

Noise

The project includes installation of roof mounted HVAC equipment (chillers). These chillers will be screened with masonry sound deadening screen walls and thus not visible from the street or the Stoneleigh Plaza Residences. All other air handling equipment and pumps will be housed within an enclosed and insulated mechanical penthouse on the roof and thus greatly minimizing a noise affect on the outside of the penthouse. There are intake and exhaust louvers, but these are directly ducted to the air handlers, so no ambient noise within the mechanical room has a direct path to the exterior. The proposed exterior equipment (chillers, emergency generators) are expected equipment uses in the Central Business A district for the support of the Hospital functionality.

Special attention has been given to any noise producing elements of the new addition. In order to determine existing ambient sound levels along Pondfield Road and determine future noise conditions on the site and surrounding receptor locations, Cerami and Associates have prepared a Mechanical Equipment Sound Analysis (this report is included in Attachment D). Special consideration was given to the roof mounted chillers and the intake and exhaust louvers in regard to the affect they might have on the Stoneliugh Plaza Residences. The report recommends achieving a sound level of 45 dBA, which is in the 'Quiet' to 'Just Audible' range of human hearing. To achieve this level the report recommends that Chiller #1 be rotated such that the end opposite the control box faces Pondfield Road. This change has been made on sheet A-5. The report also recommends using vibration isolators under the chillers. These isolators will be included into the project by specification. Additionally, a final sound study will be performed to verify that the recommended noise levels are achieved.

The Hospital is also upgrading its emergency (back up) generator system. A new generator is planned to be located at the southwest end of the existing parking garage near the existing Hospital generator and loading dock area. This location is approximately 450 feet south of the closest corner of the Stoneleigh Plaza residences. In addition to this distance, there are multiple buildings between the two locations making any noise from the generator virtually inaudible at the residences. While the generator will generate perceptible noise at much closer distances, it will only operate in very limited circumstances. Emergency generators are typically used when the primary power supply is no longer available. Power outages typically occur during an emergency. Therefore, during an emergency situation, the hospital will continue to maintain the operation of providing vital community benefits. This generator will be tested once a month at the same time the existing hospital generator is tested. That current schedule is the first Tuesday of every month, at 5:00AM, for two hours.

Attachment D has been included to provide basic manufacturer information of the chillers and generator as well as the Mechanical Equipment sound analysis. The described best management practices of noise control have been incorporated into the proposed design plan addressing any noise related impacts.

