University of Colorado
Boulder | Colorado Springs | Denver | Anschutz Medical Campus

University of Colorado Design Review Board
Meeting Notes

Date: Thursday, July 12, 2018
Time: 8:30 a.m. – 4:45 p.m.
Location: First Floor Conference Room, 1800 Grant Street, Denver

DRB members present: Don Brandes; Sarah Brown; Victor Olgyay; Michael Winters; Cheri Gerou (ex officio); Bill Haverly, campus DRB member for the University of Colorado Boulder campus ("CU Boulder"); and André Vite, campus DRB member for the University of Colorado Denver campus ("CU Denver") and the CU Anschutz Medical Campus ("CU Anschutz").

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 8:20 a.m.

8:30 – 10:00 a.m. **Work Session – Board Only**

The Board met to briefly discuss the items on the agendas for this date prior to convening the public portion of the meeting.

10:00 – 11:00 a.m. **New Garage/Police Facility – CU Anschutz Medical Campus Pre-Design** (Information Only)

Architects:
Stantec, Denver, Colorado

Presenter:
Dominic Weilminster, AIA, Principal/Board Member,
RNL Design/Stantec, Project Designer

CU Anschutz Campus Presenter:
André Vite, AIA, Campus Architect, Office of Institutional Planning, CU Denver/CU Anschutz

Description:
Pre-Design meeting for the design and construction of a new 1,806 space parking structure with a new 25,903 GSF University Police facility incorporated within it

A/E Presentation:

Andre Vite provided an update regarding property owned by the Fitzsimons Redevelopment Authority and potential changes to the CU Anschutz campus master plan, especially regarding transportation planning. Dominic Weilminster presented the pre-design package for this project.

DRB Comments:

A. Site & Landscape Architecture:

Incorporate the context of Andre's presentation and explanation of master planning relationships and connections to the Garage/Police project for the project area. Summarize and illustrate related and proposed FRA adjustments to street alignments.

- Project is considerably more than an infrastructure project – this is an urban design strategy.
- At conceptual the consultant should look more specifically at the relationships, the adjacencies, and areas of activation/placemaking.
- Please provide a more comprehensive analysis of area-wide and site opportunities and constraints.
- At conceptual, please provide a synthesis of how you are achieving the development goals and objectives, solving area and site constraints and providing a range of conceptual site/architectural alternatives.
- Please provide two or three well developed concepts that you think address technical, planning and architectural issues.
- The University will forward to you some examples of "Conceptual Design" submittals that may be helpful in defining your submission.

B. Architecture:

- From an urban design and architectural perspective, consider and illustrate what components and elements help to make the garage, police, and perhaps some support retail/commercial successful.
- Consider mobility issues coupled with the environmental issues.
- Consider impact of:
    - Arrival from the north – address associated architectural issues.
    - User experience.
    - Walkable campus environment.
    - Use during overtime.
    - Providing a positive impact on pedestrian environment.
    - Expressing pedestrian movement.
    - Creating a project that provides a holistic opportunity to contribute.
    - Consider future bus stop and shuttle incorporation into project.

- Vehicular access to the north off 18th place is preferred – perhaps no vehicular access on Scranton:
    - Scranton as a green street is an opportunity to activate the east façade of the parking structure.

- Consider the length of the building between activation points on the garage structure.

- Police and/or retail. How can both be used as a way to activate the street level?
    - The police building being independent from the parking structure would be a positive scaling element on Scranton.

- Bring examples for Concept Design of treatments for both the outside and inside of the garage that can be implemented.

- Study the best orientation and location for a garage ramp and its affect to the streetscape and urban context.

- Study various points of arrival and entry.

- Explore how you can introduce light through the structure.

- Edges of this project are very important:
    - The relationship of the police to parking, the streetscape, and the connection into Personalized Medicine.

- Opportunities to improve the internal experience of a parking structure are:
    - Increase floor-to-floor heights.
    - Painting the interior of structure white.
    - Adding light wells to provide daylight at interior parking zones.
    - Study the arrival opportunity at the bridge connection floor to the Personalized Medicine for patients.

- Explore the methods and extent of the conceptual design presentation in terms of the building elevations, site cross-sections, and visual walk-throughs to help the DRB better understand the proposed conceptual design alternatives.

- Show how a ramp on an exterior façade can be successfully resolved in elevation.

- Bring visual examples of successful improvements to other existing parking structure designs both internal and external which could be incorporated into this project.

C. Energy and Sustainability:

- Consider the planning and design of the garage as a “mobility center:”
    - Electric car charging, bicycle parking, shuttle stops accommodates for Uber/other transit options.

- Consider the embodied energy content of the materials for example, create a baseline EPD to improve on.

- Can the new garage be part of the stormwater quality improvement program?
- How is the overall project intergrated into street level landscape/hydrology design?.
- Consider how to address the “heat island effect” of the structure (green walls, etc.):
    - Also consider the renewable energy opportunity or providing solar PV on the roof, possibly with a PPA.
- “Make this a place” (for people! – not just cars) both the building interval as well as the building edges.
- Study Daylighting.
- Study Ventilation.

DRB Action:

No action beyond the direction noted above was required for this matter. The University will be sending the A/E firm some previous Conceptual Design submittals for informational purposes.

11:00 a.m. – 12:00 p.m. **Colonel’s Row Marcus Institute for Brain Health Institute – CU Anschutz Medical Campus**
Action Required

Architects:
DAO Architecture, Westminster, Colorado

Presenter:
Dan Orecchio, RA, NCARB, DAO Architecture

CU Anschutz Campus Presenter:
André Vite, AIA, Campus Architect, Office of Institutional Planning, CU Denver/CU Anschutz

Description:
Renovation of ~5,364 GSF of existing residential space on the CU Anschutz Medical Campus including minor repairs and upgrades to the exterior such as replacing or repairing existing windows, door hardware, roof and roof tiles, stucco, and the addition of two ADA compliant access ramps that will be covered by a new roof

A/E Presentation:

Dan Orecchio, RA, NCARB presented the Colonel’s Row Exterior Renovation submittal.

DRB Comments:

A. Site & Landscape Architecture:

- Consider bringing the wall ramp down 18" to allow a lower landscape treatment and a space for signage treatment:
    - It may be that landscape treatment is dis-contiguous.
    - Consider more landscape material in the 8"-12" height range.

B. Architecture:

- Removal of the roof canopy is an improvement.

- Option A with more of the porch element engaged with a simple singular ramp is preferred direction:
    - The height of the wall that is projecting out needs to be studied.
    - Function of the front wall is to hide the slope of the ramp – seems a little high.
    - Perhaps if you could lower that wall, it needs to hide the handrail (it can be a very simple handrail - something simple but elegant).
    - Since guardrails are not required in terms of that lower wall.

- The intent is to keep the front wall from looking like a barrier.

- Lower front wall to 18"-24":
    - Could it be studied as two staggered walls with a simple rail on top.

- Consider aligning the top of the low wall with the elevation of the porch.

- Integrate railings on the top of wall.

- Study the details of the railings:
    - Consider flat stock material vs. pipe railing

Please provide a couple of options with sections through the ramp.

C. Energy and Sustainability:

In general, this submittal was responsive to the requests of DRB.

- DRB tries to ensure that the greatest value is achieved in each project it reviews.

- The vinyl windows vs. fiberglass costs should be reviewed:
    - Upgrade to fiberglass may be a 30% upgrade, not as reported by your vendor.
    - In terms of long-term value of a material that is so much more thermally stable (less air leakage).

- This is a project that is likely to be repeated in other places – it sets some precedent.

- Rather than design to meet code, consider designing for the best value and lowest cost of ownership.

Please consider air-to-air heat exchanger in reference to the tightness of construction:

- Which would require fresh air if the building envelope is tight.
- Caulking is inexpensive – it can dramatically tighten the building construction.
- Performance aspect of energy issues should be examined over prescriptive.
- Consider commissioning the building to a blower door test, seal air leaks in envelope, and provide adequate fresh air with air-to-air heat exchangers.
- Often a "performance approach" will provide lower first cost and lower operating costs and a better long-term value to energy issues:
    - For example, fan pressure can be reduced with a duct layout that uses fewer bends, fewer right angles and larger ducts.

Windows:

- Reconsider fiberglass windows – first cost may not be as significant premium and provides a long-term value.

DRB Action:

Drawings and options to be submitted to André Vite and relayed onto DRB for review and approval without reappearance to DRB.

12:30 – 2:00 p.m. **UCHealth University of Colorado Hospital – Anschutz Inpatient Pavilion Tower 3 Expansion – *CU Anschutz Medical Campus* Conceptual Design**

Architects/Engineers:

Altus Architectural Studios, Denver, Colorado; architect of record; programming & planning, coordination & document development
EYP Architecture & Engineering, Denver, Colorado; lead exterior design, programming & planning, standards expert
Affiliated Engineers, Inc., Denver, Colorado; MEP design, low voltage, lighting design
Martin & Martin, Lakewood, Colorado; civil and structural engineering
Kimley-Horn, Denver, Colorado; landscape architecture

Presenters:

Sean Menogan, Vice President, Facilities, Design and Construction, UCHealth
Sheila Elijah-Barnwell, Ph.D., AIA, NCARB, LEED AP, EDAC, Director of Healthcare, Altus Architectural Studios
Tushar Gupta, AIA, Lead Designer, EYP
Kevin Jayne, PE, LEED AP, Affiliated Engineenrs, Inc.

CU Anschutz Campus Presenter:

André Vite, AIA, Campus Architect, Office of Institutional Planning, CU Denver/CU Anschutz

Other CU Anschutz Representatives Present:
Casey Shukowski, Manager, Clinical Planning and Design, UCHealth

Description:
Conceptual Design submittal for new UCHealth University of Colorado Hospital expansion project consisting primarily of a new inpatient bed tower and associated amenities to support planned inpatient services growth

A/E Presentation:

Sean Menogan provided a brief update regarding the status of the project. Sheila Elija-Barnwell, Tushar Gupta, and Kevin Jayne presented the Conceptual Design submittal.

DRB Comments:

A. Site & Landscape Architecture

- We would encourage the A/E project Landscape Architect to become more involved in the project. Specifically, on pages 16 and 17 of the submittal, site constraints are indicated but not addressed.

- The interstitial area between the parking area and Tower 3 needs a compelling urban design concept:
    - Factors related to the pedestrian, vehicular, operations, emergency, burial of fuel tanks, landscaping, lighting, determination as to whether it is a pedestrian space or not. All of these urban design opportunities and constraints have not been explored, explained or illustrated.
    - There is no oveall site conceptual plan, landscape plan, site plan, planting plan, elevations, sections to inform the DRB that the development program or project goals are being achieved.

- Consider lowering the scale of the podium and how this ground plane can be designed into a great urban place.

- Provide an enlarged plan and 3D visuals of the space between the garage and the hospital to better understand urban design and site improvement opportunities.

- Could the south exit circulation be treated less like a roadway and more like an urban plaza which allows vehicular traffic?

- Study pedestrian connections, especially along and across 17th Avenue.

- Landscaping to north of the CUP and along 17th Avenue needs to be developed along with this project.

B. Architecture:

Massing:

- How does the architectural massing and form sit on the plinth? It appears somewhat awkward.

- The curvilinear façades do not seem to be the right approach.

- Massing on west side is problematic – not yet resolved.

- The butterfly massing is the final architectural direction and needs more study. It could be more rectilinear or one more simple angular move to the north – not a converse curve.

- The height of the podium at the west and north seems too tall:
    - Perhaps use the 2nd level pedestrian loop as a definition of podium.

- The podium at the south should tie into the existing podium of AIP2.

- All of the proposed schemes need consideration with regard to the proportion, scale, and massing with relationship to the existing building. Please further study and consider:
    - The verticality of the south end of the building.
    - The proportion of the plinth/base of levels 1, 2, and 3 and how the base relates to the tower.
    - Proportion of proposed endpoint of building is not as elegant as existing structure.
    - The horizontal and vertical reveals.

Overall – the building mass articulation and integration of the adjacent building with the site need more studies for submittal to DRB. Please evaluate and illustrate more pedestrian views of building. Clarify how you are adding a new facility and the relative impacts to parking and circulation.

C. Energy and Sustainability:

- Questions from last DRB meeting have not been addressed regarding sustainability and energy.

- Please articulate and explain the existing end uses for energy in AIP2:
    - Use this information to inform the design of AIP3.

- Articulate an energy strategy, both process and product:
    - Clarify goals, beyond code, and a plan for achieving them.

- Develop a strategy for known issues, for example: The west elevation is a glare/heat gain problem. This could be addressed with the building massing (as indicated in some diagrams provided) to reduce the western exposure.
    - Or, the window/wall ratio could be reduced to decrease the scale of the issue.
    - Or some entrance shading could reduce the extent of heat gain.
    - But, the issue should be analyzed and addressed.

- Consider a mechanical system strategy that is integrated with design and structure to minimize duct runs, static pressure, fan energy, and first cost.

- Optimize the energy strategy using parametric analysis so it can inform the architectural design, rather than being compromised.

- Look at more energy efficient hospital precedents:
    - There are some great examples, so we do not have to reinvent everything.

DRB Action:

Donald Brandes moved to table action on the Conceptual Design submittal to allow the A/E team an opportunity to come back and address DRB concerns noted above. Victor Olgyay seconded the motion which unanimously passed. The University will forward examples of previous Conceptual Design submittals that may illustrate and inform the A/E firm on the level of information and detail that is desired at the Concept Design stage.

2:15 – 3:45 p.m. **19th Street Pedestrian Bridge – CU Boulder**
Conceptual Design

Architects/Engineers:
Loris and Associates, Inc., Engineering Consultant, Superior, Colorado
BHA Design, Inc., Landscape Architects, Fort Collins, Colorado

Presenters:
Roger Sherman, BHA Design, Inc.
Peter J. Loris, P.E., Associate, Loris and Associates, Inc.
David Graff, P.E., Loris and Associates, Inc.

CU Boulder Campus Presenters:
Brian Moffitt, Project Manager, Planning, Design & Construction, Facilities Management
Richelle Reilly, Facilities Planner/Landscape Architect, Facilities Planning

Other CU Boulder Campus Representatives Present:
Tom Goodhew, Assistant Director and Planning Manager, Facilities Planning
Bill Haverly, Campus Architect and Director of Planning, Design and Construction

Description:
Conceptual Design submittal for pedestrian path connecting North of Boulder Creek to Main Campus at 19th Street

A/E Presentation:

Richelle Reilly provided a brief update regarding the project. Roger Sherman and Peter Loris presented the project package for Conceptual Design.

DRB Comments:

A. Site & Landscape Architecture:

- Overall, the placement and alignment of Option 1 is preferred with the addition of the pedestrian bridge crossing to the lower open space along Boulder Creek.

- Need more detail on both north and south landings in terms of accommodating existing site constraints, site plans for the plaza/landings, and landscape treatments.

- Need more conceptual detail on the constructability of the project in terms of the crossing structure, pavements, walls, lighting, signage, planting, etc.

B. Architecture

- Option 1 needs to resolve the steam pipe details in regards to bridge or pedestrian interaction:
  - Perhaps the bridge could move further to the west to separate itself from the steam pipe at north landing side.
  - Perhaps the pedestrian design from Clare Small Building to the landing at the east from Option 2 could be included in Option 1 (seems to be under budget).
  - Perhaps this pedestrian connection could extend and continue to the east 23rd Street Bridge landing as well.

- Add the maintenance bridge to Option 1.

- Provide sun/shadow studies for both Options 1 and 4.

- Option 1 is DRB board's preference for the following reasons:
  - The alignment.
  - The touch-down on the south side of the creek.
  - The minimum impact to the lower trail.

In General:

- The bridge structure should be elegant with a light intervention with the lower path.

- Breakaway bridge is most desirable, allowing for public access to the lower path.

- South and north landings need study as to the size, geometry and their integration into the landscape and approach to the bridge.

- Consider the design flexibility of the "breakaway" bridge:
  - It offers opportunity to have very different alignments then the designs currently show.

- Identify the “opportunity moments” along the trail and build the design to incorporate these:
  - Overlooks
  - Edges
  - Landmarks

- What about less?
  - Can we make “light touch” - minimal structure?

C. Energy and Sustainability:

- Think about materials – set a baseline using EPD data, then improve on it.

DRB Action:

Action was tabled until July 26, 2018, to allow the team an opportunity to address concerns noted above.

3:45 – 4:45 p.m. **30th Street & Colorado Avenue Underpass – CU Boulder Introduction** (Information Only)

Architects/Engineers:
Loris and Associates, Inc., Engineering Consultant, Superior, Colorado

Presenters:
Melanie Sloan, Transportation Planning, City of Boulder
Peter J. Loris, P.E., Associate, Loris and Associates, Inc.

Other CU Boulder Campus Representatives Present:
Tom Goodhew, Assistant Director and Planning Manager, Facilities Planning
Bill Haverly, Campus Architect and Director of Planning, Design and Construction
Richelle Reilly, Facilities Planner/Landscape Architect, Facilities Planning

Description:
Pedestrian and bicycle underpass at the intersection of 30th Street and Colorado Avenue

A/E Presentation:

Melanie Sloan and Peter Loris presented an informational package regarding the underpass project at 30th Street and Colorado Avenue in Boulder.

DRB Comments:

A. Site & Landscape Architecture

- The City Transportation Department has a national reputation for award winning transportation, pedertrain and mobility projects. The University and the DRB board look forward to working with the City on this underpass to benefit the overall Boulder community and the University.

B. Architecture:

No comment.

C. Energy and Sustainability:

No comment.

DRB Action:

This item was for information only and required no action at this time.

There being no further business, the public meeting of the Design Review Board was adjourned at 4:45 p.m.

University of Colorado
Boulder | Colorado Springs | Denver | Anschutz Medical Campus

University of Colorado Design Review Board
Meeting Notes

Date: Friday, July 13, 2018
Time: 9:00 a.m. – 12:00 p.m.
Location: Conference Rooms 502 & 503, Fifth Floor, 1800 Grant Street, Denver

DRB members present: Don Brandes; Sarah Brown; Victor Olgyay; Michael Winters; Cheri Gerou (ex officio); and Carolyn Fox, campus DRB member for the University of Colorado Colorado Springs campus ("CU Colorado Springs").

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 9:00 a.m.

9:00 – 10:00 a.m. **Work Session – Board Only**

The Board met to briefly to discuss the item on the agenda for this date and items heard the day before prior to convening the public portion of the meeting.

10:00 a.m. – 12:00 p.m. **William J. Hybl Sports Medicine & Performance Center – CU Colorado Springs (the "Hybl Center")**
Pre-Schematic Submittal Design Workshop

Architects/Designers/Project Team:
- RTA Architects, Colorado Springs, Colorado
- HOK, Designers, St. Louis, Missouri
- Thomas + Thomas Planning, Urban Design + Landscape Architecture, Inc., Colorado Springs, Colorado
- JE Dunn Construction, Denver, Colorado

Presenter:
- Eli Hoisington, AIA, LEED AP, Design Principal, HOK
- Jeffrey Davis, Regional Leader of Planning and Landscape Architecture, HOK

CU Colorado Springs Campus Presenter:
- Carolyn Fox, Executive Director, Planning, Design & Construction, and University Architect, Facilities Management

Others Present:
- Jim Houk, MLA, PLA, President, Thomas + Thomas

Description:

Interim Review for Schematic Design submittal regard new building to be located on North Nevada Avenue for clinics, academics, and research to create an interprofessional approach to develop future healthcare providers.

A/E Presentation:

Eli Hoisington and Jeffrey Davis presented updates and progress on landscape designs, site layout, and building architecture and detailing.

DRB Comments:

Great presentation for pre-schematic design.

The Hybl consultants were really successful in addressing the six noted issues from the June 19, 2018, meeting notes.

A. Site & Landscape Architecture:

Lighting:

- Lighting along north path should be respectful to the building; consider using bollard lighting in lieu of pole lights.
- Continue to evaluate the placement and hierarchy of the exterior lighting in terms of the fixture type.
- The DRB Board supports the direction the A/E consultants are presenting with the site and landscape “kit of parts” which incorporates functionality and compliments the architecture. Coordinate with UCCS staff.
- Consider the affect of the spill and illumination of the building given its size and the amount of glazing.

Site/Landscape:

- Evaluate the geometry of the entry turn-around and the width of the roadway.
- Evaluate the entry plaza in terms of the glass and the placement of the medallion and landscape improvements.
- Continue to study the the placement and size of the entry plaza to provide shade and relief in terms of solar orientation.
- Study the fire access in terms of the width and edge treatment.
- Continue to plan and detail the planting palette, site details, walls, walks and and pavement materials and details.

Signage & Wayfinding:

- At the schematic plan submittal please work with UCCS staff to illustrate preliminary "thoughts" on the hierarchy of project way-finding and signage.

B. Architecture:

Massing:

- The consultants have done a wonderful job with VR.
- DRB would still like to see the views looking from ENT Center.
- How does the massing of the Hybl building and the relationship of Lane look?
- How does the massing of Hybl building look from Nevada?

Entry:

- Study the articulation of the entry canopy at the main NW entry – the side verticals make the entry portal seem "tacked" on.

Student Entry:

- The shape of the glass entry element at the east student entry should be simplified; the building is angular and the window should be angular as well.
- Study the size of the entry platform landing at the east student entry; it appears to be too small to accommodate the door swings or ADA wheelchair movements.
- Glass at south façade:
    - Should the glass within the metal panels be recessed to be in the same plane as the windows in the brick wall below.
    - Design team to study this area through wall sections prior to next meeting.

General Details:

- Look at details and color of soffits related to the brick framed elements:
    - Consideration to be given to the columns on the underside of the soffits and what that wants to look like, specifically the floating soffits with brick attachments to them.
- Need to see the detail at the intersection of the folded roof and the soffits:
    - How the folded roof makes the intersections with those soffits.
- Building color – silver is preferred over beige:
    - Metal panel samples would be beneficial at Design Development.
    - Metal roof wrap – a large expanse of beige metal, particularly on the large south face is not desirable:
        - The lighter color will be crisp and will let the bring stand out.
        - Beige will "muddy" the brick color.
        - Lighter color roof folded is preferred.
- Please provide sections of the building.

C. Energy and Sustainability:

- Consider the energy loads from the end-use description. This will tell us the best areas to invest in, envelope, etc.

- Consider energy demand charges:
    - Perhaps the building contains electrical storage (batteries) that may make economical sense.

- Evaluate a mechanical systems strategy.

- Consider integrating the mechanical system into the building for efficient, simple strategies to achieve substantial energy savings:
    - If model shows simultaneous heating and cooling, a hydraulic thermal storage system may be an option.

- Design short, large, straight ducts for low static pressure and fan energy.

- Consider air-to-air heat recovery.

- DRB appreciates ventilation strategy:
    - Should be included as an opportunity to provide ability to operate building when building electricity is compromised (resilience).

- Review window/wall ratios; building looks over-glazed.

- Consider optimizing the building envelope by increasing insulation:
    - May be able to reduce mechanical system size/reduce capital costs.

- Try to increase daylight autonomy factor.

- Try to hit architecture 2030 EVI goals.

- Use “Tally” or similar system to assess embodied energy in building.

- Provide a comprehensive plug load list.

DRB Action:

No action beyond the direction noted above was required for this matter.

The Schematic Design meeting for the Hybl Sports Medicine project will be held on the UCCS campus from 9 am -12 pm on Friday, August 17, 2018.

There being no further business, the public meeting of the Design Review Board was adjourned at 12:45 p.m.