



SUSTAINABLE SITE

Building development and construction processes are often destructive to local ecologies. These activities can encroach on productive agricultural land, reduce open space, and impact resident vegetation and wildlife. Storm water runoff from developed areas can pollute water in receiving areas and harm aquatic life. When considering site alternatives, it is important to consider environmental impact throughout the site selection process.

WPI's EAST HALL site is located within close proximity to an internal bus route, city bus routes and the MBTA providing easy access to public transportation. To further encourage use of alternate transportation, the project is currently providing provisions for dedicated interior storage for bikes to encourage students to consider forms of transportation other than automobiles. Additionally, reserved carpool spaces have been designated, further promoting efficient transportation.

The site was once a conglomerate of multiple surface parking lots surrounding three buildings that had outlived their usefulness on campus. The many lots extensive drainage systems required control of rainwater runoff, collecting oil and debris before entering the storm water system. Removal of the existing building and consolidation of the parking into one garage, has freed this space up for a uniquely planted landscape and new Arts Walk for recreation, reflection and repose on campus. The Walk's added benefit is it naturally absorbs and filters rain water, thus greatly reducing the impact on the storm water system.

East Hall's roof is a made up of 12,985 square feet of white, energy star roofing and 4,802 square feet of sedum or green roof. A green roof provides a variety of benefits to the building including insulation, storm water storage, and habitat creation. The roof at East Hall is a modular grid system placed above a drainage mat on a membrane roof. In a storm event, the green roof helps reduce flooding by retaining water on the roof within the modules. This process not only reduces the rate and volume of storm water leaving the roof but also filters pollutants from the water before releasing it slowly back into the system. The hope for East Hall's green roof is that

storm water runoff will be reduced by at least 25.5%.

The low maintenance roof plantings will also provide an improved roof-scape visible from Boynton Hill.

Building and site lighting were strategically designed to minimize light pollution on the site and eliminate any impact on night-sky views by meeting strict light cutoff requirements on every fixture.