



To: Wellesley Planning Board

Date: September 2025

Memorandum

Project #: 12920.21

From: WC Design Team

Re: Wellesley College Campus Renewal
Residence Hall Swing Space – Project of Significant Impact
Electrical Municipal System Impact Analysis

This memorandum summarizes the analysis of project-generated municipal systems impacts for the proposed development of temporary student housing at Wellesley College as they relate to the electrical distribution system.¹ This project involves construction of 150 student beds within five buildings, designed to serve as swing space during the renovation of the school's residential halls at Wellesley College. This residential swing space will be sited at the location of the existing Dower Hall dormitory, which is slated for demolition.

The estimated connected load for the Residence Hall Swing Space is 480 kVA with an estimated demand load of 480 kVA. The proposed housing service is a 2,000-amp, 120/208-volt, three-phase, four wire service. The buildings' electrical service will tie into a new transformer adjacent to the proposed custodial office. The equipment will include a pad-mounted 500 kVA transformer served by a 13.8 kV feeder. Each of the five buildings will be fed with a 200A-3p breaker. The HVAC cooling and heating demands are anticipated to be provided by unitary electrical equipment associated with the housing and not provided by the Wellesley College Physical Plant.

Wellesley College generates its own electricity via a 7.5-megawatt, five-engine system housed in the physical plant building on campus. Electrical power is supplied to the campus from the physical plant or is purchased from the Town of Wellesley depending upon the demand of the local utility. Generally, Wellesley College purchases electricity during off-peak hours and generates its own during peak hours. This is done for both economic reasons and to assist the Wellesley Municipal Light Plant in balancing its electric load.

The Wellesley College physical plant can accommodate current and planned future campus electric requirements. Therefore, the project will have minimal impact to the Town of Wellesley municipal electrical distribution system.

¹ Electrical systems information provided by AHA and Wellesley College.