

Authorization of New Capital Improvements Project – North Carolina State University

North Carolina State University has requested authority to establish a new capital improvements project that would allow grant funded renovations in the NCSU Phytotron building.

Originally constructed in 1968 and then called the Southeastern Plant Environment Laboratory, the NCSU Phytotron building is a four-story 42,216 square foot building located adjacent to Gardner Hall. This special laboratory, one of only three in the United States, is especially designed for research that deals with the response of biological organisms to their environment. Within the NCSU Phytotron building, there are 60 artificially lighted growth chambers of various sizes, 9 photoperiod rooms, and 5 temperature-controlled, roof top greenhouses. Separate controls regulate temperature, moisture, photoperiod, and atmospheric gasses in each chamber, making it possible to duplicate any climate on earth from tropical rain forest to arid desert. The NCSU Phytotron lends itself to an enormous number of experiments, usually between 50 and 70 different projects each year, and a broad range of research interests.

The renovation would construct a Biosafety Level 3 (BSL-3) containment facility within the existing building, update laboratory environmental controls, upgrade the control of the carbon dioxide system, and increase laboratory cooling capacity.

The project, expected to be completed by July 2013, is estimated to cost \$1,793,916 and would be funded from an American Reinvestment and Recovery Act grant awarded on August 17, 2010.

It is recommended that this project be authorized and that the method of financing as proposed by NCSU be approved.