

# University of Colorado Design Review Board Meeting Notes

Date:	Friday, November 10, 2017
Time:	8:00 a.m. – 4:00 p.m.
Location:	First Floor Conference Room, 1800 Grant Street, Denver

**DRB members present**: Don Brandes; Sarah Brown; Rick Epstein; Victor Olgyay; Michael Winters; Cheri Gerou (ex officio); and Bill Haverly, campus DRB member for the University of Colorado Boulder campus ("CU Boulder").

#### Others in attendance not otherwise noted:

Linda Money, CU Real Estate Services, CU System employee / DRB note taker.

Mr. Brandes, Chair, determined a quorum and called the meeting of the Design Review Board to order at 8:05 a.m.

#### 8:00 – 9:30 a.m. Work Session – Board Only

The Board met to briefly review administrative items with Ms. Gerou and to briefly discuss the items on the agenda prior to convening the public portion of the meeting. Ms. Gerou also provided an update to the Board regarding current legislative matters.

- 9:30 10:15 a.m. Muenzinger Air Intake Exterior Structure Improvements *CU Boulder* Conceptual Design (Action Required)
  - Architects:

CU Boulder Planning Staff

Engineers:

Martin and Martin, Lakewood, Colorado, structural engineers

- CU Boulder Campus Presenter: Jennie Freeman, Campus Landscape Specialist, Facilities Planning
- Other CU Boulder Campus Representatives Present: Bill Haverly, Campus Architect and Director of Planning, Design and Construction Richelle Reilly, Facilities Planner/Landscape Architect, Facilities Planning
  - Ed von Bleichert, Sustainbility and Resiliency Program Manager, Facilities Management

Description:

Amended Conceptual Design submittal addressing the temporary exterior structure of the Muenzinger air intake near the intersection of 18<sup>th</sup> & Colorado and replacing the temporary structure with a permanent structure

# Presentation to the Board/Discussion:

## A. Background Context:

Ms. Freeman summarized the direction provided by the Board regarding the Conceptual Design previously presented to the Board. Included in this summary was to keep in mind the primary goal of creating a structure with straightforward composition and massing that reflects the existing building while also allowing the air intake to function properly and more specific recommendations regarding the design of the structure itself, additional elements, and wayfinding signage.

Ms. Freeman then reviewed updated conceptual designs including:

- Concept A a simple rectangular structure without additional landscaping or seating elements but with wayfinding signage;
- Concept B the same rectangular structure with landscaping from side to side; and
- Concept C the same rectangular structure with limited landscaping, a seat wall, and wayfinding signage.

The proposed materiality for each of the structures varied with each of the concepts. All three options provided allowances for existing bicycle racks, required clearance for access to the fire department connection, and continued access to the tunnel through the existing tunnel lid. Due to the additional uses provided by the design and the possible challenge of matching sandstone colors, Ms. Freeman indicated that the preferred option was Concept C. She also noted that she will begin working with the structural engineers for the project upon completion and approval of the Conceptual Design submittal.

The Board expressed its appreciation to Ms. Freeman for the thoughtful and complete presentation, noting how well Ms. Freeman took the Board's suggestions from the previous meeting into consideration.

## B. DRB Comments:

The Board also shared the following comments and questions with Ms. Freeman in order to help move the project forward:

## Site and Landscape Architecture:

• Adding the landscaping and seat wall elements as proposed would give more dimensionality to the structure;

- Review requirements regarding the required clearance for the fire department connection to ensure that the proposed landscaping will be allowable;
- When finalizing the design, consider a 1/3 to 2/3 split between the proposed landscaping and the seat wall and determine the best option as to which would be the larger proportioned element through the schematic design process:
  - The landscaping should be large enough so it is meaningful;
  - Consider how much the seat wall will be used in order to determine the proper ratio; and
- Ensure that the return of the seat wall on the east side provides sufficient room for uses of the bicycle rack to the east side of the structure.

## Architecture and Design:

- When designing the updated concepts, the study and matching of the horizontal datum lines was completed well;
- Evaluate the connections to the existing building on both the west and east returns:
  - Consider the detail of the west side of the return wall in terms of the use of sandstone and how it will join the inset edge immediately adjacent to the southwest stair tower of the building;
  - Evaluate whether the inset edge could be made from concrete and how it would join the building and the western sandstone wall of the structure;
  - Determine if other materials could be used for the inset edge;
  - Determine if the inset edge could be set back from the southern edge of the stair tower in order to create a small reveal; and
- Determine whether or not a door will be required on the east side return.
- Relocate the map

Mr. Brandes moved for approval of the Conceptual Design submittal with the following recommendations:

- Include the architecture reflected in Concept A with reference to the medallion of sandstone;
- Include the curved ground plane landscaping and seating on the east side of the structure as reflected in Concept C, for which the appropriate level of construction detailing regarding joinery, materiality, stability, proportionality, etc., would be need to be to explored at Schematic Design; and
- After working with the planning staff, determine whether or not the Schematic Design and the Design Development submittal can be combined for the next submittal.

Mr. Epstein seconded the motion which unanimously passed.

The Board thanked Ms. Freeman for the presentation and indicated that it looked forward to the next submittal.

#### 10:15 – 11:00 a.m. Ameresco Solar Proposal for the Boulder Campus – *CU Boulder* Pre-Design Introduction (Information Only)

Architect(s): TBD

CU Boulder Campus Presenter: Richelle Reilly, Facilities Planner/Landscape Architect, Facilities Planning

Other CU Boulder Campus Representatives Present: Bill Haverly, Campus Architect and Director of Planning, Design and Construction Jennie Freeman, Campus Landscape Specialist, Facilities Planning Ed von Bleichert, Sustainbility and Resiliency Program Manager, Facilities Management

Description:

Pre-design introduction presentation

# Presentation to the Board/Discussion:

#### A. Background Context:

Members of the Board and other staff present for the meeting introduced themselves, after which Mr. von Bleichert explained the role of the Sustainability and Resiliency Program at Facilities Management and how it will work with the Boulder campus, and Ms. Reilly introduced Phase I of the proposed solar project for the Boulder Campus. The proposal from Ameresco Solar had been received by the Facilities Planning department approximately two weeks prior to the Board meeting. Ameresco is working with the Utilities Department and the Facilities Management Sustainability office regarding a proposal to install solar photo voltaic equipment sufficient to provide up to 10 MW kWh of power in total over the next three years in order to bolster microgrid performance between the Main Campus Microgrid and the East Campus Microgrid. Facilities Planning is working with the project in order to review the proper land use, building use, and design criteria applicable to such a project.

Elements of the proposed Phase I project include:

- Six proposed solar installations on the Boulder campus for the purpose of adding 3M kWh of annual production including:
  - Three rooftop installations and four solar canopy installations in parking lots;
  - Main Campus installations include a flat rooftop installation at the Recreation Center and a parking lot canopy installation at the intersection of Colorado Avenue and Regent Drive;
  - East Campus installations include a slanted rooftop installation at the SEEC Building, a flat rooftop installation at the Marine Street Science Center Building, and parking lot canopy installations in parking lots near or adjacent to these buildings;
- No budget has been established for this project;

- A schedule for Phase I has been proposed by the contractor, although the timeframe for the schedule can be lengthened; and
- The campus is considering a variety of financing/leasing methods.

Ms. Reilly indicated that the proposal is being brought before the Board in order to discuss this proposal and assist Facilities Planning regarding the establishment of guidelines concerning land use, building use, design criteria, etc.

The Board indicated that no official action would be required for the Pre-Design submittal, although it did indicate that it was appropriate for the Board to review planning, design, and implementation for a project such as this.

## B. DRB Comments:

In order to proceed with next step in the review process, the Board also shared the following comments.

#### Site and Landscape Architecture:

- Articulate the goals, objectives, desired outcomes addressed to sustainability and providing the 10 MW proposed by the total project, as well as addressing resiliency, and how these things can be further defined and articulated over the time horizon over the next several years and determine the overall objectives;
- If not already developed, explore developing an overall energy master plan(s) for both the Main Campus and the East Campus to:
  - Provide a precedence in order to determine how, when, and where these installations can be achieved and where and which installations might be more appropriate than others;
  - Thoughtfully and specifically address the land use and the building articulation in terms of location, visual sensitivities, and appropriateness of any potential installations; and
  - Consider that the overall energy master plan document should:
    - be concise and specific;
    - outlay goals at a high level; and
    - include specific strategies related to these goals and specifically related to the proposed 10 MW project overall rather than pursue it through a piecemeal approach.
- Investgate each campus from planning, design, and land use perspectives and determine which areas of each campus, if any, would be more appropriate for which types of installation:
  - Determine how these areas relate to the energy microgrid for each campus in order to select the best sites;
  - Consider that establishing view corridors from within campus and onto campus from various locations surrounding the campus or within the geographical line of sight regardless of the location; pedestrian and vehicular views can be a larger issue than what physically happens on campus in terms of these installations and

concern regarding the views from outside of campus can be equally as important as what happens within the campus; and

- Conceptualize what the nature and design of the criteria for placement of such installations might be and might include, such as:
  - the view from Flagstaff Mountain;
  - the view from Highway 36;
  - the campus entry points; and
  - walking through campus.
- Determine what approach is appropriate for developing the overall master plan, for example:
  - Consider creating a visual inventory of each campus that would indicate which buildings are more historically significant and which might be more or less appropriate for a photovoltaic installation; and
  - o Determine to what degree would an installation be an imposition.
- Regarding installations within parking lots, knowing that, especially on main campus, the long-term future of these lots is to become a building, consider the ability to which these installations can be removed, especially for large installations.

Mr. von Bleichert indicated that there might be different financing mechanisms based upon the permanency of the installation and that the installation of a solar canopy doesn't render the installation a permanent element.

## Architecture and Design:

- Consider that from a building perspective, there could be an extremely high level of sensitivity for an installation on a building, whether of a flat roof or a sloped roof, given the history of the architectural legacy of the main campus and the evolving architecture for the east campus:
  - Such perspectives should be studied and included within the master plan;
  - This study may express itself in terms of visual studies or appropriate sites; and
  - o Potential implications of such a study should be determined.

## Sustainability and Energy:

- The Board embraces the role and responsibility that sustainability and resiliency can take on the entire CU Boulder campus and is in complete support of these factors for the Main Campus and the East Campus in terms of looking at how the campuses can be more energy efficient and how the campuses can add to their power grids;
- Recognize that solar panels can become an asset; so, if possible, determine where an installation would be appropriate vs. where it's not appropriate;
- Through the planning process, consider that there may be areas where a solar garden, for example, may be appropriate, and there may be areas where energy at the building where it is being consumed may be more appropriate, and a cost vs. benefit analysis of such installations may help indicate the best and most cost-effective applications to pursue for specific areas;

- If the proposal from the contractor can be negotiated so it combines additional elements, it may may possible have a longer payback that would be acceptable for both parties and which may also provide more energy savings in the long term;
- Develop standards for such installations including, for example, minimum sizes for array installations and develop appropriate strategies for determining when such sizes are appropriate; and
- Develop the planning and design guidelines that current and future Design Review Boards can use in order to determine which types of applications are in compliance with the energy master plan and ensure that they have been articulated in these guidelines and that they are thoughtful and appropriate for main campus and east campus.

#### General Comments:

• In order to appropriately respond to the Ameresco proposal with more informed direction, the Board noted that it will need a significant amount of additional information as noted above including but not necessarily limited to an energy master plan, an inventory of campus buildings, and design, planning and landscape guidelines.

Mr. Haverly noted that in addition to renewable energy projects, efficiency energy projects and resiliency efforts can also be important to an overall goal and are supported by the campus and Facilities Planning. In order to pursue projects related to energy efficiency, the Board of Regents provided spending authority a number of years ago some of which has not yet been spent and might still be available. A small number of related projects have been completed on the Boulder campus which have resulted in a decrease in energy consumption.

Mr. von Bleichert also indicated that the campus Utility and Energy Services division also prefers to reduce energy consumption before adding new capacity, and that they prefer not to rush any potential projects through the process.

The Board again expressed its appreciation to the planning staff for the Pre-Design presentation and indicated that it looked forward to receiving additional information in the future related to moving the Boulder campus forward with its sustainability and energy efforts.

11:15 a.m. – 12:45 p.m.	23 <sup>rd</sup> Street Bridge, North of Boulder Creek – CU Boulder Conceptual Design (Action Required)
	Architects/Engineers: Loris and Associates, Inc., Engineering Consultant, Superior, Colorado BHA Design, Inc., Landscape Architects, Fort Collins, Colorado Icon Engineering, Inc., Civil Engineering, Centennial,
	Colorado

Presenters: Dan Beltzer, P.E., Associate, Loris and Associates, Inc. Roger Sherman, Landscape Architect, Principal, BHA Design, Inc. CU Boulder Campus Presenters: Amy Kirtland, Campus Planner for this Project, Facilities Planner/Architect, Facilities Planning Brian Moffitt, Project Manager, Planning, Design & **Construction**, Facilities Management Others Present: Jason Messaros, Landscape Architect, BHA Design, Inc. Other CU Boulder Campus Representatives Present: Bill Haverly, Campus Architect and Director of Planning, **Design and Construction** Jennie Freeman, Campus Landscape Specialist, Facilities Planning Wayne Northcutt, Architect, Facilities Planner, Facilities Management Richelle Reilly, Facilities Planner/Landscape Architect, **Facilities Planning** Ed von Bleichert, Sustainbility and Resiliency Program Manager, Facilities Management

Description:

Conceptual Design submittal; continuation of a project last heard by the Board in October 2016

#### Presentation to the Board/Discussion:

A. Background Context:

The Board and others present for the meeting introduced themselves after which, Ms. Kirtland provided a status update regarding this bridge project. This matter was last brought before the Board in October 2016 for a Conceptual Design submittal. The FEMA grant, provide funding for 75% of the cost of the bridge, is still in place. Phase 1 of the project, consisting of a conceptual design packet and proof of feasibility of the project, was submitted to FEMA in January 2017. Phase 2 of the project will be submitted to FEMA including the technical documentation required for the project through construction.

After Phase 1 was submitted, a cultural resource study was performed on the site area for the project. It identified two areas that were identified as being historically eligible, the first being the Colorado Conservation Corp retaining walls located along the hillside on the south side of Boulder Creek and the second being the 21<sup>st</sup> Street Bridge which will be removed in order to maintain the cost/benefit ratio regarding the floodplain for this 23<sup>rd</sup> Street Bridge project.

During the review process, FEMA notified the planning staff that because this project is a new bridge, after determining if this requirement could be feasible, it would require ADA compabitility for the new structure. ADA accessibility already planned for the forthcoming 19<sup>th</sup> Street bridge was not sufficient to meet the ADA requirements.

Mr. Moffitt noted that FEMA had concerns regarding the cultural resources observed in the area and had requested as part of Phase 1 confirmation of the budget for the project and the hydrology for the site area.

He then reviewed the Phase 2 requirements regarding the Section 106 approval process the the requirement for a memorandum of agreement among FEMA, the university, and the State of Colorado's Historical Preservation Office ("CHPO") and HMGP Grant Office. The agreement has been submitted to CHPO for review and is due back to the university by November 30, 2017. Additionally, for Phase 2 approval, the scope of work for the project needs to be approved by the AGA verifying the changes to the project, the budget, and the hydrology, and the schedule. This will be submitted on November 15 to FEMA for review of which FEMA has 30 days to review. As of this date, planning staff anticipates being able to meet all of the requirements of the original grant.

The grant expires in March 31, 2019, which reflects a one-year extension and which is the date by which the project must be completed. As such, planning staff will need to bring the project back to the Board for Schematic Design review and approval at its meeting in December 2017 and in January 2018 for Design Development review and approval. Completion of the design development and construction documents will need to occur in March 2018 and project bidding will need to occur in April 2018 in order to allow for as completion of the construction by the end of January 2019, leaving the remaining two months to close out the project prior to the end of the grant.

Mr. Moffitt also briefly reviewed the status of the 19<sup>th</sup> Street Bridge project being funded through a DRCOG grant.

Ms. Kirtland reviewed the existing conditions and potential bridge and connecton alternatives, noting that in order to meet the ADA requirements, the proposed alignment is different from what had been previously presented to the Board.

Mr. Beltzer presented a review of the current status of the following related to the 23<sup>rd</sup> Street Bridge project as it currently proposed:

- the mission statement;
- project and sustainability goals;
- opportunities and constraints, including challenges of the proposed schedule;
- design considerations impacting the site including:
  - o floodplain;
  - o topography;
  - o slope analysis and drainage issues; and
  - o existing structures, trees, and utilities.

Mr. Sherman presented information regarding the current site analysis and planning context including:

- project site review;
- design vernacular;
- community connectivity and a social diagram;
- future proposed projects;
- game day, pedestrian, and bicycle circulation, existing experiences, and proposed experiences;
- views of existing conditions; and
- views of existing precedents including local pedestrian bridges over Boulder Creek and Clear Creek for the Peaks to Plains Trail, along other potentially relevant examples of pedestrian bridges over various creek environments located throughout the world.

It was noted that the existing terrain of Boulder Creek, hydrology and floodplain concerns, other limitations, and the ADA compliance requirement are contributing to various challenges and difficulties regarding the designs of the bridge crossing and the landings.

Mr. Beltzer and Mr. Sherman also reviewed:

- new design alternatives for the bridge and landing alignments;
- elevations for the alternate designs;
- how existing trees could be affected by the alternative designs;
- cut/fill requirements for the preferred #4 alternative;
- various landing concepts for the north side of Boulder Creek;
- connections with the North of Boulder Creek campus and neighborhood;
- design options for the bridge and the elevated walkways;
- a massing model for one of the landing concepts showing potential views from various directions;
- potential impacts to the #169 parking lot north of Boulder Creek; and
- options regarding site furnishings, bridge, and landing materials.

Questions and concerns regarding trail grade and alignment, eliminating areas that could become attractive nuisances, project budget and schedule, FEMA permitting, and the removal of visible trees and understory and invasive species were discussed. The driving force behind the design; how the design will minimize the impact to the area and will honor the place of the site; if the design needs to be symmetrical; and the programming, purposes, and alignments regarding 19<sup>th</sup> and 23<sup>rd</sup> Streets existing and future connections; and the proposed plan regarding the use or removal of existing 19<sup>th</sup> Street Bridge, the 21<sup>st</sup> Street Bridge, and Stadium Bridge abutments were also discussed.

## B. DRB Comments:

The Board and the project planning staff then went into executive session and made the following recommendations to share with the consultants:

#### Site and Landscape Architecture:

(Included below.)

## Architecture and Design:

Understanding that a significant change could cause the need for additional hydrological studies and could render the existing project schedule impossible to meet and considering that the safety and access for all users and the technical aspects regarding engineering concerns, etc., will still need to be taken into account:

- Study the landings, their locations, how they are different from each other, how they complement each other, the materiality for both, and what should they be based on their relationship to the Buff Walk;
- Determine whether or not it would be acceptable to leave the expression and architectural materiality of the campus behind;
- Reconsider the designs of both the north and the south landings and reconsider the location of the north landing, determine if these can be simplified and made into a more unified element;
- Contemplate creating something without the collegiate sense and feel of the Buff Walk and the campus but rather something that will become a memorable experience for the user and that will reflect a sense of being in the trees without being overwhelmed by the physical presence of the landings and the crossing as they are currently proposed;
- Imagine that as soon as one leaves the Buff Walk, they are leaving the metaphorically campus and are in the trees, which would be an intensely difference experience;
- Consider exploring a landing on the north side of Boulder Creek where it accomplishes what it needs to accomplish without being overwhelming by its size and magnitude; develop a landing that is simpler, lighter, feels more like it is a part of the landscape, and perhaps is not symmetrical in its design;
- Also review whether the landing on the north side could be located south of the bicycle path adjacent to the creek instead of on the north side of the path;
- Explore the idea of a crossing that is light and artful and represents the fluvial nature of the creek below it, and which feels like one event rather than separate elements leading from one to another, without the necessity of acute 90-degee turns to get from one side to the other, and consider materiality for the railing, the lighting, etc., for such a crossing; and
- Encourage ways to promote the experience of the crossing and to discourage a desire to get from one end of the crossing to the other as quickly as possible.

## Sustainability and Energy:

(No items discussed.)

#### General Comments:

The Board agreed to hold a workshop to study the 23<sup>rd</sup> Street Bridge project with the design and planning teams before its next meeting in December and tabled action on the proposed Conceptual Design submittal.

# Ramaley Addition, Integrative Physiology (IPHY) Relocation -1:15 – 2:45 p.m. CU Boulder **Conceptual Design** (Action Required) Architects: Hord Coplan Macht, Inc., Denver, Colorado, architects RATIO Architects, Indianapolis, Indianna Presenters: Jennifer Cordes, AIA, LEEP AP, Principal, CPSO, Hord Coplan Macht Chris Boardman, AIA, LEED AP, Principal/STEM, RATIO Architects CU Boulder Campus Presenters: Wayne Northcutt, Architect, Facilities Planner, Facilities Management Others Present: Tim Wellner, AIA, LEED AP, Project Manager, Hord Coplan Macht Chris McBride, ASLA, Landscape Architect, Hord Coplan Macht David Shaffer, Architect, RATIO Architects Other CU Boulder Campus Representatives Present: Bill Haverly, Campus Architect and Director of Planning, **Design and Construction** Jennie Freeman, Campus Landscape Specialist, Facilities Planning Richelle Reilly, Facilities Planner/Landscape Architect, **Facilities Planning** Ed von Bleichert, Sustainbility and Resiliency Program Manager, Facilities Management Description: Conceptual Design submittal for addition to existing

Conceptual Design submittal for addition to existing building for the relocation of the Integrative Physiology Program

# Presentation to the Board/Discussion:

## A. Background Context:

The Board and others present for the meeting introduced themselves after which, Mr. Northcutt briefly reviewed the status of this project. The Pre-Design Introductory presentation came before the Board at its regular meeting in October 2017. The Board also held a conference call in late October whereby the Board provided a number of suggestions and recommendations for the design team and planning staff to consider. Mr. Northcutt indicated that these suggestions and recommendations were forwarded on to the design team for the Conceptual Design submission being presented at this meeting.

Ms. Cordes began the review of the Conceptual Design submittal package by briefly reviewing the goals of the project related to the Integrated Physiology Program (IPHY), including site and landscape goals, architectural goals, and sustainability goals.

The cost estimate for the project is approximately \$15M - \$16M, including new construction excluding MEP, including site work, and including two separate mechanical options.

Mr. McBride and Mr. Boardman reviewed the conceptual site area plans including:

- the neighboring buildings and potential sites for the new IPHY location;
- a topographical map;
- existing vegetation and utilities;
- definition of site;
- preliminary and more detailed conceptual site plan options, site sections, and sun angles for the space between Norlin Library and the new building addition for each of the linear, rotated, and gap schemes;
- precedent imagry and ideas, especially related to the courtyard space between the new building and Norlin Library; and
- preliminary sketch up model of the gap scheme and the site and surrounding areas.

The Board also reviewed and discussed with the consultants 3-D models showing the optional schemes, the surrounding buildings, and the site area.

## B. DRB Comments:

The following comments were shared with the design team:

#### Site and Landscape Architecture:

- Consider the termination of the articulation on Pleasant Street north of the addition and if an entry plaza or medallion could be created, reviewing where the permeable pavers end and the concrete starts so the transition isn't arbitrary in relationship to the architecture and the location of the new building; and
- Resolving the pedestrian connection between the new addition and Norlin Library and the service drive, especially regarding how to discourage pedestrians and views into the service area.
- Consider the space between the new addition and Norlin and the character of the courtyard, whether there should be access to the building, and the quality of daylight there.

## Architecture and Design:

- Look at the massing and create autonomy from the old addition in scale and character.
- Consider separating the new and old addition.

#### Sustainability and Energy:

• Review at the wind pattern on the western side of the addition and consider increasing ventilation and efficiency of the roof/penthouse stacks/mechanical equipment by determining how the wind flows and if the massing could help with comfort as well as aesthetics.

Mr. Epstein moved to approve Concept Design with the direction shown in the "refined (rotated) gap" scheme, developing it with a dual colonnade, and to explore issues with access and massing. Ms. Brown seconded the motion, which unanimously passed.

3:00 – 4:00 p.m.	Aerospace – North Wing Addition, College of Engineering – CU Boulder Pre-Design Introduction (Information Only)		
	Architects:	Hord Coplan Macht, Inc., Denver, Colorado, architects RATIO Architects, Indianapolis, Indiana PLOT Project, LLC, Denver, Colorado, landscape architects,	
	Presenters:	Jennifer Cordes, Principal, Hord Coplan Macht Kent Freed, Principal, PLOT Project, LLC Anthony Mazzeo, Principal, PLOT Project, LLC	
	CU Boulder (	Campus Presenter: Wayne Northcutt, Architect, Facilities Planner, Facilities Management	
	Other CU Bo	ulder Campus Representatives Present: Bill Haverly, Campus Architect and Director of Planning, Design and Construction James Faber, Project Manager, Construction Management, Facilities Management Jennie Freeman, Campus Landscape Specialist, Facilities Planning Richelle Reilly, Facilities Planner/Landscape Architect, Facilities Planning	
	Others Prese	ent: Ro-Tien Lang, Architect, Hord Coplan Macht, Inc. Chris McBride, ASLA, Landscape Architect, Hord Coplan Macht David Shaffer, Architect, RATIO Architects Tim Wellner, AIA, LEED AP, Project Manager, Hord Coplan Macht	
	Description:	Pre-design introduction presentation for addition to recently approved building for the Aerospace Engineering Program currently under construction	

## Presentation to the Board/Discussion:

## A. Background Context:

Ms. Cordes began the presentation by noting that the new Aerospace Engineering Sciences ("AES") Building had originally been designed for 800 students, and at the beginning of the current academic year, there were over 900 students enrolled in the program with anticipated continued growth in the program.

Mr. Northcutt indicated that the growth in the program had been planned for the expansion to the original AES building but that it had not been expected to occur so quickly. The program now anticipates having an enrollment of approximately 1,100 students in the relatively near future which has accelerated the completion of the planned expansion.

Based on the enrollment projection of 1,100 students, Ms. Cordes noted that the AES Program is hoping that the expansion will be able to provide:

- Additional classrooms and faculty and research offices associated with the increased enrollment;
- A large autoclave needed in order to sterilize various pieces being installed within some of the program's satellites not previously planned for the original building;
- An additional high bay with a gantry crane and potential vehicular access not previously planned for the original building; and
- Additional graduate level space required for accreditation purposes.

The goals for the expansion discussed with the AES program included:

- Expanding interior space for the growing enrollment;
- Building on the current vocabulary of the building and landscape architecture; and
- Strategically designing it to work within the contractor's schedule for the original building.

Additionally, Ms. Cordes and Mr. Freed noted or reviewed the:

- Preliminary budget for the new addition is \$13.7 million based upon bids for the current AES Building construction project;
- Outdoor program is not expanding with this request for the square footage, so the exterior space will be able to accommodate the anticipated growth in students;
- Area master plan from the original building;
- Existing site area plan including challenges and opportunities related to the expansion;
- Existing grading plans;
- Definition of the site area for the expansion;
- Existing building vocabulary and massing;
- Existing building floor plans, layout, stacking, and infrastructure;
- Existing materials palette; and
- Existing sustainability and energy goals and systems:
  - noting that the expansion will need an additional penthouse and a second air handling unit and that all other units have been sized for the addition.

Although not part of the scope of this expansion project, Ms. Reilly briefly discussed the pedestrian bridge originally proposed for a corridor north of the building and how the expansion may influence the future plans for this corridor.

## B. DRB Comments:

The Board also shared the following comments in order to inform the design of the Conceptual Design submittal, the design team was encouraged to:

#### Site and Landscaping:

- Ensure that the design of the expansion won't impede into the north courtyard of the original building;
- Consider updating the master plan as it relates to the pedestrian bridge corridor in order to:
  - ensure that it won't bisect the flight field paths extending to the north of the original building; and
  - show how the alignment may influence the landscape architecture included within the scope of the expansion.

#### Architecture and Design:

• Consider how the massing, height, volume, access, building edges, etc., can be designed so they are consistent and complementary to the original design.

## Sustainability and Energy:

• Consider what has been learned through the documentation process as it relates to the original building and how the expansion create an opportunity for an improvement to or may influence the original sustainability and energy plans.

The Board recognized the challenges that will be present related to the design of the expansion and indicated that it looked forward to the Conceptual Design submittal.

There being no further business, the public meeting of the Design Review Board was adjourned at 3:25 p.m.