

SANTA CRUZ
PROJECT SUMMARIES
2017-18 to 2018-19

12kV B-Feeder Reinforcement and Extension

- Reinforces the existing 35-year-old medium voltage “B” feeders to serve Phase 1 of the P3 Housing development on the west side of campus. Feeders from this vault are a reliability point of risk and single point of failure that could affect Visual Arts, Theater Arts, Music Facility, Digital Arts, ARC Center, West Fieldhouse, Housing Services, Kresge, Porter, Rachel Carson, Oakes and the University House (as part of the P3 scope of work).
- Upgrades the associated cable, switches, terminations and elbows to greater capacity in order to allow the campus to serve growth in student housing and academic/research facilities.
- Supports campus CFP objectives for Student Life/Intellectual Engagement and Residential Life; and Campus Environment, Sustainability, and Life Safety.

Alterations for Academic Programs Phase 2

- Area estimated at 33,000 asf / 60,000 gsf.
- Renovates existing space at 2300 Delaware Avenue to create additional and/or more appropriate instructional and research space for existing enrollments, enrollment growth, and program growth.
- Updates and replaces building systems infrastructure, and optimize building performance and operational efficiencies.
- Brings up building infrastructure systems in 2300 Delaware Buildings C to "warm shell" ready condition to enable flexible laboratory modifications for program specific research needs to address faculty recruitment and retention.
- Supports campus CFP objectives for Instruction and Research Program Development; Retrofitting and Upgrading Existing Academic Facilities; and Campus Environment, Sustainability, and Life Safety.

Capital Renewal –

- Addresses high priority capital renewal needs.
- Includes \$5,000,000 in each of three years beginning in 2017-18.

Core East Electrical Infrastructure Improvements

- Provides electrical redundancy in a core campus facilities including two of the largest classroom auditoria. In case of electrical failure of the existing feed, the classroom building is vulnerable to multiple days of down time and the Campus does not have additional large auditoria to provide back-up lecture space.
- Includes infrastructure and utility yard required to provide a redundant feed to existing facilities as well as accommodate the future construction of the large lecture halls in the Instructional Facilities project.
- Infrastructure improvements would be located in the central campus area near the Classroom Unit building, Bookstore, Redwood Building, Graduate Commons and Student Union.
- Supports campus CFP objectives for Improvements to Core Infrastructure.

Crown College Residence Halls Major Maintenance

- The nine structures, totaling approximately 53,000 asf (approximately 91,000 ogsf), currently provides 628 student beds. Up to twenty-two additional beds and up to twelve bathrooms with showers would be added with this project as former staff apartments are converted to residence hall rooms.
- Major maintenance is needed at nine Crown College residential housing buildings to keep facilities in good repair.
- Scope may include capital improvements in four to nine buildings and includes new flooring, windows, window coverings, paint, lights, renovated restrooms, improved security, seismic improvements, and new

roofs. The installation of low-flow water fixtures and potential communications improvements triggers accessibility compliance from parking areas to buildings, bathrooms, and laundry areas.

- Crown College in the north-east quadrant of the UCSC main campus.
- Supports campus CFP objectives for Student Life/Intellectual Engagement and Residential Life; and Campus Environment, Sustainability, and Life Safety.

East Remote Parking Renovation

- Reconstructs the East Remote surface parking lot to renovate or replace aging asphalt pavement, improve and enhance existing storm water management systems, and accommodate installation of solar photovoltaic arrays above the parking lot.
- Where feasible, reconfigures parking space layout to increase capacity, provide EV charging stations for private vehicles, and support future development of a new Transit Hub (a separate major capital improvement project).
- Location is at existing East Remote parking lot and adjoining undeveloped areas between Hagar Drive and Coolidge Drive.
- Supports campus CFP objectives for Improvements to Core Infrastructure; and Campus Environment, Sustainability, and Life Safety.

Engineering Smart Power and Robotics Laboratories

- Constructs two multi-faculty shared research facilities, totaling 8,187 asf, at 2300 Delaware Avenue, located in a previously “warm-shelled” area of Building C and approximately 7,000 square feet for an outdoor research yard adjacent to the labs.
- Baskin School of Engineering is in need of high bay laboratory space due to increased faculty and program growth in Computer Engineering and Electrical Engineering Departments.
- Provides space for a wide variety of experiments to be performed by researchers, which seek to pioneer research in the area of advanced electrical power system concepts (Smart Power) and work with ground and flying vehicles (Robotics).
- Supports campus CFP objectives for Instruction and Research Program Development; and Retrofitting and Upgrading Existing Academic Facilities.

Instructional Facilities

- Project area estimated at 15,300 asf / 30,700 gsf.
- Addresses critical need for additional instructional space, associated with current enrollments, enrollment growth, and program growth.
- Provides one 600-seat, one 400-seat, and one 200-seat classroom and a proctor room to alleviate the shortage of large general assignment classrooms. Project may be phased.
- Located near the existing Classroom Unit 1 building.
- Supports campus CFP objectives for Instruction and Research Program Development; Improvements to Core Infrastructure; and Campus Environment, Sustainability, and Life Safety.

Kresge College Academic

- Project area estimated at 25,000 asf / 35,000 gsf.
- Aligns with the Kresge College Non-Academic project.
- Assumes accessibility and site improvements in Kresge College academic areas. Includes relocating classrooms and other academic space. The project program will be better defined as pre-design studies continue. Constructs a new, approximately 600-seat lecture hall.
- Kresge College is located in the mid, north-west quadrant of the campus.
- Supports campus CFP objectives for Instruction and Research Program Development; Retrofitting and Upgrading Existing Academic Facilities; and Campus Environment, Sustainability, and Life Safety.

Kresge College Non-Academic (Housing and Student Support)

- The existing 12 residential housing buildings (11 student housing buildings and one staff apartment building) totaling approximately 58,000 asf (74,000 ogsf), 373 beds, and built in 1973, will undergo capital renewal or redevelopment (a few buildings may be removed). The project seeks to accommodate 150-200 students in apartment configurations.
- Approximately 350-400 new student beds will be created with the construction of new student housing building on the site. The new housing will be commensurate with other college based Frosh housing on campus.
- The campus is currently conducting pre-design studies. Assumes seismic, structural, utilities, accessibility, and IT improvements in Kresge College proper. The project scope and program are being refined as pre-design studies proceed.
- Kresge College is located in the mid, north-west quadrant of the campus.
- Supports campus CFP objectives for Student Life/Intellectual Engagement and Residential Life; and Campus Environment, Sustainability, and Life Safety.
- This project supports the President's Housing Initiative.
- This project would be funded by Housing Auxiliary Reserves and External Financing to be repaid by Housing Revenues. Student housing fees will not be increased beyond what is planned in the Housing ten-year financial plan.

Porter College Dining Expansion

- Dining Expansion at Porter College is needed to support the Student Housing West (P3) project providing up to 3,000 beds (approximately 2,800 net beds) on the west side of campus (development in a meadow to the northwest of Porter College and redevelopment of Family Student Housing).
- Porter Dining Common may be renovated to accommodate additional seating. Total required square feet and seating/service counts will be identified when the Student Housing West (P3) project program is confirmed.
- Supports campus CFP objectives for Student Life/Intellectual Engagement and Residential Life; and Campus Environment, Sustainability, and Life Safety

Rachel Carson College Dining Expansion

- Dining Expansion at Rachel Carson College is needed to support the Student Housing West (P3) project providing up to 3,000 beds (approximately 2,800 net beds) on the west side of campus (development in a meadow to the northwest of Porter College and redevelopment of Family Student Housing).
- Rachel Carson College Dining Room may be renovated and/or expanded to accommodate additional interior seating. Total required square feet and seating/service counts will be identified when the Student Housing West (P3) project program is confirmed.
- Supports campus CFP objectives for Student Life/Intellectual Engagement and Residential Life; and Campus Environment, Sustainability, and Life Safety

Statewide Energy Partnership (SEP) Program

- Includes projects of varying size and complexity. Includes renewal and retrofits of HVAC systems, lighting, and building controls; monitoring-based commissioning; and replacement of fume hoods and freezers with more energy-efficient equipment. \$8M planned for 2018-19, \$8M for 2021-22 and \$8M for 2024-25.
- Increases energy efficiency and reduces overall energy consumption in University buildings and infrastructure.
- Supports campus CFP objectives for Campus Environment, Sustainability, and Life Safety.

Student Health Services Building

- Approximately 10,000 ASF (14,000 gsf) of clinical, office, and support space is needed to accommodate growth for approximately 36 SHS staff including Primary Care, Counseling And Psychological Services (CAPS),

Psychiatry, Student Health Outreach and Promotion (SHOP), Campus Advocacy Resources and Education (CARE), and administrative support.

- Student Success Division's Student Health Services (SHS) department is currently reviewing options to expand SHS's operations.
- SHS is considering adding one or two floors to the existing Cowell Student Health Center, incorporating space into a planned renovation at Kresge College, or a new building on a site to be determined.
- Programming for Kresge College project is underway and is considering SHS options. Design is anticipated to begin late fall 2017, pending budget approvals. Feasibility studies will need to take place this year for reviewing other options.

Student Housing Infrastructure for P3

- Provides infrastructure improvements to support the Student Housing West (P3) project providing up to 3,000 beds (approximately 2,800 net beds) on the west side of campus (development in a meadow to the northwest of Porter College and redevelopment of Family Student Housing (FSH). Scope to be identified as the P3 project progresses.
- Project site is on the west side of campus near FSH, Porter College, and Kresge College.
- Supports campus CFP objectives for Student Life/Intellectual Engagement and Residential Life; and Campus Environment, Sustainability, and Life Safety.

Student Housing Telecommunications Infrastructure Upgrades Phase 2

- Telecommunications improvements are needed to avoid failures of communications systems that have exceeded life expectancy in student housing buildings. These improvements are part of the larger campus-wide telecommunications improvements in accordance with the Santa Cruz campus 2010-2020 Telecommunications Master Plan.
- Project includes communications-systems design, cabling, equipment, and installation while expanding and enhancing wireless service to students.
- This project includes inside cable plant and equipment upgrades in 84 student housing apartment buildings located at Kresge, Porter, Cowell, and Stevenson; Crown-Merrill Apartments; Colleges Eight, Nine, and Ten; Redwood Grove, Village Housing, Graduate Housing, as well as upgrades to the student housing residence halls that were not included in Phase I.
- Supports campus CFP objectives for Student Life/Intellectual Engagement and Residential Life; and Campus Environment, Sustainability, and Life Safety.

Student Housing West (P3)

- Additional student housing is needed to support enrollment growth, provide beds for housing guarantees, and fulfil LRDP student housing requirements.
- Provides up to 3,000 beds (approximately 2,800 net beds) through a private-public partnership on the west side of campus. Potential scope includes development of new housing in a meadow to the northwest of Porter College and redevelopment/renovations at Family Student Housing (FSH). The FSH portion would include redevelopment/renovations for child care. First phase of up to 900 beds to be built by fall 2020.
- May require the campus (or developer) to perform infrastructure improvements as identified in the Student Housing Infrastructure for P3, 12kV B-Feeder Reinforcement and Extension, West Campus 21kV Development, and Infrastructure Improvements (non-electrical) for P3 Site projects.
- Project site is on the west side of campus near FSH, Porter College, and Kresge College.
- Supports campus CFP objectives for Student Life/Intellectual Engagement and Residential Life; and Campus Environment, Sustainability, and Life Safety.
- This project meets the President's Housing Initiative.

Student Life Seismic Corrections Phase 2B

- Project area estimated at approximately 4,000 asf/6,000 gsf
- Corrects structural deficiencies of buildings with a "poor" seismic rating.
- Addresses seismic and life-safety deficiencies in select student fee funded facilities. Also includes related code and accessibility upgrades and major maintenance upgrades. Program improvements include installation of compact storage units, upgrades to sound booths, and telecommunications improvements.
- Project site is on the main campus in the Crown College area.
- Supports CFP objectives for Student Life/Intellectual Engagement and Residential Life; and Campus Environment, Sustainability, and Life Safety.

Telecommunications Infrastructure Improvements Phase D

- Provides upgrades to avoid immediate failures of communications systems that have exceeded life expectancy and to eliminate single points of failure of communications systems on the main campus. This is the fourth phase of a multi-phased plan that prioritizes work per new or expanded Area Distribution Facility (ADF). By focusing on completing all necessary improvements to each area of the campus sequentially, the transition to the new services and systems will be significantly eased.
- Provides communications-systems design, cabling, and equipment purchase and installation for campus-wide networking upgrades per the 2010-2020 Telecom Master Plan. Project consists of constructing new or expanded ADFs/IDFs (Intermediate Distribution Frames) and performs the associated inside cable plant and equipment upgrade work within approximately 47 buildings (30 State-funded, 11 Student fee-funded, six Auxiliary-funded) located in the OPERS area, the Bay Tree Bookstore area, the Lower Quarry Village area, the CASFS/Farm area, and the South campus area. Includes outside cable plant, in-building cabling, construction or expansion of IT closets and upgrades to critical networking equipment in State-funded, Auxiliary-funded, and Fee-funded buildings.
- Supports campus CFP objectives for Instruction and Research Program Development; Retrofitting and Upgrading Existing Academic Facilities; and Improvements to Core Infrastructure.

West Campus 21kV Development

- The UCSC campus main service entrance (21KV) is presently a reliability point of risk for the campus because all campus utility power comes to campus via a single substation (Slug Sub).
- There are capacity limitations on the existing campus distribution grid and feeders which affects the system's ability to serve growth in student housing and academic/research facilities.
- Project would bring a second 21KV service to the campus, distribute new facility services at 21KV, and potentially intertie the new 21KV distribution to the existing 12KV distribution through a bank of transformers.
- Supports campus CFP objectives for Improvements to Core Infrastructure.