#### **MEMORANDUM**

TO: University Facilities Planning Board: Royce Smith - Chair, Walt Banziger - Vice Chair, Kregg

Aytes, Kurt Blunck, City of Bozeman, Chris Catlett, ASMSU President, Ian Eastes, Michael Everts, Chris Fastnow, Greg Gilpin, Brett Gunnink, Keith Hamburg, Neil Jorgensen, ASMSU, Terry Leist, Robert Mokwa, Chris Kearns, Renee Reijo Pera, Fatih Rifki, Tom Stump, Julie Tatarka, Jim Thull,

David Kack, Leslie Schmidt, and Nicole Redding

FROM: Candace Mastel, Planner; Campus Planning, Design & Construction

RE: **February 6, 2018** meeting of the University Facilities Planning Board to be held in the **Facilities** 

Meeting Quonset at 3:30 pm

#### ITEM No. 1 - APPROVAL OF NOTES

Draft notes from December 16, 2017 to be distributed before next meeting.

#### ITEM No. 2 – EXECUTIVE COMMITTEE REPORT

Report on any current Executive Committee actions

<u>ITEM No. 3 – CONSENT AGENDA</u> None

ITEM No. 4 – RECOMMENDATION Koch Story & Langford Parking Lot Verizon Small Cell

Locations

**Presenter:** Pat Simmons

ITEM No. 5 – RECOMMENDATION South Hedges Rooftop T-Mobile Communications Facility (Antenna)

**Presenter:** Pat Simmons

ITEM No. 6 – INFORMATIONAL Classrooms Upgrades 2018 Design Development

Presenter: Jaclyn Liebscher

#### **HORIZON ITEMS**

- Interior Public Spaces Signage
- Turf Fields Facility Concept
- Renne Library Spaces & Technology Renovation
- External Building Signage Policy
- Master Planning Issues
- Revisit and Update Policies

#### CM/as

PC:

President Cruzado
Amber Vestal, President's Office
Maggie Hammett, President's Office
Julie Heard, Provost Office
ASMSU President

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Lisa Hespen, VP Admin & Finance

Heidi Gagnon, VP Admin & Finance Jennifer Joyce, VP Student Success Leslie Schmidt, Asst.VP Research Office Tony Campeau, Registrar Frank Parrish, MSU Police Becky McMillan, Auxiliaries Services Julie Kipfer, Communications Jody Barney, College of Agriculture Susan Fraser, College of Agriculture Robin Happel, College of Agriculture Elizabeth Schmidt, College of Business Candace Mastel, Campus Planning

#### MEETING MINUTES OF THE UNIVERSITY FACILITIES PLANNING BOARD December 19, 2017

Members Present: Walt Banziger, Kurt Blunck, Christina Fastnow, David Kack, Duane Morris, Fatih Rifki,

Glen Steinhoff, Kylar Clifton, Christ Catlett, Kurt Blunck, Michael Everts and Dan

Stevenson

**Members Absent:** Royce Smith, Kregg Aytes, Mike Everts, Chris Kearns, Terry Leist, Robert Mokwa,

Renee Reijo Pera, David Singel, Leslie Schmidt, Keith Hamburg, and Jim Thull,

Staff & Guests: Randy Stephens, Candace Mastel, Jaclyn Liebscher, Grant Petersen, Matthew Campbell,

Kyle Scarr, Charley Franklin, Jeff Bondy, Steve Erickson, Stephan Albert, Tom Stump,

Matthew Rogan, and Sam Des Jardins

#### ITEM No. 1 – APPROVAL OF NOTES

Approval of the draft notes from December 19, 2017 meeting.

#### ITEM No. 2 – EXECUTIVE COMMITTEE REPORT None

#### ITEM No. 3 – CONSENT AGENDA

None

#### ITEM No. 4 – RECOMMENDATION – Lambert Field Schematic Design

Grant Peterson presented the Lambert Field Schematic Design. Peterson explained when this project was previously presented to UFPB it was unsure what part of the site would be used for the project. Location of the field has been determined to be moste appropriate near the corner of South 15<sup>th</sup> Avenue and West Lincoln Street. Peterson explained different site aspects. There is an existing sidewalk along South 15<sup>th</sup> Avenue (*across the street from the site*) and Lincoln Street. The site will contain bicycle parking, ADA access viewing area, bleacher seating and four field lighting structures. Peterson noted that the four field lights are being optimized to reduce glare also.

Kylar Clifton (ASMSU President) and Steve Erickson (Director of Recreational Sports) commented that there is a lot of excitement from the students for this project.

David Kack motioned to approve the recommendation and Kurt Blunck seconded.

The motion was unanimously approved.

The Vote: Yes: 11 No: 0

#### ITEM No. 5 – RECOMMENDATION – New Residence Hall Site Plan Update

Darryl Curfman presented the updated proposal for the new Residence Hall Site Plan. Curfman noted that since the previous UFPB meeting (*December 19<sup>th</sup>*, 2017), the design team and building committee have completed the following initiatives to answer concerns of impact to the neighbor on the north side of College Street.

- Met with City of Bozeman Planners. The City is in support of the building site and configuration.
- Conducted additional shadow impact studies of a 5/7 and 6/5 story extended configuration.
- Provided seven feet of additional building setback in accordance with adjacent R-2 zoning.
- Informal review with the President, with concurrence to move forward with the two six-story wings at the location illustrated on the staff report.

Curfman presented illustrations showing the design and configuration of the New Residence Hall on the Antelope lot site. The goals are to:

Orient the building in a manner that optimizes sun control to reduce heat gain in warmer months
and increase solar access in the colder months with most of rooms facing either north or south.

- Minimize the building's footprint and impact on MSU's land resources.
- Capitalize on the building's location adjacent to Wally Byam Park to create additional outdoor green space and activity areas for students.
- Respect the possibility of a future major pedestrian pathway continuing along the south side of the site as an extension of Harrison Street.
- Orient the main student entrance as close to the Harrison Street pedestrian path as possible as this will be the main pathway to the new dining hall and to the academic core of the campus.
- Consider a secondary entry with a vehicle drop-off on the northwest side of the site that is accessed from South13th Avenue.
- Optimize bike parking areas for ease of student use/access.

Curfman noted that currently, the total building area is approximately 150,000 square feet. The building footprint is located with a significant setback along College Street on the north side to provide privacy to residents facing that minor arterial street. The building location also respects the continuation of a future Harrison Street pedestrian extension to the south. This Harrison Street pedestrian path is the likely pathway residents will use to access the New Dining Hall east of the building.

The recommendation is to approve the New Residence Hall site layout configuration as illustrated/proposed on the Antelope lot site which urbanizes the campus and connects to the greater community, uses the site most efficiently, incorporates parking to the south off College Street, and considers a future third wing addition and pedestrian pathway.

There were no comments or concerns from UFPB.

The motion was unanimously approved.

The Vote: Yes: 11 No: 0

### ITEM No. 6 - RECOMMENDATION - Proposed New Parking Lot

Darryl Curfman presented the proposed new parking lot. Curfman reminded UFPB that we are looking at a new Parking Lot due to the location of the New Residence Hall. In consideration of the displacement of the 325 parking spaces in the Antelope parking lot (*location of the New Residence Hall*), the new Residence Hall project team proposed replacement of these parking spaces with a new parking lot south of the Bison lot, and to expand the existing Bison lot. This will provide complete utilization of the site as well as maintain a parking ratio at .34 (3:1) per the Transportation Master Plan (*Feb 28, 2017*).

Given that MSU's enrollment continues to increase (*reported as two percent in Fall 2017*), it is prudent to account for the residents who will occupy the Residence Hall in this area at a similar ratio of 3:1 (*160 spaces per 480 residents*). Curfman noted that the Bison, Deer, and South 12th lots are generally considered filled to capacity and removing any parking spaces without provisions for replacement; or other alternatives, would cause an immediate deficit condition for Fall Semester 2018 when the Antelope lot is removed from service. This will create an immediate and significant impact to students, faculty and staff if the Antelope parking is not replaced. It is recommended that proposed parking be constructed beginning in May of 2018 with completion in August 2018.

Curfman explained that it is clear there are two basic philosophies to consider in the campus parking program:

- 1. Continue to build parking at the existing parking ratio of .34 as the campus population grows, and/or
- 2. Utilize various Transportation Demand Management (TDM) strategies to pull back the expansion of parking and thus target a lower parking ratio.

The development of TDM initiatives are underway and considerable progress will be made, however a Fall parking deficit is imminent without replacement of the displacement and allowance for a certain percent growth at this time. To account for displacement of the Antelope lot and the addition of parking demand in this area due to construction of the New Residence Hall, Curfman noted they recommend provision for 160 new parking stalls consistent with the Transportation Master Plan to maintain a 3:1 (.34) ratio when accounting for students in the new 480 bed Residence

#### Hall.

In summary, the recommendation includes the following details:

- 1. Construct a new 322 stall lot required to replace the Antelope lot (325), including 8 handicapped (HC) stalls.
- 2. Extend the Bison lot to provide 95 additional stalls.
- 3. Provide for seven stalls within the Residence Hall East entrance area.
- 4. Provide 58 spaces in the Residence Hall service lot including three HC stalls.

Kurt Blunck noted that this new Parking Lot meets Parking Services/MSU's needs.

There was discussion of how the spaces will be allocated for parking (i.e. SB vs E parking spaces). Banziger noted that the breakout of spaces is not a Board discussion and can be worked out later with Blunck.

Duane Morris motioned to approve the recommendation and Fastnow seconded.

The motion was approved.

The Vote: Yes: 10 No: 1

#### **HORIZON ITEMS**

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#### CM/as

#### PC:

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Julie Heard, Provost Office ASMSU President Lisa Hespen, VP Admin & Finance Heidi Gagnon, VP Admin & Finance Jennifer Joyce, VP Student Success Leslie Schmidt, Asst. VP Research Office Tony Campeau, Registrar Frank Parrish, MSU Police Becky McMillan, Auxiliaries Services Julie Kipfer, Communications Jody Barney, College of Agriculture Susan Fraser, College of Agriculture

Robin Happel, College of Agriculture Elizabeth Schmidt, College of Business Candace Mastel, Campus Planning



## UNIVERSITY FACILITIES PLANNING BOARD February 6, 2018

**ITEM #4** 

Verizon Wireless Small Cell Antenna Additions – Koch/Story & Langford

### PRESENTERS:

Candace Mastel, Campus Planner

PROJECT	PLANNING	SCHEMATIC	DESIGN	CONSTRUCTION X
PHASE:			DOCUMENTS	DOCUMENTS

## VICINITY MAP:



Langford Parking Lot



Koch Story Parking Lot

#### **STAFF COMMENTS:**

Verizon Wireless has completed additional studies of areas on campus that their Macro Cell Site on Leon Johnson does not cover well enough for the number of students using Verizon cell services.

**How Many Locations:** Proposing two additional Small Cell locations: Koch/Story parking lot light pole and Langford Hall parking lot light pole. These are similar installations to the light pole sites previously approved by UFPB, which are installed and operational at Miller Dining, Hamilton Hall, AJM Johnson (*with Spring restoration of landscaping still needed*).

Verizon's RF Engineer reported the following: "I came down the Thursday before Christmas to walk through the campus and look at them, and each node had both a good coverage footprint and high throughputs. At this point, the campus area has gone from having some of the lowest speeds in Bozeman to some of the highest speeds."

Below is what the AJM Johnson light pole installation looks like.



How will it be Installed: The new installations will be a similar installation to the existing Small Cells at light poles. A small equipment box is mounted on the pole with fiber optic cable running to the Utility Tunnel, through it and to Leon Johnson Verizon Macro Site. Electrical service will be extended from the nearest building service. Coax cable runs from the equipment box to the antenna.

The MSU Technical Antenna Committee has reviewed and approved the proposal. The frequencies are the same as already at Leon Johnson. Verizon will request approval from the State Historical Preservation Office.

	YES	NO
MSU POLICIES	X	
COMMITTEE OR APPROPRIATE REVIEW	X	
MASTER PLAN	X	

#### **BOARD ACTION REQUIRED:**

Approve the installation by Verizon of their two additional Small Cell sites on light poles in the Langford and Koch/Story Parking Lots.



**STAFF COMMENTS:** 

## UNIVERSITY FACILITIES PLANNING BOARD February 6, 2018

**ITEM #5** T-Mobile Macro Cell Site - South Hedges Hall **PRESENTERS:** Candace Mastel, Campus Planner **PLANNING** CONSTRUCTION **PROJECT SCHEMATIC DESIGN DOCUMENTS DOCUMENTS** PHASE: **VICINITY MAP:** AVENU 2 T H (N) T-MOBILE ANTENNA MODIFICATION AT ROOF DECK LEVEL, SEE ENLARGED ROOF PLAN. S 1 T-Mobile has proposed to install a new wireless communications facility on the rooftop of South Hedges Hall. This will provide reliable cellular coverage for current and future T-Mobile customers in highly-populated areas of the MSU campus. They are expanding the nation-wide service into Montana, with installations in the western part of the State, including Missoula, and now in the Gallatin Valley. This install includes similar license agreements and fee structures as the below projects:

• Verizon and AT&T on Leon Johnson Hall

• Sprint on North Hedges Hall

**How Many Antennas:** Six eight-foot panel antennas with remote radio units and hybrid cables

running to the three separate locations on the roof top.

**How will it be installed:** On a ten-foot by five-foot platform on the roof with metered electricity

service from MSU, plus a microwave dish pointing west to the Bozeman Chronicle antenna tower for connections with the rest of their system. Roof

maintenance can be done with this installation.

Any Roof Penetrations: No, there will be no penetrations in the roof as they are using non-

penetrating, weighted roof mounts.

Any Structural Study's done: Stahly Engineering performed a structural and ballast study of the

equipment, verifying the load capacity of the antennas. The equipment frame is supported with no retrofits required. Solid CMU blocks will provide adequate counterweight for the antenna and equipment frames

for windspeeds at South Hedges.

Frequency Study done: A frequency study is required and will be done as soon as UFPB approves

the installation.

MSU's Technical Antenna Committee has approved and recommends the proposal. T-Mobile will also get approvals from the City of Bozeman and the State Historical Preservation Office.

Below are simulated pictures of the building with antennas and equipment platform. Currently, there is an existing KUSM twenty-foot antenna in the center of the building, KUSM microwave dishes and MSU Police and Residence Life radio repeater antennas mounted on the penthouses.





	YES	NO
MSU POLICIES	X	
COMMITTEE OR APPROPRIATE REVIEW	X	
MASTER PLAN	X	

## **BOARD ACTION REQUIRED:**

Approve the installation by T-Mobile of their macro cell site on the roof of South Hedges Hall including three sets of antennas and equipment platform.



## UNIVERSITY FACILITIES PLANNING BOARD **February 6, 2018**

**ITEM # 6** 

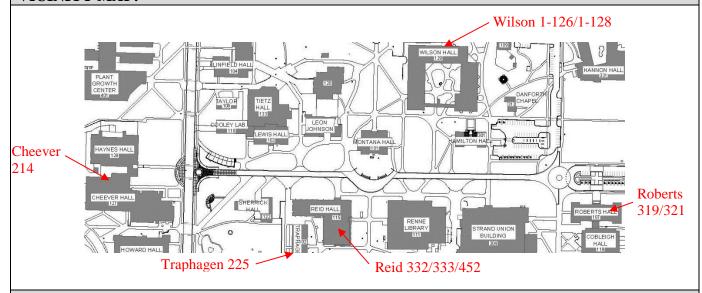
**Classroom Projects Summer 2018** 

#### PRESENTERS:

Jaclyn Liebscher, Project Manager CPDC

PROJECT	PLANNING	SCHEMATIC	DESIGN	X	CONSTRUCTION	
PHASE:			DOCUMENTS		DOCUMENTS	

### **VICINITY MAP:**



#### **STAFF COMMENTS:**

Each year a selection of classrooms that are declining in condition are designated for renovation. The priority of classroom renovations is determined with the involvement of the Classroom Committee, CPDC Planning, and the Registrar's Office. This year's list of classrooms was previously presented to, and approved by, UFPB on September 5, 2017.

Active learning spaces are a goal of the University. The intent is to renovate the classrooms so that each space is flexible – whether it be a lecture style or a group table style of teaching. This philosophy encourages interaction amongst peers and increases retention rates. The renovations include improvements to lighting (LED) and controls, chairs and tables, acoustics, mechanical, IT lecterns, projectors and screens, whiteboards, chair rails, carpeting and paint.

This summer's project is budgeted for \$1 million and involves the following classroom renovations which we plan to bid under four separate contracts:

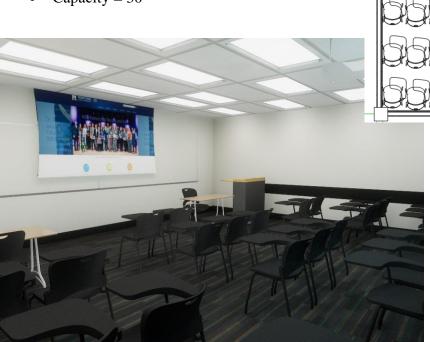
- Wilson 1-126, 1-128
- Traphagen 225
- Roberts 319, 321
- Cheever 214
- Reid 332, 333, 452

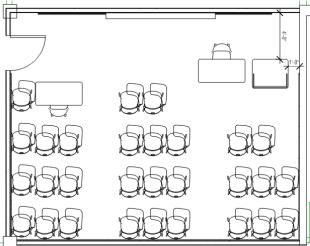
Existing pictures of a sampling of the spaces versus the tenant improvements are shown below.

# Wilson 1-126 Existing:



- Remove tiers and create ADA accessibility
- Add an ADA desk and chair
- Improve lighting and acoustics
- New furniture
- New AV / IT
- Capacity = 30







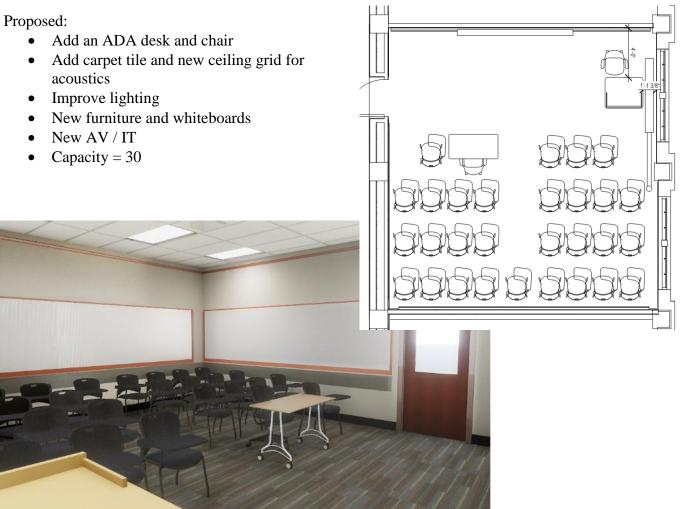
## Proposed:

Expand room into storage closet space 1-129 to increase capacity



# Roberts 319 Existing:

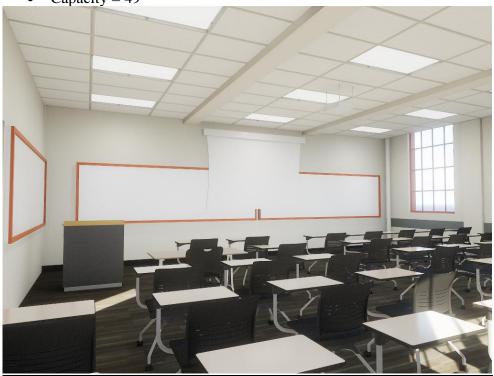




## Roberts 321 Existing:



- Add an ADA desk and chair
- Add carpet tile and new ceiling grid for acoustics
- New furniture and whiteboards
- New lighting and AV / IT
- Capacity = 49



## Reid 332 Existing:



- Remove tier in back of room
- Incorporate empty storage space next door into classroom to increase capacity
- Add an ADA desk and chair
- Update acoustics, lighting IT, AV
- New furniture and whiteboards
- Capacity = 45

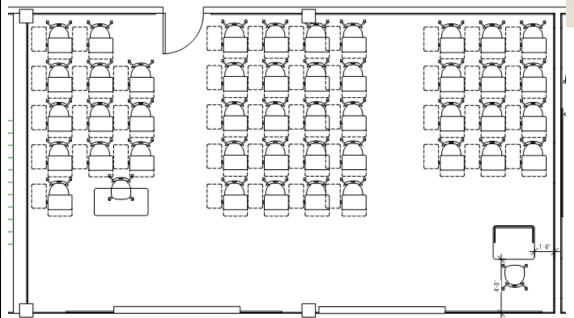


# Reid 333 Existing:



- Remove double entry to increase capacity
- Add an ADA desk and chair
- Update acoustics, lighting IT, AV
- New furniture and whiteboards
- Capacity = 45





Reid 452
Existing:



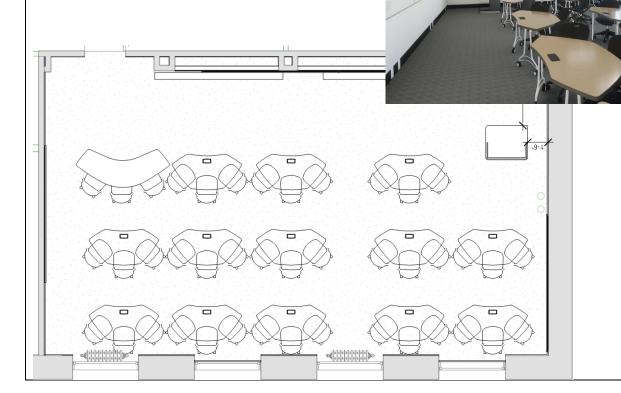
- Change the orientation of the room and create an ADA accessible entry
- Add window shades
- Add an ADA desk and chair
- Update acoustics, lighting IT, AV
- New furniture and whiteboards
- Capacity = 40



## Traphagen 225 Existing:



- Change orientation of classroom
- Add an ADA desk
- New furniture, whiteboards, lighting, IT, AV, and paint
- Capacity = 45



## Cheever 214



## Proposed:

- Add an ADA desk
- New furniture, lighting, ceiling grid, IT, AV, paint and carpet
- Optional air conditioning for use during summer semester
- Capacity = 64



COMPLIANCE:	YES	NO
MSU POLICIES	X	
COMMITTEE OR APPROPRIATE REVIEW	X	
MASTER PLAN	X	

### **BOARD ACTION REQUIRED:**

This is for information only. The project was previously approved at the September 5, 2017 meeting.