AMERICAN UNIVERSITY
WASHINGTON, DC

Hall of Science FAQs

What is the Hall of Science?

AU proposes to build a new Hall of Science that will be a state-of-the-art facility that relocates the university's biology, environmental sciences, chemistry, and neuroscience departments to a modern, centralized location. By bringing together these programs, the project aims to foster collaboration across various disciplines through shared space and research laboratories. The building is on track to receive Leadership in Energy and Environmental Design (LEED) Gold certification, a benefit to the campus, neighborhood, and District of Columbia.

Why does AU need a new science building?

Science is now the fastest growing area of undergraduate study on campus and AU has seen a steady increase in interest in the sciences, from both students and faculty. The university's current science building, Beeghly Hall, was built in 1965 and does not meet modern standards for science education and research. This has an impact on the quality of education we are able to offer students, as well as the university's ability to secure grants and other funding for important research.

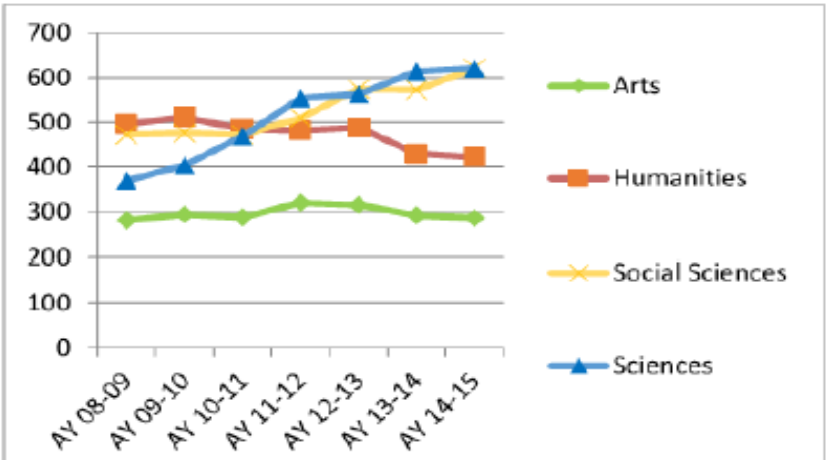


Table 1: Undergraduate Enrollment Growth by Division (CAS Only)

Was this building included in AU's 2011 Campus Plan?

The Zoning Regulations of the District of Columbia require that any college or university receive approval from the Zoning Commission of the District of Columbia to operate on property which is located in a residential zone or in certain low density commercial zones. The D.C. Zoning Commission's standard of review is that the college or university use "shall be located so that they are not likely to become objectionable to neighboring property because of noise, traffic, parking, number of students, or other objectionable conditions." The Zoning Commission approves Campus Plan, Campus Plan Amendment, and Further Processing of an Approved Campus Plan applications.

Campus Plans are typically valid for a period of 10 years or more, and include caps on the number of students, caps on the number of faculty/staff, a requirement to house some percentage of undergraduate students, and specific conditions to address issues that have been raised during the Zoning Commission's public hearing process. The Campus Plan identifies the land use priorities of the college/university for the term of that Campus Plan and also establishes the general height and size of proposed new buildings on the Campus.

The concept of a new science building was included in AU's 2011 Campus Plan. However, after a more thorough review of the Beeghly Hall site, it became apparent that renovating and expanding the existing building, as originally envisioned, was not feasible.

In order to construct a building that was approved in the Campus Plan, the college/university must obtain "Further Processing" approval of the building from the Zoning Commission, the next step for AU. The architectural plans approved by the Zoning Commission in the Further Processing application public hearing process are more refined than the materials reviewed during the Campus Plan process. The Zoning Commission has the authority to review and approve an amendment of the Campus Plan simultaneously with the review and approval of a Further Processing application.

Where will the Hall of Science be located?

The new building's proposed location is the parking lot next to the Asbury building, internal to the main campus.

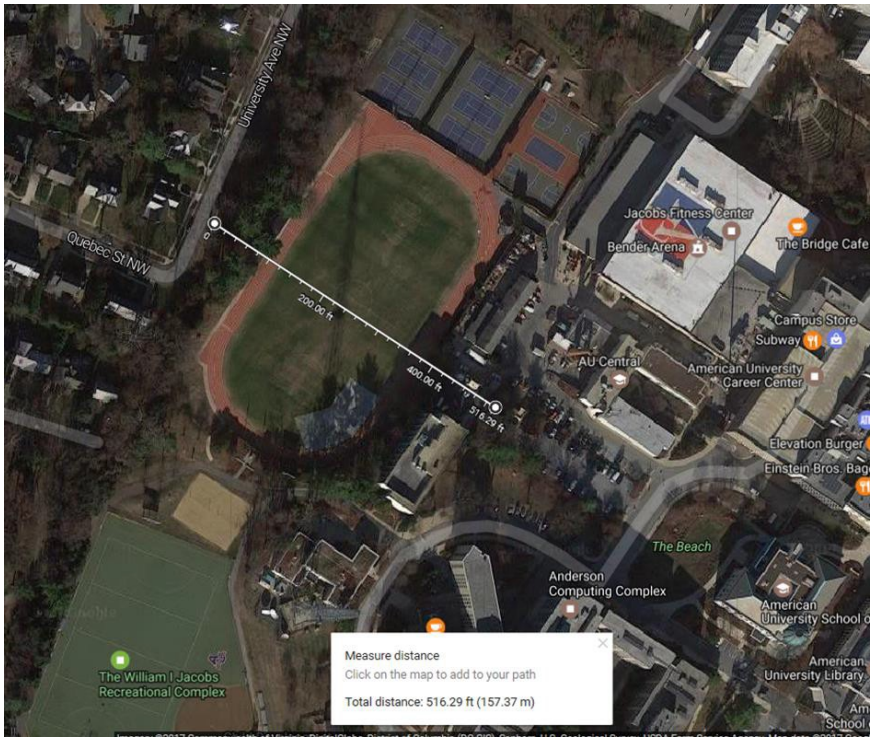
Will the current science building be impacted during construction? What are the future plans for this building?

Classes in Beeghly Hall will continue during construction. AU is currently evaluating potential reuses for the existing building. No decisions have been made and any future discussion will include the greater community.

What will the new building look like?

What visual impact will there be for nearby neighbors?

The proposed Hall of Science will be located over 500 feet from the edge of campus adjacent to University Avenue and an additional 90 feet further away from the edge of campus than what was proposed in the campus plan (see Google map aerial view below).



The proposed Hall of Science will be the same height as the existing Beeghly Hall (see view from Quebec Street below). It will appear slightly shorter than Beeghly Hall from the neighboring community because it is further away from the edge of campus.

Who are the architects for the project?

The project architect is Ballinger (http://www.ballinger.com/), a firm that specializes in science and other academic buildings. Their work includes major projects for George Washington University, John Hopkins University, and the University of Maryland.

When do you expect construction to begin and the building to be completed?

The timeline depends on Zoning Commission approval. Once the Commission approves the proposed design, we anticipate approximately 24 months to complete construction.

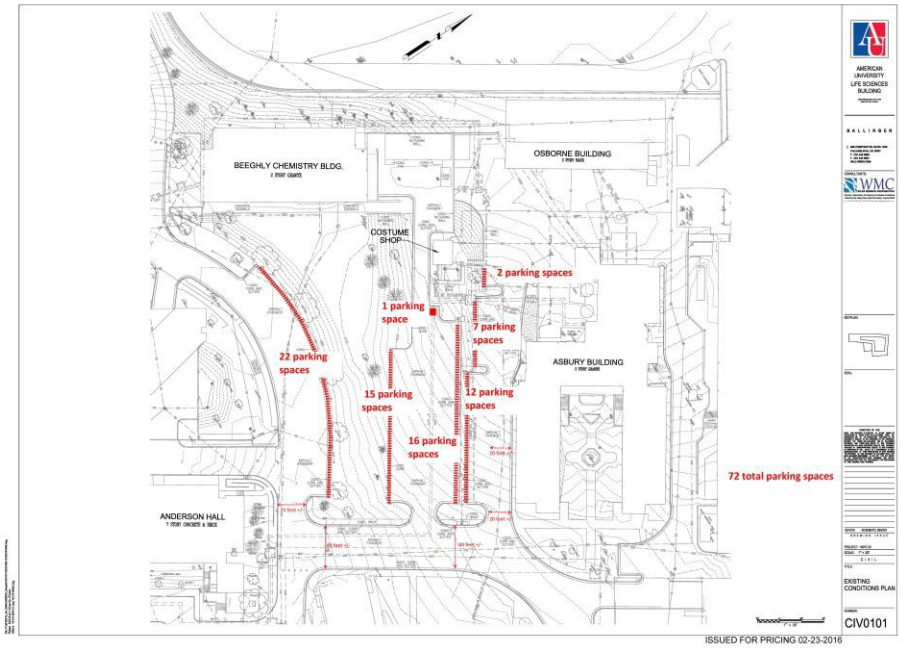
Considering the issue of World War I munitions in Spring Valley, will the U.S. Army Corps of Engineers be notified of this project?

AU is required to contact the U.S. Army Corps of Engineers any time construction is slated to occur on the main campus. The Corps will be made aware of these plans upon approval.

Additionally, and in coordination with the Corps, AU has engaged the engineering firm of ECS Mid-Atlantic to complete a Phase 1 Environmental Site Assessment. The findings of this effort will be included in the Environmental Impact Screening Form submission required by the District of Columbia.

Will on-campus parking be impacted by the project?

AU anticipates the removal of approximately 75 on-campus parking spaces as a result of the construction of the Hall of Science (see site plan below). The university will maintain the overall required number of parking spaces, as well as continue its Transportation Demand Management (TDM) program which includes the AU shuttle, the Metro U*Pass program, carpooling and car-sharing, telecommuting, and other transit oriented benefits for students, staff, and faculty.



What days and times will construction activities occur?

We anticipate that construction will occur during regular permitted construction hours in the District of Columbia, Monday – Saturday, 7 a.m.-7 p.m.

What impact can neighbors expect from construction activities?

Because the project is internal to AU's main campus and not directly adjacent to any residential properties, we anticipate the impact of construction to be minimal. That said, AU is committed to working to minimize any impact of construction on the surrounding neighborhood. The university will accomplish this by addressing the following concerns:

Trucking & Construction Vehicles

There will be construction vehicles, including dump trucks, entering and exiting the campus on routes determined by the District Department of Transportation (DDOT). These routes will be shared with the community in advance of construction. AU will include in contracts with the selected trucking companies financial penalties for any truck that does not adhere to approved routes. In addition, drivers who are found not in compliance will be removed from the job immediately. AU will also work closely with DDOT and the Metropolitan Police Department (MPD) to ensure proper enforcement takes places if and when needed.

Construction Worker Parking

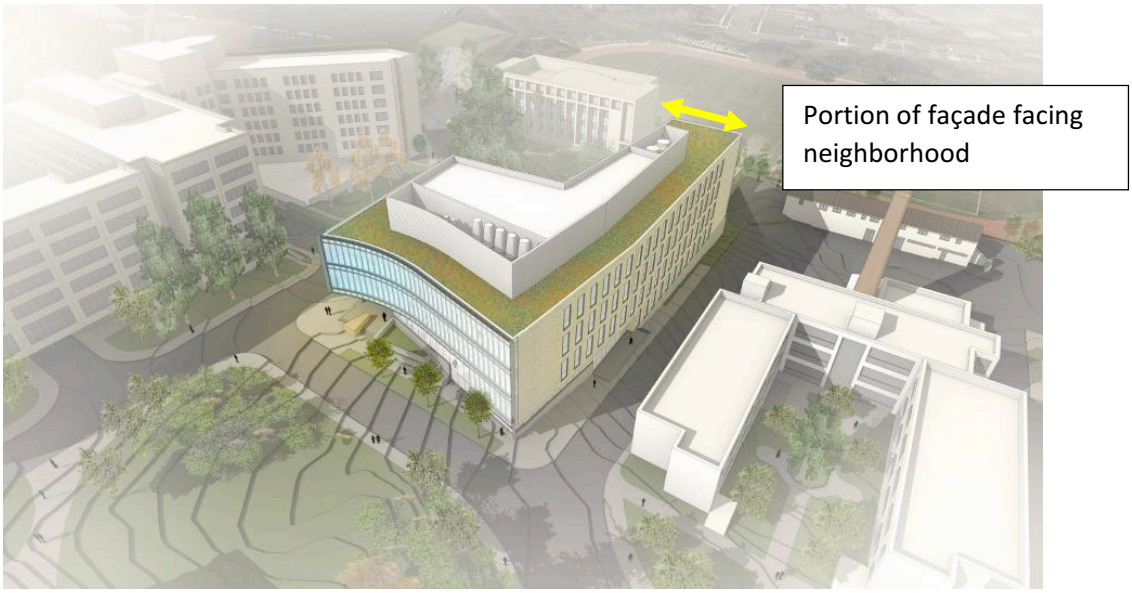
Construction workers will be prohibited from parking on neighborhood streets during the project. AU will make accommodations in existing facilities for workers. Those found in violation of this policy will be removed from the job and their vehicle ticketed for violation of the Good Neighbor parking policy.

Work Hours & Noise

As mentioned, AU will seek regularly permitted construction hours in the District of Columbia (7 a.m. – 7 p.m., Monday – Saturday). However, in instances when construction noise is especially disruptive to the neighborhood (if pile-driving is required, for example), AU is committed to working with the project contractor to adjust the morning start time to help mitigate this impact.

Will lights from the building shine into the neighborhood?

Only a small portion of the building's façade is oriented towards University Avenue and is over 500 feet from the AU's property line adjacent to University Avenue. The visibility of the Hall of Science Building is also shielded by a landscaped buffer (see aerial view below). The lab space at the northwest corner of the building will have vacancy sensors to ensure lighting is turned off when those spaces are unoccupied. In addition, AU has agreed to include automated shades for these windows.



Will AU employ industry best practices to mitigate fume emissions from the building?

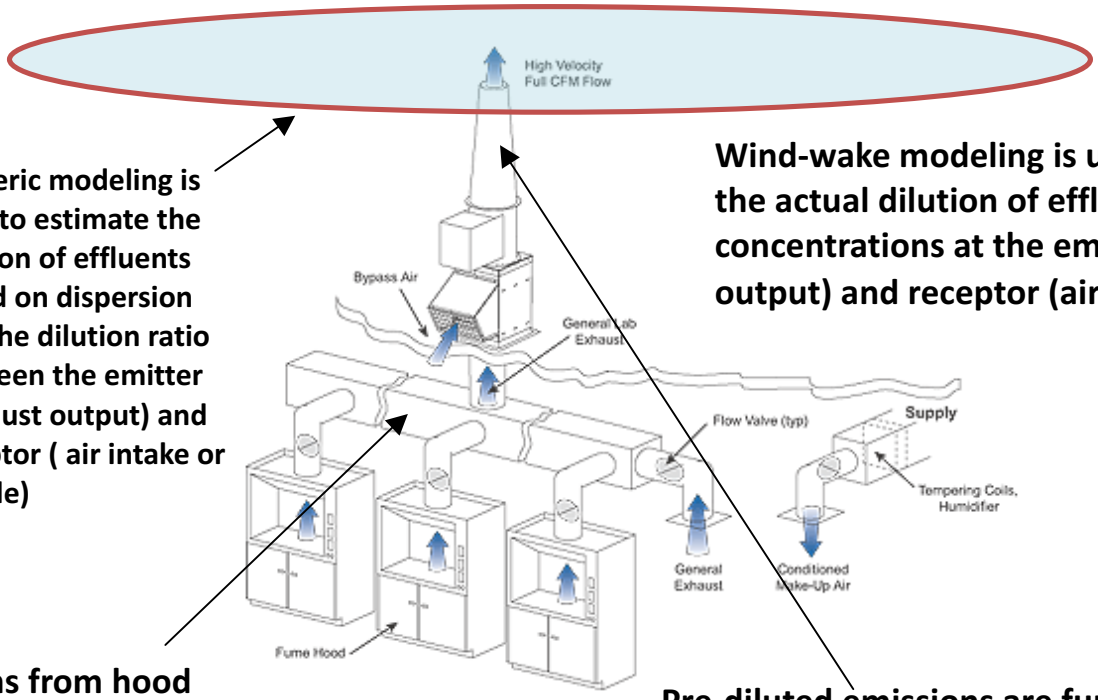
Yes, AU will employ the following industry-wide best practices in the design of the proposed Hall of Science:

- AU will perform a wind-wake modeling for effluent dispersion using a wind tunnel test to measure dilution rather than numerical modeling that only estimates dilution on a hypothetical basis.

  The test uses a scale model of the site and its surroundings. A tracer gas at a known concentration is released from each emitter location on the model. The actual dilution of the gas is measured at receptor points in the scale model. The model is put on turn table so results can found for all wind conditions. Receptor point locations will include both on-campus locations close to the Hall of Science, as well as locations in the near neighboring residential area along University Avenue and Quebec Street.

- High dilution exhaust fans, located within a roof well to the east of the mechanical penthouse. Exhaust discharge per ANSI Z9.5.

- Manifolded exhaust system for pre-dilution – emissions are first diluted within the building, and then further diluted at the point of discharge. See diagram below.



Numeric modeling is used to estimate the dilution of effluents based on dispersion and the dilution ratio between the emitter (exhaust output) and receptor (air intake or people)

Wind-wake modeling is used to determine the actual dilution of effluents by measuring concentrations at the emitter (exhaust output) and receptor (air intake or people)

Emissions from hood are pre-diluted within building by combining it with general exhaust

Pre-diluted emissions are further diluted by high dilution exhaust fans that discharge the exhaust at high velocities to disperse the emission

How can I receive information and updates on the construction?

Construction updates will be available on the Building AU website (http://www.american.edu/buildingAU/), as well as presented at meetings of the Community Liaison Committee and the newly created Neighborhood Collaborative. A contact sheet will also be provided to community members in advance of construction with information on who to call and email with construction related concerns.