BOARD OF TRUSTEES
NORTH CAROLINA STATE UNIVERSITY

Buildings and Property Committee
Time: 1:00 – 2:30 p.m., September 21, 2017
Winslow Conference Room
Robert “Chip” Andrews, Chair
Members: Gonzalez, Goodnight, Murphy, Prestage, Weisiger

AGENDA

CALL TO ORDER
Chip Andrews, Chair, Buildings and Property Committee
Roll Call
• Reading of the State Government Ethics Act

1. 2017-2018 COMMITTEE PLAN OF WORK      TAB 1
Doug Morton, Associate Vice Chancellor, Facilities
• Review of 2017-2018 Committee Plan of Work 5.1.A

2. COMMITTEE RESPONSIBILITIES AND PROCEDURES    TAB 2
Doug Morton, Associate Vice Chancellor, Facilities
• Review of Committee Responsibilities 5.2.A

3. MINUTES           TAB 3
Chip Andrews, Chair, Buildings and Property Committee
• Approval of April 20, 2017 meeting minutes 5.3.A

4. PROPERTY MATTERS         TAB 4
Harlan Stafford, Director, Real Estate & Development
✓ Acquisition by Lease: ± 7904.5 square feet (SF) of office space in the National Oceanic and Atmospheric Administration National Climate Data Center, 151 Patton Avenue, Rooms 4016, 5001-5007, Asheville, North Carolina for the North Carolina Institute for Climate Studies for a term of five (5) years.
✓ Disposition by Easement: A temporary construction easement (approximately 9-month project duration, to be completed during summer 2018 or summer 2019) for the construction of a joint stormwater drainage and sanitary sewer project along Dan Allen Drive partnering with the City of Raleigh. A permanent sanitary sewer easement for ± 26,325 square feet (SF) would also be granted to the City of Raleigh covering the sanitary line to be installed.

✓ Requires full board approval
1 Materials will be distributed to committee members at the meeting
5. DESIGNER AND CONSTRUCTION MANAGER AT RISK SELECTIONS  

Doug Morton, Associate Vice Chancellor, Facilities

- Academic Success Center at D.H. Hill – Construction Manager at Risk, North Precinct 5.5.A.1
- Bureau of Mines – Construction Manager at Risk, North Precinct 5.5.A.2
- Chancellor’s Faculty Excellence Program (CFEP) Carbon Electronics Cluster Lab Renovation in Partners III, Centennial Precinct 5.5.A.3
- B104 Lab Renovation at CVM Main Building, Centennial Biomedical Precinct 1(5.5.A.4)
- Approval of Designer Selections Less Than $1 million 5.5.A.5

6. ACCEPTANCE OF COMPLETED BUILDINGS AND PROJECTS  

Doug Morton, Associate Vice Chancellor, Facilities

- The University and Office of State Construction have accepted the attached list of completed buildings and projects with dollar values greater than $2,000,000. The University has accepted the attached list of completed buildings and projects with dollar values less than $2,000,000. All are recommended to the Buildings and Property Committee for formal acceptance. This listing represents buildings and projects received since the April 20, 2017 meeting. 5.6.A

7. PROPERTY MATTERS (Received after Full Board Mailing)

8. SITE AND PLAN REVIEW / APPROVAL  

Lisa Johnson, University Architect

- Carmichael Gym Addition and Renovation, Central Precinct 5.8.A.1
- Thermal Energy Storage, Centennial Precinct 5.8.A.2
- Engineering Building Oval, Centennial Precinct 5.8.A.3
- Case Academic Center Dining Addition, Central Precinct 5.8.A.4
- Thermal Energy Storage, Centennial Precinct 5.8.A.5
- Approval of Plans and Specifications of Formal Projects less than $2 million 5.8.A.6

9. INFORMATIONAL REPORTS  

- Capacity Study Update (Doug Morton) ¹(5.9.A.1)
- Capital Projects Update (Doug Morton) 5.9.A.2
- Status of Projects in Planning (Lisa Johnson) 5.9.A.3

ADJOURN

✓ Requires full board approval
¹ Materials will be distributed to committee members at the meeting
September

- Accept Completed Buildings and Projects (NC State Pol 01.05.1, App 1.II.a.vi) [Acceptance]
- Acquisition and Disposition of Interests in Real Property (UNC Pol. Ch. 100.1, App.1 (VI)), (NC State Pol 01.05.1, App 1.II.a.vii) (Consider and approve property matters in a timely fashion to avoid adverse impact to the business of the University.)
- Architect Selection (NC State Pol 01.05.1, App 1, II.ii) and Construction Managers at Risk Selection (NC State Pol 01.05.1, App 1, II.iii) (Participate in designer, developer, and CMR selection interviews and approve selections in a timely manner to avoid impacts to project schedules.)
- Building Site, Plan and Specification Approval (NC State Pol 01.05.1, App 1, III.iv.v) (Review of project design plans for responsiveness to the vision of the physical master plan. Review and approve design projects in a timely manner to avoid impact to project design and construction schedule.)
- Capital Projects Update (UNC Pol., Ch. 100.1, App.1 (VI) (Receive periodic updates and comment as warranted.)
- Projects in Planning Status (Receive periodic updates and comment as warranted.)
- Review Committee Responsibilities (Annually)

November

- Accept Completed Buildings and Projects (NC State Pol 01.05.1, App 1.II.vi) [Acceptance]
- Acquisition and Disposition of Interests in Real Property (UNC Pol. Ch. 100.1, App.1 (VI)), (NC State Pol 01.05.1, App 1.II.vi) (Consider and approve property matters in a timely fashion to avoid adverse impact to the business of the University.)
- Architect Selection (NC State Pol 01.05.1, App 1, II.ii) and Construction Managers at Risk Selection (NC State Pol 01.05.1, App 1, II.iii) (Participate in designer and CMR selection interviews and approve selections in a timely manner to avoid impacts to project schedules.)
- Building Site, Plan and Specification Approval (NC State Pol 01.05.1, App 1, III.iv.v) (Review of project design plans for responsiveness to the vision of the physical master plan. Review and approve design projects in a timely manner to avoid impact to project design and construction schedule.)
- Capital Projects (UNC Pol., Ch. 100.1, App.1 (VI) and Centennial Campus Update) (Receive periodic updates and comment as warranted.)
- Projects in Planning Status (Receive periodic updates and comment as warranted.)

Desired outcomes and measures of success are highlighted
February

- Accept Completed Buildings and Projects (NC State Pol 01.05.1, App 1.II.vi) [Acceptance]
- Acquisition and Disposition of Interests in Real Property (Policy Manual, Ch. 100.1, App.1 (VI)), (NC State Pol 01.05.1, App 1.II.vi) (Consider and approve property matters in a timely fashion to avoid adverse impact to the business of the University.)
- Architect Selection (NC State Pol 01.05.1, App 1, II.ii) and Construction Managers at Risk Selection (NC State Pol 01.05.1, App 1, II.iii) (Participate in designer and CMR selection interviews and approve selections in a timely manner to avoid impacts to project schedules.)
- Building Site, Plan and Specification Approval (NC State Pol 01.05.1, App 1, III.iv.v) (Review of project design plans for responsiveness to the vision of the physical master plan. Review and approve design projects in a timely manner to avoid impact to project design and construction schedule.)
- Capital Projects Update (Policy Manual, Ch. 100.1, App.1 (VI)) (Receive periodic updates and comment as warranted.)
- Projects in Planning Status (Receive periodic updates and comment as warranted.)

April

- Accept Completed Buildings and Projects (NC State Pol 01.05.1, App 1.II.vi) [Acceptance]
- Acquisition and Disposition of Interests in Real Property (Policy Manual, Ch. 100.1, App.1 (VI)), (NC State Pol 01.05.1, App 1.II.vi) (Consider and approve property matters in a timely fashion to avoid adverse impact to the business of the University.)
- Architect Selection (NC State Pol 01.05.1, App 1, II.ii) and Construction Managers at Risk Selection (NC State Pol 01.05.1, App 1, II.iii) (Participate in designer and CMR selection interviews and approve selections in a timely manner to avoid impacts to project schedules.)
- Building Site, Plan and Specification Approval (NC State Pol 01.05.1, App 1, III.iv.v) (Review of project design plans for responsiveness to the vision of the physical master plan. Review and approve design projects in a timely manner to avoid impact to project design and construction schedule.)
- Capital Projects Update (Policy Manual, Ch. 100.1, App.1 (VI)) and Centennial Campus Update (Receive periodic updates and comment as warranted.)
- Parking and Transportation Ordinances (NC State Pol 07.60.01), (NCGS §116-44.4, §20-137.7) [Approval]
- Physical Master Plan Update (UNC Pol. Ch. 100.1, App 1 (VI)), (NC State Pol. 01.05.1, App 1, II.a.i) (Receive annual update and comment as warranted.)
- Projects in Planning Status (Receive periodic updates and comment as warranted.)

Desired outcomes and measures of success are highlighted
NORTH CAROLINA STATE UNIVERSITY
BOARD OF TRUSTEES
BUILDINGS AND PROPERTY COMMITTEE

REVIEW OF COMMITTEE RESPONSIBILITIES

The By-Laws Subject to policies of the Board of Governors and all legal requirements relative to the construction of state-owned buildings, the Buildings and Property Committee is responsible for the following matters concerning campus capital construction projects which have been approved by the Board of Governors and authorized by the State of North Carolina.

MASTER PLAN
Required
Annual review by Buildings and Property Committee

DESIGNER SELECTION
Required
All major new buildings, major additions, and comprehensive renovation projects (cost greater than $1,000,000) require one current or former Trustee on selection committee. For large complex projects that involve several campus units the Secretary to the Trustees’ Buildings and Property Committee in consultation with the Chair of the Trustees’ Buildings and Property Committee will decide if additional user and Trustee representation is warranted. Bi-annual approval of Open-ended Service Agreement Designer selections. Selections are for a one-year term with an option for a one-year extension.

Procedure
Committee Chair approval of short list
Selection committee interview
Buildings and Property Committee selection or rejection
For open-ended design services agreements, interview may be waived and there will be no rank ordering

CONSTRUCTION MANAGER-AT-RISK
Required
All projects require that the same Selection Committee, which interviewed and evaluated the designers for a particular capital project, also serve as Selection Committee members for the Construction Manager-at-Risk for that project. For large complex projects that involve several campus units the Secretary to the Trustees’ Buildings and Property Committee in consultation with the Chair of the Trustees’ Buildings and Property Committee will decide if additional user and Trustee representation is warranted.

Procedure
Committee Chair approval of short list
Selection committee interview
Buildings and Property Committee selection or rejection

SITE SELECTION
Procedure

Project building committee recommendation

University Administration recommendation
Buildings and Property Committee selection (Space Committee approves temporary structures in research annexes)

PLANS AND SPECIFICATIONS
Required

Approval of projects less than $2,000,000 – based on recommendations presented in quarterly Status Reports from Facilities Division
Approval of projects greater than $2,000,000 – review site plan, floor plans, elevations, perspective models, and budget between design development and construction document stages

Procedure
Facilities Division staff recommendation
d-hoc building committee recommendation
Campus Design Review Panel recommendation

ACCEPT COMPLETED BUILDINGS AND PROJECTS
Required
Acceptance following University and State Construction Office certification

PROPERTY MATTERS
Required

Approval/recommendation for:
Property purchase and sale
Property leases
Utility easements
Demolitions

Procedure
University Administration recommendation
Buildings and Property Committee approval/recommendation
Full Board decision if required by scope

BUILDINGS AND PROPERTY POLICIES
Procedure

University Administration recommendation
Buildings and Property recommendation
Full Board decision

TRAFFIC AND PARKING POLICIES
Procedure

Physical Environment Committee recommendation (?)
University Administration recommendation
Buildings and Property recommendation
Full Board decision
Minutes

Meeting No. 16-17: 4

Location: Chancellor's Conference Room

Time: 2:43 – 4:22 p.m.

Committee Members Present:
Mr. Chip Andrews, Chair
Mrs. Ann Goodnight
Mr. Wendell Murphy
Dr. Ron Prestage
Mr. Randy Ramsey
Ms. Susan Ward

Present from the University:
Mr. Scott Douglass, Vice Chancellor, Finance and Administration
Mr. Douglas Morton, Associate Vice Chancellor, Facilities Division
Ms. Barbara Moses, Associate Vice Chancellor, Budget and Resource Management
Mr. David Rainer, Associate Vice Chancellor, Health and Public Safety
Mr. Brent McConkey, Assistant General Counsel, Office of General Counsel
Mr. Robert Hoon, Deputy General Counsel, Office of General Counsel
Ms. Lisa Johnson, University Architect
Mr. Harlan Stafford, Director, University Real Estate & Development
Ms. Catherine Reeve, Director, Transportation
Mr. Daniel Ziser, Technical Support Analyst, Facilities Division
Ms. Julia Brooks, Executive Assistant, Facilities Division

CALL TO ORDER
Chair Andrews called the meeting to order at 2:43 p.m.

ROLL CALL
Andrews called the roll. All were present.

STATE GOVERNMENT ETHICS ACT
The chair reminded all members of their duty to avoid conflicts of interest and appearances of conflicts of interest under the State Government Ethics Act. He inquired as to whether there were any known conflicts of interest with respect to any matters coming before the Buildings and Property Committee at this meeting. The committee members indicated that they had no conflicts of interest or appearances thereof.
MINUTES
Andrews asked whether there were any corrections to the February 16, 2017 meeting minutes. There being none, Andrews declared the minutes approved as drafted.

PROPERTY MATTERS
Andrews asked Mr. Stafford to present the three property matters that require full board approval. They were:

- Disposition by easement: ± 42,000 square feet (approximately 0.8264 acres) to Duke Power Energy, LLC (Duke Energy Power) across State-owned land allocated to NC State University for the installation of overhead power lines to provide a 3-phase power source for a new irrigation pump to be located at the Lake Wheeler Road Field Lab. The proposed installation will involve ± 0.9642 acres for the purpose of a permanent easement.
- Disposition by easement: North Carolina Department of Transportation (NCDOT) has requested an easement from NC State University for the proposed Broadpointe Drive Bridge Improvement project, located in Mills River, North Carolina, which will improve the current grading, drainage, and traffic safety, along Broadpointe Drive. The proposed easement will involve ± 0.831 acres of permanent and temporary easements. This project will run southwesterly, along Broadpointe Drive for approximately 0.246 miles (1,300 Linear Feet). The proposed improvement will affect two separate properties owned by the State of North Carolina. The properties are located on the eastern and western side of the road, which have been designated as Parcel #3 on the NCDOT's project plans. The easements will involve ± 0.733 acres for the purpose of new Right of Way and 0.098 acres as Temporary Construction Easement. Note that the temporary areas should convert back to the landowner at the completion of the project.
- Disposition by ground lease: Forty year, ± 9.0 acres ground lease to the Tammy Lynn Memorial Foundation, Inc. The property is located on Centennial Campus, at 739 Chappell Drive, Raleigh, NC 27606. The lease will continue Tammy Lynn Memorial Foundation's use of this property. It will also include favorable revisions of an access easement adjacent to the land that currently impairs further development of North Shore Project, and provide a limited license to access adjoining trail on NC State land.

Andrews called for a motion and a second to recommend to the full board approval of these items as outlined by Stafford. Mr. Murphy made the motion, which Mrs. Goodnight seconded. Andrews asked if there was any further discussion on the motion. There being none, he called for a vote. The motion passed.

DESIGNER SELECTIONS
Chair Andrews asked Mr. Morton to discuss the designer selections. Recommended was Approval of designers for five projects, and approval of ten designer selections less than $1 million dollars.

Andrews called for a motion and a second to recommend approval of the designer selections as outlined by Morton. Ms. Ward made the motion, which Mrs. Goodnight seconded. Andrews asked if there was any further discussion on the motion. There being none, he called for a vote. He announced the motion passed.
ACCEPTANCE OF COMPLETED BUILDINGS AND PROJECTS
Chair Andrews asked Mr. Morton to present the completed buildings and projects for acceptance. Morton requested acceptance of five completed projects listed with a combined value of $6.9 million.

Andrews called for a motion and a second to recommend acceptance as outlined by Morton. Mr. Ramsey made the motion, which Ms. Ward seconded. Andrews asked if there was any further discussion on the motion. There being none, he called for a vote. He announced the motion passed.

PARKING AND TRANSPORTATION
Chair Andrews asked Ms. Reeve to present the Proposed Revision to Policy 7.60.1 Parking and Transportation Ordinances for 2017-2018. Reeve said the changes affect three primary areas; parking zones, fees adjustment and fines adjustment. The desire of Transportation is to have a one-park campus to reduce heavy traffic. She said transportation is fee supported. The funds from fee generation also go to campus deck repairs. The Coliseum deck is in great need of repair. Transportation now needs a deck replacement fund. Reeve noted that they do not keep all the funds generated from the fines. The money actually goes to the State and only $70,000 retained. Her presentation included the introduction of the LPR (license plate recognition) system, so that Transportation will have a more robust system to check/ticket repeat offenders. There is great benefit to transportation enforcement. In the future, there will also be more gating in certain areas on campus.

Chair Andrews thanked Ms. Reeve for the report. Chair Andrews called for a motion and a second to accept as outlined by Ms. Reeve. Mr. Ramsey made the motion, which Mr. Murphy seconded. Andrews asked if there was any further discussion on the motion. There being none, he called for a vote. He announced the motion passed.

PHYSICAL MASTER PLAN
Chair Andrews asked Ms. Johnson to present the Physical Master Plan update. Ms. Johnson distributed materials for this presentation.

2014 Master Plan Overarching Issues
Johnson discussed with the committee the current overarching issues:
- One Campus concept
- Focus on NC State brand
- Strengthen all Campus Paths
- Improve Connectivity
- Improve pedestrian crossing at Western Boulevard
- Landmarks for way finding and identity

Campus Capacity and Assessment Study
Johnson said this study connects our strategic plan goals to the physical plan. With enhancing connections and developing communication tools, we will make better decisions.

Master Plan Impacts Underway
Johnson discussed the impacts underway to include the Engineering Building Oval, Plant Sciences Building, Carmichael Addition and Renovation, Case Commons Residence Hall,
Transportation Impacts
Johnson relayed the transportation and connectivity impacts. She discussed the Pullen Road Extension, Initiative Way Extension, Hillsborough Street – Streetscape, Avent Ferry/Western Tunnel, Avent Ferry Road Streetscape, I-440 Widening with NCDOT, and the Trinity Road Tunnel.

Future Projects Impacts
Johnson presented the future project impacts. She discussed the displacement of Chemistry from Dabney to a new Chemistry building at Broughton Hall. She also discussed the Science Crossroads project in the area previously held by Harrelson Hall. This site will one day be a teaching building.

SITE REVIEW AND PLAN REVIEW APPROVAL
Chair Andrews asked Ms. Johnson to present site review and approval for the Engineering Building Oval. Johnson said this $137 million dollar project, will house two engineering departments; The Fitts Industrial and Systems Engineering (ISE), Civil, Construction and Environmental Engineering (CCEE); also the Dean’s Administration from the North Campus. The 220,000 GSF, four-story structure will include laboratories, classrooms, and offices to support broad initiatives in the areas of advanced materials and manufacturing; robotics and sensor technology; service sector engineering; critical infrastructure and security; transportation and logistics; and energy and environmental systems.

Chair Andrews called for a motion and a second to recommend site review and approval of the Engineering Building Oval as outlined by Ms. Johnson. Dr. Prestage made the motion, which Mr. Murphy seconded. Andrews asked if there was any further discussion on the motion. There being none, he called for a vote. The motion passed.

Ms. Johnson also presented both the site and plan approval for Reedy Creek Equine Farm Therio Phase A, in the West Campus Precinct. This $2.4 million dollar project will relocate the existing CVM Theriogenology facilities from Southern Pines to the existing Reedy Creek Farm in an effort to consolidate the university’s equine science and health care facilities. It includes the construction of a Theriogenology Facility (8,000 GSF), a Recipient Building (2,300 GSF), and 15 acres of associated site work.

Chair Andrews called for a motion and a second to recommend both the site and the plan approval of the Reedy Creek Equine Farm as outlined by Johnson. Mrs. Goodnight made the motion, which Mr. Murphy seconded. Andrews asked if there was any further discussion on the motion. There being none, he called for a vote. The motion passed.

INFORMATIONAL REPORTS
Chair Andrews recognized Mr. Morton to present the update about capital projects. Morton noted the Gregg Museum will receive certificate from the city and Arts NC State will move into the building. Morton also noted this project has dramatically changed this corner of Hillsborough Street. This project included collaboration with the City of Raleigh to connect Pullen and the park grounds. He urged the committee to visit this site and see the grand results of this project.

Andrews recognized Johnson to provide an update on projects in planning. Johnson presented
the update. She noted the committee would review plans for Carmichael in September and Plant Sciences in November 2017.

There being no additional business, the meeting adjourned at 4:22 p.m.

Respectfully submitted,

[Signature]

Douglas Morton
Secretary to the Committee

cc: Scott Douglass, Vice Chancellor, Finance & Administration
    P.J. Teal, Assistant Secretary of the Trustees

Approved: ___________________________________________  Date

__________________________________________  
Committee Chair

Buildings and Property Committee April 20, 2017 Minutes
Page 5
ACQUISITION OF REAL PROPERTY

ACQUISITION LEASE

LESSOR  The United States of America

LESSEE  NC State University

LOCATION  North Carolina Institute for Climate Studies (NCICS); NOAA's National Climate Data Center, 151 Patton Avenue, Rooms 4016, 5001-5007, Asheville, Buncombe County, NC

SIZE  7,904.52 sq. ft. rentable space (5,615.53 sq. ft. of useable space)

RATE  $23.08 x 7,904.52 rentable square feet = $182,436.32/year ($15,203.03/month). Total Contract Value over five year renewal; $182,436.32 x 5 = $912,181.60. Cost includes utilities, janitorial services, and required maintenance.

TERM  Five (5) year renewal term

USE  Acquisition Lease of Office space for NCICS, a UNC system inter-institutional research institute, which is a partnership between Universities, the private sector, non-profit organizations, community groups, and the federal government focused on advancing understanding of the current and future state of the climate.
STATE OF NORTH CAROLINA
DEPARTMENT OF ADMINISTRATION
RALEIGH

* ACQUISITION OF REAL PROPERTY

Institution or Agency: North Carolina State University Date: July 25, 2017

The Department of Administration is requested, as provided by GS 146-22 et seq. to acquire the real property herein described by (purchase), (lease), (rental), or (other specify):

This Property is needed for the following reasons and purposes: North Carolina State University, on behalf of the North Carolina Institute for Climate Studies (NCICS), has been leasing space in Asheville, NC since July 1, 2012. The current lease expired on June 30, 2017, and NCICS is requesting to continue to lease this space through an amendment to the existing lease agreement. NCICS, a UNC system inter-institutional research institute, is a partnership between Universities, the private sector, non-profit organizations, community groups, and the federal government focused on advancing understanding of the current and future state of the climate.

Name and Address of Present Owner: The United States of America (Lessor) c/o General Services Administration (GSA), PO Box 301511, Los Angeles, CA 90030-1511

Description of Property: (attach additional sheets if necessary).
NOAA's National Climate Data Center, 151 Patton Avenue, Rooms 4016, 5001-5007, Asheville, Buncombe County, NC. Lease is for 7,904.52 sq. ft. rentable space (5,615.53 sq. ft. of useable space)

Term: Five (5) year renewal term

Rental price (if applicable): $23.08 x 7,904.52 rentable square feet = $182,436.32/year ($15,203.03/month). Total Contract Value over five year renewal; $182,436.32 x 5 = $912,181.60. Cost includes utilities, janitorial services, and required maintenance.

Funding: The lease cost will be paid utilizing 100% Facilities and Administrative (F&A) funds (WRS 257342) generated by sponsored contract and grant expenses.

Item: OUC 063001 Acct. WRS 257342 Other:

In the event the above described real property is not acquired, is there other real property available, owned by the State or otherwise, that you believe would, if acquired, fulfill the requirement of your agency? If so, give details. No.

Action, recommending the above request, was taken by the Board of Trustees and is recorded in the minutes thereof on ___________, 2017.

Signature

* The term "real property" includes timber rights, mineral rights, etc. (GS 146-64)
Veach-Baley Federal Complex
151 Patton Avenue, Asheville, NC 28801
DISPOSITION
OF REAL PROPERTY

EASEMENT

GRANTOR  The State of North Carolina

GRANTEE  City of Raleigh

LOCATION  Along Dan Allen Drive, NCSU main campus, Raleigh, NC

SIZE  ± .61 acres (permanent utility easement) and ±1.68 acres (temporary construction easement)

RATE  $630,000.00

TERM  Temporary construction easement to the City providing rights necessary for installation of stormwater drainage and sanitary sewer lines, to be completed during summer 2018 or summer 2019. Perpetual utility easement covering newly-installed sanitary sewer line after construction period.

USE  Permanent utility easement covering the City’s use, operation and maintenance of the sanitary sewer line to be installed. Temporary construction easement allowing for the construction of a joint stormwater drainage and sanitary sewer project along Dan Allen Drive partnering with the City of Raleigh.
STATE OF NORTH CAROLINA
Department of Administration
*DISPOSITION OF REAL PROPERTY

Institution or Agency: North Carolina State University       Date: 8/10/2017

The Department of Administration is requested, as provided by GS 146-28 to dispose of the real property herein described by (sale), (lease), (rental), or (other specify): Easement

The disposition by exchange is recommended for the following reasons: The City of Raleigh desires an easement across state-owned land allocated to NC State University along Dan Allen Drive to construct a new sanitary sewer line that will replace other existing lines that traverse the University’s main campus. The University has need for a new stormwater drainage line that would run adjacent to the proposed sanitary sewer line, and has negotiated a joint project agreement pursuant to which the City would install both the sanitary line (at the City’s cost) and the stormwater line (at the University’s cost). In addition to the permanent utility easement for the sanitary sewer line, a temporary construction easement will need to be granted in favor of the City to allow completion of the project.

Description of Property:
+ .61 acres (permanent utility easement) and +1.68 acres (temporary construction easement) along Dan Allen Drive, main campus

Term: Sanitary sewer easement is perpetual; Temporary construction easement would extend for the term of the joint project (approximately 9-month anticipated duration)

Estimated value: $630,000 for perpetual sanitary sewer easement

Where deed is filed, if known: Wake County

If deed is in the name of agency other than applicant, state the name. N/A

Rental income, if applicable, and suggested terms: $630,000 in easement consideration

Funds from the disposal of this property are recommended for the following use. Easement consideration would be used initially to offset obligations of the University under the joint project agreement (i.e., costs allocated to the stormwater line and related restoration costs), with net proceeds, if any, paid to the State property fund

Action recommending this transaction was taken by the Board of Trustees at its meeting held on September____, 2017.

Signature _________________________
Chancellor

*The term *"real property"* includes timber rights, mineral rights, etc. (GS 146-64)
REQUIRES FULL BOARD APPROVAL

5.4.A.2
Academic Success Center at DH Hill – CM@Risk
Total Project Scope – $9.3M (Carry Forward)

04/28/17  Advertised in NC Purchase Directory

05/23/17  Closing date for submittals
           (13 proposals received)

06/01/17  Appointment of Selection Committee
           By Doug Morton, Secretary – Buildings and Property Committee

06/01/17- Selection Committee review:
06/23/17  Chip Andrews, Trustee
           Lisa Johnson, University Architect
           Doug Morton, Associate Vice Chancellor, Facilities Division
           Cameron Smith, Senior Director, Capital Project Management
           Chris Johnson, Design Project Manager, Office of the University Architect
           David Goldsmith, Associate Director for Materials Management, Libraries
           Pete Fraccaroli, Director, Academic & Student Affairs Facilities Planning &
           Management
           Others who assisted in review and short listing process
           Bill Davis, Associate Director Design, Capital Project Management
           Charlie Marshall, Associate Director Construction, Capital Project Management
           Mark Michaelson, Construction Project Manager, Capital Project Management
           Lauren Rockart, Lord Aeck Sargent

06/01/17  Short list recommendation by Selection Committee:
           Clancy + Theys Construction Company – Raleigh, NC
           Holder Construction Company – Charlotte, NC
           New Atlantic Contracting, Inc. – Winston Salem, NC

06/09/17  Short list approved by Robert F. Andrews

06/15/17  Pre-interview briefing of Designers

06/23/17  Designers interviewed. Recommendation in priority order:
           Holder Construction Company – Charlotte, NC
           New Atlantic Contracting, Inc. – Winston Salem, NC
           Clancy + Theys Construction Company – Raleigh, NC
**Bureau of Mines CM@Risk**

**Total Project Scope – $6M (Carry Forward)**

- **03/09/17** Advertised in NC Purchase Directory
- **04/05/17** Closing date for submittals
  
  *(17 proposals received)*
- **04/11/17** Appointment of Selection Committee
  
  By Doug Morton, Secretary – Buildings and Property Committee
- **04/14/17** Short list recommendation by Selection Committee:
  
  - CT Wilson Construction – Durham, NC
  - Holt Brothers Construction – Raleigh, NC
  - LeChase Construction Services, LLC – Durham, NC
- **04/26/17** Short list approved by Robert F. Andrews
- **05/02/17** Pre-interview briefing of Designers
- **06/05/17** Designers interviewed. Recommendation in priority order:
  
  - Holt Brothers Construction – Durham, NC
  - LeChase Construction Services, LLC – Durham, NC
  - CT Wilson Construction – Durham, NC
CFEP Carbon Electronics Cluster Lab Renovation in Partners III
Total Project Scope – $1.3M (F&A)

03/29/17 Advertised in NC Purchase Directory

04/26/17 Closing date for submittals
(8 proposals received)

05/10/17 Appointment of Selection Committee
By Doug Morton, Secretary – Buildings and Property Committee

05/10/17- Selection Committee review:
06/07/17 Susan Ward, Trustee
Lisa Johnson, University Architect
Lisa Keel, Project Manager, Capital Project Management
Dr. Margery Overton, Exec. Vice Chancellor & Provost, CFEP Director
Paul Huffman, Professor, Physics
Charlie Marshall, Associate Director, Construction Capital Project Management
John Royal, Building Construction & Management, Engineering
Others who assisted in review and short listing process
Lisa Maune, Associate Director, Design, Capital Project Management
Liz Moore, Facility Planner, Office of the University Architect
Roger Russell, Department Resources Manager, Materials Science Engineering
Justin Schwartz, Department Head, Materials Science Engineering
Keith Warren, Assistant Department Head, Physics

05/10/17 Short list recommendation by Selection Committee:
BHDP – Raleigh, NC
Integrated Design – Raleigh, NC
Swanson + Stewart – Durham, NC

05/10/17 Short list approved by Robert F. Andrews

05/23/17 Pre-interview briefing of Designers

06/07/17 Designers interviewed. Recommendation in priority order:
Swanson + Stewart – Durham, NC
BHDP – Raleigh, NC
Integrated Design – Raleigh, NC
Note: The projects below are submitted to the Trustees’ Buildings and Property Committee for formal approval of designer selections for projects less than $1,000,000 that are not on the OESAD list. This listing represents designers selected since April, 2017.

<table>
<thead>
<tr>
<th>Project</th>
<th>Fee</th>
<th>Designer</th>
<th>Type of Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>DH Hill Tower and Poe Hall Water Proofing</td>
<td>$725,000</td>
<td>Sutton-Kennerly and Associates</td>
<td>Carry Forward</td>
</tr>
<tr>
<td>Steam Tunnel Structure Repair</td>
<td>$600,000</td>
<td>Dewberry</td>
<td>R&amp;R</td>
</tr>
<tr>
<td>Engineering Building Oval Commissioning Envelope</td>
<td>$182,500</td>
<td>Terracon Consultants Inc.</td>
<td>R&amp;R</td>
</tr>
<tr>
<td>CFEP Carbon Electronics Cluster Lab Renovation</td>
<td>$160,169</td>
<td>Swanson + Stewart Architects</td>
<td>F&amp;A</td>
</tr>
<tr>
<td>Dearstyne Complex HVAC Upgrades</td>
<td>$145,825</td>
<td>McKim &amp; Creed</td>
<td>F&amp;A</td>
</tr>
<tr>
<td>Dabney Hall HVAC Evaluation &amp; Upgrade Study Phase 2</td>
<td>$131,790</td>
<td>RMF Engineering</td>
<td>F&amp;A</td>
</tr>
<tr>
<td>Academic Success Center at DH Hill Library</td>
<td>$122,310</td>
<td>Lord Aeck and Sargent</td>
<td>Carry Forward</td>
</tr>
<tr>
<td>Campus Wide Building Automation System Master Plan</td>
<td>$114,338</td>
<td>Dewberry Engineers, Inc.</td>
<td>R&amp;R</td>
</tr>
<tr>
<td>Water Line Replacement</td>
<td>$74,350</td>
<td>Draper Aden Associates</td>
<td>Utilities Trust Funds</td>
</tr>
<tr>
<td>Witherspoon Student Center Renovation Study</td>
<td>$49,500</td>
<td>Perkins + Will</td>
<td>Campus Enterprises Trust Funds</td>
</tr>
<tr>
<td>Project Description</td>
<td>Cost</td>
<td>Designer</td>
<td>Source</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>---------</td>
<td>----------------------------------------</td>
<td>-------------------------------------------------------------</td>
</tr>
<tr>
<td>Case Academic Dining Addition</td>
<td>$46,156</td>
<td>RND Architects, PA</td>
<td>Dining Receipts</td>
</tr>
<tr>
<td>Plant Sciences Building Commissioning Envelope</td>
<td>$44,500</td>
<td>WJE Engineers/Architects</td>
<td>Golden Leaf Grant, Gifts, 2016 Bond, Self-liquidating Debt</td>
</tr>
<tr>
<td>Primrose Hall HVAC Upgrades</td>
<td>$26,460</td>
<td>Dewberry Engineers, Inc.</td>
<td>Appropriated</td>
</tr>
<tr>
<td>MRC Overhead Soffit Masonry Replacement</td>
<td>$23,390</td>
<td>Atlas Engineering</td>
<td>Appropriated</td>
</tr>
<tr>
<td>Plant Sciences Geotech/CMT/SI</td>
<td>$19,341</td>
<td>Summit Design</td>
<td>Golden Leaf Grant, Gifts, 2016 Bond, Self-liquidating Debt</td>
</tr>
<tr>
<td>Partners II HVAC Upgrades</td>
<td>$16,000</td>
<td>Sigma Engineering Solutions</td>
<td>CC Trust Funds</td>
</tr>
<tr>
<td>College of Sciences Imagination Lab Marketing Study</td>
<td>$15,000</td>
<td>Perkins + Will</td>
<td>College of Science Appropriated Funds</td>
</tr>
<tr>
<td>Carmichael Complex Swing Space</td>
<td>$14,000</td>
<td>CRA Associates, Inc.</td>
<td>Self-liquidating Debt</td>
</tr>
<tr>
<td>Hunt Library Planting</td>
<td>$12,500</td>
<td>The John R. McAdams</td>
<td>Appropriated</td>
</tr>
<tr>
<td>Carmichael Outdoor Swimming &amp; Diving Facility Study</td>
<td>$11,800</td>
<td>Spillman Farmer Architects, PLC</td>
<td>Athletics Trust Funds</td>
</tr>
<tr>
<td>CFL Overhead Soffit Masonry Replacement</td>
<td>$11,670</td>
<td>Atlas Engineering</td>
<td>Appropriated</td>
</tr>
<tr>
<td>Hunt Library Suite 4100 Renovations</td>
<td>$9,800</td>
<td>Andre Johnson Architects, PLLC</td>
<td>Appropriated</td>
</tr>
</tbody>
</table>
Approval of Designer Selections Less than $1,000,000

Sprinkler Backflow Preventer $9,000
Designer: RMF Engineering
Source: Appropriated

FM Interact Software FMx Reporting & Training $3,800
Designer: Little Diversified Architects
Type of Funds: F&A
## Buildings and Property Committee
### Board of Trustees
#### Acceptance of Completed Buildings and Projects

<table>
<thead>
<tr>
<th>Code/Item</th>
<th>Project#</th>
<th>Location</th>
<th>Title</th>
<th>Project Cost</th>
<th>University Acceptance</th>
</tr>
</thead>
<tbody>
<tr>
<td>45589 / 303</td>
<td>201511063</td>
<td>DH Hill Library</td>
<td>Elevators 1 &amp; 2 Modernizations</td>
<td>$434,256</td>
<td>1/12/2017</td>
</tr>
<tr>
<td>41124 / 353</td>
<td>201311064</td>
<td>DH Hill Library</td>
<td>Fire Alarm System Upgrade</td>
<td>$617,094</td>
<td>4/7/2017</td>
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<tr>
<td>NA / NA</td>
<td>201611083</td>
<td>Dabney Room 722</td>
<td>Fume Hood Replacements</td>
<td>$126,452</td>
<td>4/14/2017</td>
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<tr>
<td>NA / NA</td>
<td>201511113</td>
<td>Engineering Building III</td>
<td>Labs Power and Fume Hood Additions</td>
<td>$141,690</td>
<td>4/18/2017</td>
</tr>
<tr>
<td>41524 / 332</td>
<td>201511116</td>
<td>CMAST</td>
<td>Coastal Quarters Renovations</td>
<td>$421,446</td>
<td>4/19/2017</td>
</tr>
<tr>
<td>40824 / 313</td>
<td>201020028</td>
<td>Gregg Museum of Art and Design</td>
<td>Renovation Project</td>
<td>$9,560,000</td>
<td>5/22/2017</td>
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<tr>
<td>41524 / 350</td>
<td>201611031</td>
<td>Partners I</td>
<td>Roof Replacement</td>
<td>$365,795</td>
<td>6/1/2017</td>
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<tr>
<td>NA / NA</td>
<td>201720007</td>
<td>Material Management Warehouse</td>
<td>Rail and Stair Replacement</td>
<td>$145,539</td>
<td>6/12/2017</td>
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<tr>
<td>41524 / 325</td>
<td>201512124</td>
<td>ES King Village</td>
<td>Roof Replacement</td>
<td>$257,903</td>
<td>6/15/2017</td>
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<tr>
<td>41424 / 321</td>
<td>201520005</td>
<td>CVM 3B Lab</td>
<td>Renovation 3rd floor</td>
<td>$3,075,000</td>
<td>6/21/2017</td>
</tr>
<tr>
<td>NA / NA</td>
<td>201611074</td>
<td>Wolf Village Transit Stop</td>
<td>Relocation of bus stops and shelters</td>
<td>$194,645</td>
<td>7/3/2017</td>
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<tr>
<td>45589 / 304</td>
<td>201511062</td>
<td>CVM Main Building</td>
<td>1st and 3rd Floors Fire Alarm Renovation</td>
<td>$525,030</td>
<td>7/6/2017</td>
</tr>
<tr>
<td>40824 / 304</td>
<td>201320016</td>
<td>Research II</td>
<td>HVAC Renovations</td>
<td>$1,700,000</td>
<td>7/7/2017</td>
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<tr>
<td>41624 / 305</td>
<td>201611062</td>
<td>CVM North Theater</td>
<td>Renovation, C120</td>
<td>$422,969</td>
<td>7/19/2017</td>
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<tr>
<td>NA / NA</td>
<td>201712014</td>
<td>Bowen/Metcalf/Carroll Residence Halls</td>
<td>Ceiling Replacements</td>
<td>$306,912</td>
<td>7/24/2017</td>
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<tr>
<td>41624 / 307</td>
<td>201611082</td>
<td>CVM Main Building</td>
<td>C273 Suite Renovation</td>
<td>$248,273</td>
<td>7/28/2017</td>
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<tr>
<td>41524 / 334</td>
<td>201620004</td>
<td>Owen Hall</td>
<td>Renovation</td>
<td>$1,563,880</td>
<td>7/28/2017</td>
</tr>
<tr>
<td>41624 / 306</td>
<td>201620003</td>
<td>Dan Allen Parking Upper Deck</td>
<td>Deck Repairs</td>
<td>$765,000</td>
<td>8/3/2017</td>
</tr>
<tr>
<td>NA / NA</td>
<td>201511016</td>
<td>DH Hill Library</td>
<td>Erdahl Cloyd Wing Room 2302 renovated bathroom facilities and custodial closet</td>
<td>$293,028</td>
<td>8/4/2017</td>
</tr>
<tr>
<td>41524 / 326</td>
<td>201411004</td>
<td>Price Music Building</td>
<td>Interior Renovations</td>
<td>$419,147</td>
<td>8/7/2017</td>
</tr>
<tr>
<td>41524 / 360</td>
<td>201620006</td>
<td>PRV Station (14 buildings)</td>
<td>Demo and Replacement of Steam Lines</td>
<td>$763,500</td>
<td>8/8/2017</td>
</tr>
<tr>
<td>41624 / 308</td>
<td>201611081</td>
<td>CVM</td>
<td>Dining Seating - Area Renovation</td>
<td>$250,195</td>
<td>8/8/2017</td>
</tr>
<tr>
<td>41624 / 314</td>
<td>201411104</td>
<td>Morrill Drive East</td>
<td>Sidewalk and Lighting</td>
<td>$336,261</td>
<td>8/9/2017</td>
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<tr>
<td>41324 / 353</td>
<td>201420009</td>
<td>Winston Hall</td>
<td>HVAC Renovations</td>
<td>$671,500</td>
<td>8/11/2017</td>
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<tr>
<td>41324 / 309</td>
<td>201420003</td>
<td>Greek Village Phase II</td>
<td>Infrastructure utilities installation and lot grading, parking, and paving marking</td>
<td>$3,082,000</td>
<td>8/14/2017</td>
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<tr>
<td>NA / NA</td>
<td>201611073</td>
<td>CVM Atrium</td>
<td>Lighting Upgrades</td>
<td>$138,035</td>
<td>8/22/2017</td>
</tr>
<tr>
<td>41524 / 303</td>
<td>201520011</td>
<td>DH Hill Library</td>
<td>Accessibility and Elevator Improvements</td>
<td>$525,995</td>
<td>8/28/2017</td>
</tr>
</tbody>
</table>

**TOTAL** $27,457,553
Agenda Item / Issue: 5.8.A.1 Site Approval/Carmichael Gym Addition and Renovation – Central Campus

Requested / Required Action: Approval

Functions: This project demolishes the existing 47,000 GSF administrative wing of Carmichael Gymnasium and replaces it with an addition of about 82,800 GSF. The project provides recreation, fitness and specialized activity space, as well as functional training areas, classroom, and office space. The project includes a new fire suppression and alarm system for the entire 343,000 GSF Carmichael facility. The focus of the project is to shape the future of wellness on campus by unifying, celebrating and inspiring active lifestyles of NC State students, faculty and staff. The building design will unify the fitness space, increase visual access to destinations, improve wayfinding within the complex, and improve street presence.

Project Scope:

<table>
<thead>
<tr>
<th>Cost Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design/Consultant Costs</td>
<td>$ 4,155,520</td>
</tr>
<tr>
<td>Construction</td>
<td>$ 34,493,864</td>
</tr>
<tr>
<td>Contingency/Other Project Costs</td>
<td>$ 6,350,616</td>
</tr>
<tr>
<td><strong>Total Project Budget</strong></td>
<td><strong>$ 45,000,000</strong></td>
</tr>
</tbody>
</table>

Design Team: CRA Associates, Inc. with HOK – Lead Designer
ColeJenest & Stone – Landscape Architect
Bass, Nixon & Kennedy, Inc. – MEP

Master Plan Summary: The building will unify the existing Carmichael facility and create a single identity for the Carmichael Complex. The architectural design will be respectful of Talley, Reynolds, and the neighborhood. The east façade is the visual terminus of a view corridor along Cates Avenue. The project will contribute toward the implementation of the Cates Avenue Master Plan, displacing head in parking spaces to create a safer pedestrian crossing between the north entrance and Talley Student Union.


Suggested Motion: Move approval of the site for the Carmichael Gym Addition and Renovation.

Funding Source: Self Liquidating/Student Fees - $45,000,000

Responsible University unit: Office of Finance and Business, Facilities Division
University Presenter/Contact: Lisa Johnson, University Architect
SITE PLAN: PROJECT LOCATION
NORTH PLAZA ENLARGEMENT

KEY

A. CATES AVENUE CROSSWALK
B. PROPOSED BICYCLE RACKS
C. PROPOSED STAIRWAY TO BASEMENT LEVEL
D. SEATING AREA WITH CAST CONCRETE SEAT WALLS
E. MAIN BUILDING ENTRANCE
F. MAIN LEVEL PLAZA WITH SEAT WALLS
G. STAIR ACCESS TO PATH
H. PLAZA OVERLOOK
I. MAIN LEVEL PATIO WITH GREENROOF AND SCULPTURAL SEATING
J. REMOVED PARKING AT CORNER
K. PROPOSED LARGE STREET TREES AT CORNER
L. PROPOSED BRICK "ALL CAMPUS PATH"

PRECEDENT IMAGES
EAST GARDEN ENLARGEMENT

KEY
A. LANDSCAPE AREA WITH TERRACED WALLS AND FEATURE TREE
B. EXISTING CATES AVE. PEDESTRIAN CROSSWALK TO REMAIN, IMPROVED ACCESSIBLE RAMP AT CORNER
C. ROOFTOP PLANTING AREA WITH ACCENT PLANTING TO ALIGN WITH BUILDING FEATURE
D. PEDESTRIAN "BRIDGE" WITH SUNKEN PLANTERS
E. PROPOSED PLANTER BED WITH BRICK WALL, POTENTIAL LOCATION FOR BUILDING SIGNAGE
F. EXISTING MORRILL DRIVE CROSSWALK TO REMAIN
G. PROPOSED BRICK ACCESSIBLE RAMP TO LOWER LEVEL
H. PROPOSED MEDIUM-SIZED SHADE TREES ALONG "ALL CAMPUS PATH"
I. PROPOSED SEAT WALL AT BUS DROP-OFF LOCATION

C - E SECTION VIEW

PRECEDENT IMAGES
PROMENADE ENLARGEMENT

PRECEDENT IMAGES

KEY
A. PROPOSED BRICK ACCESSIBLE RAMP TO UPPER LEVEL
B. PLANTING AREA WITH ORNAMENTAL GRASS BANDS
C. EXISTING STAIRS TO REMAIN. REPLACE CHEEK WALLS
D. PROPOSED PEDESTRIAN CORRIDOR WITH BRICK PAVERS AND CAST CONCRETE BENCHES
E. SOUTH BUILDING ENTRANCE WITH ENHANCED PAVERS
F. PROPOSED BICYCLE RACKS
G. PROPOSED BRICK PAVER HARDSCAPE PLAZA AREA WITH CAST CONCRETE SEAT WALLS
H. ENHANCED LANDSCAPING IN EXISTING LANDSCAPE
LEVEL 03
Axonometric Plan
EXISTING CATES AVENUE AXIS
“THE CATES RECEPTOR WINDOW”
EXTERIOR DESIGN
Northeast Corner on Cates
EXTERIOR DESIGN
Northwest Entry Corner on Cates
<table>
<thead>
<tr>
<th>Agenda Item / Issue:</th>
<th>5.8.A.2 Site Approval/Thermal Energy Storage – Centennial Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requested / Required Action:</td>
<td>Approval</td>
</tr>
<tr>
<td>Functions:</td>
<td>This project will increase chilled water supply capacity via installation of a thermal energy storage (TES) tank while reducing the electrical demand associated with the generation of chilled water to serve about 400,000 GSF of new building construction on Centennial Campus. The new thermal storage tank is 85 feet tall and 90 feet in diameter. It is a steel tank that will be clad in two feet wide insulated metal vertical planks. The pattern of planks will consist of three tones of gray. A wrap around stair will be on the perimeter of the tank.</td>
</tr>
<tr>
<td>Project Scope:</td>
<td>$762,140 Design/Consultant Costs $6,586,906 Construction $2,250,954 Contingency/Other Project Costs $9,600,000 Total Project Budget</td>
</tr>
<tr>
<td>Design Team:</td>
<td>RMF Engineering – Lead Designer CLH - Landscape Architect Ewing Cole – Architect</td>
</tr>
<tr>
<td>Master Plan Summary:</td>
<td>NC State’s utility systems are developed, as centralized district systems to conserve resources, increase energy efficiency, and enhance sustainable development. The 2014 Physical Master Plan includes a placeholder for the Centennial Campus thermal energy storage tank.</td>
</tr>
<tr>
<td>Recommendation:</td>
<td>Approved by CDRP on July 26, 2017. Approval recommended.</td>
</tr>
<tr>
<td>Suggested Motion:</td>
<td>Move approval of the site for the Thermal Energy Storage unit.</td>
</tr>
<tr>
<td>Funding Source:</td>
<td>Appropriated/Non-Appropriated - $9,600,000</td>
</tr>
<tr>
<td>Responsible University unit</td>
<td>Office of Finance and Business, Facilities Division</td>
</tr>
<tr>
<td>University Presenter/Contact:</td>
<td>Lisa Johnson, University Architect</td>
</tr>
</tbody>
</table>
DIAMETER: 90’
HEIGHT: 85’
Agenda Item / Issue: 5.8.A.3 Plan Approval/Engineering Building Oval – Centennial Campus

Requested / Required Action: Approval

Functions: The project will build the fourth engineering building on Centennial Campus. The site is located on approximately four acres on the west side of The Oval, between Engineering Building I and the Hunt Library. The building will accommodate the moves of the Fitts Industrial and Systems Engineering (ISE), Civil, Construction and Environmental Engineering (CCEE), and the Dean's Administration from North Campus. The 220,000 GSF, four-story structure will include laboratories, classrooms, and offices to support broad initiatives in the areas of advanced materials and manufacturing; robotics and sensor technology; service sector engineering; critical infrastructure and security; transportation and logistics; and energy and environmental systems.

Project Scope: $11,400,000 Design/Consultant Costs
$109,400,000 Construction
$16,200,000 Contingency/Other Project Costs
$137,000,000 Total Project Budget

Design Team: Clark Nexsen – Lead Designer
Surface 678 – Landscape Architect

Master Plan Summary: Buildings on the perimeter of The Oval provide the framework for the activities within the open space. This project will complete the western edge. It is intended that The Oval will be a primary, exterior activity hub for formal and informal events on Centennial Campus. The east façade of the building which fronts The Oval should acknowledge the pedestrian nature of space and provide an inviting transition from the building into the green space. Ample exterior and interior glazing will expose the public activities taking place within the building to engage the campus community.

Recommendation: Approved by CDRP on July 26, 2017. Approval recommended.

Suggested Motion: Move approval of the plans for the Engineering Building Oval Building.

Funding Source: $77M Appropriated/$60M Non-Appropriated - $137,000,000

Responsible University unit: Office of Finance and Administration, Facilities Division
University Presenter/Contact: Lisa Johnson, University Architect
EXISTING SITE

EB-OVAL SITE

EB-I

EB-II

EB-III

THE OVAL

WOLF RIDGE

PARKING DECK

PARTNERS WAY

ALL-CAMPUS PATH

EB OVAL SITE

HUNT LIBRARY

VISITOR PARKING

PARKING
CONSTRUCTED WETLAND AT THE SOUTHWEST ENTRY PLAZA ALONG PARTNERS WAY
LEVEL 2 PLAN
BUILDING SECTION THROUGH CIRCULATION AND LIGHTWELL
GRAD STUDENTS, FACULTY, AND POST-DOCS ARE CLUSTERED AROUND NEIGHBORHOODS THAT ENCOURAGE COLLABORATION AND INTERACTION
ELEVATIONS

VIEW OF COLLONADE AT NORTHEAST ENTRY PLAZA

VIEW FROM THE OVAL
ELEVATIONS

NORTH ELEVATION

VIEW FROM EB-1 OF NORTHEAST ENTRY PLAZA

VIEW BETWEEN EB-1 AND EB-OVAL TOWARDS THE OVAL
ELEVATIONS

SOUTH ELEVATION

VIEW FROM ALL CAMPUS PATH OF THE SOUTHWEST CORNER

VIEW FROM PARTNERS WAY OF THE SOUTHWEST CORNER
EXTERIOR DETAILS

- CURTAINWALL - REFLECTIVE GLASS
- CURTAINWALL - VISION GLASS
- CURTAINWALL - SHADOWBOX GLASS
- CURTAINWALL - VERTICAL SUNSHADE
- THIN-BRICK PANELS
- METAL REVEAL AT BRICK PANELS
- CURTAINWALL - VISION GLASS
- MASONRY - CAVITY WALL
- ALUMINUM PLATE COLUMN COVERS
PARTNERS WAY ENTRY

VIEW ACROSS PARTNERS WAY TOWARD THE LEVEL 1 ENTRY AND ALL CAMPUS PATH
Agenda Item / Issue: 5.8.A.4 Plan Approval/Case Academic Center Dining Addition – Central Campus

Requested / Required Action: Approval

Functions: This project will build an approximately 2,200 gross square foot (GSF) addition to the south side of Case Academic Center (CAC) dining facility located on the north side of Cates Avenue adjacent to Reynolds Coliseum. The existing dining facility consists of approximately 12,000 GSF of enclosed dining and 800 GSF of outdoor patio dining space. The current 118-seat facility, will be increased to 200+ seats to meet student demand at peak times. This project will also upgrade the entire dining interior space and will expand the mechanical space.

Project Scope:

- $161,969 Design/Consultant Costs
- $1,704,935 Construction
- $132,096 Contingency/Other Project Costs
- $1,999,000 Total Project Budget

Design Team: RND Architects – Lead Designer
Edmondson Engineers, PA - MEP & FP

Master Plan Summary: The architectural character of the Dining Addition will draw cues from the pattern, rhythm, style and material palette of the adjacent Case Commons Residence Hall to unify the street front. The project will incorporate the principles of Universal Design to ensure, to the greatest extent possible, the facility is useable by everyone regardless of age, ability or circumstance.

Recommendation: Approved by CDRP on July 26, 2017. Approval recommended.

Suggested Motion: Move approval of the plans for the Case Academic Dining Addition Improvements.

Funding Source: Dining Receipts - $1,990,000

Responsible University unit: Office of Finance and Business, Facilities Division
University Presenter/Contact: Lisa Johnson, University Architect
EXISTING CONDITIONS

View of existing terrace on south side of building.

View of existing parking lot and west facade.

View of existing stairs and ramp to main entry.
No. Date Description

EXISTING PLAN PLUS CASE
COMMONS FUTURE PLAN

© RND Architects, PA.
NCSU Case Academic Dining Addition
SOUTH ELEVATION

Existing Building

Dining addition

Case Commons project
**South Elevation Detail**

- **Existing building**
- **Aluminum facia panel**
- **Fritted glass**
- **Metal canopy with wood ceiling**
- **Vision glass - Low-e**
- **Main entry doors**
- **Red brick to match Case Commons with brick sill detail**
- **Metal sunshade**
- **Vision glass - Low-e**
- **Fritted glass**
- **Spandrel glass**
- **Brick to match Case Commons with brick sill detail**
Main entry & lobby addition
30'

Street level planting bed

All campus path
12''

Planting box (NIC)
6'
Agenda Item / Issue: 5.8.A.5 Plan Approval/Thermal Energy Storage – Centennial Campus

Requested / Required Action: Approval

Functions: This project will increase chilled water supply capacity via installation of a thermal energy storage (TES) tank while reducing the electrical demand associated with the generation of chilled water to serve about 400,000 GSF of new building construction on Centennial Campus. The new thermal storage tank is 85 feet tall and 90 feet in diameter. It is a steel tank that will be clad in two feet wide insulated metal vertical planks. The pattern of planks will consist of three tones of gray. A wrap around stair will be on the perimeter of the tank.

Project Scope: $762,140 Design/Consultant Costs  
$6,586,906 Construction  
$2,250,954 Contingency/Other Project Costs  
$9,600,000 Total Project Budget

Design Team: RMF Engineering – Lead Designer  
CLH Design PA - Landscape Architect  
Ewing Cole - Architect

Master Plan Summary: NC State’s utility systems are developed as centralized district systems to conserve resources, increase energy efficiency, and enhance sustainable development. The 2014 Physical Master Plan included a placeholder for the Centennial Campus thermal energy storage tank.


Suggested Motion: Move approval of the plans for the Thermal Energy Storage unit.

Funding Source: Appropriated/Non-appropriated - $9,600,000

Responsible University unit: Office of Finance and Business, Facilities Division

University Presenter/Contact: Lisa Johnson, University Architect
Approval of Plans and Specifications of Formal Projects
Less than $2,000,000

**Note:** The projects below are submitted to the Trustees' Buildings and Property Committee for formal acceptance of plans and specifications. This listing represents projects received since the April 20, 2017 meeting.

<table>
<thead>
<tr>
<th>Project</th>
<th>Construction Estimate</th>
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<td>Harris Hall</td>
<td>$ 1,565,050</td>
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<td>Project #201611084</td>
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<tr>
<td>Renovations</td>
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<tr>
<td>Designer: Lambert Architect + Interiors</td>
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<tr>
<td>Winston-Salem, NC</td>
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<tr>
<td>Fund Source: University Carry Forward</td>
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<tr>
<td>Weisiger Brown</td>
<td>$ 750,000</td>
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<tr>
<td>Project #201611013</td>
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<td>Parking Lot</td>
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<tr>
<td>Designer: CLH Design</td>
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<td>Cary, NC</td>
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<td>Fund Source: Athletics Trust Funds</td>
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<tr>
<td>Scott Hall</td>
<td>$ 680,210</td>
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<td>Project #201611033</td>
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<tr>
<td>HVAC Upgrades</td>
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<tr>
<td>Designer: Dewberry</td>
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<td>Raleigh, NC</td>
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<tr>
<td>Fund Source: F&amp;A</td>
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<tr>
<td>Wolf Ridge Student Health</td>
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<td>Project #201620052</td>
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<td>Renovations</td>
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<tr>
<td>Designer: RND Architects, P.A.</td>
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<tr>
<td>Durham, NC</td>
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<tr>
<td>Fund Source: Student Health Trust Funds</td>
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<tr>
<td>Lake Wheeler</td>
<td>$ 400,000</td>
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<td>Project #201620025</td>
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<td>Compost Site</td>
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<td>Designer: Draper Aden Associates</td>
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<td>Fayetteville, NC</td>
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<td>Fund Source: Grounds F&amp;A</td>
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<td>Project #201620056</td>
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<td>Suite 1400 Renovation</td>
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<td>Designer: BHDP Architecture</td>
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<tr>
<td>Raleigh, NC</td>
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<tr>
<td>Fund Source: Provost F&amp;A</td>
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### Approval of Plans and Specifications of Formal Projects
#### Less than $2,000,000

<table>
<thead>
<tr>
<th>Location</th>
<th>Amount</th>
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<th>Work</th>
<th>Designer</th>
<th>City, State</th>
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<tr>
<td><strong>Carter Finley Stadium</strong></td>
<td>$297,601</td>
<td>201724016</td>
<td>East Concourse Roof Replacement</td>
<td>Atlas Engineering</td>
<td>Raleigh, NC</td>
<td>Athletics Trust Fund</td>
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<td><strong>Monteith Engineering Research (MRC)</strong></td>
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<td>Soffit Masonry Replacement</td>
<td>Atlas Engineering</td>
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<td>F&amp;A</td>
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<td><strong>Avent Ferry Complex</strong></td>
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<td>201720056</td>
<td>Network Lab Renovation and Expansion</td>
<td>Sigma Engineered Solutions</td>
<td>Morrisville, NC</td>
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<td><strong>CVM</strong></td>
<td>$240,000</td>
<td>201611073</td>
<td>Atrium Lighting Upgrades</td>
<td>Innovative Design, Inc.</td>
<td>Raleigh, NC</td>
<td>CVM Trust Funds</td>
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<td><strong>Eastern 4-H Conference Center</strong></td>
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<td>201720045</td>
<td>Pier and Dock Structure</td>
<td>Swanson + Stewart Architects</td>
<td>Raleigh, NC</td>
<td>Eastern 4-H Trust Funds</td>
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<td><strong>Headhouse Unit 1 At Method</strong></td>
<td>$235,061</td>
<td>201611047</td>
<td>Roof Replacement</td>
<td>Fleming &amp; Associates, PA</td>
<td>Fayetteville, NC</td>
<td>Repair and Renovation</td>
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<td><strong>Research Building 1</strong></td>
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<td>201620049</td>
<td>Lab 227 Renovations</td>
<td>Edmondson Engineers, PA</td>
<td>Durham, NC</td>
<td>Materials Science/Engineering Appropriated Funds</td>
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## Approval of Plans and Specifications of Formal Projects

### Less than $2,000,000

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<tr>
<th>Building</th>
<th>Fund Source</th>
<th>Project #</th>
<th>Costs</th>
<th>Project Details</th>
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<td>CVM</td>
<td>CVM Trust Funds</td>
<td>201611082</td>
<td>$214,054</td>
<td>Suite C273 Renovation for General Dentistry</td>
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<td>DH Hill Library</td>
<td>Library F&amp;A Funds</td>
<td>201611080</td>
<td>$200,000</td>
<td>Single Occupant Restroom on First Floor</td>
<td>RND Architects, PA</td>
<td>Durham, NC</td>
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<td>SAS Hall</td>
<td>Repair and Renovation</td>
<td>201620034</td>
<td>$180,000</td>
<td>Smoke Evacuation and Entry Door Replacement</td>
<td>Davis Kane Architects, PA</td>
<td>Raleigh, NC</td>
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<td>Ricks Hall</td>
<td>Cooperative Extension Appropriated Funds</td>
<td>201620014</td>
<td>$143,834</td>
<td>First Floor Renovations</td>
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<td>Jordan Hall</td>
<td>Marine, Earth &amp; Atmospheric Science F&amp;A</td>
<td>201620054</td>
<td>$132,720</td>
<td>Labs 2134/2137 Renovations</td>
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<td>Hunt Library</td>
<td>Provost Appropriated Funds</td>
<td>201720078</td>
<td>$132,565</td>
<td>Suite 4100 Renovations</td>
<td>Andre Johnson Architect PLLC</td>
<td>Raleigh, NC</td>
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<td>Constructed Facilities Lab</td>
<td>Facilities F&amp;A</td>
<td>201712037</td>
<td>$121,385</td>
<td>Overhead Soffit Masonry Replacement</td>
<td>Atlas Engineering</td>
<td>Raleigh, NC</td>
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Approval of Plans and Specifications of Formal Projects
Less than $2,000,000

**Primrose Hall**
Project #201720042
Interior Upgrades and Furniture
Designer: Dewberry
   Raleigh, NC
Fund Source: Provost Appropriated Funds

$115,206

**Talley Student Union**
Project #201720070
WolfXpress Move to Bookstore
Designer: McGahey Design PA
   Garner, NC
Fund Source: Campus Enterprises Trust Funds

$109,446

**Dorothy and Roy Park Alumni Center**
Project #201712039
Roof Replacement
Designer: Atlas Engineering
   Raleigh, NC
Fund Source: Repair and Renovation

$102,607
# Capital Projects at a Glance
## as of August 31, 2017

### NORTH CAROLINA STATE UNIVERSITY

<table>
<thead>
<tr>
<th>Code/Item</th>
<th>Project Name</th>
<th>Bid</th>
<th>Expected Acceptance</th>
<th>Total Project Budget</th>
<th>Remarks</th>
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<tr>
<td>41424 310</td>
<td>CBC Chiller Plant Expansion</td>
<td>Design</td>
<td>8/1/17</td>
<td>3/22/18</td>
<td>$4M Requesting Award</td>
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<tr>
<td>41324 357</td>
<td>North &amp; Central Electrical Distribution</td>
<td>Design</td>
<td>8/15/17</td>
<td>6/26/18</td>
<td>$4.1M Requesting Award</td>
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<tr>
<td>41424 307</td>
<td>Patterson Business Center Renovation</td>
<td>Design</td>
<td>9/7/17</td>
<td>4/13/18</td>
<td>$3.0M Bid Advertisement Underway</td>
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<tr>
<td>41524 336</td>
<td>Reedy Creek Equine Farm</td>
<td>Design</td>
<td>9/20/17</td>
<td>7/3/18</td>
<td>$2.4M Bid Advertisement Underway</td>
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<tr>
<td>41624 309</td>
<td>Harris Hall Student Services Renovation</td>
<td>Design</td>
<td>10/26/17</td>
<td>5/9/18</td>
<td>$1.75M CD Review Underway</td>
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<tr>
<td>41624 313</td>
<td>Greek Village Phase 3 Infrastructure</td>
<td>Design</td>
<td>11/17/17</td>
<td>5/17/19</td>
<td>$5.5M CD Review Underway</td>
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<tr>
<td>41524 341</td>
<td>Scott Hall HVAC Upgrades</td>
<td>Design</td>
<td>12/15/17</td>
<td>9/5/18</td>
<td>$750K CD Review Underway</td>
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<tr>
<td>41624 313</td>
<td>Case Academic Center Dining Addition</td>
<td>Design</td>
<td>1/4/18</td>
<td>8/1/18</td>
<td>$2.0M CD Production Underway</td>
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<tr>
<td>41524 338</td>
<td>Gabney Hall HVAC Evaluation and Upgrade</td>
<td>Design</td>
<td>1/30/18</td>
<td>1/1/19</td>
<td>$1.1M CD Production Underway</td>
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<td>41524-337</td>
<td>Carbon Electronics Cluster Lab Renovations</td>
<td>Design</td>
<td>2/2/18</td>
<td>7/10/18</td>
<td>$1.3M SD/DD Production Underway</td>
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<tr>
<td>41524 301</td>
<td>Case Commons Residence Hall</td>
<td>Design</td>
<td>2/5/18</td>
<td>7/16/19</td>
<td>$15M CD Production Underway</td>
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<td>41524 339</td>
<td>Murphy Center Broadcast Studio</td>
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<td>2/7/18</td>
<td>12/19/18</td>
<td>$5.5M CD Redesign Underway</td>
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<td>41524 314</td>
<td>Centennial Campus Utility Infrastructure</td>
<td>Design</td>
<td>2/15/18</td>
<td>6/19/19</td>
<td>$9.6M CD Production Underway</td>
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<tr>
<td>41524 340</td>
<td>Dearstyn Entomology and Avian HVAC Upgrades</td>
<td>Design</td>
<td>2/21/18</td>
<td>10/8/18</td>
<td>$1.5M SD/DD Review Ongoing</td>
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<tr>
<td>41624 325</td>
<td>Water Line Replacements - various</td>
<td>Design</td>
<td>3/12/18</td>
<td>4/22/19</td>
<td>$600K SD/DD Production Underway</td>
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<tr>
<td>41524 313</td>
<td>Engineering Building Oval</td>
<td>Design</td>
<td>4/17/18</td>
<td>6/8/20</td>
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<td>41624 301</td>
<td>Exterior Lighting LED Conversion</td>
<td>Design</td>
<td>4/25/18</td>
<td>9/9/18</td>
<td>$1.5M SD/DD Production Underway</td>
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<tr>
<td>41624 311</td>
<td>DH Hill &amp; Poe Waterproofing</td>
<td>Design</td>
<td>5/9/18</td>
<td>9/18/18</td>
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<td>41624 312</td>
<td>Bureau of Mines Renovation</td>
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<td>10/29/18</td>
<td>11/26/19</td>
<td>$6M Programming Review Underway</td>
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<td>41624 302</td>
<td>Carmichael Renovation &amp; Expansion</td>
<td>Design</td>
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<td>7/27/20</td>
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<td>41624 311</td>
<td>DH Hill Academic Success Center</td>
<td>Design</td>
<td>11/15/18</td>
<td>11/29/19</td>
<td>$9.3M Programming Underway</td>
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<td>41624 331</td>
<td>B104 Lab Renovation, CVM Main Building</td>
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<td>9/11/19</td>
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<td>41524 314</td>
<td>Plant Sciences Building</td>
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<td>12/13/19</td>
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<td>41524 301</td>
<td>Weisiger-Brown Parking Lot</td>
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<td>41224 315</td>
<td>HB 1292 Utility Savings</td>
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<td>41524 302</td>
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<td>CC Thermal Utilities &amp; Infrastructure (CTI, COT &amp; MRC)</td>
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<td>41224 352</td>
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<td>41324 353</td>
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<td>41224 370</td>
<td>Energy Performance Contracting #4, CCUP Cogen</td>
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<td>41524 360</td>
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<td>41324 353</td>
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<td>41524 303</td>
<td>DH Hill Accessibility &amp; Elevator Improvements</td>
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Gregg Museum of Art and Design

Before

After
Gregg Museum of Art and Design

Before

After
Morrill Drive Sidewalk

Before

After
<table>
<thead>
<tr>
<th>SUBMITTAL NUMBER</th>
<th>PROJECT NAME</th>
<th>SCOPE</th>
<th>DESIGNER</th>
<th>FIRM NAME</th>
<th>DATE SELECTED</th>
<th>REVIEW</th>
<th>APPROVAL</th>
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<th>CAMPUS DESIGN REVIEW PANEL</th>
<th>TRUSTEE'S BPC REVIEW</th>
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<td>RND Architects</td>
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<td>7/26/17</td>
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<td>RMF Engineering</td>
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<td>007</td>
<td>The Shores Residential Project - Phase I</td>
<td>$25,000,000</td>
<td>White Oak Properties</td>
<td>2/18/99</td>
<td>4/25/00</td>
<td>4/25/00</td>
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<td>Fall 2017</td>
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<td>113</td>
<td>Dan Allen Gateway</td>
<td>$171,000</td>
<td>OBS Landscape Architects and Planners</td>
<td>12/15/10</td>
<td>3/30/11</td>
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<tr>
<td>126</td>
<td>Broughton Hall Addition &amp; Renovation</td>
<td>$50,000,000</td>
<td>O'Brien Atkins</td>
<td>11/19/08</td>
<td>9/20/12</td>
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<td>017</td>
<td>Conference Center/Hotel</td>
<td>$28,000,000</td>
<td>Concord Eastridge</td>
<td>11/23/14</td>
<td>10/25/14</td>
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<td>12/3/15</td>
<td>April, 2015</td>
<td>Fall 2017</td>
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<td>137</td>
<td>Sigma Phi Epsilon House</td>
<td>$3,000,000</td>
<td>Hager Smith</td>
<td>11/29/15</td>
<td>7/29/15</td>
<td>7/29/15</td>
<td>9/16/15</td>
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<td>Summer 2017</td>
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<td>140</td>
<td>Centennial Campus Utility Plant</td>
<td>$18,226,054</td>
<td>All and Flad</td>
<td>1/19/13</td>
<td>2/24/16</td>
<td>2/24/16</td>
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<td>March, 2017</td>
<td>May, 2018</td>
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<td>142</td>
<td>Case Common Residential Hall</td>
<td>$15,000,000</td>
<td>Little Diversified Architectural Consulting</td>
<td>10/8/15</td>
<td>9/15/16</td>
<td>9/15/16</td>
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<td>4/18/17</td>
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<td>143</td>
<td>Lambda Chi House</td>
<td>$4,800,000</td>
<td>Carl Winnstead, AIA</td>
<td>2/18/06</td>
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<td>June, 2017</td>
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<td>Delta Zeta House</td>
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<td>Carl Winnstead, AIA</td>
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<td>July, 2018</td>
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<td>Reedy Creek Equine Farm Thero Phase A</td>
<td>$2,400,000</td>
<td>Scoutks Design, Inc.</td>
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<td>August, 2017</td>
<td>June, 2018</td>
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<td>Harris Hall Renovation - One Stop Student Service</td>
<td>$1,700,000</td>
<td>Lambert Architecture + Interiors</td>
<td>12/5/16</td>
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<td>October, 2017</td>
<td>March, 2018</td>
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