Information sheet about Science Facilities Planning:

Vision and Objectives of the project (from Facilities Master Plan, Spring 2014):
New and renovated facilities should:

• Support integrated science education. Students, faculty, and staff should experience the connections between scientific disciplines and the connections between science, other academic fields, and “real life” outside of the classroom.
• Support student-faculty research. Facilities should increase our ability to involve more students in meaningful research in our laboratories, and to incorporate meaningful research opportunities into the science curriculum.
• Enhance the strengths of our current facilities and programs in a manner that reflects Carleton’s historic leadership in educating scientists.

While reflecting these design principles:
• Adaptability/flexibility— Teaching and research spaces should be relatively easy to reconfigure as new faculty and new scientific techniques and areas of interest come and go. Incorporation of flexible casework, partitions, and utilities are ways in which adaptability can be achieved.
• Sustainability—As some peer institutions have done when building and renovating science facilities, we envision buildings that, in addition to cutting operational costs and being more sustainable, are also tools for teaching about energy conservation and the environment.

General recommendations (from Facilities Master Plan, Spring 2014)
• New construction should connect together existing buildings, and thus occupy part of the current science courtyard and/or the NE (Mudd/Olin) and NW (Olin/Hulings) corners of the existing complex.
• New construction should be primarily for high intensity laboratory uses.
• New office and dry laboratory space (e.g. many Psychology, Geology, GIS, and Computer Science labs) should be placed in renovated space in Mudd and Olin.
• Construction and renovation should enable cross-disciplinary and collaborative interactions.
• Improvement of classrooms that would replace and supplement Olin 02 and 04 is a priority.
• Construction should result in an increase of approximately 30% in the overall footprint of the sciences (note that EYP and the Science Planning Group are currently working to vet and test this estimate).

Estimated cost (from Facilities Master Plan, Spring 2014)
• $70 million project cost (this corresponds to about $49 million in construction costs and $21 million will cover design, and furnishings such as telecom, ITS, furniture, additional equipment, permits, etc.). This estimate does not include the future cost or maintaining a new science building. This estimated cost is the number that is being used in developing the next capital campaign.

Organization of Science facilities planning this year
• Associate Dean Fernán Jaramillo is heading the process
• A core committee made up of Fernán Jaramillo, Dean Bev Nagel, Vice President Fred Rogers, and Director of Facilities Steve Spehn will oversee the process. This group will be responsible for communication with the architects (and eventually contractors), Tuesday Group and trustees. The Science Planning Group, consisting of the Science Board and additional staff and faculty, will be the main forum for discussion and vetting of concepts, alternative solutions, and plans.
• Joe Chihade will act as a liaison between the Science faculty and the core committee.
• The architects will meet with departments and other stakeholder groups to understand their needs, get their input and vet ideas. Core committee and planning group members may also meet with departments and stakeholder groups if necessary to understand the program and space needs.

Current members of the Science Planning Group:
Ken Abrams, Joe Chihade, Cherry Danielson, Cam Davidson, Melissa Eblen-Zayas, Eric Egge, Kathie Galotti, Mark Gleason, Deborah Gross, Gretchen Hofmeister, Fernán Jaramillo, Cathy Manduca, Sarah Meerts, Victoria Morse, David Musicant, Tsegaye Nega, Janet Russell, Sarah Titus, Jennifer Wolff, Mark Zack

Architect selection
• Over the summer the committee sent a request for proposals to 12 architectural firms. Four of these firms were invited for on-campus interviews in August 2014. EYP was selected from this group and began work at Carleton in late September 2014. EYP has considerable experience building science facilities at peer and similarly sized institutions, including recent work at Trinity University, Hamilton, Union, Holy Cross, Franklin and Marshall, University of Scranton, and Wheaton.
• The EYP team includes: Jeremy Oberc (project director), Richard Clarke (lead architect), Charles Kirby and Melissa Burns (academic planning and design), Toni Loiacano (lab planning), and Elijah Porter (architect)

Net-Zero Energy Increase Goal
Commensurate with the Carleton Climate action plan and the sustainability design principle, the core committee has set a goal that the renovated and expanded science complex (Olin, Mudd, Hulings, and the new space) should use no more energy than the current science facilities. This goal will be met both by improving energy efficiency of current buildings, which are three of the five highest energy consuming buildings on campus, and by maximizing the efficiency of new space.

Current timeline for work on this project:
• Fall 2014 – Program verification and test fits. During this phase the architects will make sure that they understand in detail the number, types, proximal relationships and uses of needed spaces. They will use this information to determine how much new construction and renovation is needed, and what spaces should go where. This will be an iterative process, with opportunities for the Science Planning Group and science faculty and staff to provide feedback. This phase builds upon the departmental planning work done during the Facilities Master Planning process and will require continued departmental, program, and Science Planning Group input.
• January 2015 – Cost estimation and program review. An independent firm will determine if the proposed program can be accomplished within the project budget. These estimates will be used to modify the program if necessary. The space program will be presented to the Board of Trustees at their February meeting.
• Winter 2015 - Schematic design. During this phase the architects will begin to turn ideas and concepts developed during the Fall into an architectural vision that includes the location, proximal relationships, size and shape of needed new construction and the extent of renovations needed.
• April 2015 - Cost estimation and design review. An independent firm will determine if the proposed design can be accomplished within the project budget. These estimates will be used to modify the design if necessary.
• May 2015 - The program and final schematic design will be presented for approval to the Board of Trustees at their May meeting. The schematic design and program we arrive at this year will be the basis for development of the final design and construction documents, and for materials to be used in fund-raising.