CAMPUS DESIGN REVIEW PANEL
MEETING MINUTES November 30, 2016
Primrose Hall Conference Room
1:30 – 4:00 PM

Attendees:  Robin Abrams    Brian Boothe    Randall Ramsey
            Chip Andrews    David Bristol    Tom Skolnicki
            Carolyn Axtman  Eric Hawkes    
            Jeff Bandini    Lisa Johnson    
            Tim Blair      Sumayya Jones-Humieny

Additional Distribution:  Gene Bressler  Kate Meurs  Doug Morton
                          Julieta Sherk

Approval of Minutes
The September meeting minutes were approved.

Greek Village Master Plan Overview:
Greek Village guidelines are somewhat different from typical campus design guidelines. In the Greek Village redevelopment, residential lots are leased to sororities or fraternities who must comply with the Greek Village Design Guidelines. These guidelines require the new houses to be more traditional in nature than that of their predecessors. The Guidelines stipulate brick foundation walls, front porches, no flat roofs, discourage chimneys, encourage each house to have a distinct appearance, plus require certain safety measures, signage and exterior lighting.

T. Skolnicki reviewed the Greek Village Master Plan and its history. The early 2000’s effort brought to light several issues: failing housing stock, lack of a community focus, and an unsustainable model. The vision developed in 2005 was for an active, dynamic, connected, and integrated community. The 2006 Master Plan organized houses around shared open spaces unified by street character and amenities to encourage interaction. Development and
infrastructure is rolled out in phases, with each phase contributing to construction through ground leases. Development is currently in Phase 2 of five. The Greek Village Design Guidelines built upon the Physical Master Plan, and focused on traditional residential styles with durable materials, different roof forms, setbacks, two-story plus an attic height, signage and site standards, and large gathering areas. The sororities and fraternities are responsible for building their houses. Debt is handled by national funding for some sororities, but fraternities are all privately fund-raised.

Projects for Review:

1. **Lambda Chi Fraternity House, Submittal #143**
   - Site: South Campus Precinct
   - Designer Name: Carl Winstead, AIA; Mark Ashness with CE Group; and Mike Hamlin, Building Committee Chair for Lambda Chi.
   - Facilities Project Manager: N/A. Housing representative from Fraternity & Sorority Life: Shelly Brown Dobek, Director of Fraternity and Sorority Life, was unable to attend.

   a. This is the first Panel review for the project.
   c. Project Description: The Lambda Chi Alpha fraternity house will be built on Lot 20 in NC State’s Greek Village Phase 2. The house is designed as a three-story structure with a street side front porch and a walk-out lower level to an exterior courtyard. The house will contain a total of 39 beds in addition to a house director’s suite, library, study room, training/distance learning lounge, chapter room, commercial kitchen, and serving area. The gross square footage of the house is 19,360 including unheated mechanical areas with construction cost estimated at $4.5 million. The project is scheduled to break ground in May of 2017 for occupancy of August 2018.
   d. Master Plan Summary: The Greek Village master plan envisions creating a sense of community with houses facing in towards a large campus green/community space. Each house will connect to the campus path system. There will be on-street parking, but the majority of the spaces for the residents will be located behind the houses.

**Presentation and Panel Discussion:**

   a. Phase 2 is limited to lots 19 and 20. The houses are adjacent with townhouses to follow. In the interim, the area will remain open and face the southern façade of the house. Lots fall front to back, with generally flat grade at the street front. Grade also falls from Delta Zeta to Lambda Chi
   b. Patio areas are at the rear with sidewalks tying into parking lot grade at key points.
   c. A variety of plant exhibits were presented as a foundation planting.
   d. Plans were reviewed for general orientation. Public rooms on the 1st Floor face the open landscaped area that will be townhouses in future.
   e. Elevations were reviewed. The brick base is differentiated from the middle and top tripartite organization by a darker mortar color and brick banding.
   f. There is no step access to attic. Rooftop equipment is located in a well so there is no attic space other than for mechanical needs.
g. Sloping grade now terminates in a 4'-0" tall retaining wall, which will be of the same brick as the house.

h. The front door and windows are made of wood.

i. Discussion ensued about plant choices, grade, sidewalks, the porch and the lack of energy-saving measures. The design team noted that locally sourced brick, energy-efficient windows, low-flow toilets, on-demand hot water heating, and the highest SEER rating appliance are specified.

Panel Action:
Robin Abrams abstained from voting. The Panel conditionally approved on the condition that OUA follow up on the project with the following design directives to be incorporated:

1. Connect to the campus pedestrian walk on the east side of the building in lieu of building a separate, parallel, sidewalk. This will allow for more green space adjacent to the house.
2. Assure that the Loropetalum is used in a way that will give it enough room to grow large: these are often planted as small/medium shrubs and actually become large shrubs/small trees, and can be pruning nightmares with time.
3. Relocate the accessible path/ramp closer to the covered portion of the front porch and consider bringing the ramp into the side of the porch. The porch composition should be symmetrical. The front porch should have a brick base.
4. The site grades should be consistent (fairly level) between the front porch columns.
5. The base of the front porch columns appears undersized.
6. Final exterior material selections will be based on field-erected sample panels approved by the Office of the University Architect.

2. Delta Zeta Sorority House, Submittal #144
Site: South Campus Precinct
Designer Name: Carl Winstead, AIA
Facilities Project Manager: N/A. Housing representative from Fraternity & Sorority Life: Shelly Brown Dobek, was not able to attend.

a. This is the first Panel review for the project.

b. Project Background: This sorority has been on campus since 2004.

c. Project Description: The Delta Zeta sorority house will be built on Lot 19 in NC State’s Greek Village Phase 2. The house is a three-story structure with a partial lowest level. There is both a front porch and side porch on the main level and an outdoor patio on the lower walkout level. The house will contain 40 beds, a house director’s suite, officer study, parlor, living room, study room, study lounge, and a training/distance learning lounge. Separate dining and chapter rooms are planned in addition to a commercial kitchen and serving area. The gross square footage of the house is 19,951 including unheated mechanical areas with a construction cost estimated at $4.5 million. The project is scheduled to break ground in May 2017 for occupancy of August 2018.

d. Master Plan Summary: The Greek Village master plan envisions creating a sense of community with houses facing in towards a large campus green/community space. Each house will connect to the campus path system. There will be on-street parking, but the majority of the spaces for the residents will be located behind the houses.
Presentation and Panel Discussion:

a. With this site, a handicapped accessible ramp is not needed, as a universal design approach with a 2% grade is achievable.

b. The floor plans include suite style bedrooms for older members; a side porch that faces another sorority; club style bathrooms with vanities in halls; and a study that opens onto the covered front porch.

c. The exterior finish selections include a lighter brick, a cast-stone base, and dark green trim colors.

d. Much discussion ensued regarding the elevations. The sorority insists on having six Ionic columns on the front façade to signify the six founders. This results in an awkward mix of single and double columns on the front with pilasters at the wall. The preference is for six pairs of columns that continue around the perimeter of the porch for consistency on the side porch facade.

e. Concern was expressed regarding the proportions and element groupings of the elevations, the overall look of the sorority appearing too commercial, and windows that do not open.

Panel Action:

Robin Abrams abstained from voting. The Panel did not approve the project. A Working group was recommended (Lisa J, Carolyn Axtman, Sumayya Jones-Humieny, Tim Blair and Brian Boothe) to keep the project on schedule and work through design concerns with the following design directives to be incorporated:

1. Front Elevation: Provide alternatives for the front entry architecture as the Panel is concerned with the overall proportions. The six ionic columns would be better in pairs with the current design.

2. Consider design revisions that provide a stronger residential character.

3. Reduce the number of types/sizes of arched windows and openings.

4. East Elevation: The single dormer is out of scale and should be revisited.

5. The color of the downspouts should blend with the brick.

6. Rear Elevation: Consider options for providing operable windows for the three bedroom windows that are currently inoperable, possibly by restricting the opening size so it is too small for a person to pass through.

7. Final exterior material selections will be based on field-erected sample panels approved by the Office of the University Architect.

Subsequent to the meeting, the CDRP working group met with Carl Winstead, on December 19, 2016, to review updated design documents that addressed the Panel's above directives. The working group approved the project.

Status of Projects in Planning

1) Engineering Building Oval (EBO) will be reviewed by CDRP March 2017.

2) Carmichael will be reviewed in July 2017.

3) The Plant Sciences Building will be reviewed in September or November 2017.

Next Meeting

There is no December meeting. The next meeting will be January 25, 2017 at 1:30 in the Primrose Hall Conference Room.

Meeting Adjourned at 3:10 p.m.
General Business
Most CDRP members have a 3-year term while Board of Trustee (BOT) members have a 2-year and 1-year terms. Robert (Chip) Andrews is the BOT member-at-large and the new chair of the Buildings and Property Committee (BPC). Dewayne Washington’s term completed in June. Randy Ramsey’s 2-year term will complete in June of 2017.

Approval of Minutes
The May meeting minutes were approved.

Project for Review:
1. Case Commons Residence Hall, Submittal #142
   Site: Central Campus Precinct
   Designer Name: Little Diversified Architectural Consultants and Stewart, Inc.
   Facilities Project Manager: Mike Kapp, Capital Project Management

   a. This is the second Panel review for the Case Commons Residence Hall project.
b. Project Description: This four-story student residence will have approximately 28,000 GSF that will house a mix of students and student-athletes, per NCAA guidelines. A total of 63 students will live in this building plus 1 Resident Director and 2 Student RAs for a total of 65 beds. Amenity spaces will include a Social Lounge, Common’s Rooms and a Theater/Meeting Room. The project will be located to the east of Case Academic Center (CAC) on the corner of Cates Avenue and Jeter Drive. More oversight will be afforded with an on-campus residential facility that is closer to classes, tutorial services and the dining facilities.

c. Master Plan Summary: The building should take architectural advantage of the highly visible southeast corner site. The massing should be consistent with its neighboring structures. The main entry located on Cates Avenue will activate and reinforce the street front. The entry area should provide a partially covered outdoor gathering area as a welcoming feature. The building’s layout and orientation should maximize views overlooking the Dail Softball Stadium and Paul Derr Track and Soccer Fields to the south and east, while maximizing daylighting from the north. Portions of the Cates Avenue Master Plan, designed to make the Avenue more pedestrian friendly, will be implemented, including: reducing the number of street parking spaces by converting head-in to parallel spaces.

Presentation and Panel Discussion:

a. Shane Webster and Will Stewart with Little and Derek Blaylock with Stewart, Inc. presented the project updates per the previous comments as follows:

i. *Give further design consideration as to how this new building will adjoin the Case Academic Center.*

   Study is underway for the Case Dining Addition project at Case Academic Center. The existing steel trellis will be removed and the retaining wall will be lowered to engage pedestrians along Cates Avenue. The design team will look at extending the green areas south of Case Commons to link the two buildings together. Vocabulary and materials from Case Commons will be brought to Case Academic Center’s dining addition. Two windows were added to the south elevation of the stairwell to add interest to an otherwise blank wall.

ii. *Consider how the east elevation base brick pattern can better tie to the other building elevations.*

   The entire base will have an undulating Flemish bond pattern that turns the corner north into the courtyard and terminates at the canopy. It is a unique pattern, but it does relate to Reynolds’ brick pattern. The undulating header bricks range from a 2-inch projection to almost flush to a 1-inch recession. More study is needed to determine where projections and recessions occur. The design team will establish a module that relates to the fenestration. The top of the base datum aligns with the top of the entry canopy for consistency.

iii. *Provide more information on the sustainability features for the building. Can photovoltaic roof panels be considered?*

   The project is pursuing LEED Silver certification Version 3 and possibly Gold certification. (The design team will register the building for LEED before the Version 4 September deadline.) They are looking at 37 KW of photovoltaic power on the roof to power the lighting and plug load in the building. The cost is approximately $80,000 – $100,000 with a payback period of 16 – 18 years. This could be added to the energy model dependent on funding. Discussion with Jack Colby, Senior Director of Energy Systems, is needed.

iv. *Provide another level of detail at the main entrance to the building. Consider design details that provide a residential feel and speak to this building not being open to the general public.*
A wood panel surround at the front entry that is same material as the entry canopy wood soffit will provide more human-scale detail and a residential feel. This feature ends at the elevated front porch and separates the entry and living room in the plan. The living room is further separated by a green space in front to create a zone of privacy.

v. The exit door from the Cates Avenue stairwell is too inviting. This will be an exit-only door with daily use being discouraged. It should have a more utilitarian feel.
The seat wall has been extended in front of the exit door and changed from glass to a solid door that is painted an architectural bronze color to de-emphasize it.

vi. The fourth floor terrace trellis needs further 3D study to ensure that the height of the trellis is human scale and has the right level of architectural detail.
The design team will provide LED lighting elements within the trellis and recessed lights at the perimeter wall to provide a glow, with ceiling fans to provide air flow. The terrace will open onto indoor lounge to extend the space. More consideration will be given to the exact size and spacing of the trellis blades for the best shading in hot weather months. Water proofing will be provided under the floating wood floor.

vii. Consider consistent use of the south elevation horizontal sun screens.
Sunscreens now extend across the windows consistently.

viii. The building design should minimize the impact of noise transmission from the loading dock area to the residence rooms and within the building from the mechanical room to the Resident Director (RD) apartment.
A masonry wall or double-stud wall is proposed. An acoustician will be engaged to analyze high- and low-frequency sound attenuation and absorption (it should be in the low 60's for range of hertz frequency.) Quieter areas are adjacent to the RD’s bedroom with thicker walls and insulation within. The majority of bedrooms face south and east, which minimizes exposure to visual and audible noise with the L-shaped configuration. Landscaping along rear courtyard wall will help absorb some sound.

ix. Investigate the opportunity for a single occupant toilet on the ground floor.
The toilet rooms have been rearranged to provide 2 single-occupant toilets, one of which will be labeled “Women” and the other “Single Occupant Toilet”. The reconfiguration also provides better privacy for the men’s room.

x. Better define the exterior building materials and color palette.
The material finishes are as follows:
1. Brick will be a flashed brick, similar to Reynolds and Case Academic Center
2. Wood will have a medium tone.
3. Curtain wall will be clear anodized per standard.
4. Glass is Solarban 70 and is transparent.
5. Glass spandrel will match Carmichael where shown in less reflective panels and in between floors.
6. Glazing at the Living Room will have a frit pattern to reduce solar heat gain and blend with spandrel panels. The frit pattern could also undulate. Important to provide some clear views out without looking through the frit pattern
7. Metal panels will occur in vertical portions between window groupings and possibly to break down the service drive screen wall with a brick base. This will tie into the flashed gray color of the brick.
8. Ipe wood is proposed for low maintenance (it turns gray over time but with power washing will regain color).

b. Panel discussion ensued to include:
   i. The glass proportion of glass above the entry doors, between the wood panels and the soffit, was questioned. It was explained that this spacing/proportion picks up on that of the concrete soffit.
   ii. The planter under cover must have irrigation to be successful.
iii. The flashed brick choice will blend with the neighborhood, preferably be wire cut, and be contextual, but not as dark as Case Academic Center’s brick.

Panel Action:

The Panel recommends approval of the building design subject to the following directives to be reviewed by the Office of the University Architect:

1. The undulating Flemish Bond brick pattern will require further study as to where it stops and starts.
2. Consider an etched or frosted glass exit door at the Cates Avenue stair with signage indicating that this is not an entrance.
3. Using sun/shading studies, verify that all sun screens and shading devices are appropriately sized and spaced. The terrace trellis may require the shading elements to be more closely spaced.
4. Verify that construction details for the roof terrace ensure the shedding of water.
5. Consider more subtle color changes for the courtyard paving.
6. Final exterior material selections should be based on field-erected sample panels.

Project Updates

Status of Projects in Planning
Engineering Building Oval (EBO) will be reviewed at the beginning of 2017. The Plant Sciences Building is currently in the designer selection phase. Both projects will be reviewed multiple times by the CDRP due to the scale of the projects. The Carmichael Gym Addition project will also be reviewed in 2017.

Status of Projects in Construction
The Gregg Museum project was delayed by rain but is now due to complete in the fall. It will take six months to move in and set up the art exhibits. The Reynolds Renovation project will be completed by August / September. The Coaches Corner project will be implemented shortly. The Greek Village Phase 2 Delta Gamma project is also completing shortly. The next two houses are under design. The Shores Residential Phase I project will complete in fall of 2016 and the Textiles Innovation Center is slated to complete in late fall. Harrelson Hall has been demolished and the site restoration will follow.

Next Meeting
The next meeting is scheduled for August 31, 2016 at 1:30 pm in Primrose Hall Conference Room 101. Due to a light agenda, this meeting may be canceled. [Subsequent to this meeting, the August, September and October meetings were canceled.]

Meeting Adjourned at 3:00 p.m.
General Business
Steve Arndt has left NC State University for a position at the University of Pembroke, and former Associate Vice Chancellor of Facilities Kevin MacNaughton will be assuming his position in the interim until a new candidate is hired.

Approval of Minutes
The March meeting minutes were approved.

Project for Review:
1. Case Commons Residence Hall, Submittal #142
   Site: Central Campus Precinct
   Designer Name: Little Diversified Architectural Consultants and Stewart, Inc.
   Facilities Project Manager: Mike Kapp, Capital Project Management

   a. This is the first Panel review for the Case Commons Residence Hall project.
   b. Project Description: This four-story student residence will have approximately 28,000 GSF that will house a mix of students and student-athletes, per NCAA guidelines. A total of 63 students will live in this building plus 1 Resident Director and 2 Student RAs for a total of 65 beds. Amenity spaces will include a Social Lounge, Common’s Rooms and a
Theater/Meeting Room. The project will be located to the east of Case Academics Center on the corner of Cates Avenue and Jeter Drive. More oversight will be afforded with an on-campus residential facility that is closer to classes, tutorial services and the dining facilities.

c. Master Plan Summary: The building should take architectural advantage of the highly visible southeast corner site. The massing should be consistent with its neighboring structures. The main entry located on Cates Avenue will activate and reinforce the street front. The entry area should provide a partially covered outdoor gathering area as a welcoming feature. The building’s layout and orientation should maximize views overlooking the Dail Softball Stadium and Paul Derr Track and Soccer Fields to the south and east, while maximizing daylighting from the north. Portions of the Cates Avenue Master Plan, designed to make the Avenue more pedestrian friendly, will be implemented, including: reducing the number of street parking spaces by converting head-in to parallel spaces.

Presentation and Panel Discussion:

a. Robert Klinedinst and Shane Webster with Little and Michael Batts with Stewart, Inc. presented the project.

b. Site context: Cates Ave lacks the characteristics designated to be incorporated per the Cates Ave Master Plan, such as: raised cross-walks; shade trees; open shared space; parallel parking (a safety concern with the current head-in configuration); an all-campus path that widens the existing walk to the 15-foot standard and widens the existing 8’ neighborhood path to the 10-foot standard along Jeter Dr. A new N-S crosswalk will align with the Dail Softball Stadium entry. Measures must be taken to address the service drive to north of site that also serves Case Academic Center. The proposed addition will be adjacent but not have an interior connection due to security and dining access control concerns. This Separation also affords some life-team balance. NCAA requirements require a 51% minimum student and a 49% maximum student-athlete population. Work is underway with University Housing to vet the student makeup for a Living Learning Village concept. Other site design considerations include:

   i. A secure outdoor courtyard located on the north side for privacy and sunken for visual and audible buffering that allows for service area and floor-level access.

   ii. Case Academic Center is under design to improve the dining facility. The Case Academic Center finish floor elevation (FFE) is ~6'-0" above sidewalk grade. Options to lower an outdoor patio and activate the street front while tying the architecture into Case Commons are being reviewed.

   iii. The courtyard is programmed to be flexible and for activities to spill out from the adjacent Multi-Purpose Room. The program is evolving but the budget may not cover full implementation, so thought will be given to phasing.

   iv. The first floor will engage Cates Avenue and Jeter Drive at street level.

   v. The building is lined up to match Case Academic Center’s front patio wall and create a buffer with a seat wall for landscaping to prevent a fishbowl effect while allowing some transparency through the building. The grade difference will be made up with the seat wall at the Cates Ave. sidewalk.

c. Building design considerations include:

   i. An L-shaped building configuration that maximizes views on a tight sight.

   ii. A front porch cover feature that protrudes at an angle to be seen from afar.
iii. The First Floor includes: an entry that has access control with a manned concierge desk in the Lobby; a Multi-Purpose room with an adjacent Prep/Storage area; a Living Room; a Theater/Gaming Room; a Resident Director apartment; bathrooms; and Mechanical space that is ~ 5' – 6' below grade at service drive side.

iv. The Second Floor through Fourth Floor include: bedrooms on double-loaded corridor and a single-loaded corridor to afford views out. The men’s basketball team will be housed on the Second Floor, the women’s team on the Third Floor and a mix of the two will be on the Fourth Floor.

v. The rooms lay out to have the entry in a common, shared bathroom area with two bedrooms that share one bathroom. Student-athletes and students with single and double rooms is mixed throughout. There are 15 players per team with 13 scholarship students on the men’s team that will be assigned the single rooms. The two non-scholarship athletes will share a double room. The women’s basketball team offers 15 scholarships. If NCAA rules change, the layout is flexible enough to reassign the ratio of singles and doubles. The bedrooms are sized at 190 assignable square feet (ASF) for both single and double rooms.

vi. A Lounge at the corner provides more private but shared socializing space than the First Floor Living Room.

vii. The Fourth Floor has an outdoor terrace.

viii. Students requested a laundry room on each floor.

d. The service drive also serves dining facility with a 55' tractor-trailer making deliveries, so adjustments will be needed. Current conditions require that truck to drive over the existing sidewalk.

e. Parking displaced by the project and additional spaces required due to the increase in the square footage inventory will be relocated elsewhere on campus.

f. Exterior elevations draw from precedents at Reynolds Coliseum for the vertical fenestration rhythm and proportions. Per the Physical Master Plan design guidelines, the building has a base middle and top tripartite organization. A corner element over the entry is celebrated as a special feature. The material palette is made up of brick, glass spandrels and glazed windows with stone or concrete at the covered entry element. The glazing has horizontal sunscreen louver elements to provide architectural detail and sun shading on the south side.

g. The courtyard is the exterior hearth space while the adjacent Multi-Purpose and Living Rooms are the interior hearth space.

h. The trellis feature over the outdoor terrace is lower than the cornice to provide human scale. A light feature that can light up in red for sports victories or academic awards is being designed.

i. The front porch overhang is 6’ at the entry door and 8’ at the deepest area. The wall returns into the building and becomes the fireplace wall.

j. The roof will be a white membrane. The design team is looking at options for LEED Silver certification as the design progresses.

k. Panel discussion ensued to include:
   i. Adding a pattern brick where mechanical service area is located at the Jeter Dr. elevation.
   ii. Providing shade trees on Cates Ave, like elms and oaks, per the Cates Ave Master Plan.
   iii. Implementing solar panels on the roof for hot water heating; this was done at Western Manor as a test in participation with the FREEDM Center.
iv. Landscaping the exterior court yard to buffer beeping sounds from trucks backing up. All the hard walls shown will exacerbate this issue. The design team noted that the L-shaped configuration minimizes exposure to this noise from the rooms on the north end.

v. Providing exterior service access to the mechanical space.

vi. Consulting a sound transmission reduction expert during design, as other housing projects have had mechanical noise level issues with resident advisors’ / directors’ units being close to mechanical space.

vii. Providing Single Occupant Toilets to accommodate the public during events.

viii. Making the theater space flexible to accommodate changing requirements in the future, such as built-up rather than concrete-formed tiered floors.

ix. Making the monumental entry feel more private since this is not a public building: the elongated porch encompasses the extent of interior public living area. More detail is needed at the doors.

x. Adding an additional level of detail at the Terrace trellis and lowering it to align with sunscreens for human scale and making the sunscreens continuous across the south elevation.

xi. Tying the Case Academic Center and Case Commons elevations together with architectural elements and detailing.

xii. Making the exit stairs less attractive to use and the front door entry less open, public and inviting. Card access and intercom buzzer feature?

xiii. Providing year-round interest such as lighting, or seasonal change to the east elevation. The brick pattern needs to be relate to other elements.

xiv. Providing views and lighting into mechanical room?

xv. Better defining the building and courtyard exterior materials, and landscaping and hardscaping.

Panel Action:
The Panel made the following design directives to be incorporated for a second review meeting:

1. Give further design consideration as to how this new building will adjoin the Case Academic Center.
2. Consider how the east elevation base brick pattern can better tie to the other building elevations.
3. Provide more information on the sustainability features for the building. Can photovoltaic roof panels be considered?
4. Provide another level of detail at the main entrance to the building. Consider design details that provide a residential feel and speak to this building not being open to the general public.
5. The exit door from the Cates Avenue stairwell is too inviting. This will be an exit only door with daily use being discouraged. It should have a more utilitarian feel.
6. The fourth floor terrace trellis needs further 3D study to insure that the height of the trellis is human scale and has the right level of architectural detail.
7. Consider consistent use of the south elevation horizontal sun screens.
8. The building design should minimize the impact of noise transmission from the loading dock area to the residence rooms and within the building from the mechanical room to the RD apartment.
9. Investigate the opportunity for a single occupant toilet on the ground floor.
10. Better define the exterior building materials and color palette.
Project Updates

**Status of Projects in Planning**
Two bond projects were approved in November: Engineering Building Oval (EBO) and the Plant Sciences Building, both of which will be reviewed several times to the CDRP. A question pertains to the timing of the parking deck this fall. The Oval East Parking Deck, will be supported by EBO and Plant Sciences funds. The Carmichael Gym Addition is a student fee supported project and is awaiting legislative approval this session to move forward.

**Status of Projects in Construction**
Completion of the Gregg Museum was delayed by rain but is now due to complete in fall. It will take six months to move in and set up the art exhibits. The Centennial Campus Hotel and Conference Center is under construction. The Harrelson Demolition project abatement is complete and demolition will start imminently.

**Next Meeting**
There is no June meeting. The next meeting will be July 27, 2016 at 1:30 in the Administrative Services III Building Conference Room 101.

**Meeting Adjourned at 3:00 p.m.**
CAMPUS DESIGN REVIEW PANEL
MEETING MINUTES – March 30, 2016
Administrative Services III Conference Room 101
1:30 – 3:00 PM

Attendees: Steve Arndt Carolyn Axtman Tim Blair
David Bristol Eric Hawkes Lisa Johnson
Sumayya Jones-Humienny Kate Meurs Tom Skolnicki

Additional Distribution: Brian Boothe Gene Bressler Randall Ramsey
Julieta Sherk Dewayne Washington

Approval of Minutes
The July meeting minutes were approved.

Projects for Review:

1. E.S. King Roof Replacement, Submittal #141
   Site: Central Campus Precinct
   Designer Name: Swanson + Stewart Architects, with Barry Swanson and Leigh Stewart
   Facilities Project Manager: Greg Selzer

   a. This is the first Panel review for the project.
   b. Project Background: This will be a phased project over several years due to funding structure. Asking panel to approve entire design. Adding required insulation would have raised roof several inches so it was logical to add pitched roof to improve aesthetic of complex. Four buildings will be done each year. Tim Blair has been involved with project as owner representative for Housing.
   c. The complex includes about 300 units for graduate students and married students as well as upper class housing. Currently, at 98% occupied - in high demand.
   d. Project Description: This project includes the construction of new roof overbuilds to each of the 17 existing apartment buildings at the ES King Village on NCSU’s West Campus Precinct. The new sloped roofs will be finished with asphalt shingles to match those at the ES King Village Community Center Building located on the site. Associated with the new roof constructions will be new exterior soffit lighting at the breezeway entrances at each building to help create a safer environment at night for the residents. Bathroom exhaust fans will also be upgraded and all
rooftop vents extended up to and through the new roof constructions. The project is expected to occur in 5 separate phases ending in a 2021 completion date.

e. Master Plan Summary: The new roof forms will draw on the context of the surrounding neighborhood, including Wolf Village.

Presentation and Panel Discussion:

a. Seventeen bldgs. 11 are two-story one BR, four are bedroom apartment buildings and two are studio apartments with a 1960’s aesthetic.

b. Surrounding neighborhoods are residential in nature but design cues draw from Wolf Village, which is visible from E.S. King Village, as well as E.S. King Village Community Center which was built 5-6 years ago.

c. Proposed roof overbuilds will add insulation to meet energy code requirements. The existing roof deck will remain. The design includes gable roofs at each breezeway entrance with additional lighting to improve the building entrances.

d. The one and two bedroom buildings roof designs include Dutch gable roofs. Exterior materials include gray asphalt shingles, painted trim and replacing aging concrete wall panels beneath each window with stucco finish. Other concrete banding would be cleaned and painted. Gable infills will also be stucco, to tie visually into Wolf Village higher band of stucco finish. The stucco will have a medium grit texture.

e. Roof ventilation is through gable vents and ridge vents.

f. Storm water collection is perimeter gutters with downspouts.

g. The three-story studio apartment buildings will have similar roof form as the other buildings but with a hipped-roof design. The project includes a bid alternate that provides a visually supporting wall for the roof at open stairs. Lighting upgrades include soffit lighting at each breezeway entries to improve security with focus on new fixtures to have narrower spread and avoid over lighting at bedroom windows. Provide additional wall sconces within breezeways.

h. Mechanical upgrades will occur later to get rid of window AC units.

i. The 1st phase (3) one-bedroom and (2) one-bedroom are timed so they have the least impact on the current residents. Residents will be moved out during construction. The construction schedule will also be coordinated around NCSU exam periods and Wake County School schedule. On average the project will renovate one building per semester. Rents from E.S. King will pay for renovations, so revenue stream needs to be as continuous as possible. A separate sanitary Sewer project will also be coordinated with this project.

Panel Discussion:

i) The Panel generally liked the design and thought it would greatly improve the character of this housing complex. There was discussion regarding the location of the downspouts and the possibility of realigning downspouts to group with conduits in an intentional pattern.

ii) There was discussion related to the studio apartments building alternate. The Panel thought the exterior walls at the open exterior stairs greatly improved the building aesthetics. The original building design included decorative walls at these stairwells. These original walls were demolished a few years ago due to poor condition.

iii) The exterior materials were reviewed and the material palette was tentatively approved.

Panel Action:
The Panel conditionally approved the project with the following design directives to be incorporated:

1. Recommend the alternate for exterior stair screen walls on the two studio apartment buildings be included in the base bid.
2. **Final exterior material selections will be based on field-erected sample panels approved by the Office of the University Architect.**

**Status of Projects in Planning**

1. Case Commons Residence Hall will be reviewed in May. 65 Beds, 51% of which is for non-student-athletes and 49% will be for student-athletes. $15M.
2. Engineering Building Oval will be reviewed late this year or early next year.
3. Plant Sciences Building will advertise in June.
4. Carmichael Addition student fee approval is on the April Board of Governors meeting agenda. If approved, it will go to the legislature for approval. Anticipate advertising for a design team in the fall. This project will demolish the existing administrative building at corner of Cates and Morrill to provide new facilities and a new entrance to the entire Carmichael complex.

**Next Meeting**

The next meeting is scheduled for April 27, 2016 at 1:30 in the Administrative Services III Conference Room 101 but will likely be canceled due to the lack of agenda items. The next scheduled meeting is May 25th.

**Meeting Adjourned at 2:30 p.m.**
CAMPUS DESIGN REVIEW PANEL
MEETING MINUTES – February 24, 2016
Primrose Hall Conference Room
1:30 – 4:00 PM

Attendees:
Steve Arndt
Carolyn Axtman
Brian Boothe
Gene Bressler
Eric Hawkes
Lisa Johnson
Sumayya Jones-Humienny
Tom Skolnicki

Not Present:
Tim Blair
Kate Meurs
Randall Ramsey
David Bristol
Julieta Sherk
Dewayne Washington

Approval of Minutes
The September 2015 meeting minutes were approved.

Projects for Review:

1. JC Raulston Arboretum (JCRA) Pedestrian Entrance, Submittal #139
   Site: West Campus Precinct
   Designer Name: Jim Gallucci Sculptor, LTD, and JCRA Master Plan Committee
   Facilities Project Manager: Lynn Swank, Design and Construction Services

   a. This is the first Panel review for the project.
   b. Project Background: Tom Skolnicki recapitulated a previous presentation on campus edges to remind everyone of the physical master plan guidelines and standards, especially as they pertain to gateways. Campus edges are the public face of the university and have unifying elements that clearly and consistently demonstrate campus identity. Gateways are the point of arrival: they transition between the campus and the community to reinforce the university brand. Consisting of a kit of parts, they clearly represent campus character, with columns, markers, accent lighting and signage, and use a material palette of brick, precast, and metal. Previous gateway projects include: the Watauga Club Gateway, a pedestrian gateway from Hillsborough St.; the intersection of Varsity Dr. and Western Blvd., a vehicular and pedestrian gateway, with an arbor and precinct signage; and at the south end of Centennial Campus, Trailwood Dr., a vehicular gateway, with columns and markers at various heights to provide the appropriate scale for vehicles moving at greater speed.
   c. Project Description: This gateway creates a more distinct campus pedestrian entrance and replaces the existing pedestrian entrance along Beryl Road. The project will install brick columns, a decorative metal gate, metal fencing and new plant material. It also improves safety with the installation of brick walks, a new ADA curb ramp, and site lighting at the gate.
   d. Master Plan Summary: Gateways should indicate arrival at campus entries and serve as transitions between the campus and surrounding community. They should be easily recognized, communicate the university brand, be appropriately scaled, and defined with a vertical statement.
**Presentation and Panel Discussion:**

a. Existing conditions include a gate that is hard to find, unwelcoming and unbefitting for such a beautiful arboretum.

b. The goal for the new entrance is to create an entry experience with gateway artwork. The entry will shift west to lead people to the Wilder Visitor Center. The Heritage Tree Program includes two signature, heritage live oaks that bookend the future sidewalk, which is made of flagstone that won't impact tree roots as much as other types of pavers. The trees are not in the limits of scope, but will be protected. Using the kit of parts, 8'-0" tall columns will flank the metal gate, with NC State pavers creating the threshold, and lower columns/markers will extend beyond, with seat walls on either side. Naming opportunities will be provided on columns.

c. Artist Jim Gallucci incorporated the arboretum's signature Japanese maple motif on two-sided metal mesh gate panels. LED lighting, with the option to introduce different colors, will be placed in-between the mesh gate panels to silhouette the JC Raulston Arboretum letters and highlight the entry for evening events. The gate element is 18" deep, which is needed for structural integrity. The auger-drilled footings will allow for pavers to be placed around them. Automatic door openers can be actuated from a computer or cell phone.

d. The existing parking lot has a sliding gate for security. The new black metal fence will be 6' tall rather than the existing 5' tall chain link.

e. The gate will take 8 weeks to fabricate and the project will complete by 9/3/2016 in time for the arboretum's 40th anniversary celebration.

f. OUA noted that the university should work with the City of Raleigh to bulb out the sidewalk into the street at the new gate location to enhance the entrance and have them stripe the currently unmarked parallel street parking spaces.

**Panel Action:**

The Panel conditionally approved the project with the following design directives to be incorporated:

1. Final exterior material selections will be based on field-erected sample panels and reviewed by the Office of the University Architect.

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2. **Cogeneration and Building Addition EPC4, Submittal #140**

Site: Centennial Campus Precinct – Utility Plant Site  
Designer Name: Affiliated Engineers, Inc. (AEI) and Flad Associates  
Project Manager: Steve Bostian, Capital Project Management

a. This is the first Panel review for the project.

b. Project Background: Steve Bostian explained that this project is the fourth cogeneration energy performance contracting (EPC4) project. With this type of project, the university borrows money from a lender to pay for designing and constructing the project, with energy savings produced from the project paying back the loan over a specified period. For the first project of this type, Cates Cogen, the university hired an Energy Service Company (ESCO) to design, build and operate the project. The ESCO charged a premium to do this. To save money, the State Legislature passed a law that allows NC State to be an ESCO for ourselves, or "self-perform" these projects. Cogeneration equipment produces steam for buildings' process needs. Any excess steam is diverted to a turbine generator that produces electricity. Only one boiler will be installed with this project, but space in the addition allows for another boiler to be added in the future. This project will provide steam and electricity for Engineering Building Oval and Plant Sciences in the short-term, but other buildings will connect in future.

c. Project Description: The project will add a two story single bay addition to the existing Boiler Wing at the Centennial Campus Utility Plant. Cogeneration equipment, including a 5.7 MW
combustion turbine generator (CTG), ductburner, heat recovery steam generator (HRSG), steam turbine generator (STG) and high pressure gas compressor (NGC) will be installed within the new wing. The concept is that the equipment will produce steam for many campus buildings and when there is surplus steam in the system, then the steam will be used to make electricity, thus saving money spent on utilities purchased from outside sources.

d. Master Plan Summary: This project will install equipment that will provide utilities from a large central plant rather than individual smaller production plants in the campus buildings. The buildings that are projected to be connected to this central plant in the future are as follows: College of Textiles, Monteith Research Center, Constructed Facilities Lab, Toxicology Building, Partners II, Engineering Building Oval, and the Plant Sciences Building. This project is projected to save the University approximately $1,438,000 in utility costs over the next 16-17 years.

**Presentation and Panel Discussion:**

a. The site is prominent on Main Campus Dr. The existing plant celebrates the equipment inside with view windows and focus lighting. The addition will use the same palette of materials, with metal panels and brick.

b. The new boiler wing addition on the east end will be ~5,000 GSF. The new east end wall will be removable for future placement of an additional boiler.

c. The landscape buffer at this east end will be enhanced as part of project to screen views of equipment from the parking nearby and will be installed in phases. There is no landscape project architect, so OUA will be doing the design in-house.

d. The project will add a new transformer and extend the existing screen wall to the west. The existing transformer screen wall is stepped brick, whereas the new will add a metal panel to the top of wall with same color and profile.

e. The new addition will repeat the rhythm and scale of windows and clerestory windows.

f. The new exhaust stack will be somewhat taller than the existing ones, but it will be setback further from the front building façade to reduce its visual impact.

h. The rear elevation has more metal panel and less brick.

i. There is no money in budget to pave the gravel lot: it would impact the ability to pay back the loan from energy savings, but this scope could be added to the Main Campus Drive repaving project, which was postponed to allow for a ductbank project.

j. Two double-wide trailers for Landscape Construction Services, currently located in the future boiler wing footprint, will move to another location.

k. The northwest corner of this site will house a 90’ tall, 80’ wide future Thermal Energy Storage (TES) tank for an energy efficient way to substitute for another chiller by cooling water at night, when energy costs are lower, and using that chilled water during the day when it is needed.

**Panel Action:**

The Panel conditionally approved the project with the following design directives to be incorporated:

1. *Final exterior material selections will be based on field-erected sample panels and reviewed by the Office of the University Architect.*

**Status of Projects in Planning**

1. ES King Village Re-Roofing project: the existing flat roofs need insulation and will have sloped roofs added to better accommodate insulation and provide a more residential character.

2. Case Commons Residential Hall: to provide NCAA compliant on-campus housing for Men’s and Women’s’ basketball student athletes, as well as housing for non-student athletes. The student fee increase has been approved at the university level, but it awaits approval from the Board of Governors.

3. The Centennial Campus Hotel and Conference Center is slated to break ground in the near future.
Status of Projects in Construction
1. The Aloft Hotel on Hillsborough St. has completed and is open for business.
2. Harrelson Hall asbestos abatement is underway in preparation for demolition this summer.
3. The Centennial Campus Reuse Water Infrastructure is nearly complete.

Next Meeting
The next meeting will be March 30, 2016 at 1:30.

Meeting Adjourned at 3:30 p.m.