaces are outfitted with solid-surface flooring such as polished concrete and vinyl flooring, and the cabinetry are topped with durable solid-surface countertops. These less-porous materials will aid in the cleaning and sanitizing processes at the school.

4. LEED Silver - Sustainable Design Certification:

The project is designed to LEED Silver, which requires a variety of health and wellness, and environmentally sustainable design features into the project. This process identifies to the community that the building design have reached a higher standard than typical code-minimum design.

5. Enhanced Mechanical Ventilation Systems:

The new mechanical ventilation systems are designed with increased airflow, bringing outside air into the classrooms at an increased rate. The code requires a room's air be recycled with fresh air approximately 3 times per hour, while the new buildings are designed to 9 air changes per hour. All classrooms are outfitted with operable windows and ceiling fans in some select locations.

6. Mechanical System Filtration:

The HVAC systems are outfitted with enhanced filtration and provide higher levels than are typically provided in buildings. Typical buildings are designed with MERV 9 filters while the new buildings include MERV 13 rated filters, which are the highest filtration that balances energy efficiency of the HVAC system. The project could increase to MERV 15, but the mechanical system would have to be redesigned to a more energy intensive system for only a limited benefit.

7. Two Doors into Classrooms:

All of the larger classrooms including science, maker-space, and art have two entrance doors. This would allow separate student groups to enter and exit classrooms to reinforce smaller student clusters and promote social distancing. The general education classrooms currently only have one door.

Beyond these measures that are already built into the design, there are other measures that could be implemented:

A. Touchless Restroom Accessories:

Faucets, paper towel dispensers, and soap dispensers could all be changed out to touchless systems. Cost would likely be \$10-15,000.

B. Restroom door openers:

High trafficked areas, such as restrooms, could either keep their doors propped open provided visibility wasn't an issue, or the door hardware could be changed to alternative opening devices that are either touchless or foot activated. These would require additional design research and costs would likely be in excess of \$20,000.

C. Adding Additional Doors to Classrooms:

A second door could be added to new general education classrooms. However, this additional door will likely require grading, and some exterior ramps to make these second entrances accessible. Costs would likely exceed \$40,000. We would discourage this design change as alternatives could be considered.

We recommend the District proceed with the project as designed given the many components that promote a healthier environment for students. A wholesale redesign would be cost prohibitive with limited benefit. Please advise if we should consider some of these other design modifications mentioned above.

Sincerely,



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