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Feasibility Study for

# Auraria Higher Education Center PE/Events Center

9 SEPTEMBER 2014



# TABLE OF CONTENTS

## Contents

1	Executive Summary	1
2	Introduction	5
3	Needs & Market Assessment	13
4	Existing Building, Program & Use Analysis	25
5	Conceptual Design Options	33
6	Operations & Scheduling	85
7	Resources Analysis	89
X	Appendix	93

# 1 / EXECUTIVE SUMMARY





## Executive Summary

The Auraria Higher Education Center (AHEC) PE/Events Center supports a variety of programs that serve multiple campus populations. The 127,490 square foot building includes spaces for academic programs, NCAA athletics, intercollegiate club sports, large campus special events, and student recreation and is used by each of the three institutions on the Auraria Campus – Community College of Denver, Metropolitan State University of Denver and the University of Colorado Denver. Constructed in the mid-1970’s, the building struggles to meet the demands of current and prospective users.

AHEC retained a team led by Davis Partnership Architects to assess the existing building and explore options for infill and expansion. The design team recommends a thorough overhaul of the existing building systems including the replacement of a majority of the mechanical system and upgrades to the structural system to bring the building into compliance with current building codes.

Five design options for expansion and infill were generated as part of this study to meet the building program needs of the user groups. The Steering Committee selected two options for further exploration and pricing that indicate the total project cost for the expansion and renovation of the PE/Events Center would be between \$68 million and \$79 million to accommodate all the program needs.

Moving forward, AHEC should carefully review the building program generated along with the concepts to ensure it is in line with the evolving programs and services offered in the PE/Events Center. Furthermore, the Steering Committee must continue to work to create a new framework for operating and scheduling the building to create a clear and equitable process for reserving space and a well defined understanding of how new spaces would be managed and maintained by the three institutions collectively.

No consideration was given to the new Regency Athletic Complex and the newly constructed fields and facilities which will add an estimated 20,000 SF of meeting, locker room, teaching spaces, concessions, etc. Likewise no consideration was given to the CU Denver feasibility study and associated proposals for a new wellness center with recreation facilities. Moving into the program plan phase for the Auraria Campus PE/Events Center project, these will be significant elements to consider.

### Summary of costs for the preferred options

	MAXIMIZED EXPANSION OPTION	POOL OPTION
Estimated Construction Cost	\$49,750,000 (\$289/SF)	\$58,050,000 (\$321/SF)
<b>Building Area</b>	<b>172,476 SF (44,985 new SF)</b>	<b>180,576 SF (53,085 new SF)</b>
<b>Total Project Cost</b>	<b>\$67,966,000 (\$394/SF)</b>	<b>\$79,270,000 (\$439/SF)</b>

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## 2 / INTRODUCTION





## Steering Committee Acknowledgements

### Auraria Higher Education Center (AHEC)

Barb Weiske, Executive Vice President for Administration and CEO  
Jeff Stamper, Assistant Vice President of Operations and Services  
Carl Meese, Senior Campus Planner

### Student Advisory Committee to the Auraria Board (SACAB)

Ariel DeGruy, Student Representative

### Community College of Denver (CCD)

Meloni Rudolph, Dean of Student Life  
Kevin Seiler, Facilities Director

### Metropolitan State University of Denver (MSU Denver)

Sean Nesbitt, Director of Facilities Planning and Space Management  
Tony Price, Director of Campus Recreation

### University of Colorado Denver (CU Denver)

Lisa Douglas, Associate Vice Chancellor of Budget and Finance  
Cliff Young, Associate Dean of Faculty, Business School

## Project Mission & Goals

The Events Center is a shared building on the Auraria Campus located between Larimer and Lawrence Streets, and 11th and 10th Streets. The building currently provides space for MSU Denver's Human Performance and Sport Department, along with venues for athletic and recreation programs as well as multi-purpose areas for special events. While the current user is primarily MSU Denver Academics, Athletics and Recreation (which includes providing several tri-institutional services), the shared building was explored to see how it can better meet the collective needs of all of the institutions on the Auraria Campus (including AHEC, CCD and CU Denver). The building also needs to activate the two major campus streets upon which it fronts (Larimer and 10th). The study includes program analysis and program development through engagement with stakeholders, assessment of existing facilities, development and evaluation of options, and an action plan with executive summary; written building systems descriptions including preliminary plans for HVAC, temperature/humidity control, electrical and plumbing equipment, building code, life-safety and accessibility analysis, conceptual drawings of the facility site and floor plans, elevations and building sections as required to thoroughly communicate preliminary design ideas for funding purposes indicating programmed spaces, activities and relationships; and a comprehensive budget analysis/ construction cost estimate for the proposed project. Additionally, building entrances were studied to examine their readability as entrances, along with whether they are in the optimal location. Larimer Street is the major Arts and Events Corridor on the campus connecting the Auraria Campus with downtown Denver. This building currently has no entrances or visual activity available on this façade and remedies should be pursued. Any entry concepts should take into consideration the solutions identified in the 2012 Auraria Campus Strategic Implementation Plan.

Four tasks were outlined as part of the project.

### Task 1: Kick-off/Needs Assessment

During this task, the consultant team toured the existing facilities and met with the Auraria Campus PE/Events Center Steering Committee to define goals and expectations. The consultant team analyzed the building systems and adjacent site infrastructure. Systems that were assessed include:

- Fire and life safety components
- Building structural systems

- HVAC systems
- Electrical systems including power, lighting, and IT systems
- Swimming pool shell and mechanical systems, including feasibility for infill and repurposing the space
- Window/curtain-wall systems
- Accessibility
- Site utilities, roads, parking, building entrances, and pedestrian pathways in the immediate vicinity of the existing building, with consideration to feasibility of future expansion of the facility

The assessment summarizes the extent and nature of each system, identifies current deficiencies and provides a general outline of the work required to update the systems to current Auraria Higher Education Center standards.

The scope of Task 1 included an overall analysis of the building's current programming and the desired near-term program additions, as well as the spaces (both in number and quality) available to accommodate the programming. As part of this effort, the consultant team conducted user interviews to understand current programming needs and desired programming for each department that relies on the building to serve its constituency, as well as the needs of those that do not currently use the building. The end result of this process was a detailed outline of the functional deficiencies of the building and an outline program identifying the projected space needs required to adequately serve current uses as well as desired or future uses.

## Task 2: Conceptualization

The consultant team then evaluated the site and its context and developed multiple concept studies to fulfill the desired program. The team looked at options that address needs within the existing building footprint as well as options for expansion of the building. A conceptual expansion was proposed in the Auraria Higher Education Center's Strategic Implementation Plan, which was one of the options considered. The proposed alternatives recognize the near-term and long-term priorities by planning to phase the construction over time.

After presenting these alternatives to the Steering Committee, the consultant team developed a preferred concept, generating a utility/

infrastructure plan, a site development plan, floor plans, building sections, and a 3-D massing study.

The consultant team presented the preferred design to the Steering Committee, made adjustments to the design as requested, and then worked with a cost estimator to provide a detailed cost estimate of the selected option.

## Task 3: Final Report

In support of the design studies for the preferred alternative, the consultant team compiled a draft report of the findings. The report outlined the vision for the project, its goals and available resources, its projected cost, and a proposed schedule for implementation. Design narratives for each of the consulting disciplines augment the broader planning issues illustrated by the design options. Following the Auraria Higher Education Center and Steering Committee's review of the draft document, the consultant team issued a final report.

## Task 4: Funding/Presentation Materials

To assist the Auraria Higher Education Center in acquiring funding for the project, the project scope of work called for the consultant team to produce a minimum of three renderings depicting key elements or concepts for the improvement of the Auraria Campus PE/Events Center. Task 4 was amended during the feasibility study process at the request of the Steering Committee to further explore the massing, exterior building enclosure, and planning of the four concept designs presented in lieu of final presentation materials. The design team provided a comprehensive Sketch-Up model of the building massing and site model for use by the Auraria Higher Education Center.

## Campus Demographic

The Auraria Campus is a dynamic and vibrant higher education community located in the heart of downtown Denver. The 150-acre campus is shared by three separate and distinct institutions of higher learning: Community College of Denver, Metropolitan State University of Denver, and University of Colorado Denver. The Auraria Higher Education Center is a separate State of Colorado entity whose role is to provide and manage shared services, facilities, and property to support these prominent institutions in achieving their goals. The collective student population is nearly 41,000 with an additional 4,000 to 5,000 faculty and staff.

### Community College of Denver

Community College of Denver (CCD) is a leading point of entry to higher education for the City and County of Denver. CCD students graduate from cutting-edge programs, ready to take the next step in their lives, whether it's to transfer to a four-year institution or begin a new career. CCD promotes excellence in teaching, learning, and service to a diverse student community. With enrollment of over 12,000 students in Fall 2013, 92 percent are Colorado residents, and 52 percent self-identify as a student of color. The college offers more than 100 degrees and certificates in transfer and occupational education, with guaranteed transfer of core class credits to Colorado public colleges and universities.

### Metropolitan State University of Denver

Founded in 1965, Metropolitan State University of Denver (MSU Denver) has grown to nearly 21,000 students as of Fall 2013 and educates the most undergraduate Coloradans in the state. With the

least expensive tuition of the state's largest four-year institutions, MSU Denver offers a high-quality education with a wide range of academic options: 55 undergraduate majors and three Master's degrees via traditional daytime courses, as well as evening, weekend, and online classes. The university is a leader in diversity for higher education with programs and initiatives that drive inclusive excellence. Nearly 33 percent of the enrollment are students of color, and of the full-time faculty members, 23 percent are professors of color. MSU Denver's broad access, affordable tuition, quality academic experience, and excellent outcomes add up to a high-value education.

### University of Colorado Denver

The University of Colorado Denver (CU Denver) provides high-quality academic opportunities through engagement with dedicated faculty members, exposure to original research, and real-world learning options where the city is an extension of the classroom. CU Denver serves a diverse student body: 36 percent of undergraduates are students of color; and 49 percent of new freshmen are students of color. With over 12,000 students enrolled in seven schools and colleges for Fall 2013, CU Denver is one of the nation's top public urban research universities, awarding more Master's degrees annually than any other institution in the state, and providing students with a vast range of opportunities to enhance their lives and careers and to learn with purpose.



## Projected Campus Growth

Campus growth is a key consideration in meeting the needs of future Auraria Campus students. Each of the three higher education institutions serve a unique student population and experience different enrollment and growth trends.

### Community College of Denver

The Community College of Denver's identity and brand are changing to meet the targets and goals of the institution as well as provide outcomes that meet the needs of the workforce. The institution's enrollment is closely tied to the Denver area economy, experiencing surges in times of economic lulls and dropping slightly as the market improves. As a result, CCD does not actively seek a target enrollment number, but feels a head count of 12,000 or 4,000 Full Time Equivalents is its ideal size. For fall 2013, CCD had a headcount of 6,910 students. As the college looks to meet its strategic goal of doubling the number of students who complete certificate or degree programs by 2019, campus recreation has the potential to assist with student retention.

### Metropolitan State University of Denver

Overall enrollment has increased 12 of the last 13 years at MSU Denver, with Human Performance and Sport programs housed in the PE/Events Center experiencing a steady increase in enrollment each year for the last five years. MSU Denver is currently the largest of the three institutions with a fall 2013 headcount of 20,813 students. It also operates the Activities Program which allows students from each of the three institutions to enroll in for-credit physical education classes.

### University of Colorado Denver

After experiencing several years of slight enrollment decline due to economic improvement, CU Denver hopes to increase student enrollment counts by 10% over the next five years; in the fall of 2013, CU Denver saw a headcount of 12,627 students. As campus demographics change from a commuter campus to a more traditional urban college campus there will be greater need for campus amenities such as recreation.

As indicated in the Strategic Implementation Plan, the next five to seven years will see substantial growth in higher education attendance locally, with an anticipated increase in enrollment on the Auraria Campus of nearly 7,000 students by 2021.

## Relation to Strategic Implementation Plan

The Auraria Strategic Implementation Plan was developed in 2012 to respond to the changing needs and visions of each institution on the campus. The document outlines recurring campus themes and provides a framework for prioritizing both institution-specific and campus-wide improvements. While the Strategic Implementation Plan addresses long-term, broad-campus improvements, it makes specific reference to the PE/Events Center and its important roles on campus.

The PE/Events Center is designated as a near-term priority for the campus, particularly as it relates to the development of the Tivoli Field event space. The Strategic Implementation Plan suggests a new north façade for the building that would help activate the Larimer Street corridor, assist with campus wayfinding, and improve the internal functioning of the PE/Events Center. Programmatically, the plan specifically recommends the inclusion of a jogging track and climbing wall as well as a reassessment of current building entry points.

While the long-range build out of the campus documented in the Strategic Implementation Plan encourages the relocation of MSU Denver NCAA athletics and academics facilities closer to The Regency Athletic Complex at MSU Denver at Old Colfax and 5th Street, this project is not likely to happen in total in the next decade. MSU Denver, however, is currently constructing support facilities for athletics and academics at their new outdoor sports complex. It should be noted that the addition of the facilities has not been taken into account for this study. Since the impact of these new facilities and the added square footage is anticipated to be significant, it is the recommendation of this study that prior to any development of a program plan, these facilities should be factored into the equation, recognizing the potential reduced needs in the existing facility as a result of the new facility investment.

## Relationship of Project to Strategic Plan & Mission of Each Institution

In addition to this project’s relationship to greater Auraria Campus goals, each institution was asked how the expansion and renovation of the AHEC PE/Events Center ties into their individual Missions and Strategic Plans.

### Community College of Denver

This project reflects CCD’s mission and strategic plan by supplementing the student services that help retain students once they enroll. Student Recreation in partnership with the Office of Student Life plays a valuable part in student health, wellness and ultimately in their retention and persistence to graduation.

### Metropolitan State University of Denver

The MSU Denver Strategic Plan has four strategic themes. They are:

1. Student and Academic Success
2. Community Engagement and Regional Stewardship
3. Institutional Culture
4. Institutional Resources

The PE/Events Center feasibility study ties to MSU Denver’s strategic theme for Student and Academic Success. This goal states that “*MSU Denver continues to seek and sustain innovative resources for student and academic success.*” The proposed expansion and renovation would provide additional recreation and academic facilities in support of this objective.

This project would also assist the University in improving community engagement by providing additional programmable space, offering more opportunities for recreation programs or classes for the community.

The proposed renovation and expansion project would also support institutional culture.

- A number of faculty and staff utilize fitness, recreation, and mind-body programs housed in the building that support their overall health/wellness and connection to the campus community.
- The recreation program provides a number of programs and services directed at underserved populations specific to race, ethnicity, persons with disabilities.

- The PE/Events Center supports a number of campus cultural events and programs.

To the fourth strategic theme, by providing additional recreation facilities, students and staff have the ability to take additional classes, fitness programs, or recreation activities that support a healthy lifestyle and a welcoming work environment.

### University of Colorado Denver

CU Denver is committed to a community of learning and the health and care of the mind, body and community. Having an integrated activities and events center is important in achieving this objective, and ties directly into three University Strategic Priorities:

University Strategic Priority 1

- *Maximize the opportunities of our consolidated university to achieve our vision: “By 2020, the university will be a leading public university with a global reputation for excellence in learning, research and creativity, community engagement and clinical care.”*

University Strategic Priority 2

- *Deliver an outstanding and innovative educational experience.*

University Strategic Priority 5

- *Enhance diversity university-wide and foster a culture of inclusion.*



## Feasibility Study Process

Expansion and renovation of the PE/Events Center has been a topic of conversation on the Auraria Campus for nearly a decade. The 2007 Master Plan references a shared student recreation and wellness center, and the Strategic Implementation Plan and 2012 Update to the Auraria Master Plan expand upon this idea.

In the fall of 2013 the Auraria Campus formed a Steering Committee comprised of representatives from each campus institution to direct a more comprehensive, feasibility study. In August 2013 an RFQ was issued for a design firm to complete a feasibility study that focused on four tasks as outlined by the Steering Committee – a needs assessment, conceptual design, final feasibility report, and funding and presentation materials. After reviewing the qualifications of the submitting design teams and selecting three for interviews, the committee chose Davis Partnership Architects with Cheryl Kent of C.L. Kent Consulting L.L.C. to complete the feasibility study.

The feasibility study began with a discussion of existing facility deficiencies with the Auraria Higher Education Center on January 16, 2014. In late January and early February 2014, each of the three higher education institutions was involved in individual workshop sessions to assess their use of the existing facilities and explore additional programming needs and requirements. Simultaneously, the consulting engineering team completed an assessment of the existing building systems and made recommendations for upgrades. The Steering Committee met multiple times throughout the feasibility study to provide additional direction on programming, concept design, and project cost.

The Feasibility Study Steering Committee was composed of two representatives from each higher education institution, three representatives from AHEC, and a student representative from the Student Advisory Committee to the Auraria Board. The architect's team included the following: a sports planner; a recreation operations specialist; a cost estimator; a landscape architect; and civil, structural, mechanical, electrical, and plumbing engineers.



# 3 / NEEDS & MARKET ASSESSMENT





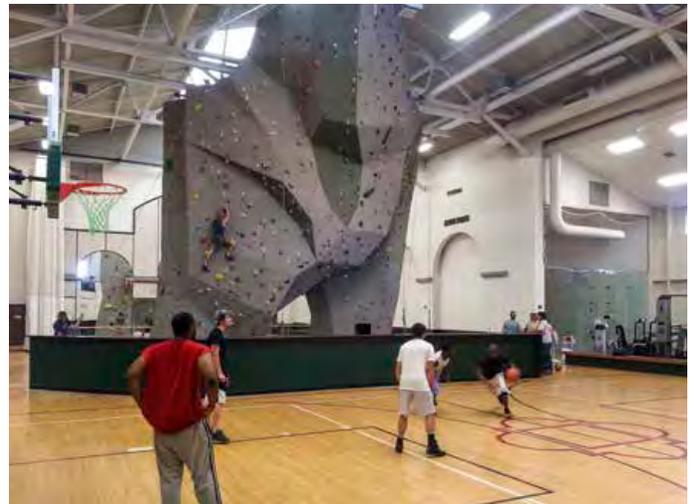
## Evidence of Need

### Existing facilities in relation to Academic Accreditation

As the home of MSU Denver's department of Human Performance and Sport (HPS), the availability of academic facilities in the PE/ Events Center is a key component of the continued success and accreditation of the degree and certificate programs. Over the last five years, the HPS department has seen steady growth. HPS degree programs are currently accredited by CAATE (Commission on Accreditation of Athletic Training Education), CAAHEP (Commission on accreditation of Allied Health Education Programs), COSMA (Commission on Sport Management Accreditation), and NASPE/CAEP (National Association of Sport and Physical Education/Council for the Accreditation of Educator Preparation) and each entity has specific program and facility requirements in order to maintain accreditation. In general, these bodies require that physical facilities supporting a degree or certificate program be of sufficient quality to support a high-quality academic program. Many of MSU Denver's current facilities meet the bare minimum for accreditation, and without improvement may become barriers for accreditation renewal.

Of all the accreditation bodies, CAATE and CAAHEP have the most stringent facility requirements. CAATE dictates that "classroom and laboratory space must be sufficient to deliver the curriculum and must be available for exclusive use during normally scheduled class times," and that, "offices must be provided for program staff and faculty on a consistent basis to allow program administration and confidential student counseling." Because of program growth, and the lack of designated classroom and laboratory space exclusive to the HPS Program, MSU Denver is not in compliance with CAATE. CAAHEP requires institutions to review their program resources, including physical facilities, on an annual basis for appropriateness and effectiveness in relation to the program's goals and outcomes. When the programs are up for reaccreditation in 2016 it is possible that MSU Denver will be found deficient in classroom and laboratory facilities, as well as lab testing space for students. Furthermore, the Sports Management program does not meet the intent of COSMA because classes are scheduled across campus as there is limited space in the PE/Events Center, leading to a lack of cohesiveness in the program.

In order to meet the needs of current and future students and adhere to industry standards and requirements, the unique needs of the Human Performance and Sport degree programs should be carefully considered in any proposed modifications to the PE/Events Center.

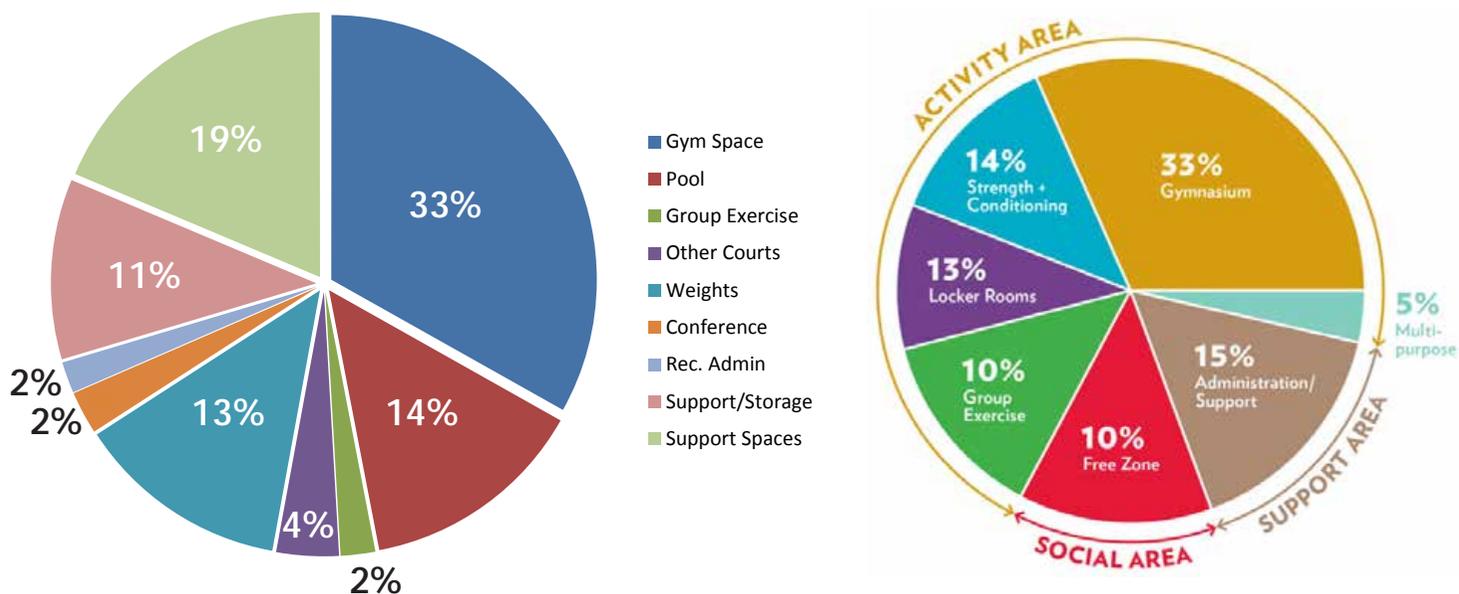


## Existing facilities in relation to NIRSA standards

The National Intramural-Recreational Sports Association (NIRSA) provides a wealth of information on the facilities of its member schools that can be used to benchmark individual facilities against national averages. While the PE/Events Center is unique in that it serves additional programs beyond recreation, comparing it to NIRSA standards sheds light on significant campus recreation deficiencies in a building that is trying to meet too many needs.

In addition to trying to meet the campus athletic, large event, recreation and academic needs in a single building, the PE/Events Center is undersized for the campus population. Nationwide, college campuses average 10-12 square feet of dedicated indoor recreation space per student while the three Auraria institutions average only 2.76 square feet per student in the existing 127,490 square foot building using the fall 2013 headcount as only 111,560 square feet of the building is available for student recreation. This number is deceiving, though, as only the Fitness Center and Fitness loft, a total of 7,000 square feet, are dedicated as recreation space at all times.

### CURRENT PE/EVENTS CENTER SPACE ALLOCATIONS IN RELATION TO NATIONAL RECREATION CENTER TRENDS



## Existing Facilities in Relation to MSU Denver's Intercollegiate Athletics & Title IX Compliance

Currently, most of MSU Denver's varsity athletic teams share general locker room space with all the other building users. It is anticipated that some of the load will be alleviated when MSU Denver's new Regency Athletic Complex opens in late 2014, though several teams associated with interior sports will still be housed in the PE/Events Center. The Men's and Women's Basketball teams and Women's Volleyball team presently share two locker rooms on the north side of the building. As the space is currently configured, equal locker room access may not be provided to both men's and women's teams, causing a potential Title IX violation due to existing conditions. Any future modification to the building should take compliance of these spaces into consideration.

## Existing Facilities in relation to CU Denver's Club Sports Program

As CU Denver develops its club sports program, the limited space available for club sports practices and meetings in the PE/Events Center is increasingly problematic. Currently, CU Denver's teams must either use space as it is available within the facility or must pay to use other facilities off campus. This hinders the advancement of a cohesive club sports program, and limits CU Denver's ability to add additional sports and teams as student demand increases. To meet the current and future needs of the CU Denver Club Sports program, providing additional, dedicated gymnasium space for this use must be considered.

## Existing facilities in relation to peer institutions

Each school was asked to provide a list of peer institutions for reference and additional benchmarking, if required. Below are the peers identified by each institution:

Community College of Denver: Fellow Community College of Colorado System schools, Northeastern Junior College.

Metropolitan State University of Denver: Fellow Rocky Mountain Athletic Conference schools, St. Cloud State University, and University of Houston, Downtown.

University of Colorado Denver: Cleveland State University, Portland State University, and University of New Orleans.

Direct comparisons to the peer institutions listed above were not made as part of the feasibility study, but should be considered moving into program planning.

## Deferred Maintenance & Life Safety

The PE/Events Center currently has deferred maintenance of nearly \$1 million. High priority safety and security improvements include the installation of an automatic sprinkler system and of access control/participant check in. The existing pool has several issues that require attention – the gutters are out of true and leak, and the pool filtration systems must be upgraded to meet current code requirements for future use. [Note: As a result of these system failures, the existing pool was closed from use during the course of this study.] As building systems age it is anticipated the list of deferred maintenance items will grow. Additional information on building systems is included in the Facility Analysis Architectural Assessment, which is available upon request as a separate document.

## Other Facility Deficiencies

Not only do the facilities in the existing PE/Events Center fall short in terms of academic and athletic requirements as well as recreation standards, they are also deficient in several other areas.

### – Conference, Meeting & Large Event Space

In addition to its function as an academic, recreation, and athletics building, the PE/Events Center is the only space on campus with adequate open area to host large events such as guest speakers, job fairs, wellness events, and other co-curricular activities. While the Tivoli Student Union has some event and conference space, and there are discussions about converting part of the old movie theaters into conference and meeting space, the existing facilities across campus are booked to their capacity, especially during high-use times like evenings.

In the PE/Events Center, scheduled extra- and co-curricular activities are periodically displaced to accommodate the needs of athletics and high priority campus events because there is simply not enough space available to meet all campus needs. There is no availability to meet community needs. If additional space were provided in the building for large events, there would be adequate schedule availability in the building for non-recurring events such as faculty and staff training that currently must be hosted elsewhere, and student clubs and organizations could be accommodated in multi-purpose and smaller meeting spaces. Furthermore, additional

space availability could generate a new revenue stream if spaces are rented to off campus users.

– **Inclusive Restrooms and Locker Rooms**

Gender inclusive, family, and functionally accessible space is increasingly important on collegiate campuses. The existing building does not include this type of space, so other spaces are periodically closed down or temporarily modified to meet this need. Providing a range of restrooms and locker room options in the PE/Events Center would help meet increasing demand and foster the campus culture of inclusivity.

– **Lounge & Study Space**

The PE/Events Center is not currently configured to allow space for informal gathering by students. The west patio space along 10th Street, along with the grand stairs to the events entry are both heavily used by students for socializing and studying on days when the weather is nice. On inclement weather days students congregate inside the building near the east and west entries on the “carpet blocks” or on the stairways, impeding traffic flow. It is recommended that both formal and informal study and lounge spaces be provided in any reconfiguration of the facility to better accommodate today’s students and their ways of studying, socializing and collaborating.

## Alternatives to the Proposed Expansion & Renovation

The primary needs for this project are driven by a number of factors including MSU Denver’s Human Performance and Sport program, intercollegiate and intramural sports needs and requirements, campus events capacity, and the availability of drop-in student recreation. The consultant team considered several options for meeting the functional programming needs of the Auraria Higher Education Center and the three institutions it houses. These options included maintaining the status quo, off-site delivery of programming, and a new building.

### No Expansion/Infill

The existing building is already overscheduled, with programs making efficient use of space when it’s available. The inadequacy of the existing spaces, however, impacts the ability of building users to schedule events and provide many of the recreational and academic programs and amenities that today’s prospective student demands. Potential recruitment and retention of students could suffer if the status quo is maintained, but it may also impact faculty and staff recruitment and retention as well.

### Off-Site Delivery of Programming

The three Auraria Campus institutions already deliver several recreation and academic programs at off-site venues, but the Steering Committee felt remote locations created inconvenience for students, limiting enrollment and participation in off-campus activities. Some activities, such as kayaking and rock climbing, can be supervised and coordinated at off-site locations, but outsourcing more traditional forms of campus recreation like weightlifting and intramural sports is not preferred. The diffusion of recreation and academic classes off campus would make the commitment to attracting and retaining students through the availability of programming on campus less visible and less convenient.

### New Building

The alternative of constructing a new building was not thoroughly explored by the consultant team, though this option could be explored prior to program planning.

## Need Summary & Preliminary Program

### Institution Meeting Summary

Davis Partnership met with each of the three higher education institutions to understand their perceptions of the existing facility, as well as their individual space and program needs in the PE/Events Center. The feedback gathered at each workshop was used to generate a list of “must haves” that became the basis of the preliminary program presented to the Steering Committee.

In their workshop on January 23, 2014, Community College of Denver noted that many of their students do not know they can use the PE/Events Center despite paying a recreation fee each semester. While some of this stems from a lack of advertising and a culture where other groups have scheduling priority, much of it is the result of inadequate space to meet student demand. Furthermore, CCD student groups are deterred from using the facility because rental costs exceed their available funding. CCD would like to use the building for events such as open houses and student life events but there is not sufficient availability in the current building and scheduling structure.

The spaces that CCD identified as high priority for their institution are:

- Large Event Space
- Conference and Meeting Room Space
- Flexible Student Lounge Space
- Drop-in Access to Recreation Facilities

On January 24, 2014, Metropolitan State University of Denver’s workshop session focused on the inadequacy of the building to meet current recreation and academic demands. Though the PE/Events Center was originally designed as an academic building, classroom space is limited and it does not meet the needs of the HPS program. MSU Denver also believes the negative, crowded experience of the current building facilities discourage its use for drop-in and student group activities.

The spaces that MSU Denver identified as high priority for their institution are:

- Additional Teaching Gym Space
- Additional Group Fitness Spaces
- More offices for HPS and Recreation

- Additional Storage
- Separate Athletics Locker Rooms

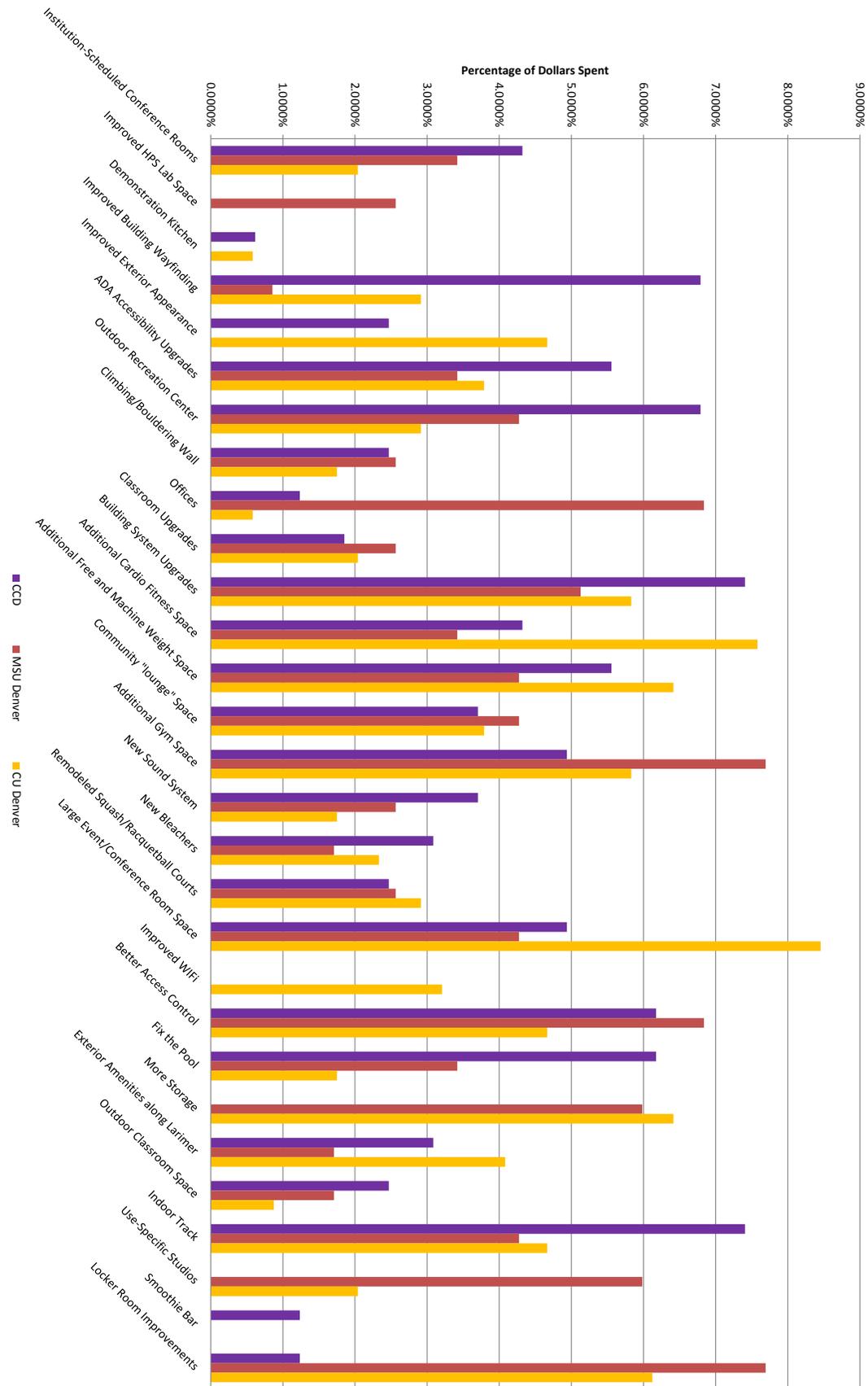
The University of Colorado Denver met with the Davis Partnership team on February 10, 2014. CU Denver does not believe there is capacity in the existing facility to meet the needs of CU Denver’s student population. Their perception is that MSU Denver “owns” the building, leaving little room for other institutions to develop programs especially since the process for reserving space in the building is not clearly defined. CU Denver would like to use the PE/Events Center for co-curricular activities such as convocation and conferences, as well as their club sports program if space were available.

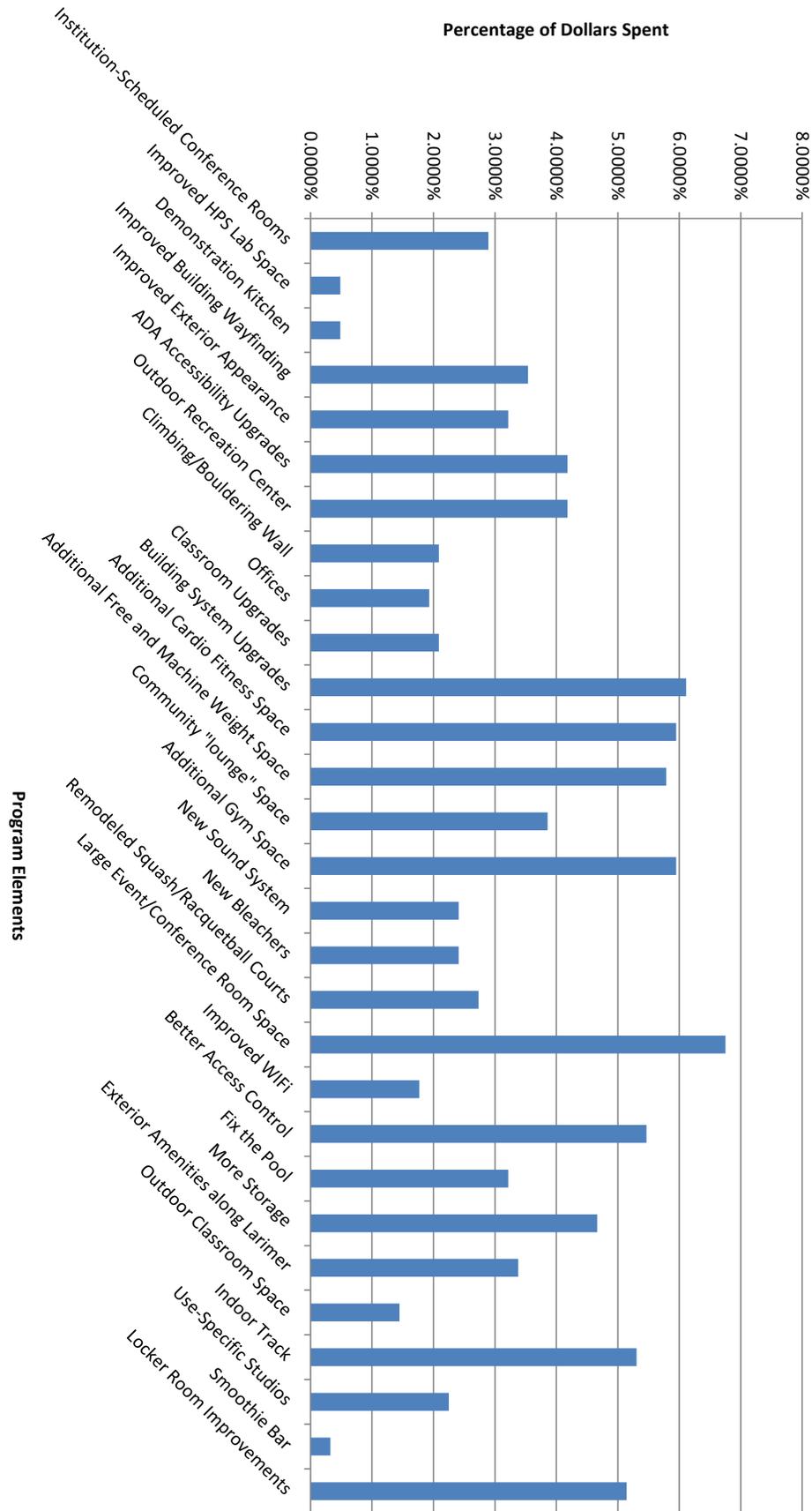
The spaces that CU Denver identified as high priority for their institution are:

- CU Denver-Specific Gym Space for Club Sports
- Large Multi-Purpose Room
- Medium-Sized Meeting Room
- CU Denver-Specific Storage

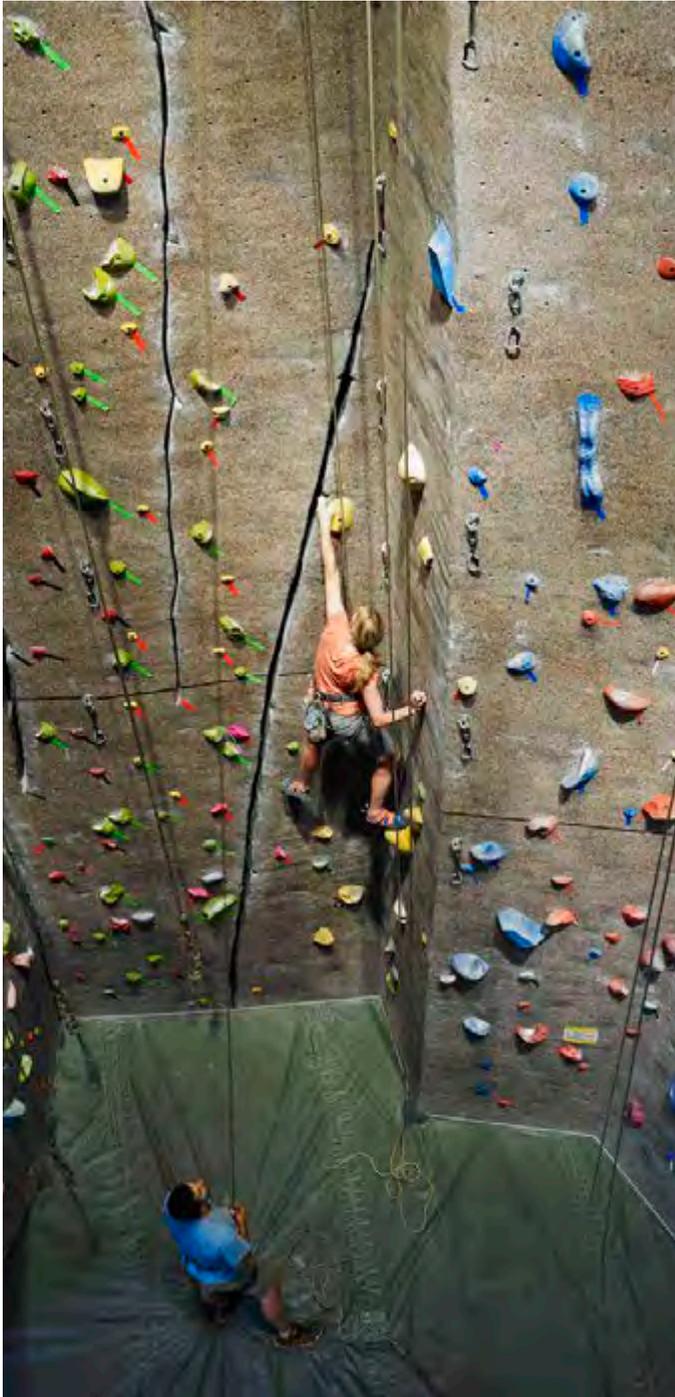
In each workshop session, participants were asked to take part in a “shopping spree” to help determine space program priorities. The charts on the next pages show spending priorities by each institution’s participants as well as the collective spending priorities of all participants. While dedicated gym space was not included as an option in the shopping spree, CU Denver verbally identified this element as its number one priority.

SPENDING PRIORITIES BY EACH INSTITUTION'S PARTICIPANTS





COLLECTIVE SPENDING PRIORITIES OF ALL PARTICIPANTS



The participants in the workshop sessions also identified some common high priority spaces:

- Entry Desk and Lobby Area
- Locker Room Upgrades
- Larger Fitness Center
- Outdoor Program Area with Climbing Wall
- Event Space
- Conference and Meeting Rooms
- Updated Building Systems

### Steering Committee Meeting 1

The shopping spree results, along with the perceptions of the existing building by each institution were presented to the Steering Committee on February 18th. Davis Partnership identified several areas of spending overlap that were used along with feedback gathered on high priority spaces at each workshop and during Meeting One to develop a list of “must have” space program elements for a preliminary space program.

### Preliminary Space Program

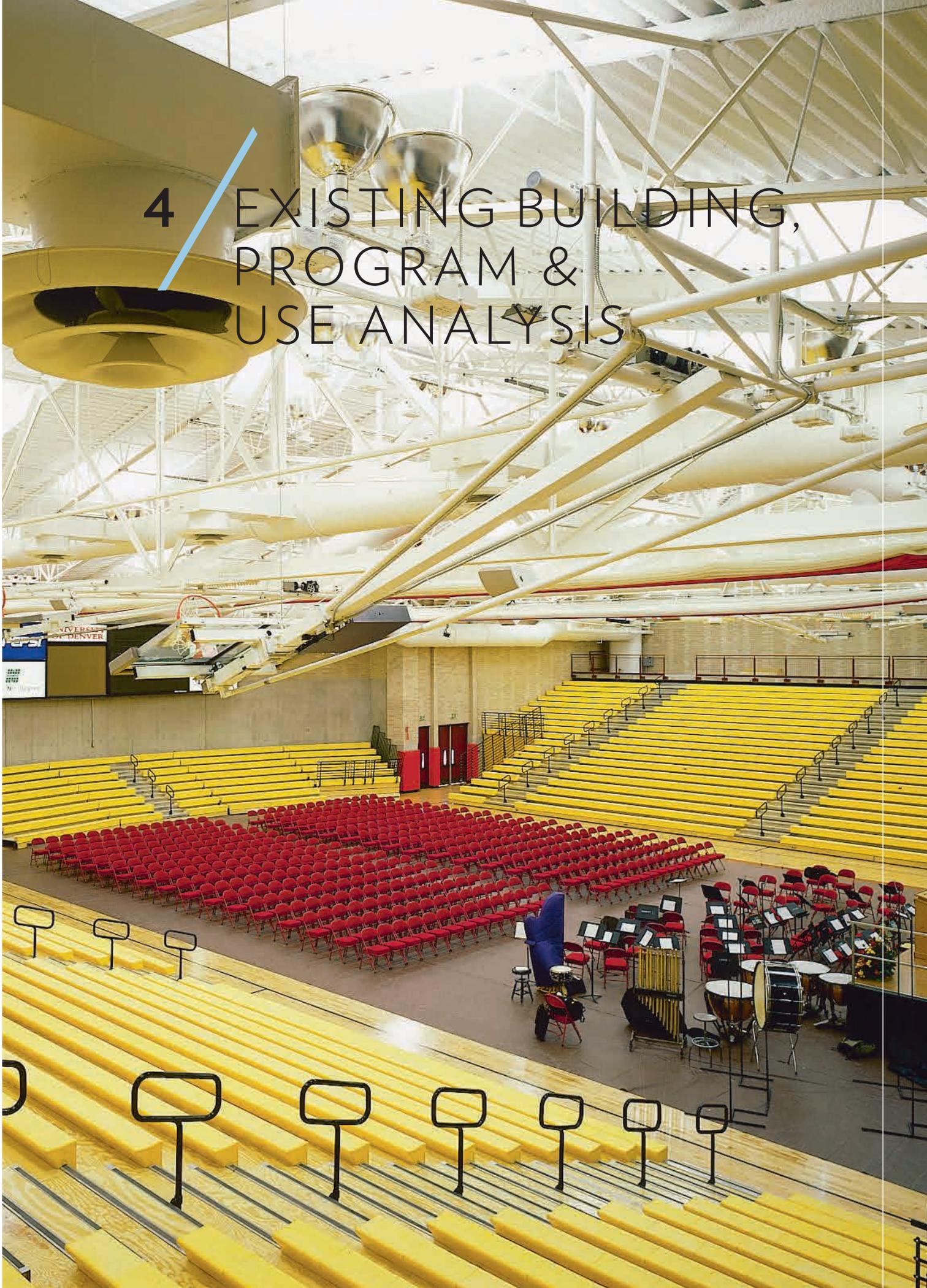
The preliminary space program takes a first pass at assigning square footages to the high-demand spaces requested by each institution during workshop session. The chart on the next page illustrates the preliminary space program as presented to the Steering Committee, which was subsequently augmented and modified based on their feedback. The final preliminary space program is presented in the Appendix.

**"MUST HAVE" PRELIMINARY SPACE PROGRAM - NEW PROGRAM SPACES IDENTIFIED BY STEERING COMMITTEE**

Program Element	ASF	Quantity	Total new	Dimensions	Capacity
CU Basketball Gym	8,000	1	8,000	94'x50' plus 6' at each end line, 10' side clearance. Total = 106x70	364 seated, 800 standing
Large Multi-Purpose Room	2,400	1	2,400	approx. 40x60	48 group fit, 109 seated, 240 standing
Divisible Medium Conference Room	1,200	1	1,200	approx. 30x40, divisible to 2@15x40	55 seated, 120 standing
Large Event Space	4,000	1	4,000	approx. 50'x80' or 63'x63', could be a half-court gym that meets HPS needs	80 group fit, 182 seated, 400 standing
Conference/Meeting Room Space	500	2	1,000	25'x20'	10 group fit, 22 conference, 50 standing each
Group Fitness Spaces	2,000	2	4,000	35'x60'	40 group fit each, potentially adjacent and divisible
HPS and Rec Offices	120	13	1,560	10'x12', quantity to be verified	single occupant offices; 13 HPS, Rec TBD
HPS Additional Gym Space	4,000	1	4,000	55'x70' half-court gym with AV capacity, Could meet large event need	80 group fit, 182 seated, 400 standing
Athletics Locker Rooms	950	3	950	1900sf existing, only 950sf new	meets intent of Title IX
Fitness Center	20,000	1	20,000	flexible, could be broken into multiple spaces/pockets	400 equipment stations at 50asf each
<b>Outdoor Program</b>					
Climbing/Bouldering Wall	1,200	1	1,200		5-6 climbing lanes + bouldering
Offices	1,000	1	1,000		matches existing space
Storage	2,500	1	2,500		varies based on equipment stored
Entry Lobby/Lounge	2,000	1	2,000		
Storage	2,000	3	6,000		separate storage for each, sizing to be determined
<b>TOTAL</b>			<b>59,810 sf new program space</b>		

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# 4 / EXISTING BUILDING, PROGRAM & USE ANALYSIS



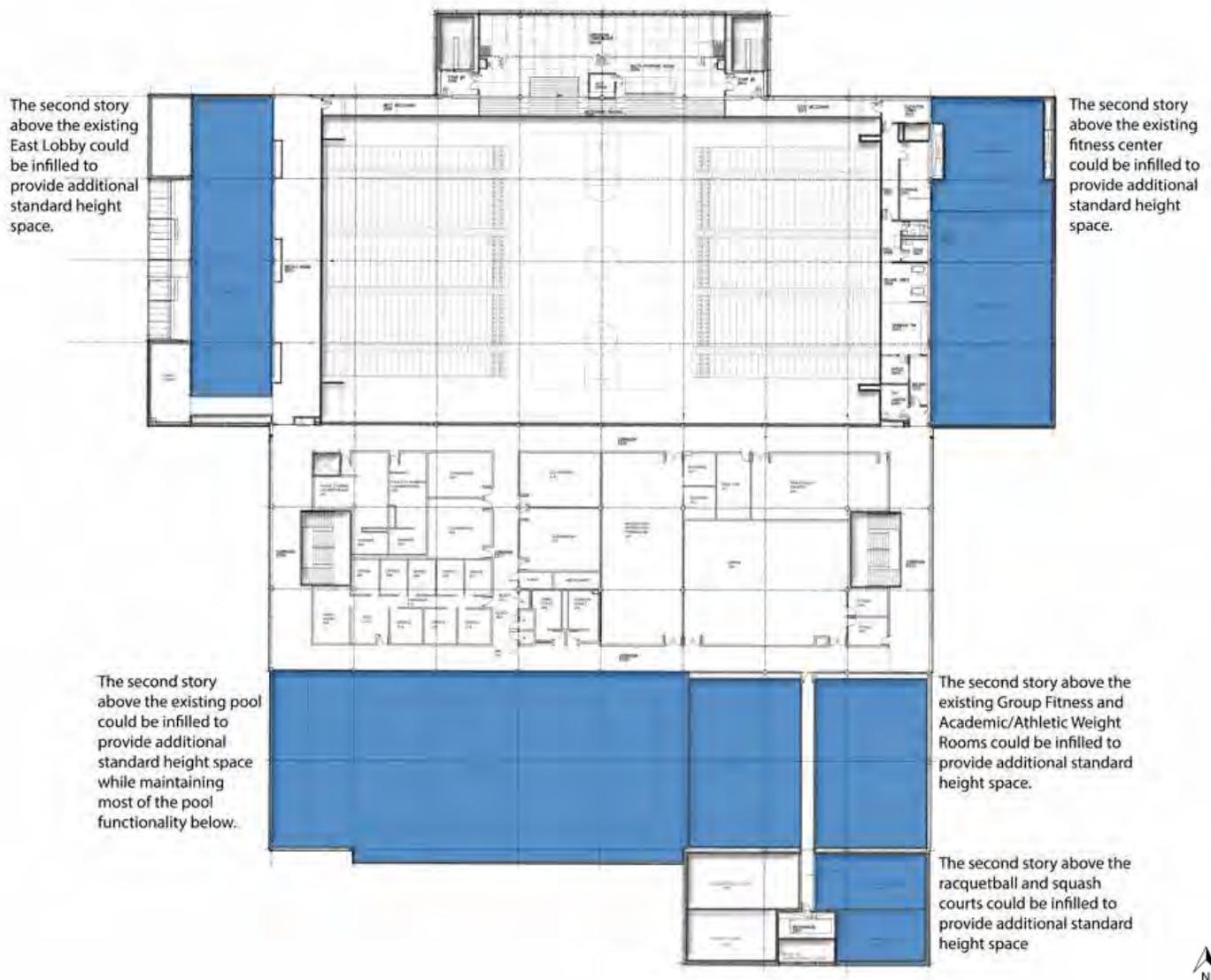


## Site Analysis & Expansion Options

The design team was asked to explore the maximum available capacity of the existing building and its surroundings.

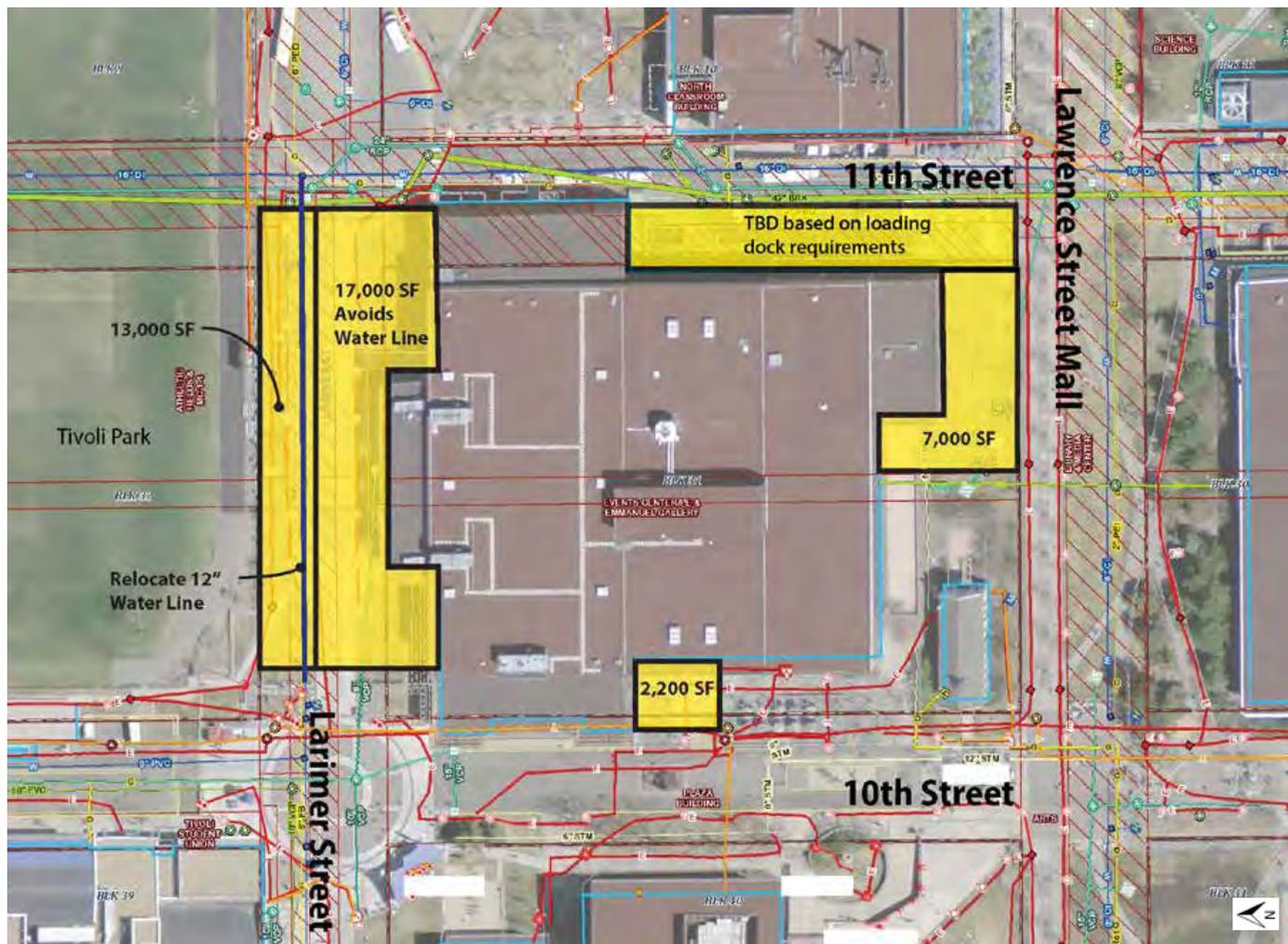
There are several double-height spaces in the existing facility that could be infilled to provide additional square footage within the current structure. The diagram below indicates the areas targeted for infill and their approximate square footages. Direction was given by the Steering Committee to explore design concepts that maximize existing building infill to the greatest extent possible without compromising function.

### AREAS OF POTENTIAL INFILL



The Davis Partnership team also explored areas for potential building expansion. Despite its location in the heart of the Auraria Campus, there are areas for potential expansion on each side of the building that would not only increase its available square footage, but would also improve campus wayfinding and reinforce campus design priorities. The Steering Committee favored expansion to the south along the Lawrence Street Mall, to the east along 11th Street as long as access to the North Classroom loading dock could be maintained, to the north along Larimer Street, and to the west along 10th Street to create a new building entrance. The diagram below shows the areas discussed for potential building expansion.

**AREAS OF POTENTIAL EXPANSION**



With areas for potential expansion outlined, Martin/Martin completed a site survey of the PE/Events Center to locate utilities, easements and right of ways to further refine expansion areas.

## Existing Building Assessment

In conjunction with the development of the “must haves” list and preliminary space program, the design team completed a thorough assessment of the condition of the existing building. Originally constructed in the mid-1970’s with additions in the early 1990’s, many of the building’s systems have seen little modification since their installation, despite numerous changes to the function and program of various spaces.

### Structural

The following summary of the existing structural system outlines the current state of the PE/Events Center and provides guidance on which code-required upgrades may be necessary as the building is infilled and expanded. The full structural assessment can be found in the Facility Analysis/Architectural Assessment, which is available upon request as a separate document.

The original structure appears to be laterally stabilized using reinforced beam and column moment frame construction with concrete masonry unit (CMU) infill walls at the exterior. Most of the interior CMU walls are not considered shear walls as they were observed to have a deflection gap between the floor/roof framing with no shear detailing in the original building plans. The mechanical penthouse above the roof is laterally stabilized using steel angle cross bracing at its two opposite corners.

The additions appear to have a similar lateral system as the original building, using moment frame stabilization with the addition of specified CMU shear walls typically located at the stair cores. The lateral system appears to be integrally connected to the original structure which indicates the original structure may have been assumed to transfer a portion of the lateral load. Select portions of the original structure masonry walls have been grouted and it is unclear whether these have been used as part of the lateral system.

In the opinion of Davis Partnership, the building appears to have been designed laterally for wind loads – its seismic resistance capacity is unknown without further analysis. The current IBC seismic loads are more onerous than the UBC seismic loads, so the building likely does not meet current seismic loads.

### Mechanical, Electrical, Plumbing, Fire Protection

The following summary of the existing mechanical, electrical, plumbing and fire protection systems outlines the current state of

the building systems and proposes modifications. The full systems assessment can be found in the Facility Analysis/Architectural Assessment, which is available upon request as a separate document.

#### – HVAC

The bulk of the core systems date back to the original construction in 1975 or the expansion in 1990. This equipment (e.g. Air Handlers, Chillers, Pumps, Heating Water Generators) is well past its estimated service life and should be replaced to ensure proper operation. In addition to equipment, the hydronic water piping and insulation is failing and requires replacement in many areas. ME Engineers suggests the replacement of all HVAC equipment with the exception of the cooling tower. As part of this work, the building heating system should be changed over from steam to gas-fired boilers to avoid the outages currently experienced. It is also suggested that the existing pneumatic HVAC control system be fully removed and replaced with a new, electronic, web-accessible control system.

#### – Plumbing

Steam generator for domestic water was recently replaced with gas-fired water heaters, which are in good working order and should remain unchanged. The bulk of the plumbing fixtures have also been recently replaced as part of water conservation efforts. ME Engineers suggests the lavatory faucets be replaced in all locker areas. The domestic water, sanitary and storm water piping in the building is failing in many areas and requires replacement. At minimum, the piping insulation on these systems requires replacement, which will also allow for the condition of the piping to be fully investigated. If the heating system is changed over from steam to natural gas, a new gas meter and service will need to be coordinated with the local provider.

#### – Electrical

The current electrical system for the building is a combination of equipment (e.g. main distribution board, motor control center, secondary panels, transformers, feeders, etc.) from the original construction in 1975, the 1990 expansion, and 2003 Gym Modifications. The majority of this equipment is out dated and does not comply with current NEC code requirements. ME Engineers recommends that this equipment be replaced. However, the existing power panels from the 1990 and 2003 renovation appear to be in good condition. It may be worthwhile to consider keeping these panels along with their branch circuits and corresponding feeders from the main distribution board, in order to

limit exposure on replacing the system. The current lighting scheme for the building include a combination of 1990 fixtures with fluorescent, metal halide, and quartz lamp types, with exception to the 2003 gym renovation where relatively new fixtures are being used. There is currently no lighting control system for the building other than local toggle switches, keyed switches, and dimmer panel for stage lighting. The majority of the lighting is run, or capable of being run, 24 hours if not physically turned off. ME Engineers recommends updating the lighting fixtures and control system to a more energy efficient system.

#### - Fire Protection

The fire alarm system was replaced three years ago and includes manual and automatic initiating devices, notification and voice evacuation. The fire alarm control panel and annunciator panel may need to be replaced pending if it has the capability to monitor a sprinkler system. The building is currently not served by an automatic fire sprinkler system. To bring the building up to current code, an automatic fire sprinkler system will need to be provided throughout. This will require a new water connection from the main in the street and a new fire entry room.

## Architectural

The PE/Events Center serves a broad range of academic and non-academic student needs. While its finish materials are worn and dated, periodic updates to classrooms, recreational spaces, conference rooms, and multi-use areas have kept the building functional. There are, however, several areas that Davis Partnership recommend be upgraded or modified in order to meet current codes and regulations.

The general use locker rooms are worn and dated, and do not comply with a number of current codes and regulations. The current locker room arrangement does not have an ADA accessible locker and changing area, and the showers, sinks, and toilets are not accessible because there is not adequate clearance between the building columns and the adjacent lockers. Furthermore, the existing gang showers are not compliant with current code and should be replaced with single-occupant stalls with unique drains. Each of the three institutions mentioned that they would like to see the locker rooms upgraded as part of any work done to the building. Theft is a common problem in the locker rooms, partially because the existing lockers are perforated metal and can be broken into fairly easily. Given the numerous issues with the existing locker rooms, it is recommended they be gutted and completely remodeled.

Both elevators are in good, working order and recently had their controls replaced. Any enhancements to the facility must ensure compliance with ADA requirements. An elevator checklist of relevant requirements can be found in the Facility Analysis/Architectural Assessment, which is available upon request as a separate document.

The building's roof membrane, flashing, transitions, and parapet cap all appear to be in good condition. The existing roof and overflow drains provide adequate drainage capacity, and the tapered insulation appears to provide adequate positive drainage without areas of water pooling. In some areas the mastic used to join membrane seams is cracked, but does not appear to allow water intrusion. Additional roof membrane and drainage information can be found in the Facility Analysis/Architectural Assessment, which is available upon request as a separate document..

Davis Partnership also recommends that testing be undertaken of the synthetic flooring surface under the resilient maple floor in the three court gym. This poured in place floor was installed when the building was constructed in an era where mercury vapors were used to cure synthetic resilient flooring. Due to the age of the existing building, it is recommended that this material as well as other potentially hazardous materials be tested before the commencement of renovation or construction.



## Deferred Maintenance

Within the next fiscal year, the storm pipes over the existing three court gym require replacement, and chiller replacement will need to be performed. AHEC estimates these maintenance items will cost roughly \$110,000. Additional near-term deferred maintenance items to be addressed include back flow preventer replacements (\$8,000), electrical theatrical connections that need to be updated and replaced (\$25,000), and the addition of a connection from the building fire panel into the campus system (\$160,000). Long-term deferred maintenance items that will become increasingly pressing are the replacement of cast iron piping (\$40,000) and other enhancements to the primary domestic water system (\$20,000).

Beyond general building deferred maintenance, re-leveling of the pool gutters and the replacement of the liner, along with the replacement of the pool filtration system to meet current standards are the bare minimum required for a functional pool. Additional related modifications to the space along with these items are estimated cost in excess of \$4 million. Bringing the pool systems up to current code and assessing the condition of the existing pool shell, liner, and deck were not included in the scope of work for this project.

While these deferred maintenance items give an idea of the current state of the building in terms of the work required to keep it operational into the future, it is not a comprehensive list. AHEC facilities staff members believe the deferred maintenance list, and the expenses required to fix these items, will only continue to grow until the building can be renovated.

## Shared/Designated Space

A number of spaces in the existing building are either shared or designated for uses other than campus recreation. The Three Court Gym, West Lobby, Pool, Group Fitness Room, Dance Studio, and Green Room are the spaces that are shared between multiple programs. The appendix includes facility scheduling information for these spaces during the Spring 2014 semester for reference. It should be noted that “shared” is a generic term used to describe program spaces that are scheduled for use by multiple, distinct departments or institutions. As additional spaces are added to the building that could be shared between recreation, academics, and other uses it will be important for the steering committee to come to a consensus on how these spaces will be scheduled and whether specific uses will be given scheduling priority.

There are also areas in the building that are designated for specific uses. Several of MSU Denver’s athletic programs have designated locker rooms, and the Human Performance and Sport program has faculty offices in the facility. It is assumed that the designated spaces required by these programs will also be necessary in the expansion and renovation of the building.

## Outline space program & functional area requirements

The Space Needs List is the result of direction provided by the Steering Committee on high priority spaces, existing facility deficiencies, and the amount of space available within and around the building for expansion. It was used as the basis for the conceptual designs presented as part of this feasibility study.

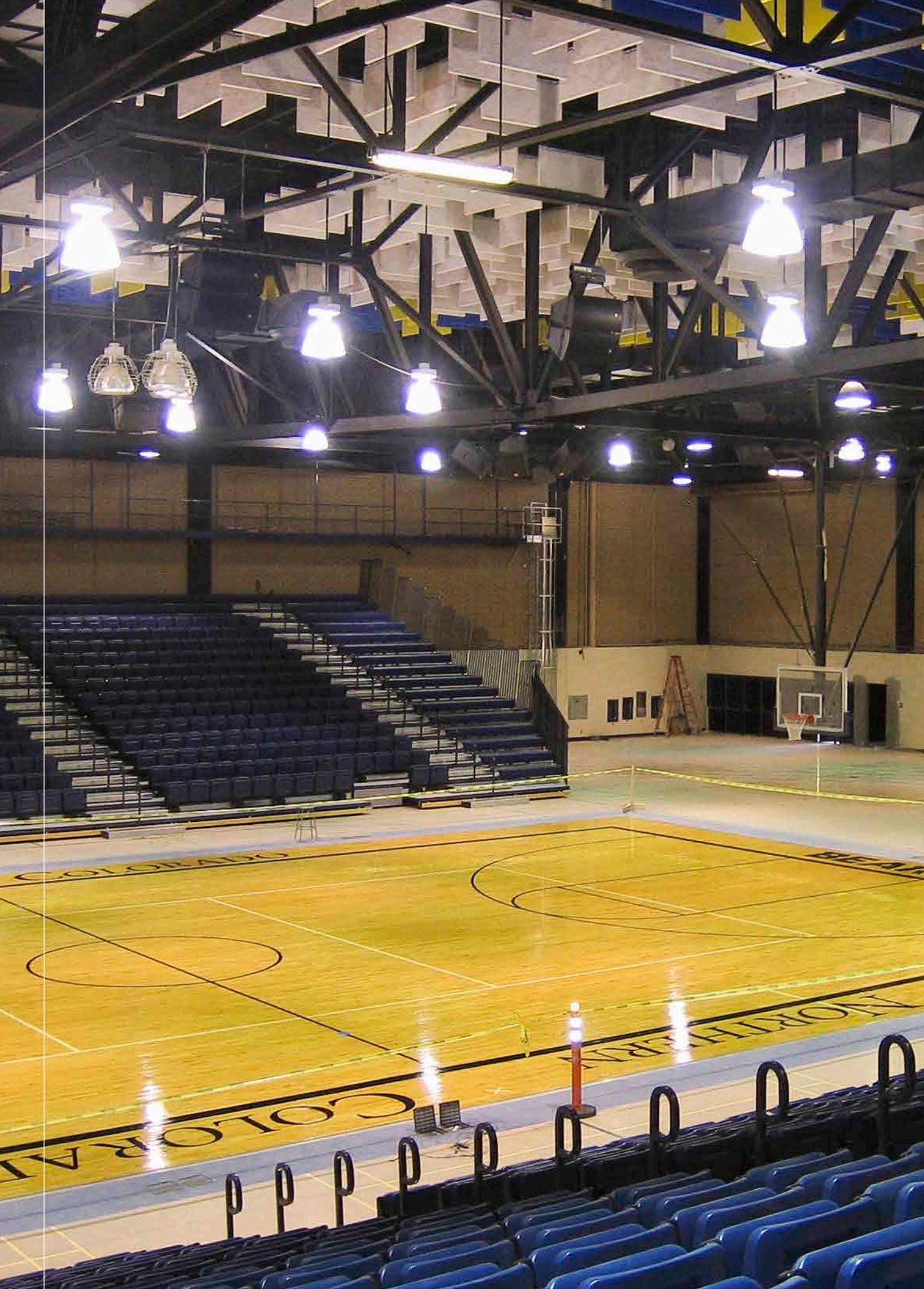
It is the goal of the space program to provide as much flexibility for multiple uses as possible while still allowing for greater definition of the spaces in program planning and design. As such, a number of spaces are currently designated as “multipurpose rooms” which could be developed to serve a variety of needs including a mat room, a yoga studio, a cycling studio, and other specialized spaces based on need and demand.

The full Space Program list can be found in the appendix.



# 5 / CONCEPTUAL DESIGN OPTIONS





## Conceptual Design Options

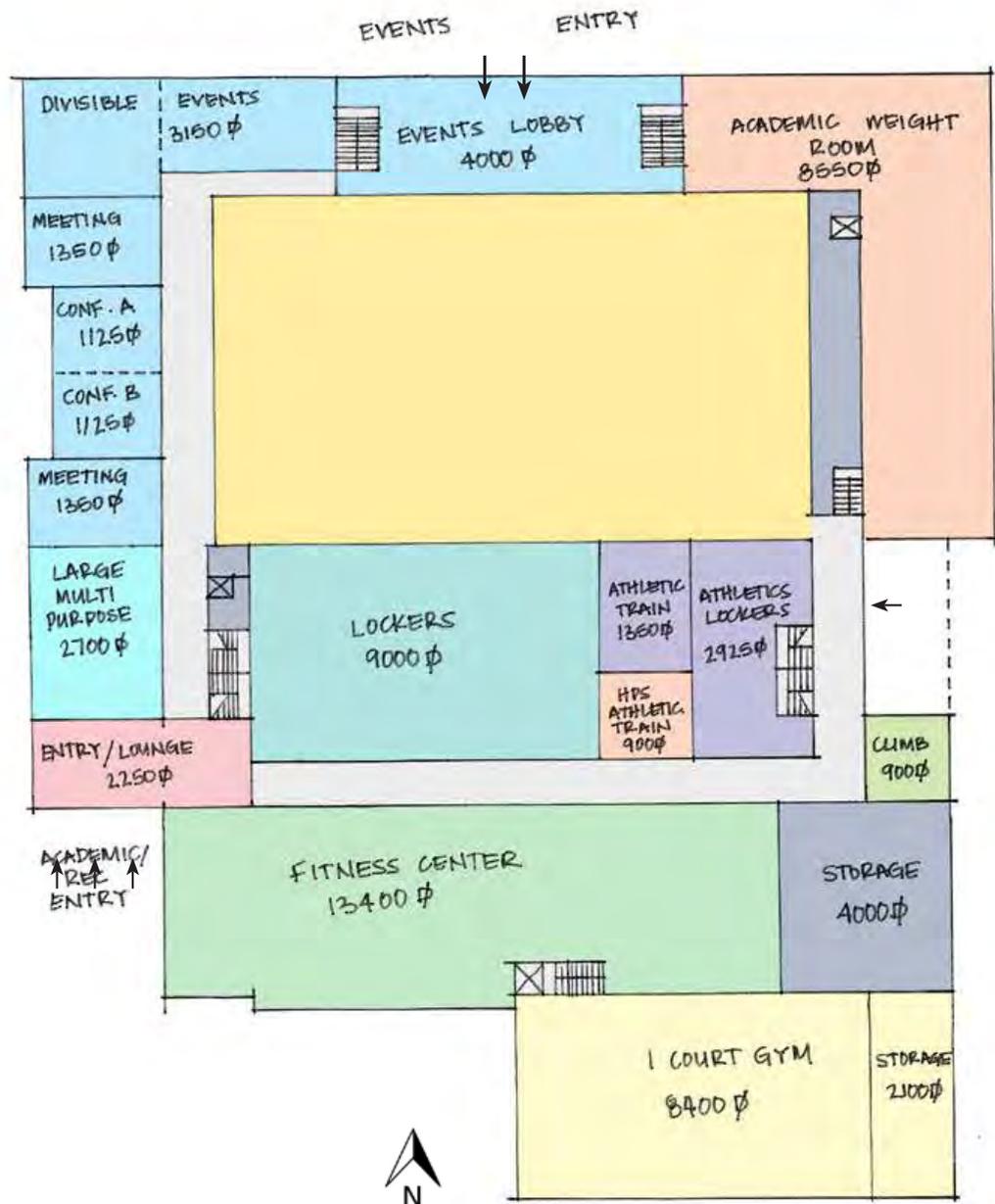
On March 28, 2014 the Steering Committee reviewed three design options based on the preliminary space program and feedback gathered during the previous meetings. Each of the options presented explored maximizing the infill potential of the existing building while strategically adding on to the facility. On April 7, 2014 the four institutions held a community workshop which invited students, staff, and faculty to discuss the current status of the study. Subsequently, at the request of the Committee, the design team submitted a fourth option for review following Meeting Three that focused on maintaining the lap swimming functionality of the existing pool.

### Maximized Expansion Option

#### MAXIMIZED EXPANSION OPTION - LEVEL ONE

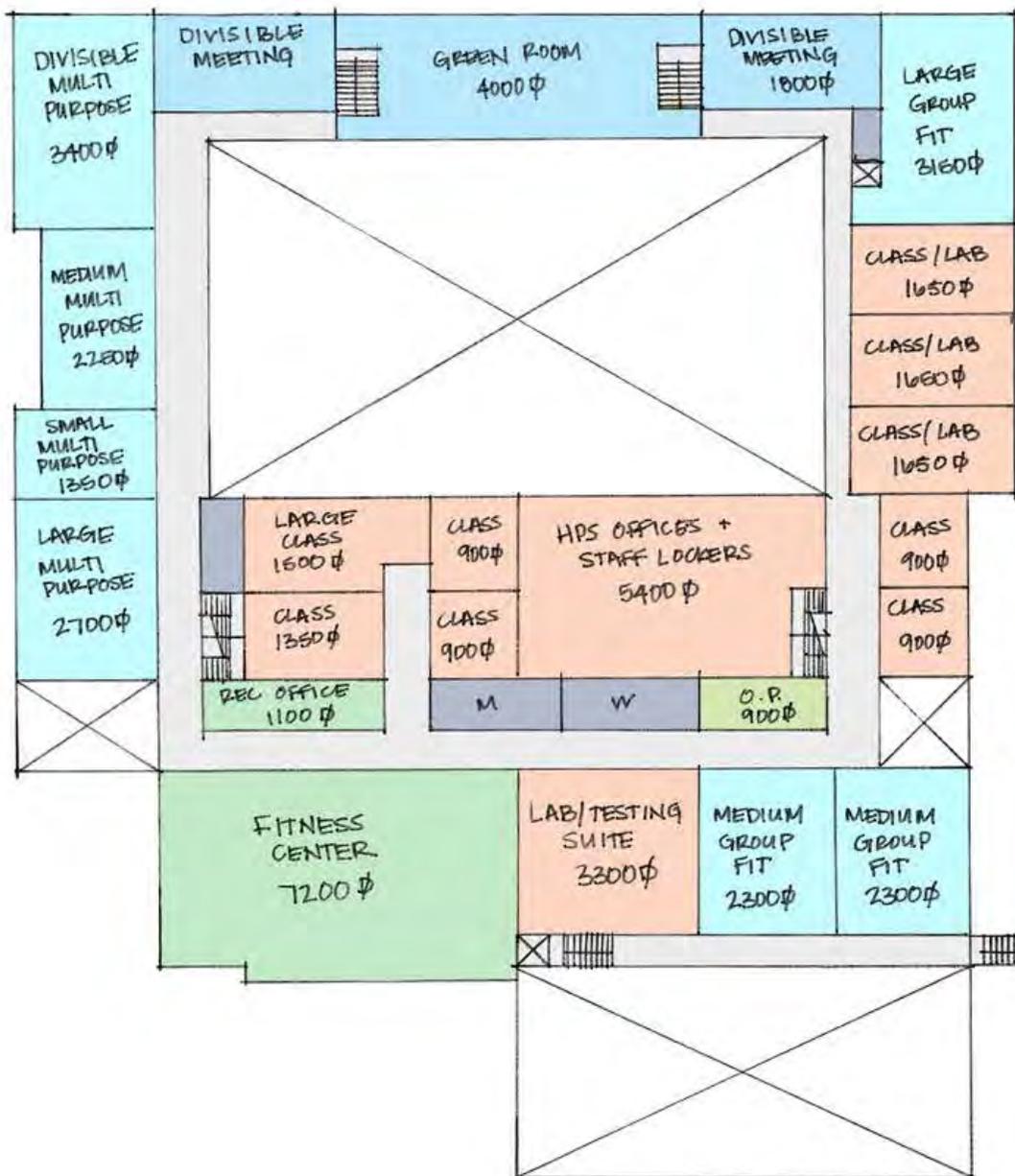
The first design option fully maximizes the infill of the existing building, adding nearly 19,000 square feet within the existing building structure. It also expands the building substantially in all directions with 75,000 square feet of new space. Of all the design options explored, the Maximized Expansion Option most fully meets the needs and requirements of the user groups and the preliminary space program.

Level one meets many of the shared-use needs in the building including conference, event, and meeting room space, providing student lounge and drop-in fitness space, locker rooms, and a climbing wall. In addition, CU Denver's need for a dedicated multipurpose room and single court gym could be met on this level, along with expanded program space for HPS and Title IX compliant locker rooms for MSU Denver Athletics.



Level two provides a number of multipurpose rooms that could be scheduled for a variety of activities, as well as additional lab, classroom and office space for MSU Denver's HPS program. Expanded recreation offices and additional drop-in fitness space are also provided.

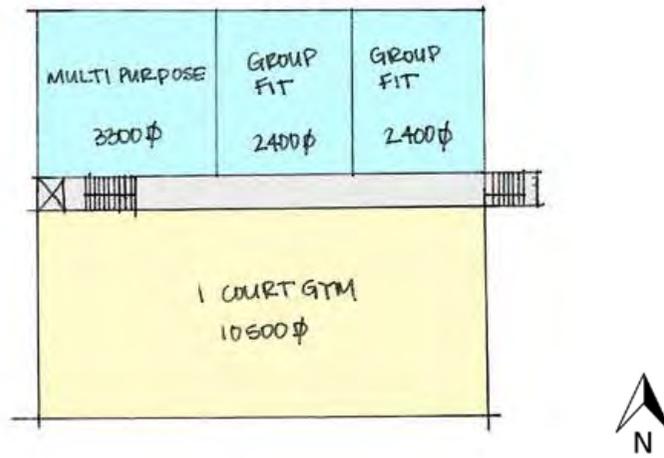
**MAXIMIZED EXPANSION OPTION - LEVEL TWO**



Level three includes an additional single court gym that could be used as a teaching gym, along with additional group fitness and multipurpose rooms.

**MAXIMIZED EXPANSION OPTION - LEVEL THREE**

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The proposed additions in the Maximized Expansion Option provide the opportunity to explore how the PE/Events Center interacts with adjacent campus pathways like the Larimer Street corridor, the Lawrence Street Mall, and 10th Street. The following architectural design and massing of the additions could help address greater campus wayfinding goals and can activate proposed future campus modifications such as the multi-use Tivoli Park.

**MAXIMIZED EXPANSION OPTION - VIEW FROM NORTHEAST (11TH & LARIMER)**



**MAXIMIZED EXPANSION OPTION - VIEW FROM SOUTHWEST (10TH & LAWRENCE)**



MAXIMIZED EXPANSION OPTION - VIEW FROM LARIMER STREET LOOKING WEST



MAXIMIZED EXPANSION OPTION - VIEW FROM LAWRENCE STREET MALL LOOKING EAST



MAXIMIZED EXPANSION OPTION - VIEW FROM TIVOLI PLAZA LOOKING SOUTH DOWN 10TH STREET



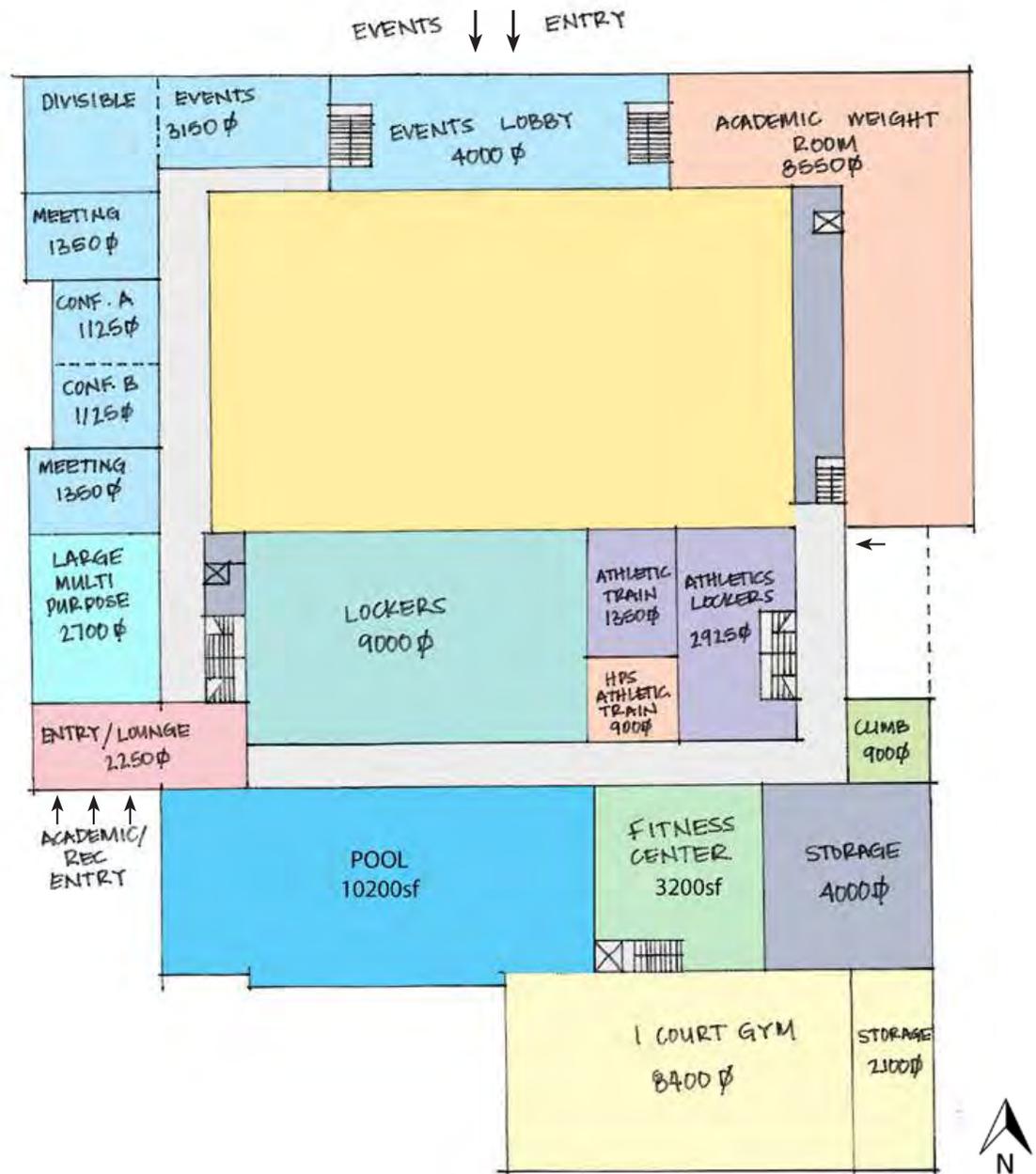
## Pool Option

At the conclusion of Meeting Three, the Steering Committee directed the design team to explore maintaining the existing pool as an alternate arrangement of the Maximized Expansion Option. Keeping the pool minimally changes the exterior massing of the building, but it does impact the internal planning of individual spaces.

At level one, the fitness center shrinks significantly to maintain the extents of the existing pool, moving that space to other parts of the building across three floors.

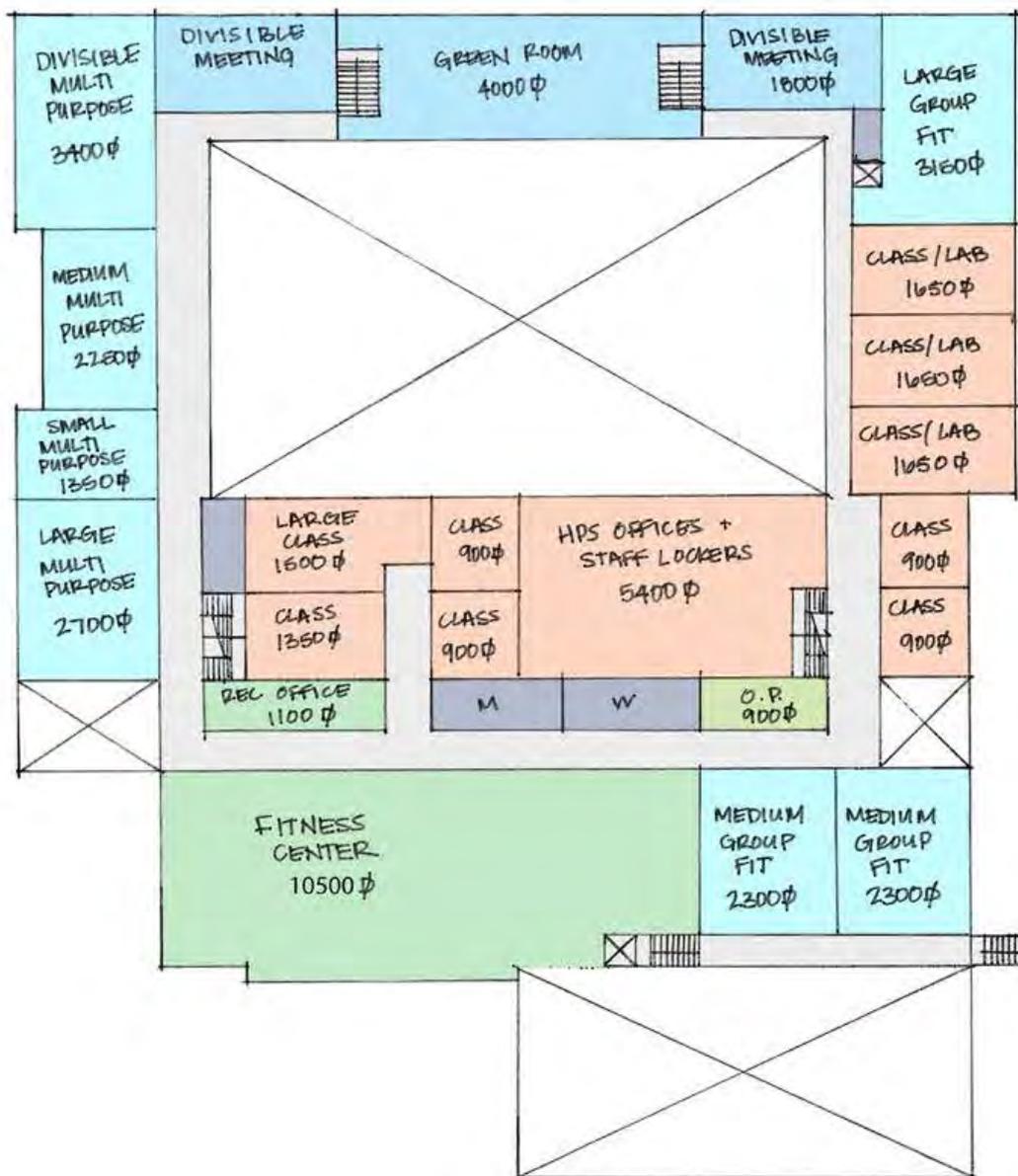
Though the pool is maintained, its functionality is altered: infill above the existing pool eliminates diving as a program function, but maintains all other functions that do not require double height space.

### POOL OPTION - LEVEL ONE



Level two remains largely the same, though the lab and testing suite is eliminated to accommodate additional fitness center square footage.

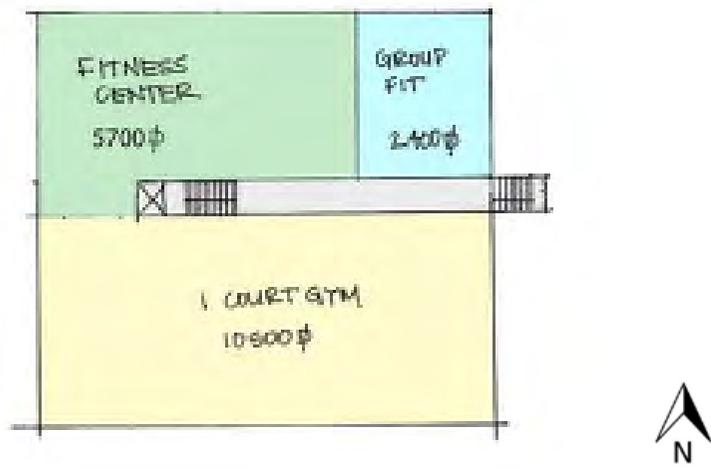
POOL OPTION - LEVEL TWO



Level three maintains the single court gym as well as one group fitness studio, dedicating the balance of the floor area to the fitness center.

**POOL OPTION - LEVEL THREE**

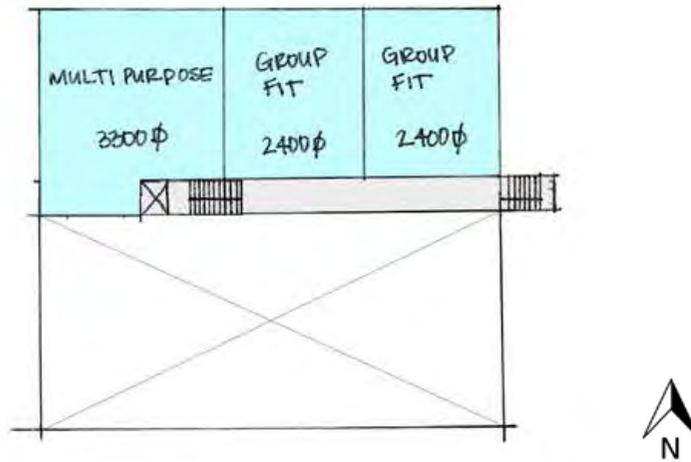
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The Pool Option also includes a fourth story. Because gyms are double height spaces, adding additional program area at this level minimally impacts costs. Level four includes group fitness and multipurpose spaces displaced elsewhere in the building.

**POOL OPTION - LEVEL FOUR**

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In general, the exterior massing of the Pool Option is only slightly different from that of the Maximized Expansion Option and would be barely perceptible from the ground plane.

**POOL OPTION - VIEW FROM NORTHEAST (11TH & LARIMER)**

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**POOL OPTION - VIEW FROM SOUTHWEST (10TH & LAWRENCE)**

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POOL OPTION - VIEW FROM LARIMER STREET LOOKING WEST



POOL OPTION - VIEW FROM LAWRENCE STREET MALL LOOKING EAST



POOL OPTION - VIEW FROM TIVOLI PLAZA LOOKING SOUTH DOWN 10TH STREET



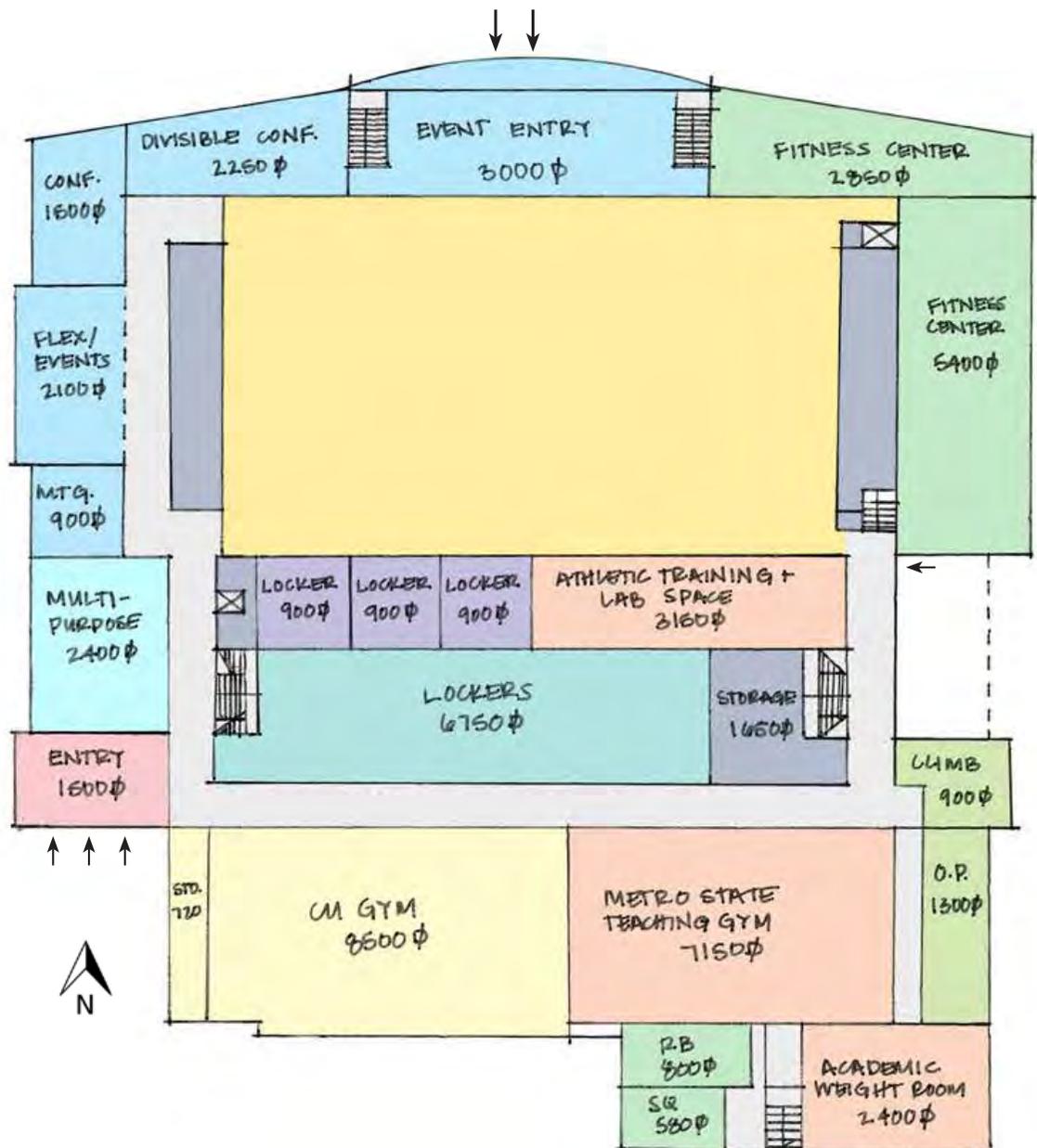
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## North Expansion Option

The North Expansion Option balances infill of the existing building with targeted building expansions that focus on the north and east sides of the building. Between 8,000 square feet of infill and 51,000 square feet of expansion, this option increased the available space in the PE/Events Center by nearly 60,000 square feet.

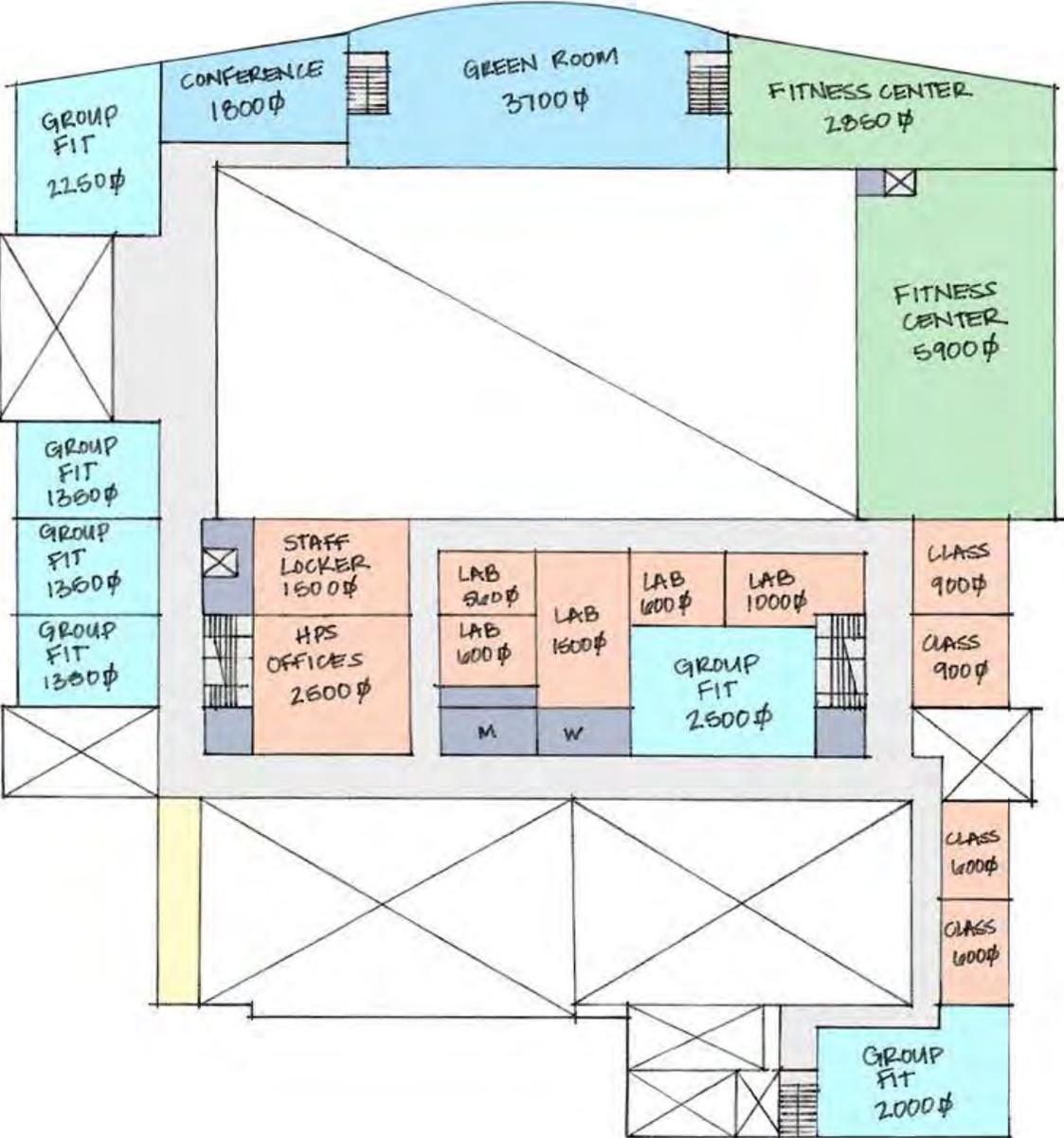
Level one focuses on the shared-use areas outlined in the space program including conference, event and meeting space, locker rooms, student lounge and flex space, drop-in fitness, and the outdoor program and climbing wall. In this option, both MSU Denver's teaching gym and CU Denver's dedicated gym space are accommodated on level one. It also maintains one racquetball and one squash court for recreational use.

### NORTH EXPANSION OPTION - LEVEL ONE



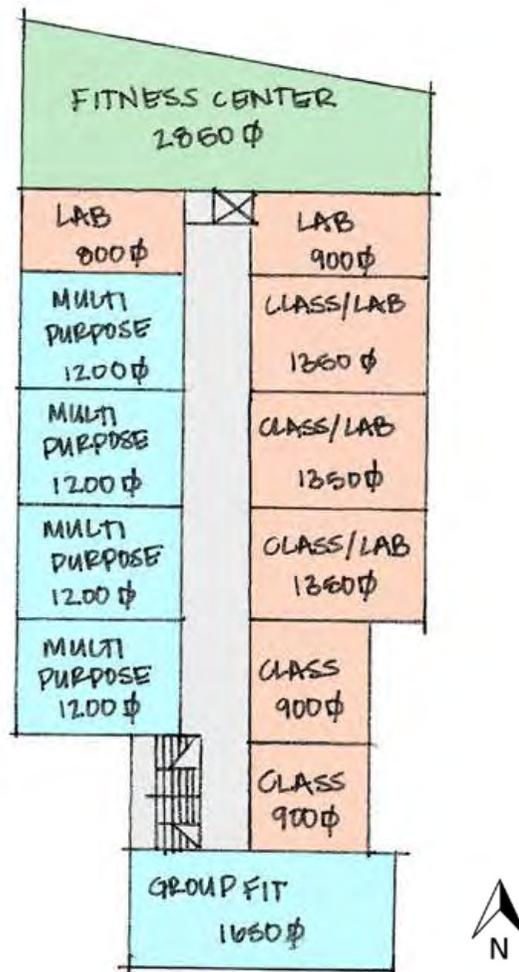
Level two includes group fitness rooms that meet the needs of recreation, club sports, and academics along with HPS lab and classroom spaces as well as staff offices and lockers. Drop-in fitness space is also located on level two at the north east corner.

**NORTH EXPANSION OPTION - LEVEL TWO**



Level three provides multipurpose space for a variety of uses along with HPS classroom and lab space and the balance of the fitness center square footage.

NORTH EXPANSION OPTION - LEVEL THREE



The North Expansion Option provides an opportunity to activate both the Larimer Street corridor and the future Tivoli Park improvements. The new 10th Street entry improves campus wayfinding by creating a clear day-to-day entrance to the building. With no addition planned to the south, this option has little impact on the Lawrence Street Mall and the Emmanuel Gallery, as seen in the conceptual images below.

**NORTH EXPANSION OPTION - VIEW FROM NORTHEAST (11TH & LARIMER)**

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**NORTH EXPANSION OPTION - VIEW FROM SOUTHWEST (10TH & LAWRENCE)**

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NORTH EXPANSION OPTION - VIEW FROM LARIMER STREET LOOKING WEST



NORTH EXPANSION OPTION - VIEW FROM LAWRENCE STREET MALL LOOKING EAST



NORTH EXPANSION OPTION - VIEW FROM TIVOLI PLAZA LOOKING SOUTH DOWN 10TH STREET



## Track Option

Following the review of the North Expansion Option, the design team explored the inclusion of a track at the second level around the gym spaces. At 65' wide by 235' long, the space above the two court spaces is large enough to accommodate a track, meeting several of the standards for indoor tracks, including:

- 20' minimum inside radius for indoor tracks
- 30' minimum outside radius for indoor tracks
- Three to four lanes at 4' wide

In order to best accommodate a variety of running and walking users, three lanes should be provided. The following formula confirms that the available space is wide enough to accommodate three lanes:

$$2 (20' \text{radius}) + 2 (3 \text{ lanes} \times 4' \text{ per lane}) = 64' \text{ total width required} < 65' \text{ available}$$

Indoor tracks that are less than 1/10 mile see less use than longer tracks because building distance becomes tedious. The following formula confirms that the available space could support a track nearly 1/10 mile, and provides the maximum track length that could be accommodated:

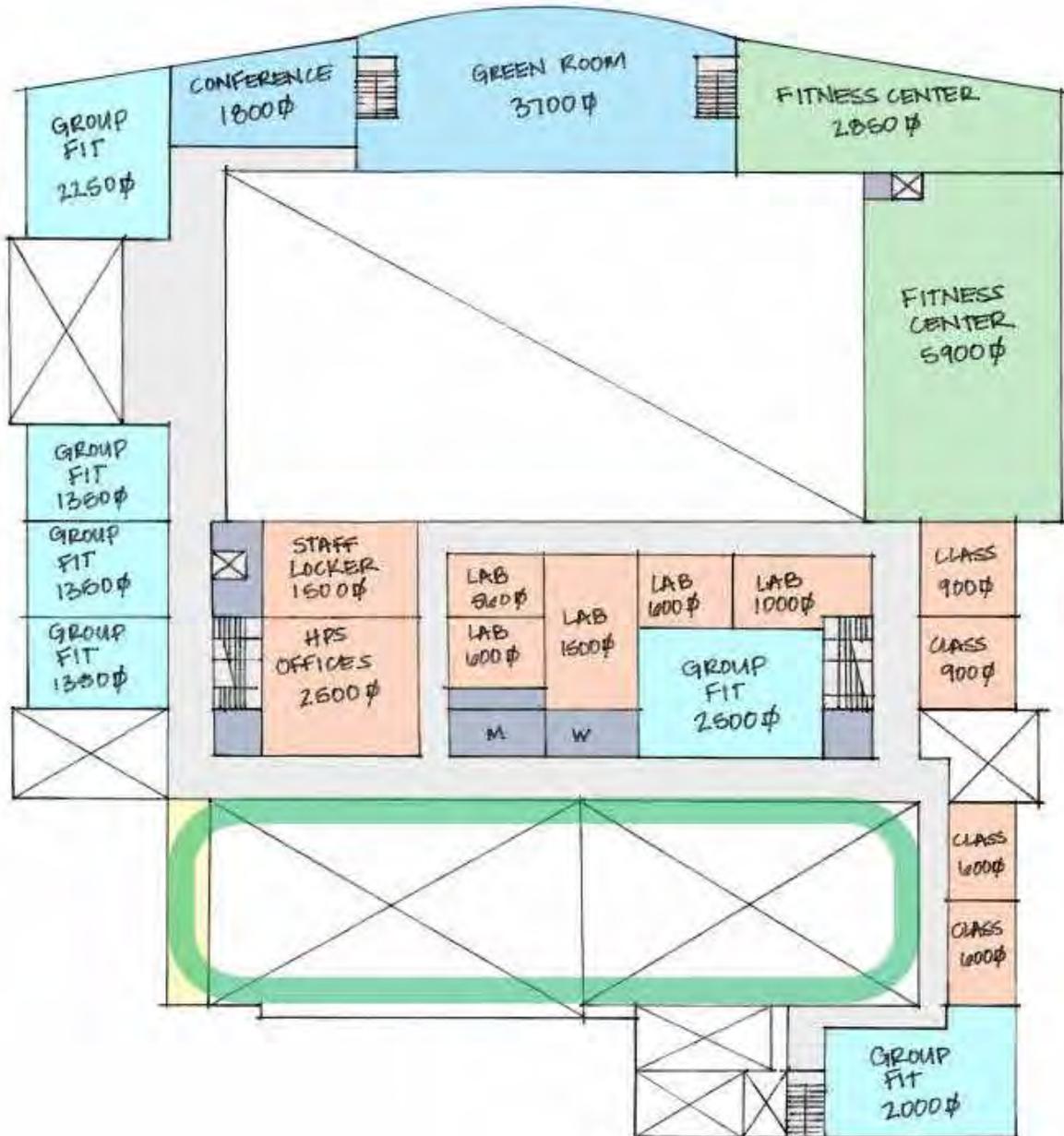
$L = 2S + 2\pi (R + (n-1) W)$  where S= straightaway, R = radius of turn, n = lane number and W = width of the lane.

$$L = 2(235' - 2(20') - 2(12')) + 2\pi (20' + (1-1)4')$$

- Track Length = 492' inside lane = 10.75 laps per mile, just short of 1/10 mile.

In addition to ensuring there is adequate space available to support the track, there are other considerations that impact an indoor track and adjacent spaces. Because the track would need to run between two adjacent spaces, noise may transfer from one gym to the next via the track. In instances where there are games or other loud activities going on in both spaces this isn't problematic, but if the two gyms are simultaneously programmed for different events, for example a club sports game and an HPS class, noise transfer is sure to be an issue. The track's proposed location is within the footprint of the existing building, and because of the uses on level one, would need to be suspended from the top beams of the existing structure. This type of structural support would trigger additional upgrades to the lateral bracing systems and would incur substantial cost. Furthermore, great care would need to be taken in designing the track in order to minimize the impact of the suspended track on the fields of play in the gyms below.

TRACK OPTION - LEVEL TWO

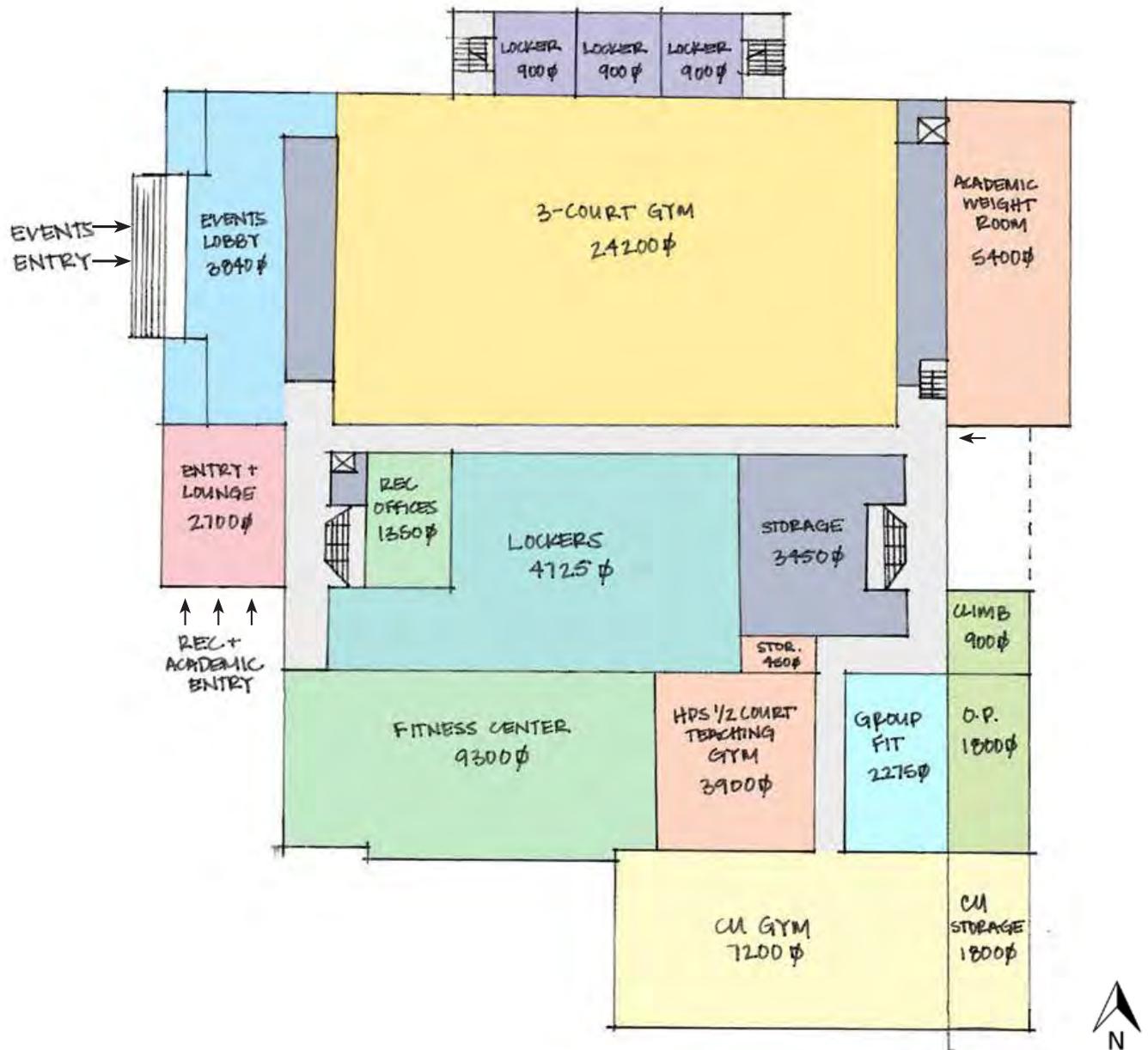


## Value Option

The Value Option limits building expansion to the south and west, providing the most compact building solution that meets only the highest priority needs. With 14,000 square feet of infill and 31,000 square feet of expansion, this option is the most conservative building solution, adding 45,000 square feet to the existing building.

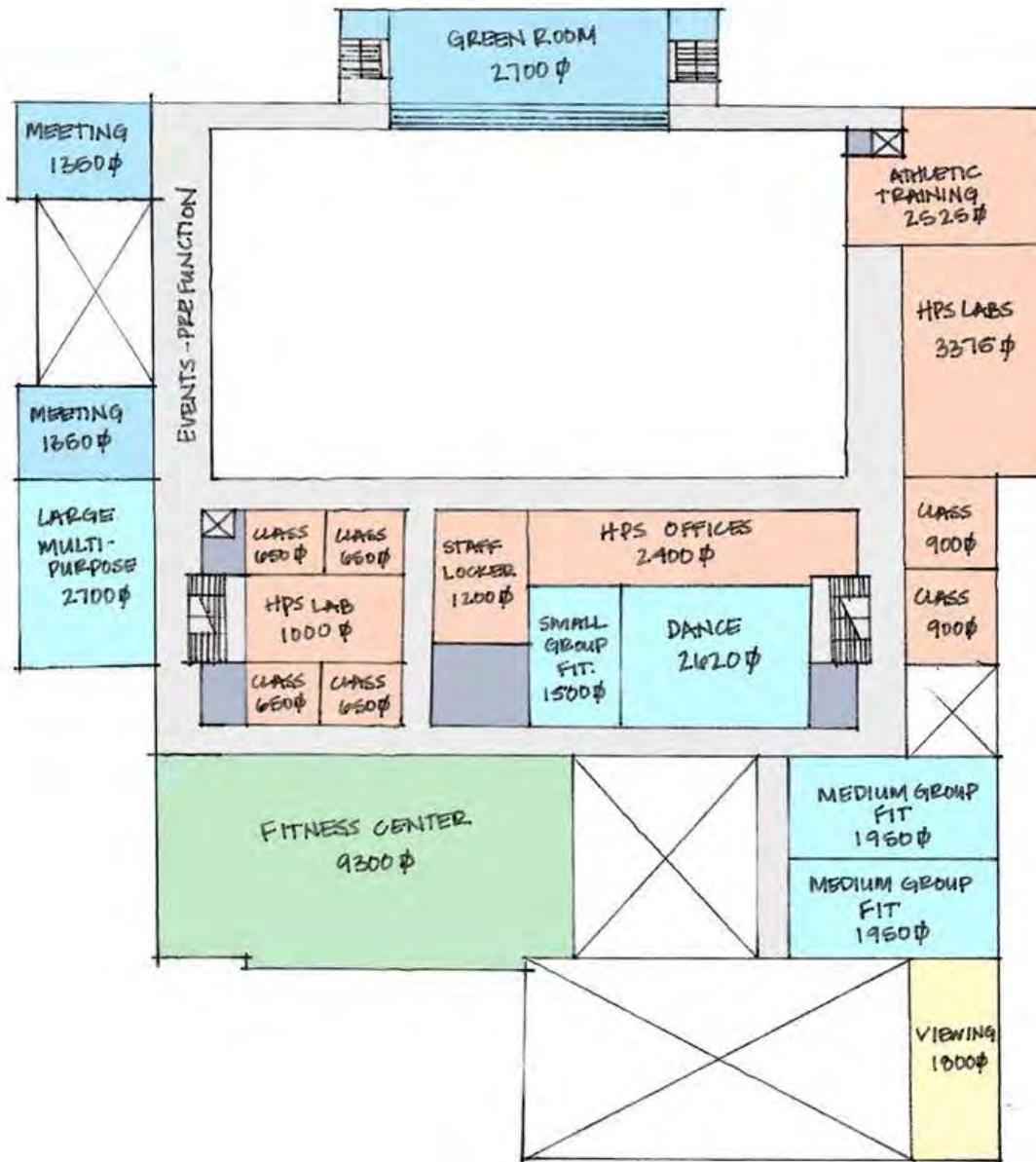
Level one maintains much of the existing building program, but relocates the fitness center, and adds a half-court teaching gym for MSU Denver as well as a single court gym for CU Denver. A new lounge and entry along 10th Street and a relocated climbing wall and outdoor program are also included.

### VALUE OPTION - LEVEL ONE



Level two provides additional space for the HPS program, group fitness studios and the balance of the fitness center.

VALUE OPTION - LEVEL TWO



This option impacts the exterior massing and building elevations the least of the five design options. With expansion concentrated to the south and west, this option does not address greater campus objectives along Larimer Street at Tivoli Field. The new building entrance along 10th Street would help clarify the location of the building entry, and the south gym expansion could enhance the Lawrence Street Mall.

**VALUE OPTION - VIEW FROM NORTHEAST (11TH & LARIMER)**

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**VALUE OPTION - VIEW FROM SOUTHWEST (10TH & LAWRENCE)**

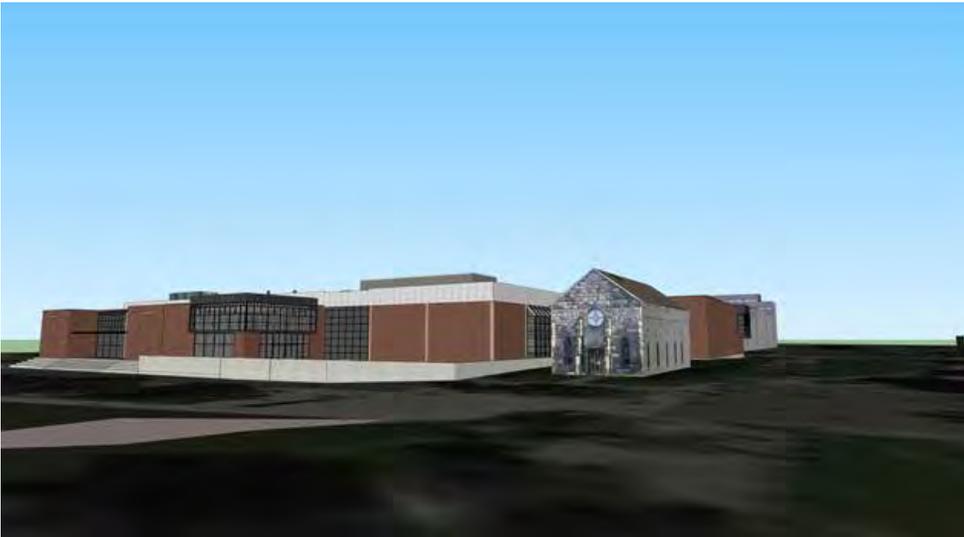
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VALUE OPTION - VIEW FROM LARIMER STREET LOOKING WEST



VALUE OPTION - VIEW FROM LAWRENCE STREET MALL LOOKING EAST



VALUE OPTION - VIEW FROM TIVOLI PLAZA LOOKING SOUTH DOWN 10TH STREET

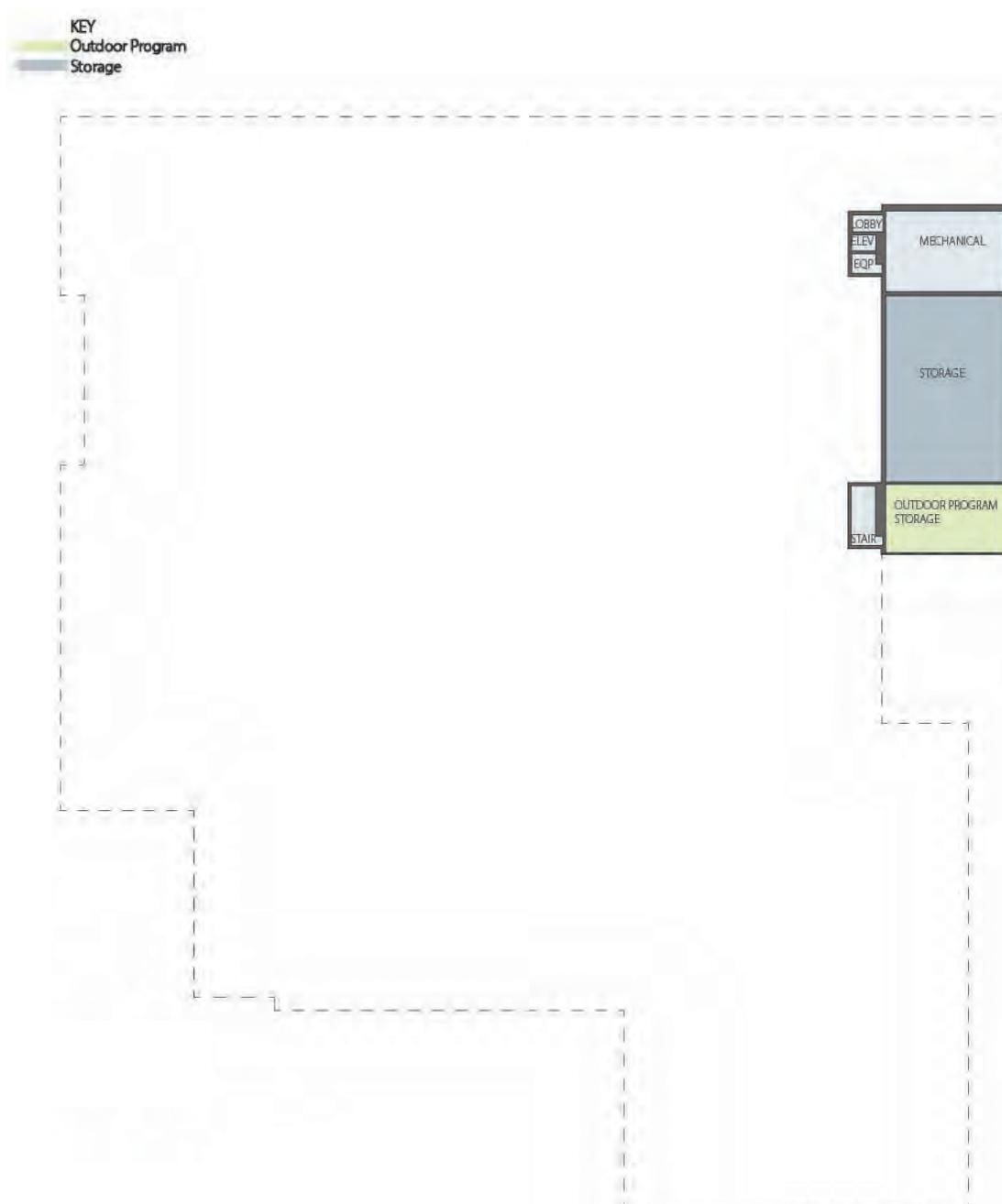


## Selected Design Options

All five design concepts were reviewed at Steering Committee Meeting Four on April 21, 2014 and the design team was directed to proceed with further development of both the Maximized Expansion and Pool Options for pricing. Conceptual level plans, design team narratives, and a Sketch-Up model along with existing building drawings supplied by AHEC were used as the as the basis for the estimate. Based on direction received from AHEC, the construction cost estimate includes escalation through fall 2017.

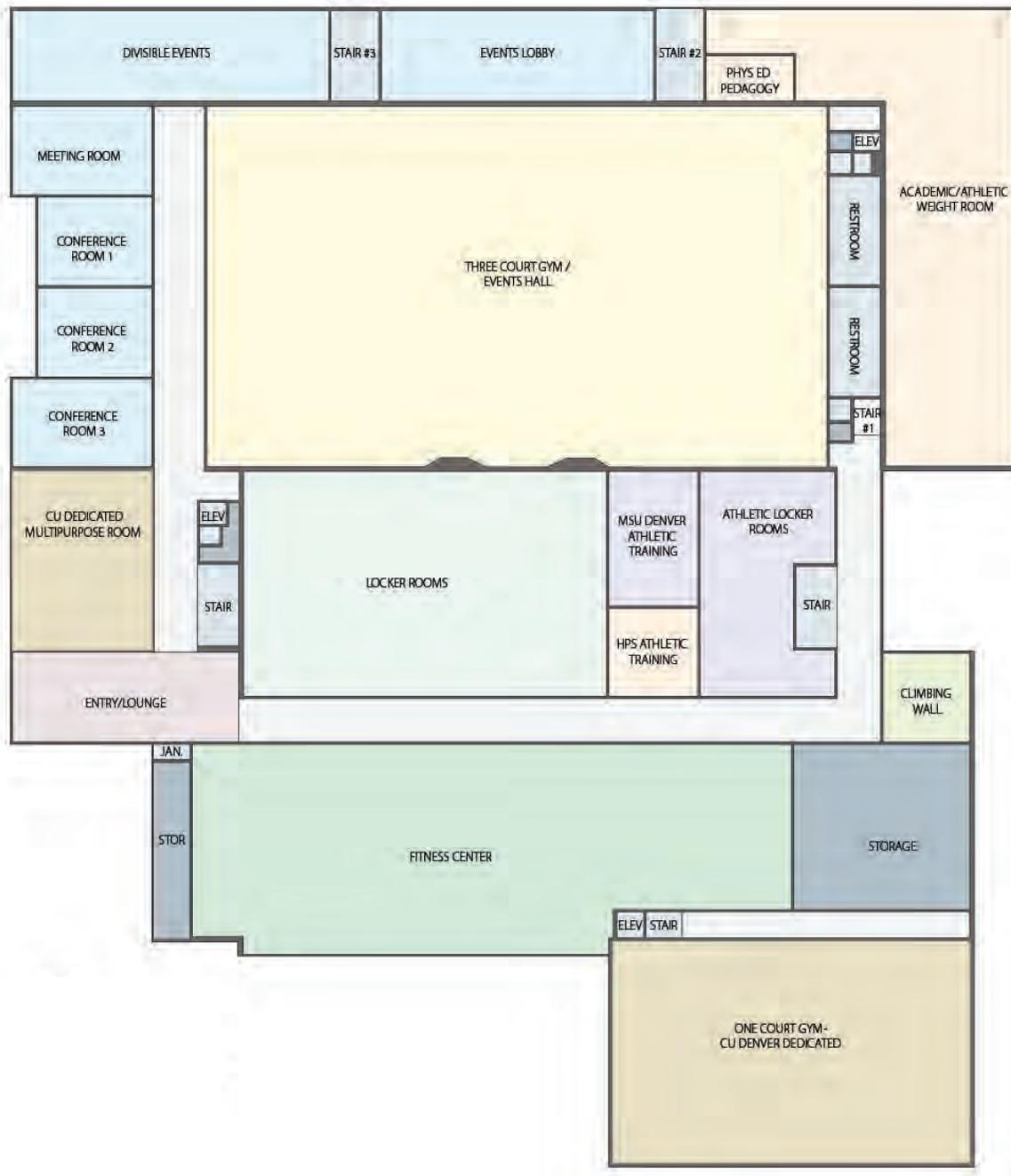
### Maximized Expansion Option

#### MAXIMIZED EXPANSION OPTION - BASEMENT



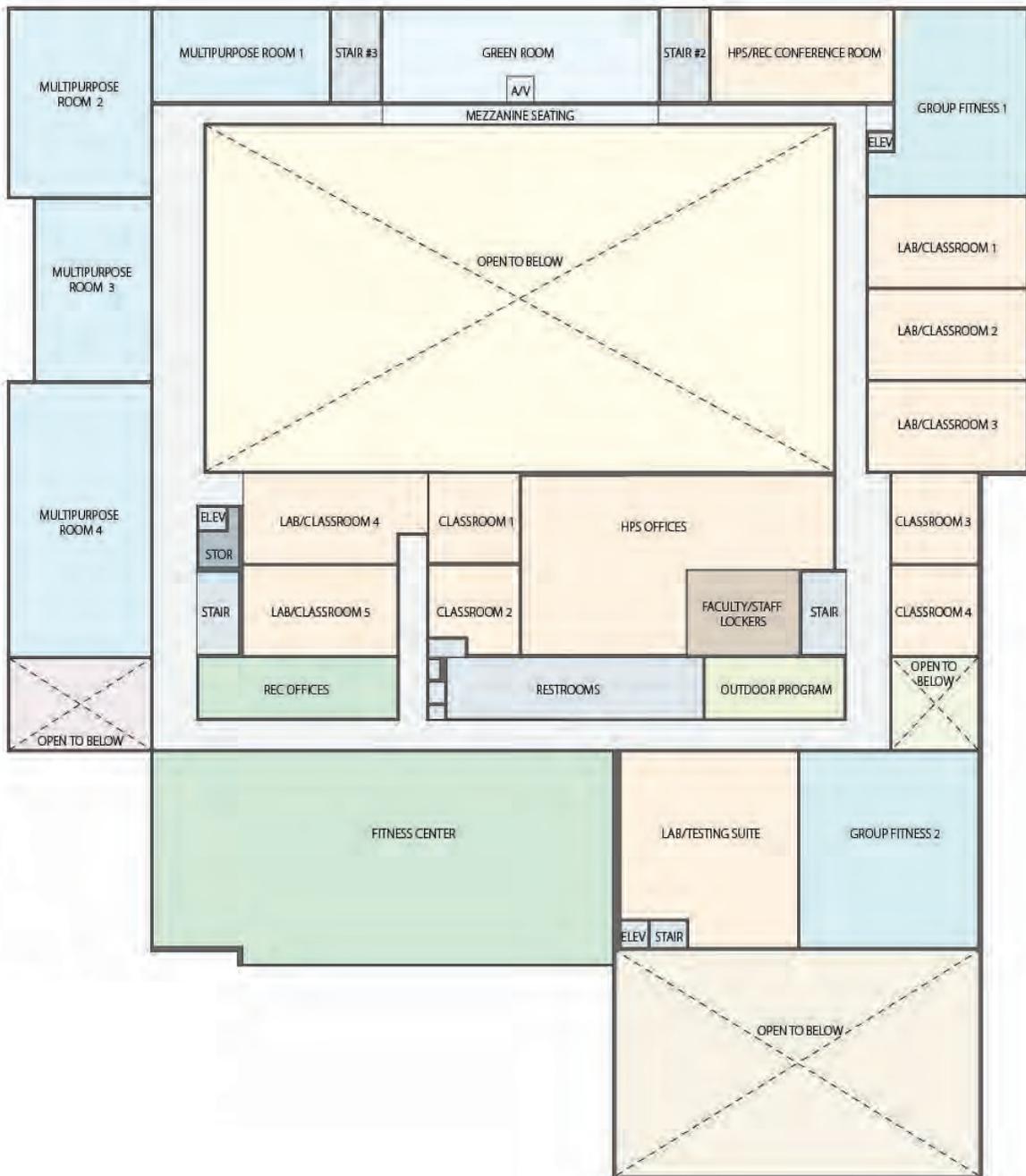
MAXIMIZED EXPANSION OPTION - LEVEL ONE

- KEY
- Athletics
- Building Support
- CU Denver Dedicated Space
- Events
- Human Performance and Sport
- Lobby/Entry
- Locker Rooms
- Multi-purpose
- Outdoor Program
- Recreation
- Storage
- Three Court Gym

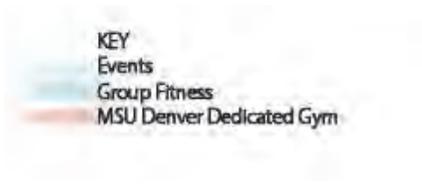


MAXIMIZED EXPANSION OPTION - LEVEL TWO

- KEY
- Athletics
  - Building Support
  - Events
  - Faculty/Staff Locker Room
  - Group Fitness
  - Human Performance and Sport
  - Multi-purpose
  - Outdoor Program
  - Recreation
  - Storage
  - Three Court Gym



MAXIMIZED EXPANSION OPTION - LEVEL THREE



## Shared/Dedicated Space

Because there are numerous departments and activities it is helpful to see how different spaces may be designated for shared or dedicated use. The following diagrams and descriptions capture numerous discussions by the Steering Committee surrounding how spaces in the Maximized Expansion Option may be designated and used if the building is expanded and renovated.

For spaces that are designated as campus recreation as well as spaces where all three institutions have equal scheduling access, headcount can be used to determine each institution's share of the space. The total 2013 campus headcount data used by AHEC in the annual funding model was used to determine the percentage of total campus headcount that can be allocated to each institution.

INSTITUTION	SPRING 13	SUMMER 13	FALL 13	TOTAL	PERCENTAGE
CCD	7,286	2,294	6,910	16,490	17.79%
MSU Denver	20,452	5,702	20,813	46,967	50.66%
CU Denver	12,446	4,178	12,627	29,251	31.55%
<b>Total</b>	<b>40,204</b>	<b>12,174</b>	<b>40,350</b>	<b>92,708</b>	<b>100.00%</b>

The spaces that the shared approach applies to are hatched in the plans on the following pages.

The total square footage for recreation and tri-institutionally shared spaces in this concept option is 46,515 square feet. Accordingly, each institutions share of these spaces is included below.

INSTITUTION	PERCENTAGE	SQUARE FEET
CCD	17.79%	8,275 s.f.
MSU Denver	50.66%	23,565 s.f.
CU Denver	31.55%	14,675 s.f.
<b>Total</b>	<b>100.00%</b>	<b>46,515 s.f.</b>

There are also spaces in the building that are shared between programs such as recreation and academics, or academics and athletics so the approach outlined above does not apply. It is not the goal of this feasibility study to clarify how these spaces should be scheduled or how uses should be prioritized, it is recommended that this charge be taken on by the Steering Committee in advance of design during program planning. Based on current use for departmentally shared spaces, the diagrams on the following pages show these spaces at each level and note which entities share each space.

Several spaces in the building are also designated for use by a single department or institution. The square footage of each of these spaces

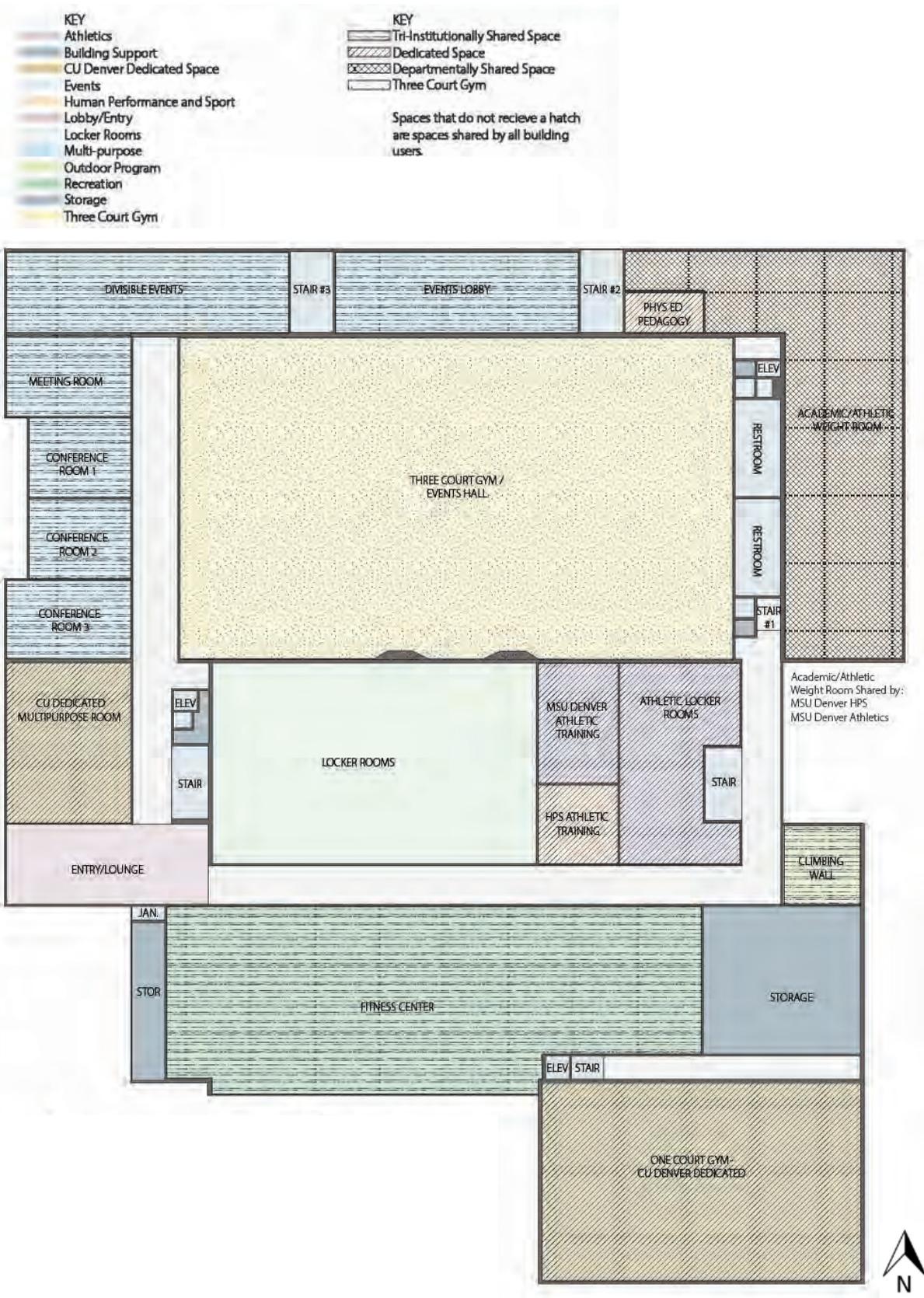
will be wholly assigned to that user as indicated in the plans on the following pages. The total square footages designated for use by a single department or institution is listed below.

INSTITUTION	SQUARE FEET
MSU Denver HPS	26,482 s.f.
MSU Denver Athletics	4,199 s.f.
CU Denver	11,270 s.f.
<b>Total</b>	<b>41,915 s.f.</b>

The three court gym is used by multiple departments within the building, and is the only event space on campus with the capacity to host large events. As such, it is considered separately because of the high-demand for this space, and should be carefully studied by the Steering Committee before program planning commences. Its function as a special events space, as well as how regularly scheduled activities may change as the result of additional space available in the building and elsewhere, should be considered in the program plan. It is highlighted in the following plans.

The remaining building square footage of 27,556 square feet for program spaces that are shared through the building, such as locker rooms, mechanical space, and vertical circulation, as illustrated in the following plans.

MAXIMIZED EXPANSION OPTION - LEVEL ONE - SHARED SPACES PLAN

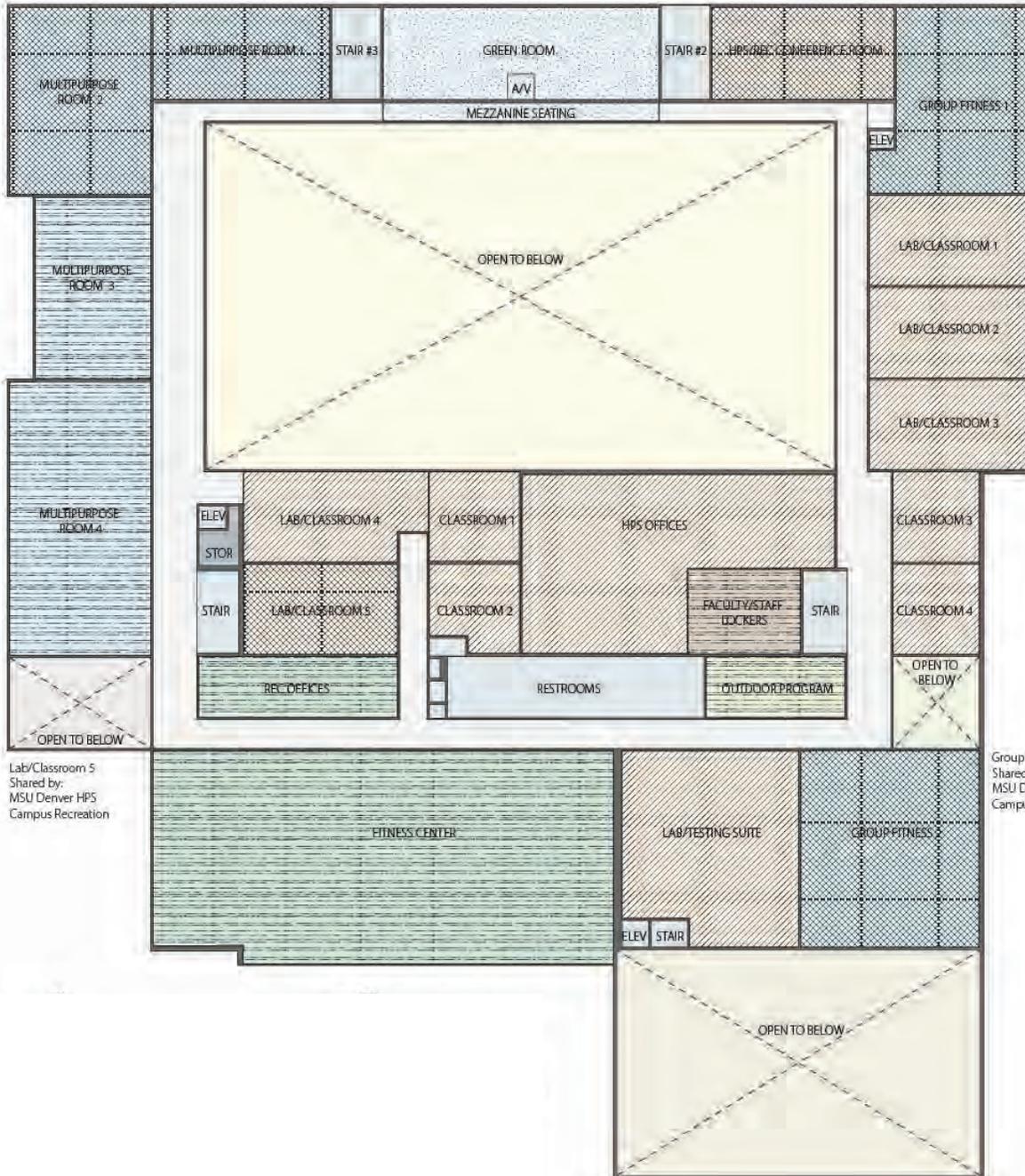


## MAXIMIZED EXPANSION OPTION - LEVEL TWO - SHARED SPACES PLAN

<p><b>KEY</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #d3d3d3; border: 1px solid black; margin-right: 5px;"></span> Athletics</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #808080; border: 1px solid black; margin-right: 5px;"></span> Building Support</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #e0e0e0; border: 1px solid black; margin-right: 5px;"></span> Events</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #c0c0c0; border: 1px solid black; margin-right: 5px;"></span> Faculty/Staff Locker Room</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #a0a0a0; border: 1px solid black; margin-right: 5px;"></span> Group Fitness</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #808080; border: 1px solid black; margin-right: 5px;"></span> Human Performance and Sport</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #606060; border: 1px solid black; margin-right: 5px;"></span> Multi-purpose</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #404040; border: 1px solid black; margin-right: 5px;"></span> Outdoor Program</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #202020; border: 1px solid black; margin-right: 5px;"></span> Recreation</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #000000; border: 1px solid black; margin-right: 5px;"></span> Storage</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #808080; border: 1px solid black; margin-right: 5px;"></span> Three Court Gym</li> </ul>	<p><b>KEY</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px dashed black; margin-right: 5px;"></span> Tri-Institutionally Shared Space</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black; margin-right: 5px;"></span> Dedicated Space</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px dashed black; margin-right: 5px;"></span> Departmentally Shared Space</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 1px solid black; margin-right: 5px;"></span> Three Court Gym</li> </ul> <p>Spaces that do not receive a hatch are spaces shared by all building users.</p>
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Multipurpose 1  
Shared by:  
MSU Denver HPS  
Campus Recreation  
Others as Available

Multipurpose 2  
Shared by:  
MSU Denver HPS  
Campus Recreation  
Others as Available



Group Fitness 1  
Shared by:  
MSU Denver HPS  
Campus Recreation

HPS/Rec Conference  
Shared by:  
MSU Denver HPS  
Campus Recreation

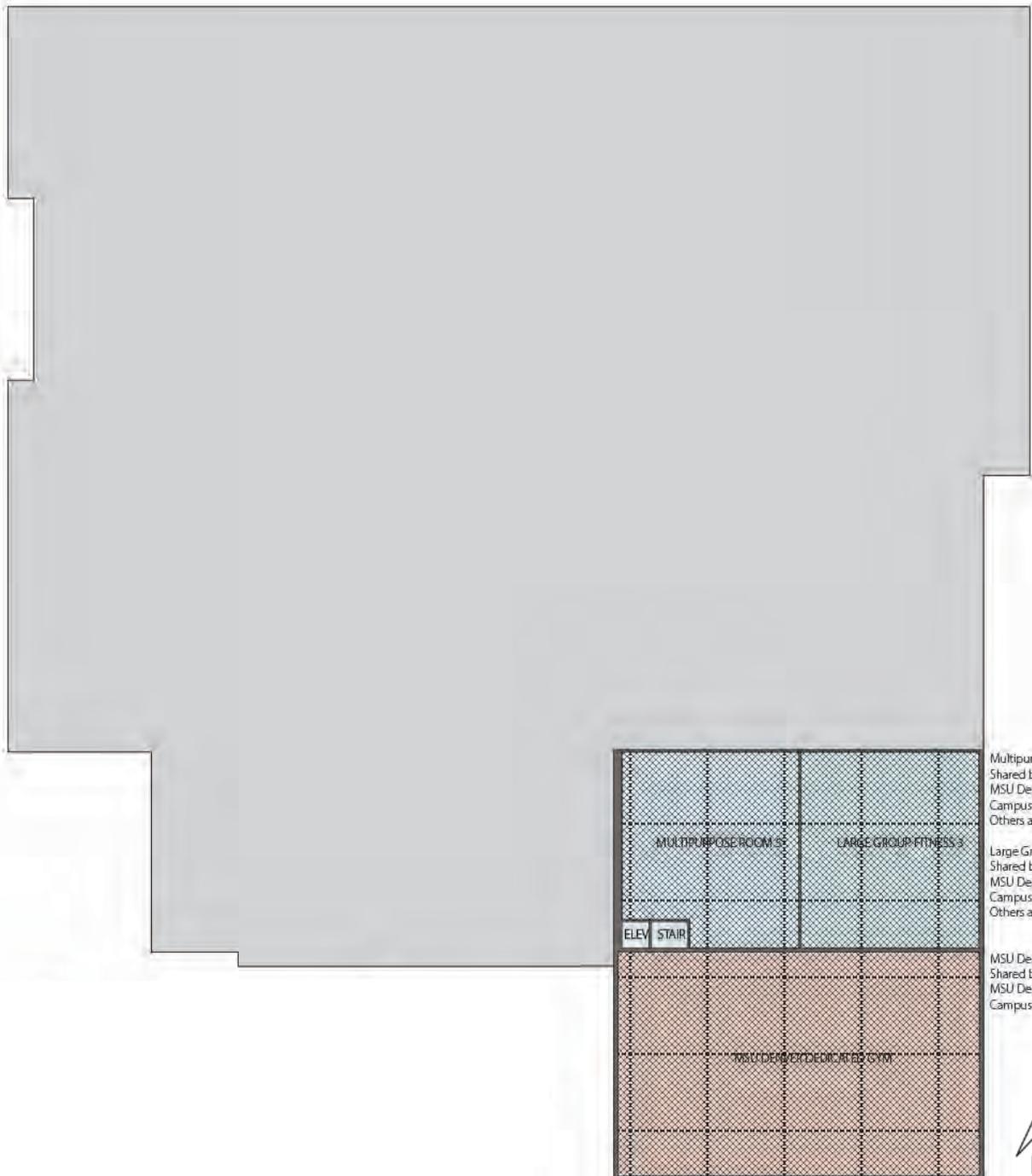
Lab/Classroom 5  
Shared by:  
MSU Denver HPS  
Campus Recreation

Group Fitness 2  
Shared by:  
MSU Denver HPS  
Campus Recreation



MAXIMIZED EXPANSION OPTION - LEVEL THREE - SHARED SPACES PLAN

<p><b>KEY</b></p> <ul style="list-style-type: none"> <li>Events</li> <li>Group Fitness</li> <li>MSU Denver Dedicated Gym</li> </ul>	<p><b>KEY</b></p> <ul style="list-style-type: none"> <li>Tri-Institutionally Shared Space</li> <li>Dedicated Space</li> <li>Departmentally Shared Space</li> <li>Three Court Gym</li> </ul> <p>Spaces that do not receive a hatch are spaces shared by all building users.</p>
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## Detailed Cost Estimate

The consultant team retained Rider Levett Bucknall to perform a construction cost estimate for each of the selected options. The construction cost estimate is based on the floor plans and SketchUp images presented earlier in this Feasibility Study and represents what constructing this design option might cost. “Soft costs” such as design team fees, owner contingencies, and furnishings, fixtures and equipment are not included in the detailed cost estimates to follow.

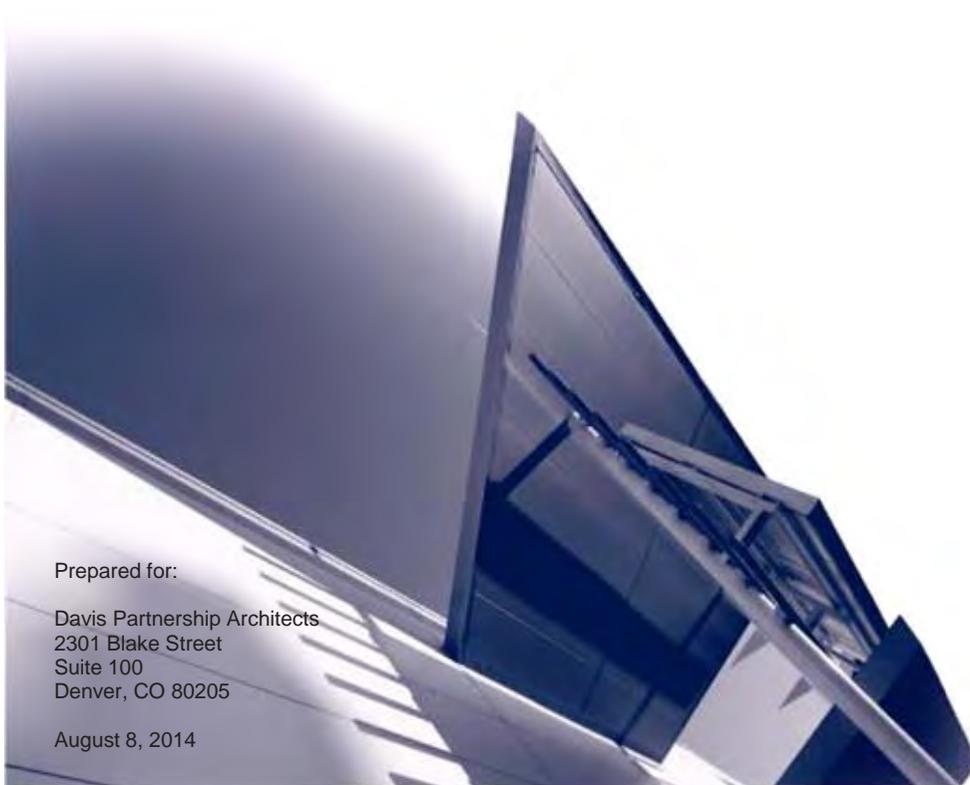
RLB | Rider Levett Bucknall

# Construction Cost Estimate

Feasibility Study Estimate

## **Auraria Campus PE/Events Center**

Denver, CO



Prepared for:

Davis Partnership Architects  
2301 Blake Street  
Suite 100  
Denver, CO 80205

August 8, 2014

RLB | Rider Levett Bucknall

**Auraria Campus PE/Events Center  
Feasibility Study**

Project Details

**Description**

***Basis of Estimate***

This estimate has been prepared at the request of Davis Partnership Architects is to provide a programmatic estimate of construction cost for the AHEC PE/Events Center project, located in Denver, Colorado.

The estimate is based upon the AHEC PE/Events Program Plan and Narratives received May 12, 2014 prepared by Davis Partnership Architects.

Where information was insufficient, assumptions and allowances were made based wherever possible on discussions with the architect and engineers.

It is assumed that the project will be procured using a CM/GC procurement arrangement where the CM/GC will be required to receive a minimum of three subcontract bids for each trade. Awarded contractors will be required to pay market wage rates.

Pricing is based on May 2014 costs. Construction cost escalation has been carried at 3% per annum in the estimate and assumes a September 2017 construction start. An estimating contingency has been included at 10%.

***Items Specifically Included***

- . Pool repairs allowance of \$4,000,000

***Items Specifically Excluded***

- . Hazardous materials abatement
- . Rock excavation
- . Work to adjacent structures or systems unless noted otherwise
- . Costs associated with phasing the construction work
- . Out of hours work
- . Photovoltaics and other renewable energy resources
- . Furniture, Fittings and Equipment (FF&E) unless noted otherwise
- . Audio / Visual equipment
- . Telecom / Data equipment
- . Murals and works of art
- . Mock-ups
- . Work outside the site boundaries unless noted otherwise
- . Special testing & inspections
- . Utility tap fees and charges
- . Permits & plan review fees
- . Owner's contingency
- . Land and legal costs
- . Architectural, Engineering and other professional fees
- . Geotechnical, traffic and all other studies
- . Escalation beyond a September 2017 construction start

**Auraria Campus PE/Events Center  
Feasibility Study**

Maximized Expansion Option

Total GFA: 172,476 SF  
Rates Current At May 2014

Description	Cost/SF	Total Cost
A1010 Standard Foundations	\$5.00	\$862,360
A1030 Slab on Grade	\$1.25	\$215,600
B1010 Floor Construction	\$16.66	\$2,872,940
B1020 Roof Construction	\$12.44	\$2,144,836
B2010 Exterior Walls	\$14.24	\$2,455,958
B2020 Exterior Windows	\$7.64	\$1,317,700
B2030 Exterior Doors	\$0.46	\$80,000
B3010 Roof Coverings	\$5.74	\$990,707
C1010 Partitions	\$21.33	\$3,678,515
C1020 Interior Doors	\$1.45	\$250,000
C1030 Fittings	\$8.00	\$1,379,808
C2010 Stair Construction	\$0.34	\$58,800
C3010 Wall Finishes	\$1.65	\$284,133
C3020 Floor Finishes	\$7.50	\$1,294,202
C3030 Ceiling Finishes	\$3.19	\$550,109
D2010 Plumbing Fixtures	\$1.10	\$189,724
D2020 Domestic Water Distribution	\$1.75	\$301,833
D2030 Sanitary Waste	\$1.60	\$275,962
D2040 Rain Water Drainage	\$0.09	\$15,655
D3020 Heat Generating Systems	\$2.40	\$413,942
D3030 Cooling Generating Systems	\$3.74	\$644,971
D3040 Distribution Systems	\$24.18	\$4,169,712
D3050 Terminal & Package Units	\$3.90	\$672,656
D3060 Controls & Instrumentations	\$8.00	\$1,379,808
D3070 Systems Testing & Balancing	\$0.60	\$103,486
D4010 Sprinklers	\$3.15	\$543,299
D4030 Fire Protection Specialties	\$0.02	\$3,450
D5010 Electrical Service & Distribution	\$3.30	\$569,171
D5020 Lighting and Branch Wiring	\$8.35	\$1,440,175
D5030 Communications & Security	\$7.55	\$1,302,194
D5090 Other Electrical Systems	\$0.65	\$112,109
E2010 Fixed Furnishings	\$2.36	\$406,315
F1010 Special Structures	\$0.38	\$64,996
F1040 Special Facilities	\$0.05	\$8,500
F2010 Building Elements Demolition	\$5.33	\$919,438
G1030 Site Earthwork	\$0.32	\$55,902

**Auraria Campus PE/Events Center  
Feasibility Study**

Maximized Expansion Option

Total GFA: 172,476 SF  
Rates Current At May 2014

Description	Cost/SF	Total Cost
<b>G2040 Site Development</b>	<b>\$0.43</b>	<b>\$75,000</b>
<b>ESTIMATED NET COST</b>	<b>\$186.14</b>	<b>\$32,103,966</b>
<b>MARGINS &amp; ADJUSTMENTS</b>		
Contractor General Requirements	4.0 %	\$1,284,159
Contractor General Conditions	4.0 %	\$1,335,525
Contractor Bonding & Insurances	2.0 %	\$694,473
Subcontractor Bonding	1.5 %	\$531,272
Contractor Bidding Contingency	5.0 %	\$1,797,470
CM/GC Overhead & Profit	4.0 %	\$1,509,875
CM/GC Construction Contingency	5.0 %	\$1,962,837
Estimating Contingency	10.0 %	\$4,121,958
Escalation September 2017	9.75 %	\$4,420,800
<b>ESTIMATED TOTAL COST</b>	<b>\$288.52</b>	<b>\$49,762,335</b>

# Pool Option

## POOL OPTION - BASEMENT

- KEY
- Outdoor Program
- Storage



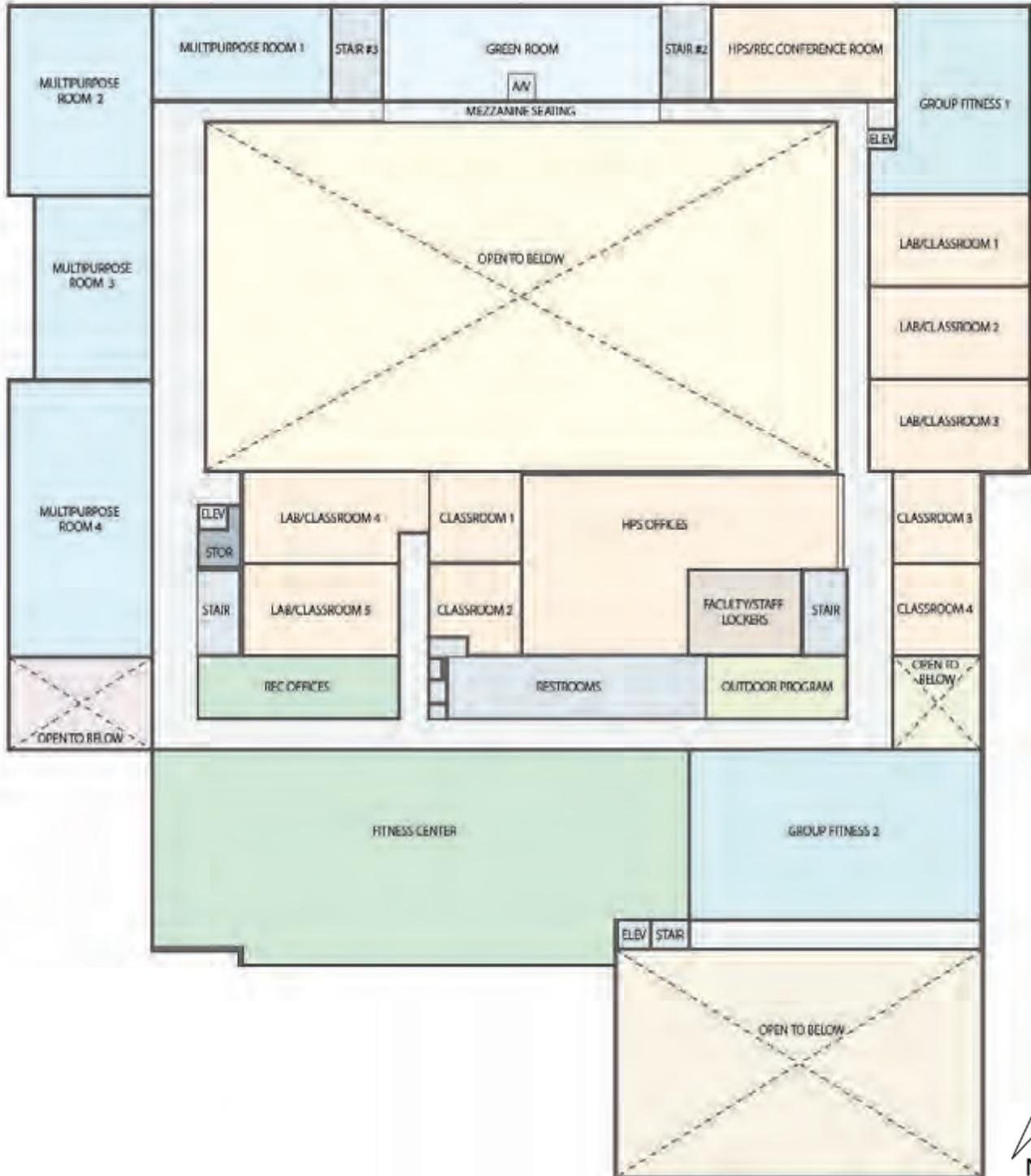
POOL OPTION - LEVEL ONE

- |                             |                 |  |
|-----------------------------|-----------------|--|
| KEY                         |                 |  |
| Athletics                   | Multi-purpose   |  |
| Building Support            | Outdoor Program |  |
| CU Denver Dedicated Space   | Pool            |  |
| Events                      | Recreation      |  |
| Human Performance and Sport | Storage         |  |
| Lobby/Entry                 | Three Court Gym |  |
| Locker Rooms                |                 |  |



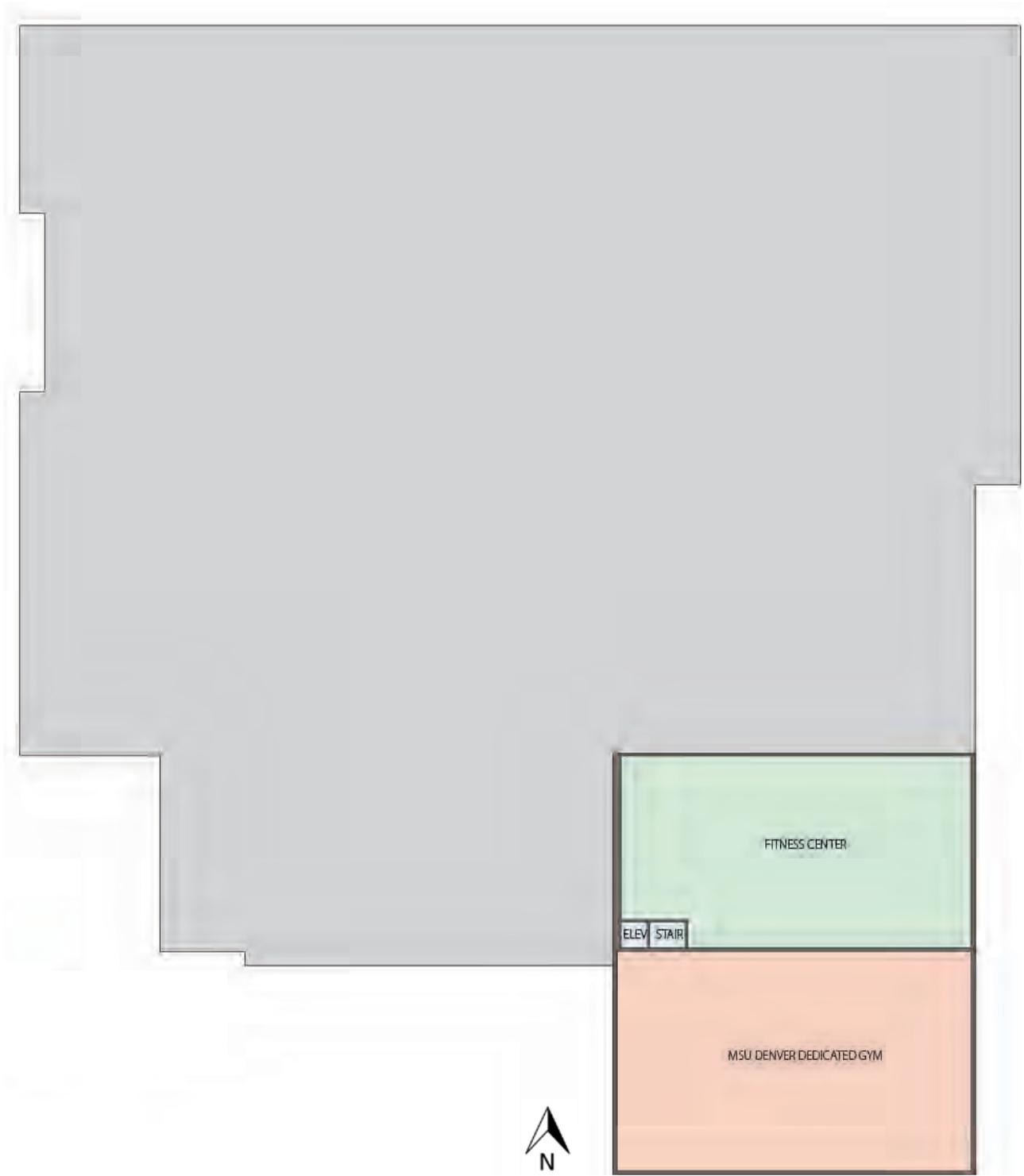
**POOL OPTION - LEVEL TWO**

- |   |   |
|---|---|
|  Athletics                   |  Multi-purpose   |
|  Building Support            |  Outdoor Program |
|  CU Denver Dedicated Space   |  Pool            |
|  Events                      |  Recreation      |
|  Human Performance and Sport |  Storage         |
|  Lobby/Entry                 |  Three Court Gym |
|  Locker Rooms                |   |



POOL OPTION - LEVEL THREE

- KEY  
Fitness Center  
MSU Denver Dedicated Gym



**POOL OPTION - LEVEL FOUR**

- KEY
- Events
- Group Fitness
- MSU Denver Dedicated Gym



## Shared/Dedicated Space

Because there are numerous departments and activities it is helpful to see how different spaces may be designated for shared or dedicated use. The following diagrams and descriptions capture numerous discussions by the Steering Committee surrounding how spaces in the Pool Option could be designated and used if the building is expanded and renovated.

For spaces that are designated as campus recreation as well as spaces where all three institutions have equal scheduling access, headcount can be used to determine each institution’s share of the spaces. The total 2013 campus headcount data used by AHEC in the annual funding model was used to determine the percentage of total campus headcount that can be allocated to each institution.

INSTITUTION	SPRING 13	SUMMER 13	FALL 13	TOTAL	PERCENTAGE
CCD	7,286	2,294	6,910	16,490	17.79%
MSU Denver	20,452	5,702	20,813	46,967	50.66%
CU Denver	12,446	4,178	12,627	29,251	31.55%
<b>Total</b>	<b>40,204</b>	<b>12,174</b>	<b>40,350</b>	<b>92,708</b>	<b>100.00%</b>

The spaces that the shared approach applies to are hatched in the plans on the following pages.

The total square footage for recreation and tri-institutionally shared spaces in this concept option is 39,098. Accordingly, each institutions share of these spaces is included below.

INSTITUTION	PERCENTAGE	SQUARE FEET
CCD	17.79%	7,676 s.f.
MSU Denver	50.66%	19,807 s.f.
CU Denver	31.55%	12,335 s.f.
<b>Total</b>	<b>100.00%</b>	<b>39,098 s.f.</b>

There are also spaces in the building that are shared between programs such as recreation and academics, or academics and athletics so the approach outlined above does not apply. It is not the goal of this feasibility study to clarify how these spaces should be scheduled or how uses should be prioritized, though this charge should be taken on by the Steering Committee in advance of design during program planning. Based on current use for departmentally shared spaces, the diagrams on the following pages show these spaces at each level and note which entities share each space.

Several spaces in the building are also designated for use by a single department or institution. The square footage of each of these spaces will be wholly assigned to that user as indicated in the plans on the following pages. The total square footages designated for use by a single department or institution is listed below.

INSTITUTION	SQUARE FEET
MSU Denver HPS	15,422 s.f.
MSU Denver Athletics	4,206 s.f.
CU Denver	12,661 s.f.
<b>Total</b>	<b>32,289 s.f.</b>

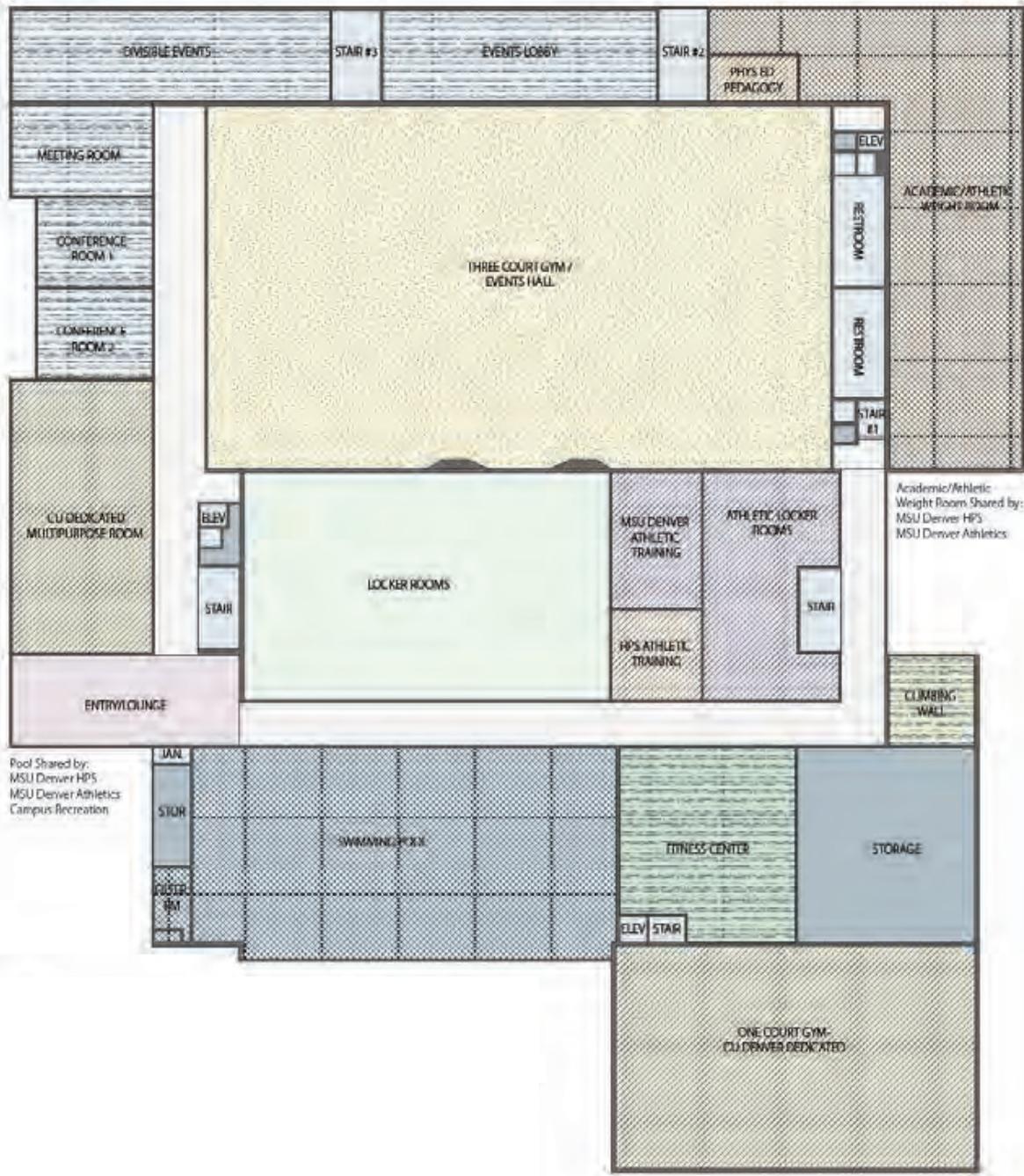
The three court gym is used by multiple departments within the building, and is the only event space on campus with the capacity to host large events. As such, it is considered separately because of the high-demand for this space, and should be carefully studied by the Steering Committee before program planning commences. Its function as a special events space, as well as how regularly scheduled activities may change as the result of additional space available in the building and elsewhere, should be considered in the program plan. It is highlighted in the following plans.

The remaining building square footage of 35,607 square feet is for program spaces that are shared through the building, such as locker rooms, mechanical space, and vertical circulation, as illustrated in the following plans.

**POOL OPTION - LEVEL ONE - SHARED SPACES PLAN**

- KEY**
- Athletics
  - Building Support
  - CU Denver Dedicated Space
  - Events
  - Human Performance and Sport
  - Lobby/Entry
  - Locker Rooms
  - Multi-purpose
  - Outdoor Program
  - Pool
  - Recreation
  - Storage
  - Three Court Gym

- KEY**
- Tri-Institutionally Shared Space
  - Dedicated Space
  - Departmentally Shared Space
  - Three Court Gym
- Spaces that do not receive a hatch are spaces shared by all building users.



Pool Shared by:  
MSU Denver HPS  
MSU Denver Athletics  
Campus Recreation

Academic/Athletic-  
Weight Room Shared by:  
MSU Denver HPS  
MSU Denver Athletics



POOL OPTION - LEVEL TWO - SHARED SPACES PLAN

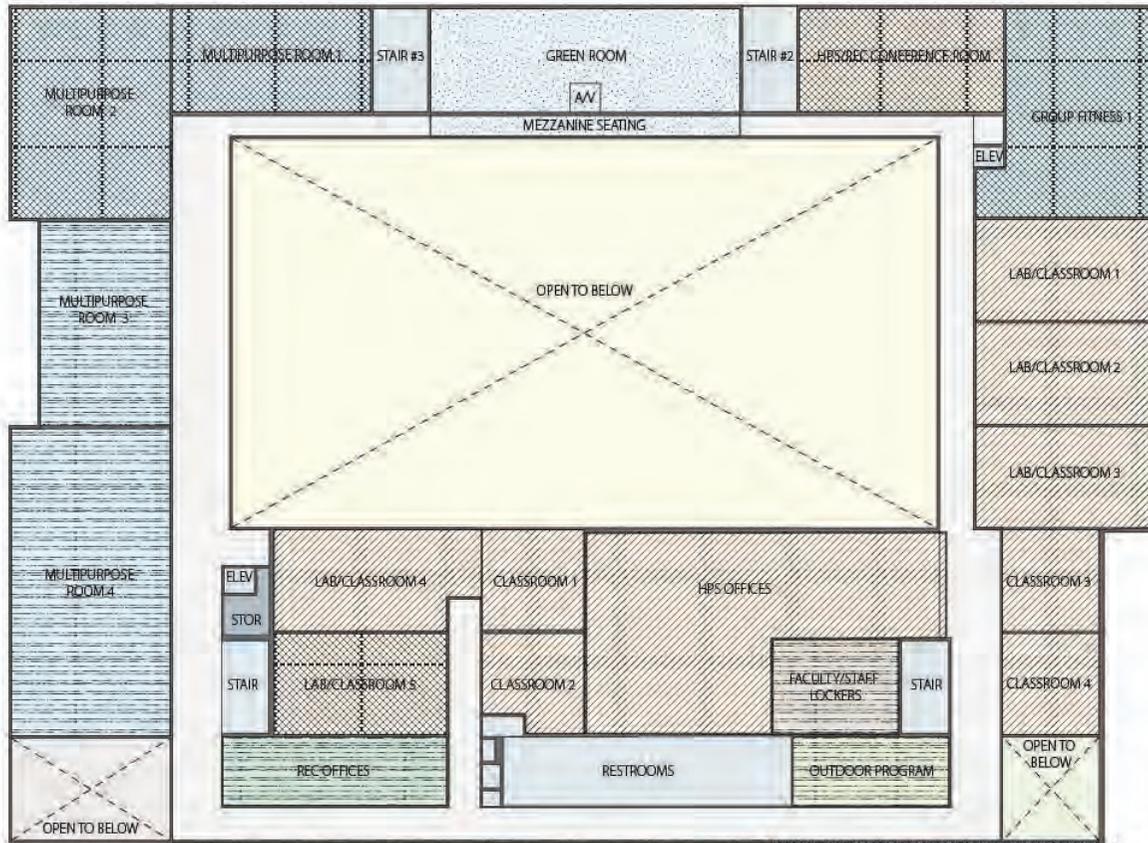
- KEY**
- Athletics
  - Building Support
  - Events
  - Faculty/Staff Locker Room
  - Group Fitness
  - Human Performance and Sport
  - Multi-purpose
  - Outdoor Program
  - Recreation
  - Storage
  - Three Court Gym

- KEY**
- Tri-Institutionally Shared Space
  - Dedicated Space
  - Departmentally Shared Space
  - Three Court Gym

Spaces that do not receive a hatch are spaces shared by all building users.

Multipurpose 1  
Shared by:  
MSU Denver HPS  
Campus Recreation  
Others as Available

Multipurpose 2  
Shared by:  
MSU Denver HPS  
Campus Recreation  
Others as Available



Group Fitness 1  
Shared by:  
MSU Denver HPS  
Campus Recreation

HPS/Rec Conference  
Shared by:  
MSU Denver HPS  
Campus Recreation

Lab/Classroom 5  
Shared by:  
MSU Denver HPS  
Campus Recreation

Group Fitness 2  
Shared by:  
MSU Denver HPS  
Campus Recreation

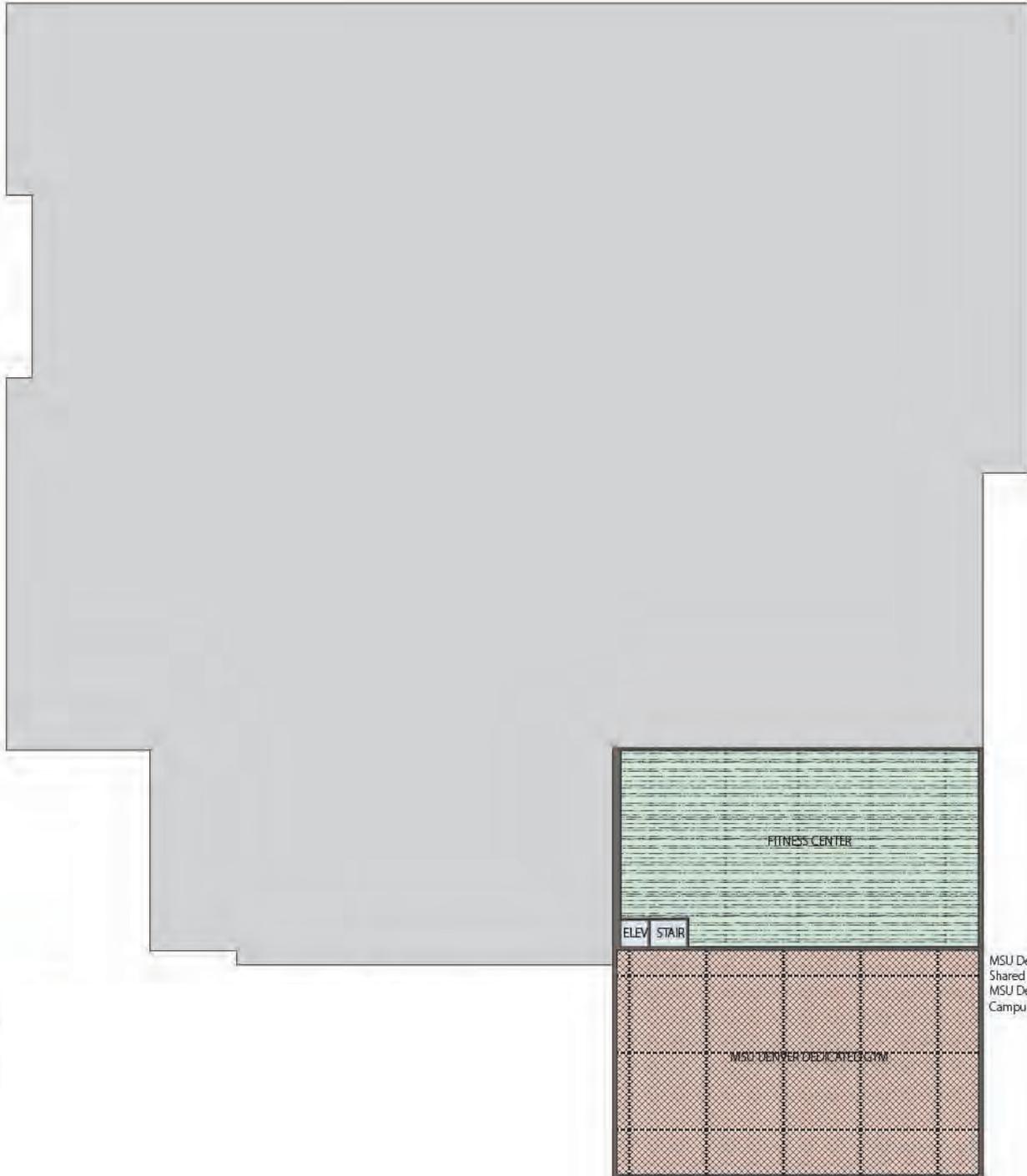


**POOL OPTION - LEVEL THREE - SHARED SPACES PLAN**

KEY  
 Fitness Center  
 MSU Denver Dedicated Gym

KEY  
 Tri-Institutionally Shared Space  
 Dedicated Space  
 Departmentally Shared Space  
 Three Court Gym

Spaces that do not receive a hatch are spaces shared by all building users.



**POOL OPTION - LEVEL FOUR - SHARED SPACES PLAN**

**KEY**  
 Events  
 Group Fitness  
 MSU Denver Dedicated Gym

**KEY**  
 Tri-Institutionally Shared Space  
 Dedicated Space  
 Departmentally Shared Space  
 Three Court Gym

Spaces that do not receive a hatch are spaces shared by all building users.



Multipurpose 55  
 Shared by:  
 MSU Denver HPS  
 Campus Recreation  
 Others as Available

Large Group Fitness 3  
 Shared by:  
 MSU Denver HPS  
 Campus Recreation  
 Others as Available



## Detailed Cost Estimate

The consultant team retained Rider Levett Bucknall to perform a construction cost estimate for each of the selected options. The construction cost estimate is based on the floor plans and SketchUp images presented earlier in this Feasibility Study and represents what constructing this design option might cost. “Soft costs” such as design team fees, owner contingencies, and furnishings, fixtures and equipment are not included in the detailed cost estimates to follow.

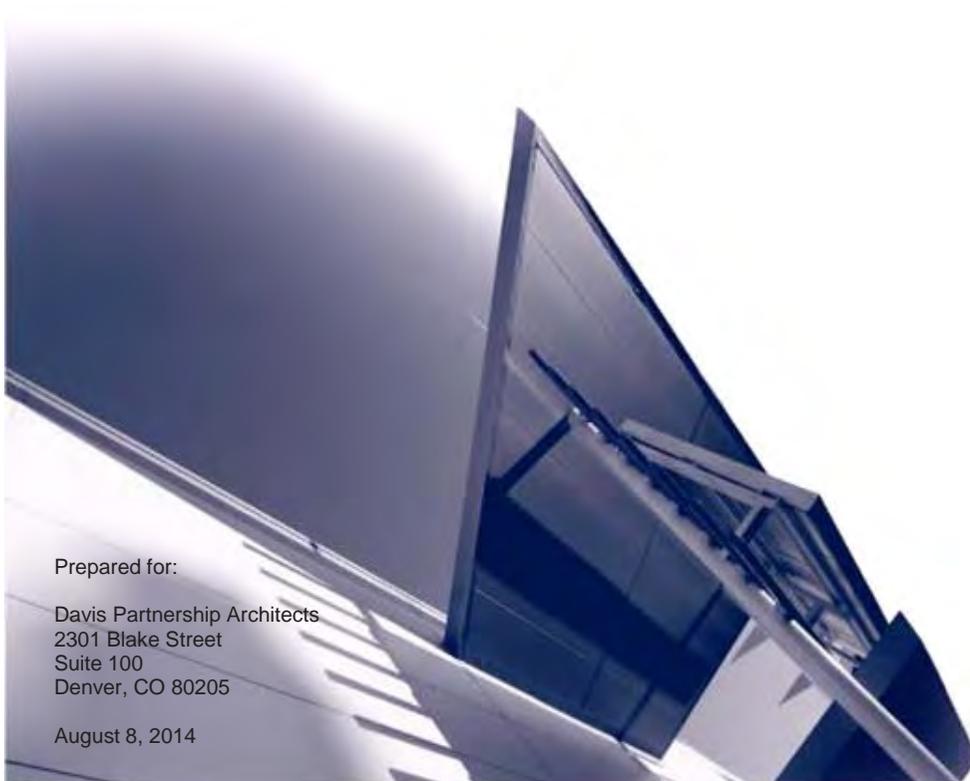
RLB | Rider Levett Bucknall

# Construction Cost Estimate

Feasibility Study Estimate

## **Auraria Campus PE/Events Center**

Denver, CO



Prepared for:

Davis Partnership Architects  
2301 Blake Street  
Suite 100  
Denver, CO 80205

August 8, 2014

RLB | Rider Levett Bucknall

**Auraria Campus PE/Events Center  
Feasibility Study**

Project Details

**Description**

***Basis of Estimate***

This estimate has been prepared at the request of Davis Partnership Architects is to provide a programmatic estimate of construction cost for the AHEC PE/Events Center project, located in Denver, Colorado.

The estimate is based upon the AHEC PE/Events Program Plan and Narratives received May 12, 2014 prepared by Davis Partnership Architects.

Where information was insufficient, assumptions and allowances were made based wherever possible on discussions with the architect and engineers.

It is assumed that the project will be procured using a CM/GC procurement arrangement where the CM/GC will be required to receive a minimum of three subcontract bids for each trade. Awarded contractors will be required to pay market wage rates.

Pricing is based on May 2014 costs. Construction cost escalation has been carried at 3% per annum in the estimate and assumes a September 2017 construction start. An estimating contingency has been included at 10%.

***Items Specifically Included***

- . Pool repairs allowance of \$4,000,000

***Items Specifically Excluded***

- . Hazardous materials abatement
- . Rock excavation
- . Work to adjacent structures or systems unless noted otherwise
- . Costs associated with phasing the construction work
- . Out of hours work
- . Photovoltaics and other renewable energy resources
- . Furniture, Fittings and Equipment (FF&E) unless noted otherwise
- . Audio / Visual equipment
- . Telecom / Data equipment
- . Murals and works of art
- . Mock-ups
- . Work outside the site boundaries unless noted otherwise
- . Special testing & inspections
- . Utility tap fees and charges
- . Permits & plan review fees
- . Owner's contingency
- . Land and legal costs
- . Architectural, Engineering and other professional fees
- . Geotechnical, traffic and all other studies
- . Escalation beyond a September 2017 construction start

**Auraria Campus PE/Events Center**  
**Feasibility Study**

Pool Option

Total GFA: 180,576 SF  
 Rates Current At May 2014

Description	Cost/SF	Total Cost
A1010 Standard Foundations	\$4.71	\$850,210
A1030 Slab on Grade	\$1.19	\$215,600
B1010 Floor Construction	\$16.25	\$2,933,541
B1020 Roof Construction	\$12.11	\$2,186,836
B2010 Exterior Walls	\$15.00	\$2,707,748
B2020 Exterior Windows	\$8.09	\$1,460,500
B2030 Exterior Doors	\$0.44	\$80,000
B3010 Roof Coverings	\$5.49	\$990,707
C1010 Partitions	\$21.29	\$3,843,755
C1020 Interior Doors	\$1.38	\$250,000
C1030 Fittings	\$8.00	\$1,444,608
C2010 Stair Construction	\$0.51	\$92,400
C3010 Wall Finishes	\$1.60	\$289,102
C3020 Floor Finishes	\$7.16	\$1,293,002
C3030 Ceiling Finishes	\$2.78	\$501,124
D2010 Plumbing Fixtures	\$1.10	\$198,634
D2020 Domestic Water Distribution	\$1.75	\$316,008
D2030 Sanitary Waste	\$1.60	\$288,922
D2040 Rain Water Drainage	\$0.09	\$15,655
D3020 Heat Generating Systems	\$2.40	\$433,382
D3030 Cooling Generating Systems	\$3.63	\$654,691
D3040 Distribution Systems	\$23.83	\$4,302,612
D3050 Terminal & Package Units	\$3.90	\$704,246
D3060 Controls & Instrumentations	\$8.00	\$1,444,608
D3070 Systems Testing & Balancing	\$0.60	\$108,346
D4010 Sprinklers	\$3.15	\$568,814
D4030 Fire Protection Specialties	\$0.02	\$3,612
D5010 Electrical Service & Distribution	\$3.30	\$595,901
D5020 Lighting and Branch Wiring	\$8.35	\$1,507,810
D5030 Communications & Security	\$7.55	\$1,363,349
D5090 Other Electrical Systems	\$0.65	\$117,374
E2010 Fixed Furnishings	\$2.87	\$517,959
F1010 Special Structures	\$0.36	\$64,996
F1040 Special Facilities	\$22.20	\$4,008,500
F2010 Building Elements Demolition	\$5.33	\$962,368
G1030 Site Earthwork	\$0.31	\$55,902

**Auraria Campus PE/Events Center  
Feasibility Study**

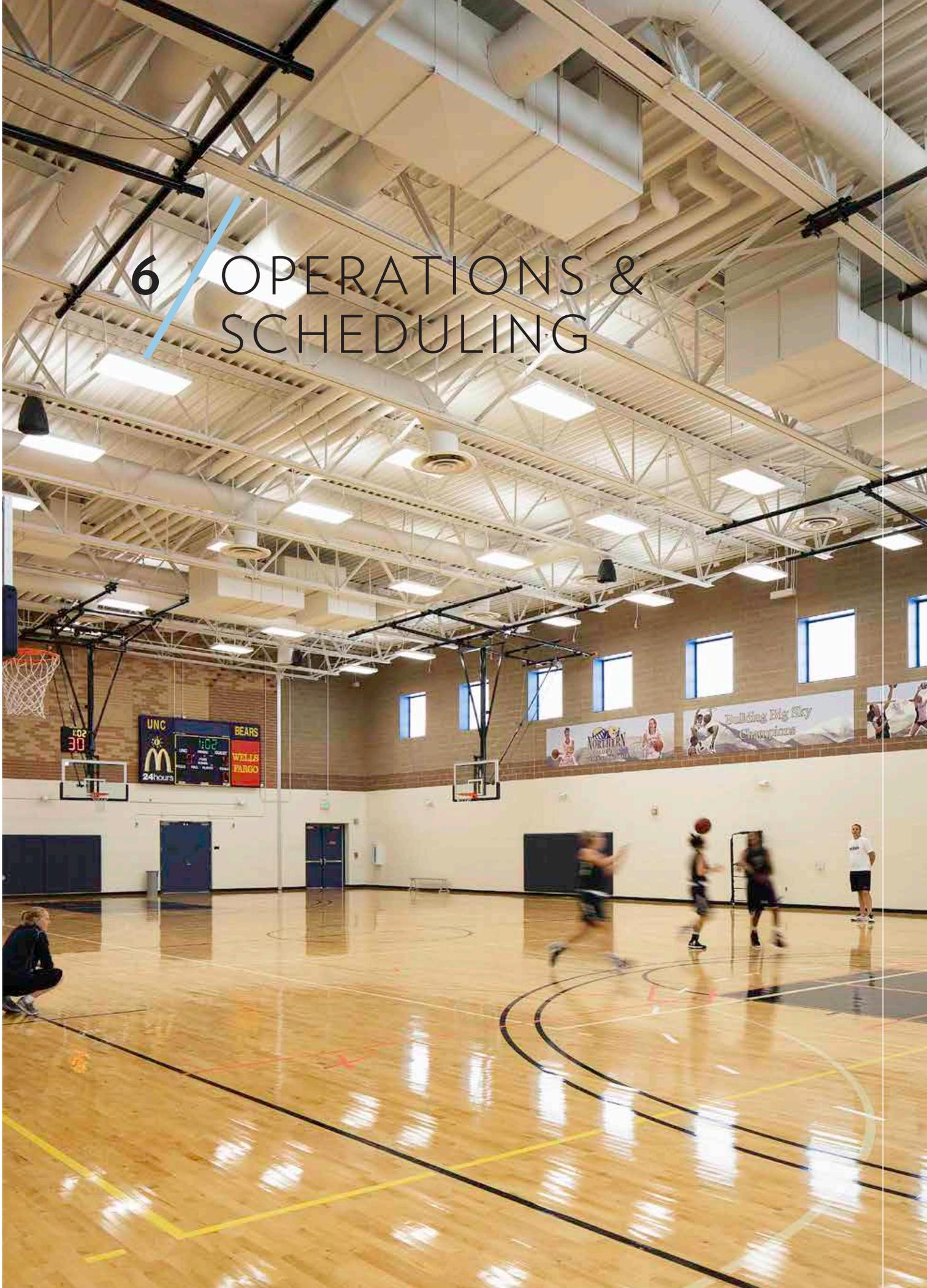
Pool Option

Total GFA: 180,576 SF  
Rates Current At May 2014

Description	Cost/SF	Total Cost
<b>G2040 Site Development</b>	<b>\$0.42</b>	<b>\$75,000</b>
<b>ESTIMATED NET COST</b>	<b>\$207.38</b>	<b>\$37,447,822</b>
<b>MARGINS &amp; ADJUSTMENTS</b>		
Contractor General Requirements	4.0 %	\$1,497,913
Contractor General Conditions	4.0 %	\$1,557,829
Contractor Bonding & Insurances	2.0 %	\$810,071
Subcontractor Bonding	1.5 %	\$619,705
Contractor Bidding Contingency	5.0 %	\$2,096,667
CM/GC Overhead & Profit	4.0 %	\$1,761,200
CM/GC Construction Contingency	5.0 %	\$2,289,560
Estimating Contingency	10.0 %	\$4,808,077
Escalation September 2017	9.75 %	\$5,156,662
<b>ESTIMATED TOTAL COST</b>	<b>\$321.45</b>	<b>\$58,045,506</b>

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# 6 / OPERATIONS & SCHEDULING





## Operations & Scheduling Agreement

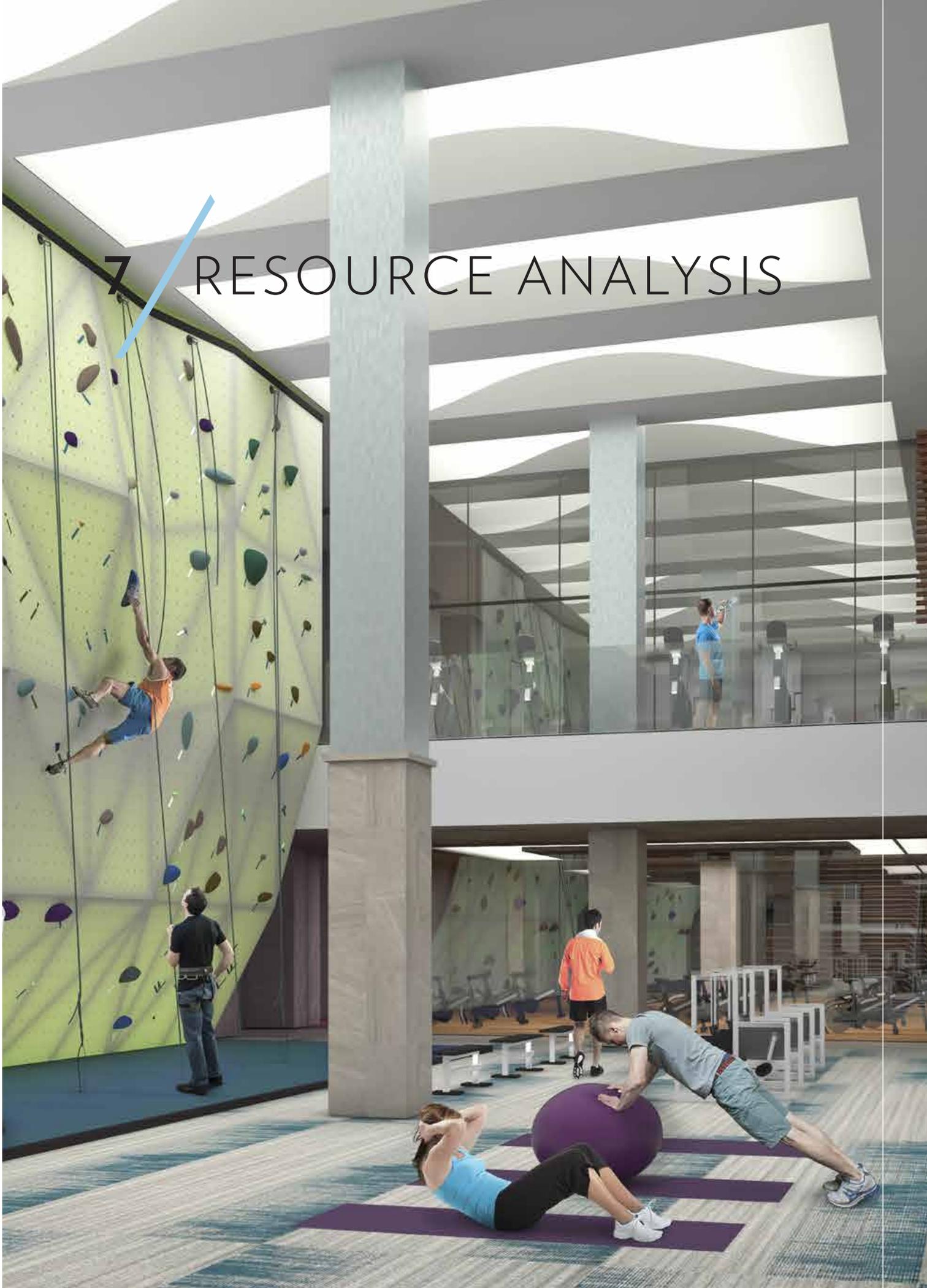
In addition to discussing the functional deficiencies of the existing PE/Events Center building, shaping the potential future building program, and providing feedback on the Feasibility Study, the Steering Committee is tasked with creating a new framework for operating and scheduling the PE/Events Center. While the documentation of these activities is not included in the Feasibility Study, their outcomes are crucial to the future progress of the project, and the continued success of shared services and spaces in the building.

Scheduling of the existing facilities is unclear and problematic. The scheduling priorities of the spaces have been defined through previous agreements, there are instances of one use “bumping” another previously scheduled activity because it has priority. This scheduling model has created a number of issues as groups who book space in the PE/Events Center have no guarantee that the space will remain available to them. “Bumping” was cited by each of the institutions as one of the biggest challenges associated with using the current facilities, with campus recreation only having two spaces where they are not bumped for other uses – the fitness loft and the fitness center. These spaces total roughly 7,000 square feet.

A significant portion of available space in the selected design options functions as shared space that serves a variety of uses. Some institutions doubt that the process could be refined enough to achieve efficient balance in the building in regards to space used by each institution. In order to operate, manage, and schedule these spaces there needs to be a clear process for reserving space, along with a clear understanding of how the spaces are managed and maintained by the three institutions collectively.

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# 7 / RESOURCE ANALYSIS





## Furniture, Fixtures, & Equipment (FF&E)

Though it is not within the scope of the Feasibility Study to generate a suggested list of furniture, fixtures, and equipment, these costs should be considered during project planning as they impact the total project cost. It is recommended that during program planning the Steering Committee carefully consider the options for funding FF&E to ensure accurate budgeting and proper purchasing controls that fall within institution and state guidelines.

In general, campus recreation projects see FF&E costs that range from 6-8% of the total construction cost while higher education academic projects see FF&E costs around 10% of the total construction cost. As a good rule of thumb an additional 2.5% should be added to the furniture, fixtures, and equipment budget to account for planned technology purchases. Using these percentages as a guideline, the chart below outlines potential FF&E cost models that provide a rough order of magnitude cost that should be further explored in the Program Plan.

	MAXIMIZED EXPANSION OPTION	POOL OPTION
Estimated Construction Cost	\$49,750,000	\$58,050,000
2.5% Technology Purchases	\$1,245,000	\$1,450,000
Sports/Fitness % of Building	68.45%	68.45%
Sports/Fitness Construction Cost	\$34,050,000	\$39,735,000
Sports/Fitness FF&E at 8%	\$2,725,000	\$3,180,000
Education % of Building	31.55%	31.55%
Education Construction Cost	\$15,700,000	\$18,315,000
Education FF&E at 10%	\$1,570,000	\$1,832,000
<b>Anticipated FF&amp;E Costs</b>	<b>\$5,540,000</b>	<b>\$6,462,000</b>

## Anticipated “Soft Costs”

### Total Project Cost

In addition to the project construction cost and soft costs associated with construction outlined in the detailed cost estimates, other soft costs should be included in project planning. These fees may include design team fees, inspection fees, state mandated owner contingencies, bond fees, interest, project management, insurance, and LEED certification costs. The chart below outlines the rough order of magnitude soft costs for the expansion and renovation of the PE/Events Center for the Maximized Expansion and Pool Options and can be used as a baseline to calculate the soft costs associated with other options.

	MAXIMIZED EXPANSION OPTION	POOL OPTION	COST BASIS
Estimated Construction Cost	\$49,750,000	\$58,050,000	
<b>ANTICIPATED SOFT COSTS</b>			
Design Team Fees	\$5,970,000	\$6,965,000	12% of Total Project Cost
Inspection Fees	Per AHEC	Per AHEC	
Owner Contingency	\$4,975,000	\$5,805,000	5% new, 10% renovation
Code Review	\$2,000	\$2,000	
Financing Costs	Per AHEC	Per AHEC	
Commissioning	\$173,000	\$181,000	1.00/sf
Project Management	\$1,493,000	\$1,742,000	3% per AHEC
LEED Certification	\$63,000	\$63,000	Registration \$13,000; Consultant \$50,000
FF&E Costs	\$5,540,000	\$6,462,000	
<b>Total Soft Costs</b>	<b>\$18,216,000</b>	<b>\$21,220,000</b>	
<b>Proposed Building Area</b>	<b>172,476 SF (44,985 new SF)</b>	<b>180,576 SF (53,085 new SF)</b>	
<b>Total Project Cost</b>	<b>\$67,966,000 (\$394/SF)</b>	<b>\$79,270,000 (\$439/SF)</b>	

## Ongoing Operations and Maintenance Costs

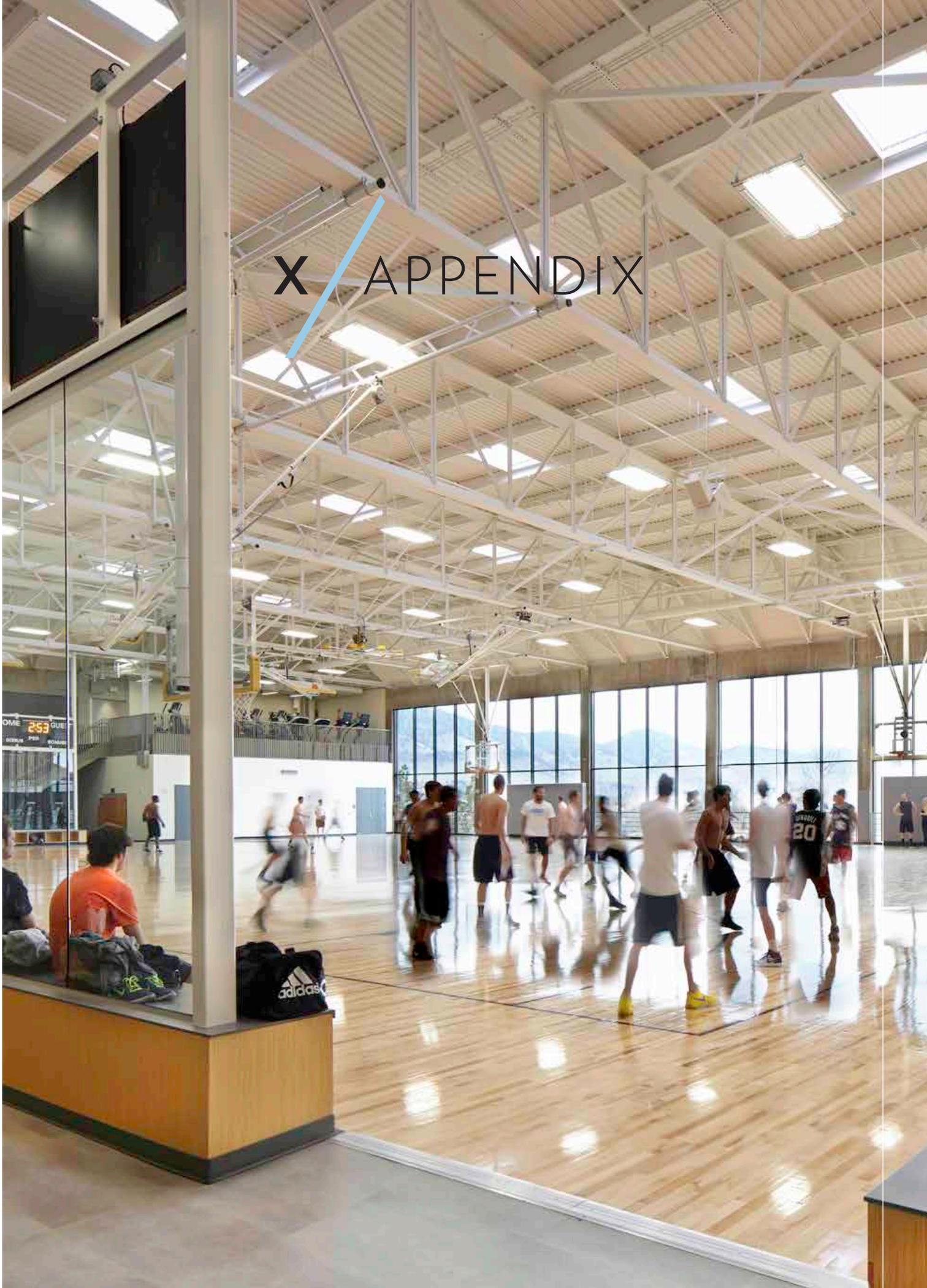
The increased square footage in the PE/Events Center resulting from an expansion and infill project requires thought about the ongoing costs beyond construction and soft costs. Utilities, staffing, and ongoing operations and maintenance costs for the building will change as a result of the project, and should be budgeted for accordingly.

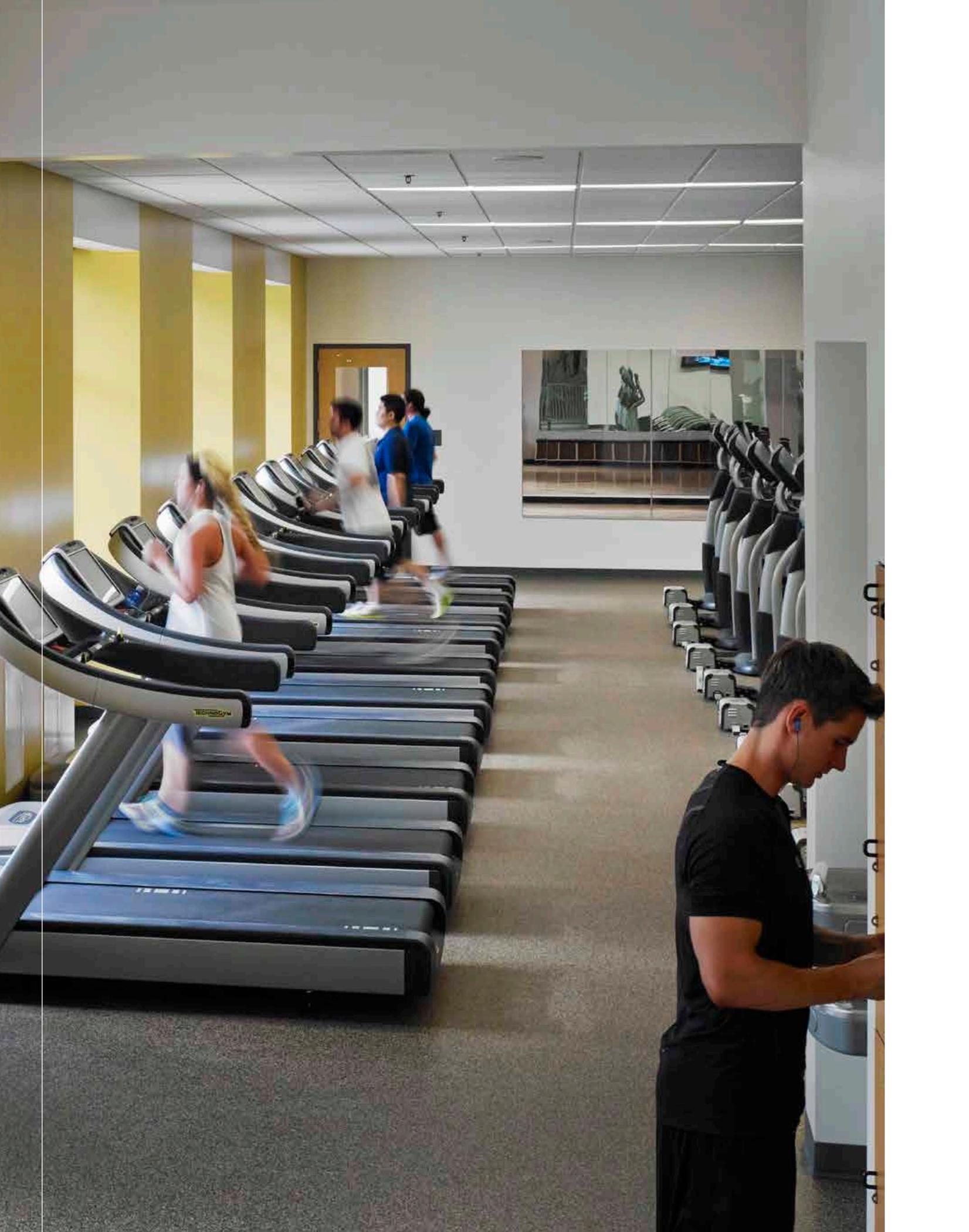
Additional square footage will result in higher overall building utility costs, though this ongoing cost could potentially be minimized with the installation of highly-efficient replacement mechanical and electrical systems. Utility costs would also be impacted by the decision on whether or not to keep the pool. If the pool remains in the building re-leveling the gutters and total replacement of the pool liner would reduce water consumption. In its current state, the pool leaks over 100,000 gallons of chemically-treated water annually. Likewise, replacement of the pump and filtration equipment with higher efficiency, code compliant systems would further reduce the utility costs associated with the space. If the pool is eliminated, the overall building utility costs would be reduced and the utility draw of the converted space would be similar to adjacent recreation spaces. We would expect to see a slightly better utility cost per square foot throughout the building with the replacement of the mechanical systems.

In addition to increased utility costs resulting from additional square footage, there will also be increased staffing costs. Quadrupling the size of the fitness center will require a greater staffing commitment from Recreation Services in terms of the supervision of spaces, and equipment maintenance. It is recommended that Recreation Services explore staffing models and options to best meet the needs of users in the additional space and budget for adequate staffing accordingly. These discussions could include creating a basic day-to-day operations model for drop-in services as well as an approach for staffing scheduled activities like group fitness classes, intramural sports, and outdoor programming. It should be noted that costs for janitorial services and general maintenance will also increase.

As the building continues to be used for events, a discussion of how large events will be staffed as this may not only impact other activities in the building, but also how staff positions are structured. Other ongoing and recurring costs that should be considered in an operations budget include the fees associated with bonding the project, equipment replacement and lease refresh costs, periodic building systems service and maintenance, and program subscription and certification costs.

# X / APPENDIX





## Design Team Acknowledgements

### Architect

Davis Partnership Architects  
2301 Blake Street, Suite 100  
Denver, CO 80205-2108  
303-861-8555

- Brian Erickson, AIA, LEED AP
- Lynn Moore, FASLA
- Meg Rapp, AIA, LEED AP
- Charley Meyer, ASLA

### Recreation Operations Specialist

L Kent Consulting LLC  
1135 Harrison Street  
Denver, CO 80206  
720-548-7604

- Cheryl [Cheri] Kent, MA

### Civil Engineer

Martin/Martin  
12499 W. Colfax Avenue  
Lakewood, CO 80215  
303-431-6100

- Andre Schlappe, P.E.

### Structural Engineer

Studio NYL  
2995 Baseline Road, #314  
Boulder, CO 80303  
303-554-0457

- Julian Lineham, P.E.
- Jeremy Lynn, P.E.

### Mechanical/Electrical/Plumbing Engineering

ME Engineers  
10055 W. 43rd Avenue  
Wheat Ridge, CO 80033  
303-421-6655

- Corey Berhost, P.E., LEED AP BD+C
- Joe DeBell, P.E.

### Estimator

Rider Levett Bucknall  
1621 Eighteenth Street  
Suite 255  
Denver, CO 80202  
720-904-1480

- Peter Knowles

### Spring 2014 Shared Space Scheduling Data

- (Provided by Rec Services)

### Architectural Space Descriptions

- Architectural space descriptions were not reviewed by the Steering Committee, but were used as the basis for pricing.

# Space Program

Program Elements	Qty	Unit Area	Existing Area	Program Area	Area Notes
<b>HUMAN PERFORMANCE AND SPORT:</b>					
<b>EDUCATION: PROGRAM USE</b>					
111 - INSTRUCTIONAL /PEDAGOGY	1	493	493	400	
111B - ACADEMIC WEIGHTS	1	2,432	2,432	8,000	Shared with Athletics 50/50
203 - FACULTY MENS LOCKERS	1	654	654	550	
204 - FACULTY WOMENS LOCKERS	1	462	462	600	
205 - CLASSROOM	1	368	368	900	
206 - CLASSROOM	1	548	548	900	
207 - CLASSROOM	1	479	479	900	
208 - CLASSROOM	1	636	636	900	
209 - KINESIOLOGY/PHYSIOLOGY/FITNESS LAB	1	1,539	1,539	1,800	
209A - OFFICE	1	135	135	120	currently functions as an office
209B - OFFICE	1	137	137	120	
209C - SUITE	1	449	449	120	currently functions as an office
211 - TEST LAB	1	294	294	720	
212 - KINESIOLOGY SPORTS	1	1,114	1,114		included in lab/classroom space
214 - OFFICE	1	146	146	120	currently functions as an office
214.1 - OFFICE	1	146	146	120	currently functions as an office
217 - RECEPTION	1	362	362	120	
217A - OFFICE	1	168	168	120	
217A1 - OFFICE	1	100	100	120	
217B - OFFICE	1	125	125	120	
217C - OFFICE	1	123	123	120	
217D - OFFICE	1	125	125	120	
217E - OFFICE	1	124	124	120	
217F - OFFICE	1	125	125	120	
217G - OFFICE	1	154	154	120	
217H - OFFICE	1	151	151	120	
217I - OFFICE	1	152	152	120	currently functions as an office
	Sub Total		11,741	17,590	
<b>EDUCATION: ACCESSORY SPACES</b>					
	Sub Total:		0	0	
<b>NEW PROGRAM AREA: PROGRAM USE</b>					
New HPS Faculty Offices	15	120	0	1,800	
HPS Office Reception	1	900	0	900	
HPS Conference Room	1	1,250	0	1,250	
Teaching Gym	1	8,000	0	8,000	could be shared with Rec
Student Computer Lab	1	900	0	900	
Training Clinical Lab	1	900	0	900	
Classroom/Lab Combo Space	5	1,800	0	9,000	
	Sub Total		0	20,050	
<b>NEW PROGRAM AREA: ACCESSORY SPACES</b>					
Storage	1	4,000	0	0	included in building support
	Sub Total:		0	0	
SUB TOTAL AREA: Existing			11,741		
SUB TOTAL AREA: NEW			25,899		
SUB TOTAL AREA:			37,640		





Program Elements	Qty	Unit Area	Existing Area	Program Area	Area Notes
<b>RECREATION</b>					
<b>RECREATION AREA: PROGRAM USE</b>					
001 - OUTDOOR PROGRAM WORK AREA	1	315	315		included in Outdoor Program
001B - OUTDOOR PORGRAM OFFICE	1	156	156		included in Outdoor Program
002 - OUTDOOR PROGRAM WORK ROOM	1	566	566		included in Outdoor Program
108 - OFFICE	1	147	147		included in Rec Office Suite
108A - OFFICE	1	65	65		included in Rec Office Suite
108B - OFFICE	1	131	131		included in Rec Office Suite
108C - OFFICE	1	139	139		included in Rec Office Suite
108D - OFFICE	1	98	98		included in Rec Office Suite
108E - OFFICE	1	109	109		included in Rec Office Suite
110 - FITNESS CENTER	1	4,960	4,960	20,000	
111C - RACQUETBALL	1	806	806		eliminated
111D - SQUASH	1	593	593		eliminated
111E - SQUASH	1	593	593		eliminated
111F - RACQUETBALL	1	806	806		eliminated
201 - FITNESS LOFT	1	1,688	1,688		included in Fitness Center
	Sub Total:		11,172	20,000	
<b>RECREATION AREA: ACCESSORY SPACE</b>					
	Sub Total:		0	0	
<b>NEW PROGRAM AREA: PROGRAM USE</b>					
Climbing Wall	1	900		900	
Outdoor Program Offices	1	1,000		1,000	
Outdoor Program Storage	1	1,000		1,000	
Recreation Office Suite	8	120		960	
	Sub Total		0	3,860	
<b>NEW PROGRAM AREA: ACCESSORY SPACES</b>					
	Sub Total:		0	0	
SUB TOTAL AREA: Existing			11,172		
SUB TOTAL AREA: NEW			12,688		
SUB TOTAL AREA:			<b>23,860</b>		











Program Elements	Qty	Unit Area	Existing Area	Program Area	Area Notes
<b>BUILDING AREA TOTALS:</b>					
TOTAL PROGRAM AREA: Existing			100,658		maintains the pool without the pool
TOTAL PROGRAM AREA: New			67,651		
TOTAL PROGRAM AREA			163,165		
			152,929		
TOTAL BUILDING GSF: Existing			127,490		assumes 70% efficiency assumes 70% efficiency
TOTAL BUILDING GSF: New and Existing (pool)			212,115		
TOTAL BUILDING GSF: New and Existing ( no pool)			198,808		

# Spring 2014 Shared Space Scheduling Data (provided by Rec Services)

## West Lobby

FACILITY SCHEDULE						
Semester: SPRING 2014				Location: 103		
Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
6:30 AM	ROTC		ROTC		ROTC	
6:45 AM	Track Practice (IA)	Track Practice (IA)	Track Practice (IA)	Track Practice (IA)	Track Practice (IA)	
7:00 AM						
7:15 AM						
7:30 AM						
7:45 AM						
8:00 AM						
8:15 AM	HPL 1660/1670 30205/33869		HPL 1660/1670 30205/33869			
8:30 AM	POTTLE		POTTLE			
8:45 AM						
9:00 AM						
9:15 AM						
9:30 AM					Vertical Fitness Club	
9:45 AM	HPL 1660 30475	HPL 1880 32817	HPL 1660 30475	HPL 1880 32817	Club	
10:00 AM	POTTLE	LEBER	POTTLE	LEBER	9:30a - 11:45a	
10:15 AM						
10:30 AM						
10:45 AM						
11:00 AM		Healthy Pursuits		Healthy Pursuits		
11:15 AM	HPL 1660/1670 32041/30474	Yoga	HPL 1660/1670 32041/30474	Yoga		
11:30 AM	POTTLE	11:00 - 11:50a	POTTLE	11:00 - 11:50a		
11:45 AM						
12:00 PM					Healthy Pursuits	
12:15 PM		Healthy Pursuits		Healthy Pursuits	Yoga	
12:30 PM		Pilates		Pilates	12:00 - 12:50p	
12:45 PM	HPL 1660/1670 32040/31145	12:30 - 1:20p	HPL 1660/1670 32040/31145	12:30 - 1:05p		
1:00 PM	POTTLE		POTTLE			
1:15 PM						
1:30 PM				Chigong		
1:45 PM				1:30p - 2:10p		
2:00 PM						
2:15 PM	HPL 1400 30204	RECR 2110	HPL 1400 30204			
2:30 PM	HEYMAN		HEYMAN			
2:45 PM						
3:00 PM						
3:15 PM						
3:30 PM	Healthy Pursuits	Healthy Pursuits	Healthy Pursuits	Healthy Pursuits		
3:45 PM	Flow Yoga	Vinyassa Yoga	Flow Yoga	Vinyassa Yoga		
4:00 PM	3:30 - 4:20	3:30 - 4:20p	3:30 - 4:20	3:30 - 4:20p		
4:15 PM						
4:30 PM	Belly Dance		Belly Dance			
4:45 PM	4:30p - 5:20p		4:30p - 5:20p			
5:00 PM						
5:15 PM		Zumba		Zumba		
5:30 PM	Hatha Yoga	5:15 - 6:05p	Hatha Yoga	5:15 - 6:05p		
5:45 PM	5:30 - 6:20p		5:30 - 6:20p			
6:00 PM						
6:15 PM						
6:30 PM	Vertical Fitness Club			Vertical Fitness Club		
6:45 PM	Club			Club		
7:00 PM	6:30p - 8:30p	CU Denver	CU Denver	8:30p - 8:30p		
7:15 PM		Club Sports	Club Sports			
7:30 PM		7:00p - 9:00p	7:00p - 9:00p			
7:45 PM						
8:00 PM		Vert Fit				
8:15 PM		6:30 - 8:30p				
8:30 PM						
8:45 PM						
9:00 PM						

Space Allocation by % Program	
Total Available -	82 hours/week
Athletics	11%
Academics	16%
HP Group Fit	23%
CU Denver Club Sports	5%
Metro Club Sports	10%
Other (ROTC)	1%
NP (Not Programed)	36%

Events Gym - East Court

FACILITY SCHEDULE							Space Allocation by % Program
Semester: SPRING 2014						Location: 104E	
Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
6:30 AM							Athletics 39%
6:45 AM							Academics 18%
7:00 AM							Recreation 25%
7:15 AM							NP (Not Programed) 18%
7:30 AM							
7:45 AM							
8:00 AM							
8:15 AM							
8:30 AM	HPS 4772 33606 HUSEMAN	HPS 1640 33114 STEPHENS	HPS 4772 33606 HUSEMAN	HPS 1640 33114 STEPHENS			
8:45 AM							
9:00 AM					CRA		
9:15 AM					Drop-In Basketball		
9:30 AM					9:00a - 2:00p		
9:45 AM							
10:00 AM	HPS 1670 32598 BARND	HPS 1640 30632 STEPHENS	HPS 1670 32598 BARND	HPS 1640 30632 STEPHENS			
10:15 AM							
10:30 AM							
10:45 AM							
11:00 AM				CRA			
11:15 AM				Drop-In Soccer			
11:30 AM	HPS 2090 32599 NGUYEN	HPS 4500 32600 BERTELSEN	HPS 2090 32599 NGUYEN	11:00-12:15			
11:45 AM							
12:00 PM						CRA	
12:15 PM						Drop-In Basketball	
12:30 PM						12:00p - 3:50p	
12:45 PM							
1:00 PM	HPS 3400 30210 NGUYEN	HPS 1660 32697 BERTELSEN	HPS 3400 30210 NGUYEN	HPS 1660 32697 BERTELSEN			
1:15 PM							
1:30 PM							
1:45 PM							
2:00 PM							
2:15 PM							
2:30 PM							
2:45 PM							
3:00 PM							
3:15 PM							
3:30 PM							
3:45 PM							
4:00 PM							
4:15 PM							
4:30 PM							
4:45 PM							
5:00 PM							
5:15 PM							
5:30 PM							
5:45 PM							
6:00 PM							
6:15 PM							
6:30 PM	CRA Intramurals	CRA Intramurals	CRA Intramurals	CRA Intramurals			
6:45 PM	Basketball	Volleyball	Volleyball	Volleyball			
7:00 PM	6:30p - 10:30p	6:30p - 10:30p	6:30p - 10:30p	6:30p - 10:30p			
7:15 PM							
7:30 PM							
7:45 PM							
8:00 PM							
8:15 PM							
8:30 PM							
8:45 PM							
9:00 PM							

## Events Gym - Center Court

FACILITY SCHEDULE							Space Allocation by %
Semester: SPRING 2014						Location: 104C	Program
Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
6:30 AM	Athletic Practice	Athletics 40%					
6:45 AM	Athletic Practice	Academics 4%					
7:00 AM							Recreation 17%
7:15 AM							NP (Not Programed) 33%
7:30 AM							
7:45 AM							
8:00 AM							
8:15 AM							
8:30 AM							
8:45 AM							
9:00 AM		Athletic Practice		Athletic Practice			
9:15 AM		MS		MS			
9:30 AM		Sports - 11:00a		Sports - 11:00a			
9:45 AM							
10:00 AM							
10:15 AM							
10:30 AM							
10:45 AM							
11:00 AM							
11:15 AM	HPS 2090		HPS 2090				
11:30 AM	32599		32599				
11:45 AM	NGUYEN		NGUYEN				
12:00 PM						CRA	
12:15 PM						Drop-In Basketball	
12:30 PM						12:00p - 3:50p	
12:45 PM	HPS 3400		HPS 3400				
1:00 PM	30210		30210				
1:15 PM	NGUYEN		NGUYEN				
1:30 PM							
1:45 PM							
2:00 PM	Athletic Practice						
2:15 PM	Athletic Practice						
2:30 PM	Athletic Practice						
2:45 PM	Athletic Practice						
3:00 PM							
3:15 PM							
3:30 PM							
3:45 PM							
4:00 PM							
4:15 PM							
4:30 PM							
4:45 PM							
5:00 PM							
5:15 PM							
5:30 PM							
5:45 PM							
6:00 PM							
6:15 PM							
6:30 PM	CRA Intramurals	CRA Intramurals	CRA Intramurals	CRA Intramurals			
6:45 PM	Basketball	Volleyball	Volleyball	Volleyball			
7:00 PM	6:30p - 10:30p	6:30p - 10:30p	6:30p - 10:30p	6:30p - 10:30p			
7:15 PM							
7:30 PM							
7:45 PM							
8:00 PM							
8:15 PM							
8:30 PM							
8:45 PM							
9:00 PM							

Events Gym - West Court

FACILITY SCHEDULE							Space Allocation by %	
Semester: SPRING 2014				Location: 104W			Program	
Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Program	%
6:30 AM							Athletics	14%
6:45 AM							Academics	5%
							Recreation	51%
							HP Group Fit	5%
							CU Denver Club Sports	6%
							NP (Not Programed)	19%
7:00 AM								
7:15 AM								
7:30 AM								
7:45 AM								
8:00 AM								
8:15 AM								
8:30 AM								
8:45 AM								
9:00 AM	CRA	CRA	CRA	CRA	CRA			
9:15 AM	Drop-In Basketball	Drop-In Basketball	Drop-In Basketball	Drop-In Basketball	Drop-In Basketball			
9:30 AM	Half Court Only	Half Court Only	Half Court Only	Half Court Only	Half Court Only	Pending Facility		
9:45 AM	9-11:30	9-11:30	9-11:30	9-11:30	Schedule			
10:00 AM								
10:15 AM								
10:30 AM								
10:45 AM								
11:00 AM	Healthy Pursuits		Healthy Pursuits					
11:15 AM	Abs & Back 11-11:50		Abs & Back 11-11:50					
11:30 AM		Healthy Pursuits		Healthy Pursuits				
11:45 AM		Total Fitness		Total Fitness				
12:00 PM		11:30-12:20		11:30-12:20		CRA		
12:15 PM						Drop-In Basketball		
12:30 PM						12:00p - 3:50p		
12:45 PM	HPS 1640 32202	HPS 1640 33729	HPS 1640 32202	HPS 1640 33729				
1:00 PM	RUMMEL-MANCUSO	RUMMEL-MANCUSO	RUMMEL-MANCUSO	RUMMEL-MANCUSO				
1:15 PM								
1:30 PM								
1:45 PM	CRA	CRA	CRA	CRA				
2:00 PM	Drop-In Soccer	Drop-In Basketball	Drop-In Soccer	Drop-In Basketball				
2:15 PM	1:45 - 3:45p	1:45 - 3:45p	1:45 - 3:45p	1:45 - 3:45p				
2:30 PM								
2:45 PM								
3:00 PM								
3:15 PM								
3:30 PM								
3:45 PM	Drop-In Basketball		Drop-In Basketball					
4:00 PM	3:45 - 6:00p	UCD Club V Ball	3:45 - 6:00p	UCD Club V Ball				
4:15 PM		4:00p - 6:00p		4:00p - 6:00p				
4:30 PM								
4:45 PM								
5:00 PM	CU Denver							
5:15 PM	Club Basketball							
5:30 PM	5:00p - 7:30p							
5:45 PM								
6:00 PM								
6:15 PM								
6:30 PM		CRA Intramurals	CRA Intramurals	CRA Intramurals				
6:45 PM		Volleyball	Volleyball	Volleyball				
7:00 PM		6:30p - 10:30p	6:30p - 10:30p	6:30p - 10:30p				
7:15 PM								
7:30 PM	CRA Intramurals							
7:45 PM	Basketball							
8:00 PM	6:30p - 10:30p							
8:15 PM								
8:30 PM								
8:45 PM								
9:00 PM								

Pool

FACILITY SCHEDULE						
Semester: SPRING 2014				Location: 102 (POOL)		
Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:30 AM	CRA Open Swim	CRA Open Swim	CRA Open Swim	CRA Open Swim	CRA Open Swim	
8:45 AM	6:30a - 8:00a	6:30a - 8:00a	6:30a - 8:00a	6:30a - 8:00a	7:00a - 8:00a	
7:00 AM						
7:15 AM						
7:30 AM						
7:45 AM						
8:00 AM						
8:15 AM	HPL 1010	HPL 1010	HPL 1010	HPL 1010		
8:30 AM	32615	30202	32615	30202		
8:45 AM	JOHNSON	POWELL	JOHNSON	POWELL		
9:00 AM						
9:15 AM						
9:30 AM						
9:45 AM	HPL 1040		HPL 1040			
10:00 AM	30644		30644			CRA Open Swim
10:15 AM	JOHNSON		JOHNSON			10:00a - 1:00p
10:30 AM						
10:45 AM						
11:00 AM					CRA Open Swim	
11:15 AM	HPL 1030	HPL 1030	HPL 1030	HPL 1030	11:00a - 1:00p	
11:30 AM	30203	31495	30203	31495		
11:45 AM	JOHNSON	JOHNSON	JOHNSON	JOHNSON		
12:00 PM						
12:15 PM	CRA Open Swim	CRA Open Swim	CRA Open Swim	CRA Open Swim		
12:30 PM	12:15p - 2:00p	12:15p - 2:00p	12:15p - 2:00p	12:15p - 2:00p		
12:45 PM	Hydrobix		Hydrobix			
1:00 PM	12:30p - 1:20p		12:30p - 1:20p			
1:15 PM						
1:30 PM						
1:45 PM						
2:00 PM						
2:15 PM	Swim and Dive	Swim and Dive	Swim and Dive	Swim and Dive		
2:30 PM	Practice	Practice	Practice	Practice		
2:45 PM	Club Sports	Club Sports	Club Sports	Club Sports		
3:00 PM	2:15 - 5:00p	2:15 - 5:00p	2:15 - 5:00p	2:15 - 5:00p		
3:15 PM						
3:30 PM						
3:45 PM						
4:00 PM						
4:15 PM						
4:30 PM						
4:45 PM						
5:00 PM	CRA Open Swim	CRA Open Swim	CRA Open Swim	CRA Open Swim		
5:15 PM	5:00 - 7:00p	5:00 - 7:00p	5:00 - 7:00p	5:00 - 7:00p		
5:30 PM						
5:45 PM						
6:00 PM						
6:15 PM						
6:30 PM						
6:45 PM						
7:00 PM		CRA Kayak		CRA Kayak		
7:15 PM		7:00a - 9:00p		7:00a - 9:00p		
7:30 PM						
7:45 PM						
8:00 PM						
8:15 PM						
8:30 PM						
8:45 PM						
9:00 PM						

Space Allocation by %	
Program	NA
Athletics	18%
Academics	46%
Recreation	6%
Club Sports	2%
Group Fit	28%
NP (Not Programed)	

Group Fitness - 111G

FACILITY SCHEDULE						
Semester: SPRING 2014			Location: 111G			
Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
6:30 AM						
6:45 AM						
7:00 AM						
7:15 AM						
7:30 AM						
7:45 AM						
8:00 AM						
8:15 AM		HPL 1820 31858 TETRO		HPL 1820 31858 TETRO	HPS 2130 32296 LOSCHEN 8:00-8:60	
8:30 AM						
8:45 AM						
9:00 AM						
9:15 AM						
9:30 AM						
9:45 AM		HPL 100C 31016 TETRO		HPL 100C 31016 TETRO		
10:00 AM					HPS 2130 32297 LOSCHEN 10:00-11:50	
10:15 AM						
10:30 AM						
10:45 AM						
11:00 AM						
11:15 AM		HPL 100G 31273 TETRO		HPL 100G 31273 TETRO		
11:30 AM						
11:45 AM						
12:00 PM						
12:15 PM					HPS 2890 32596 DAMA SHEK 11:00-2:00	
12:30 PM						
12:45 PM	HPL 100C 33113 MACGREGOR	HPL 290B 36120 PREDKI	HPL 100C 33113 MACGREGOR	HPL 290B 36120 PREDKI		
1:00 PM						
1:15 PM						
1:30 PM						
1:45 PM						
2:00 PM						
2:15 PM	HPL 1820 31517 MACGREGOR	HPL 290A 35119 PREDKI	HPL 1820 31517 MACGREGOR	HPL 290A 35119 PREDKI		
2:30 PM						
2:45 PM						
3:00 PM						
3:15 PM	CRA		CRA			
3:30 PM	Strengthened		Strengthened			
3:45 PM	Auraria		Auraria			
4:00 PM	3:15p - 6:15p		3:15p - 6:15p			
4:15 PM						
4:30 PM						
4:45 PM						
5:00 PM						
5:15 PM						
5:30 PM		HPS 2130 32298 STRATER 5:00-6:50				
5:45 PM						
6:00 PM						
6:15 PM						
6:30 PM	HPS 2130 32296 DILLINGHAM 8:00-7:50					
6:45 PM						
7:00 PM						
7:15 PM						
7:30 PM		UC Denver Club Sports	UC Denver Club Sports			
7:45 PM						
8:00 PM		7:30 - 8:50p	7:30 - 8:50p			
8:15 PM						
8:30 PM						
8:45 PM						
9:00 PM						

Space Allocation by %

Program	%
Athletics	NA
Academics	21%
Recreation	4%
HP Group Fit	NA
CU Denver Club Sports	4%
NP (Not Programed)	71%

Dance Studio - 215

FACILITY SCHEDULE						
Semester: SPRING 2014						Location: 215
Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
6:30 AM						
6:45 AM						
7:00 AM						
7:15 AM						
7:30 AM		Britney Wright		Britney Wright		
7:45 AM		UCD Tae Kwan		UCD Tae Kwan		
8:00 AM		7:30 - 8:30a		7:30 - 8:30a		
8:15 AM						
8:30 AM						
8:45 AM						
9:00 AM						CRA
9:15 AM						Drop-In
9:30 AM						9:00a - 4:00p
9:45 AM	HPL 1160 32601 MERRILL	HPL 1180 31087 CLEGG	HPL 1160 32601 MERRILL	HPL 1180 31087 CLEGG		
10:00 AM						
10:15 AM						
10:30 AM					HPL 100K 31472 RIDLEY 8:30-12:20	
10:45 AM						
11:00 AM						
11:15 AM	HPL 1160 32147 MERRILL	HPL 1130 30777 CLEGG	HPL 1160 32147 MERRILL	HPL 1130 30777 CLEGG		
11:30 AM						
11:45 AM						
12:00 PM						
12:15 PM						
12:30 PM						
12:45 PM	HPS 2420 34462 MERRILL	HPL 1840 32148 LAMBROZO	HPS 2420 34462 MERRILL	HPL 1840 32148 LAMBROZO		
1:00 PM						
1:15 PM						
1:30 PM						
1:45 PM					HPL 100M 33670 LAMBROZO 12:30-3:20	
2:00 PM						
2:15 PM	HPL 1840 31384 STOHLBERG	HPL 1850 32457 LAMBROZO	HPL 1840 31384 STOHLBERG	HPL 1850 32457 LAMBROZO		
2:30 PM						
2:45 PM						
3:00 PM						
3:15 PM						
3:30 PM					CRA	
3:45 PM	HPL 1850 33929 STOHLBERG	Healthy Pursuits	HPL 1850 33928 STOHLBERG	Healthy Pursuits	Drop-In	
4:00 PM		Zumba		Zumba	3:30p - 6:00p	
4:15 PM		3:45-4:35		3:45-4:35		
4:30 PM						
4:45 PM		Bollywood Club		CRA		
5:00 PM		4:45p - 6:00p		Drop-In		
5:15 PM	HPL 1840 32605 STOHLBERG		HPL 1840 32605 STOHLBERG	4:45p - 9:00p		
5:30 PM						
5:45 PM						
6:00 PM		CRA		CRA		
6:15 PM	CRA	Drop-In	CRA	Dance Lessons		
6:30 PM	Drop-In	6:00p - 9:00p	Drop-In	8:15p - 8:30p		
6:45 PM	8:15p - 9:00p		6:15p - 9:15p			
7:00 PM						
7:15 PM						
7:30 PM			CU Denver			
7:45 PM			Club Sports			
8:00 PM			7:30p - 9:00p			
8:15 PM						
8:30 PM						
8:45 PM						
9:00 PM						

Space Allocation by %	
Program	NA
Athletics	30%
Academics	41%
Recreation	3%
HP Group Fit	5%
CU Denver Club Sports	2%
Student Org	19%
NP (Not Programed)	

Green Room

FACILITY SCHEDULE						
Semester: SPRING 2014				Location: Green Room		
Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
6:30 AM						
6:45 AM						
7:00 AM						
7:15 AM						
7:30 AM						
7:45 AM						
8:00 AM						
8:15 AM						
8:30 AM						
8:45 AM						
9:00 AM						
9:15 AM						
9:30 AM						
9:45 AM						
10:00 AM						Market/Youth League
10:15 AM						10:00-12:00
10:30 AM						
10:45 AM						
11:00 AM		6:45-9:00		6:45-9:00		
11:15 AM		Practice		Practice		
11:30 AM		11:00-12:00		11:00-12:00		
11:45 AM						
12:00 PM						
12:15 PM						
12:30 PM		Healthy Presale		Healthy Presale		
12:45 PM		Wander/Women		Wander/Women		
1:00 PM		12:00-1:00		12:00-1:00		
1:15 PM						
1:30 PM	Healthy Presale	Healthy Presale	Healthy Presale	Healthy Presale		
1:45 PM	ipped in 30	ipped in 30	ipped in 30	ipped in 30		
2:00 PM	1:30-2:00p	1:30-2:00p	1:30-2:00p	1:30-2:00p		
2:15 PM			Market/Youth League			
2:30 PM			1:00-3:00			
2:45 PM						
3:00 PM						
3:15 PM						
3:30 PM						
3:45 PM						
4:00 PM						
4:15 PM						
4:30 PM						
4:45 PM						
5:00 PM						
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6:45 PM						
7:00 PM						
7:15 PM						
7:30 PM						
7:45 PM						
8:00 PM						
8:15 PM						
8:30 PM						
8:45 PM						
9:00 PM						

## Architectural Space Descriptions

Architectural space descriptions were not reviewed by the Steering Committee, but were used as the basis for pricing.

### Classroom

Programming Intent: Scheduled use for the Human Performance and Sport academic programming, with swing use for other academic programming and formal and informal student meetings and activities.

Finishes: Flooring to consist of wear-resistant vinyl tile, rubber base. Wall finishes consisting of painted drywall. Ceilings to be 10'-0" high, to support recreation programming flexibility, with 2x4 acoustical ceiling tile.

Exterior windows and day-lighting are desirable. Mini-blind window coverings provided at all exterior windows. Battery operated wall clock.

Specialties: 4x6 white marker board along one wall, 4x4 cork tack board.

Furnishings and Equipment: Furnishing to include movable tables and chairs, movable lectern/podium. Electrical raceways at seating areas for laptop use.

Technology: Ceiling mounted video/data projector, ceiling mounted electrically operated projection screen. Inclusion of a sound system with ceiling mounted speakers, computer connection point and iPod/MP3 docking station allows diverse programming.

### Lab Classroom

Programming Intent: Scheduled use for the Human Performance and Sport academic programming and physiological testing.

Finishes: Flooring to consist of resilient rubber flooring, rubber base. Wall finishes consisting of painted impact resistant drywall. Ceilings to be 10'-0" high minimum, to support programming flexibility, with 2x4 acoustical ceiling tile.

Exterior windows and day-lighting are desirable. Mini-blind window coverings provided at all exterior windows. Each classroom to have supply closet with adjustable shelving for storage of program specific materials. Solid Surface countertop and plastic laminate base cabinets along one wall with a double basin sink. Battery operated wall clock.

Specialized performance and testing equipment will be used in these spaces. Dedicated electrical circuit outlets to support equipment requirements.

Specialties: 4x6 white marker board along one wall with tack rail, 4x4 cork tack board.

Furnishings and Equipment: Furnishing to include movable tables and chairs, movable lectern/podium. Electrical raceways at seating areas for laptop use.

Technology: Ceiling mounted video/data projector, ceiling mounted electrically operated projection screen. Inclusion of a sound system with ceiling mounted speakers, computer connection point and iPod/MP3 docking station allows diverse teaching modalities.

### Athletic Training Areas

Programming Intent: Scheduled for clinical use by the Human Performance and Sport academic program or the MSU Denver Athletics program.

Finishes: Flooring to consist of poured epoxy flooring with rubber base. Wall finishes consisting of painted concrete masonry units. Ceilings to be 10'-0" high minimum, to support programming flexibility, with 2x4 acoustical ceiling tile.

Each treatment room or area to have supply closet with adjustable shelving for storage of program specific materials. Solid surface countertop and plastic laminate base cabinets with keyed locks along one wall in each space. Battery operated wall clock.

Specialized performance and testing equipment will be used in these spaces. Dedicated electrical circuit outlets to support equipment requirements.

Specialties: single-use cold therapy whirlpools, clinical equipment as required. Hose bib for water jug filling. Doors should be large enough to accommodate stretchers.

Furnishings and Equipment: Furnishing to include taping tables, treatment tables, tables and chairs. Sink and refrigerator, ice machine.

Technology: Computer documentation workstations. Television monitor with computer connection in Athletics Training Room.

Ceiling mounted video/data projector, ceiling mounted electrically operated projection screen and computer plug-in in Academic Training Room.

### Meeting Room

Programming Intent: Scheduled use primarily for conferences and events along with student meetings and student clubs, with incidental meeting room use by other college users as availability permits. Rooms to be sub-dividable as indicated on plans. HPS and Recreation to have individual meeting rooms.

Finishes: Flooring to consist of carpet, base, chair rail. Wall finishes consisting of painted drywall. Ceilings to be 10'-0" high minimum, with 2x4 acoustical ceiling tile.

Exterior windows and day-lighting are highly desirable. Mini-blind window coverings provided at all exterior windows.

Specialties: 4x6 white marker board, 4x4 cork tack board, 1"-thick, overhead supported, folding-pair acoustical wall panel system with acoustical fabric covering, wall pocket with closing door. Modernfold, Durafold.

Furnishings and Equipment: Furnishing to include movable tables and chairs. Movable podium with flexible plug-in connections to A/V system. Battery operated wall clock. Floor boxes with power and data for laptop use.

Technology: Ceiling mounted video/data projector, ceiling mounted electrically operated projection screen. Inclusion of a sound system with ceiling mounted speakers, computer connection point and iPod/MP3 docking station allows diverse programming.

### Multi-Purpose Room

Programming Intent: Scheduled use for large assembly uses by student life, club sports, and College program meetings. Rooms to be sub-dividable as indicated on plans.

Finishes: Flooring to consist of parquet wood athletic flooring, base, chair rail. Wall finishes consisting of painted impact resistant drywall or concrete masonry units. 30% of walls to have 1" acoustical wall panel. Ceilings to be 10'-0" high minimum, with 2x2 acoustical ceiling tile.

Exterior windows and day-lighting are desirable. Electrically operated perforated window coverings with 1-3% light transmission provided at all exterior windows.

Specialties: 1"-thick, overhead supported, folding-pair acoustical wall

panel system with acoustical fabric covering, wall pocket with closing door. Modernfold, Durafold.

Furnishings and Equipment: Folding tables and stacking chairs. Battery operated wall clock.

Technology: Inclusion of a sound system with ceiling mounted speakers, computer connection point and iPod/MP3 docking station allows diverse programming.

### Gym Spaces

Programming Intent: Structured for drop-in use, instructional programming, club sports, and intramural uses.

Programming includes basketball, volleyball, indoor-soccer, badminton, floor-hockey, special events, activities, and general assembly events. Wall projections and offsets shall be minimized to support use of room by indoor soccer and field hockey. All projections and devices shall be caged.

Finishes: Resilient wood athletic flooring with vented rubber base. Flooring to be striped for multiple sports. Wall finishes to be highly durable and impact resistant consisting of painted concrete block CMU construction. Corners of gym to be rounded for indoor soccer and floor hockey use. 30% of upper walls to have 1" acoustical wall panel. Ceilings to be painted exposed structure, acoustical structural deck, min 25'-0" high to bottom of structure.

Day-lighting and day-light harvesting are highly desirable. Exterior clerestory windows or translucent panel impact resistant wall systems, translucent glass skylights.

Specialties: Two wall mounted electronic scoreboards with wireless controllers for each court. (6) Retracting basketball hoops with glass backboards. Court inserts for volleyball and badminton standards. Wall padding in overrun areas. Wall recesses for indoor-soccer and floor-hockey goals. Rough-in for ceiling mounted video/data projection and wall mounted projection screen in one gym space.

Technology: Public address system, music system, wall mounted mass notification LED text display.

### Supporting Ancillary Spaces: [Gym Equipment Storage Room](#)

#### Gym Equipment Storage Room

Finishes: Painted exposed structure, painted concrete masonry units, sealed concrete floor. Lockable chain link storage areas.

## Strength & Conditioning Spaces

Programming Intent: Primarily structured for either drop-in or academic/athletic use and equipped to support general core training, general weight training, Functional Training, Stretching, TRX cross-training, and cardio conditioning. Instructional programming may consist of small group training and personal training.

Strength and Conditioning programming has seen explosive participation growth nationally and regionally. This program component is expected to have the highest participation rates and density of use. Strength and Conditioning areas can be rearranged and reconfigured, new types of equipment added periodically to keep pace with user demand, industry trends, and unique Auraria campus patterns and preferences that emerge has additional options are provided to the student population.

A functional and suspension training area will be located in a designated zone with medicine balls, plyometric boxes, battle ropes, fitness and bosu balls, foam rollers and other functional training equipment. Areas for stretching can be included as part of functional training or dispersed through the strength and conditioning area

Finishes: Resilient, rubber athletic flooring with rubber base. Wall finishes to be painted concrete CMU below 8'-0" in non-mirrored areas. Painted gypsum board to be provided behind mirrors and above CMU walls to structure. Incorporating painted CMU, painted concrete or resilient surfaces to 8'-10' above finished floor construction in functional training areas is beneficial in supporting impact exercises such as medicine ball tossing. Ceilings to be painted exposed structure, structural deck, min 12'-0" to 14'-0" clearances to bottom of structure. Day lockers to be provided adjacent to fitness areas.

Exterior windows, views, and day-lighting and day light harvesting are highly desirable.

Specialties: Provide floor/wall anchors to accommodate heavy battle ropes. Blocking and structure at functional training areas to support chin-up bars and suspension training.

Furnishings and Equipment: Equipment to consist of free-weights, plate-loaded machine weights, and selectorized machine weights, with some selectorized equipment configured in circuits as well as cardio fitness equipment. Continuous mirrors to extend from 18" above finished floor to 8'-0" on two adjacent walls.

Technology: Public address system, music system, (8) CATV flat screens. Provide recessed floor boxes with dedicated power circuits and telecommunicate data and CATV connections at each cardio

equipment station with a cord management system.

## Supporting Ancillary Space:

### Strength and Conditioning Storage Room

Finishes: Painted exposed structure, painted concrete masonry units, sealed concrete floor. Storage system to accommodate a broad range of small and large functional training and fitness equipment.

### Climbing & Bouldering Space

Programming Intent: Structured for drop-in use, instructional programming, and club sports.

Climbing and Boulder to provide mix of visibility and privacy to meet needs of beginners and advanced climbers. Climbing walls will consist of a multi-faceted vertical wall providing 6-climbing lanes 4'-6' in width for a total climbing width of 33'-0", and a maximum height of 32'-33' with belay bars and lead climbing capacity.

Bouldering area will be sufficient to allow for multiple users without interfering with top rope climbing. Topping out will not be part of the bouldering wall program, with a maximum height of 12'-13'.

Finishes: Structural floor slab recessed for impact floor system. Wall finishes to be painted impact resistant drywall where not concealed by climbing and bouldering wall systems. Ceilings to be painted exposed structure, acoustical structural deck, min 3' above climbing wall maximum height. Exterior windows, views, and day-lighting and day light harvesting are highly desirable.

Specialties: Provide additional hand-holds and route setting materials. Provide (6) overhead supported auto-belay systems. Provide bench height storage cubbies for user personal belongings, storage, shoe changing. Day lockers to be provided for securing personal belongings.

Technology: Music system/Public Address System including ceiling mounted speakers and iPod/MP3 docking station.

## Supporting Ancillary Spaces:

### Climbing Wall Storage Room

#### Climbing Wall Storage Room

Finishes: Painted exposed structure, painted concrete masonry units, sealed concrete floor. Storage system to accommodate shoes, harnesses, and other climbing equipment.

### Group Exercise Space/Studio

Programming Intent: Academic programs to be accommodated include Dance. Otherwise, programming will be structured for drop-in use, instructional programming in various studios.

Programming to offer group fitness programming consisting of yoga, mat-Pilates, spinning, general group fitness formats, TRX-type activities, small group training. Studio design to be as flexible as possible and will accommodate multiple formats of exercise classes in both large and smaller studios.

These spaces can also be used for many non-fitness programming to increase space utilization, including meetings, banquets, arts and crafts.

Separate storage and sound system controls for Academic and Recreation/Fitness staff is required so that academic classes are not negatively impacted by items broken, etc., by other participants.

Finishes: Floating, resilient wood floor system with vented rubber base. Wall finishes to be painted impact resistant drywall or concrete masonry units. Ceilings to be painted exposed structure, min 10'-0" high. Mirrors to be provided on two adjacent walls from 18" above finish floor to 8'. Exterior windows, views, and day-lighting and day light harvesting are desirable where possible. Windows to be provided with mini-blind wall coverings.

Specialties: Provide ballet bar along one mirrored wall. Wall mounted pull-up bars.

Technology: Music system/Public Address System including ceiling mounted speakers and iPod/MP3 docking station with wireless headset system. Bench height storage cubbies for user personal belongings should be structured to support stretching and plyometric activities.

## Supporting Ancillary Spaces: Group Exercise Storage Room

### Group Exercise Storage Room

Finishes: Painted exposed structure, painted concrete masonry units, sealed concrete floor. Storage system to accommodate a broad range of small and large functional training and fitness equipment.

### Outdoor Recreation Resource Suite

Programming Intent: Support of formal and informal outdoor recreation activity programs and classes thorough provisions for outdoor recreation resource materials, equipment rental, education and training, and organized group activities and excursions.

Staff areas include a Coordinator's Office and Control Counter/Equipment Check-out counter. A library/workroom/lounge for trip planning resource materials, guide books, maps.

Recreation staff and current outdoor program users should evaluate outdoor equipment rental needs and scope. Student surveys at other institutions indicate a strong interest in being able to rent outdoor equipment that may consist of Kayaks/Paddleboards, rock-climbing gear, bicycles, tents, sleeping bags, GPS locators, camping gear, fishing poles, but an Auraria Campus student survey is highly recommended.

Architecturally, spaces are to be kept as open as possible to support flexible use of space. Ceilings to be open to structure in all storage areas to maximize usable height of space.

Finishes: Sealed concrete in wet areas, storage areas. Carpet in lounge/library/staff office areas. Wall finishes to be painted concrete block for durability in wet areas, storage areas and painted drywall in office areas. Ceilings to be painted exposed structure, min 10'-0" high, except in lounge/library/staff office areas.

Exterior windows, views, and day-lighting and day light harvesting are desirable where possible. Windows to be provided with mini-blind wall coverings.

Furnishings and Equipment: Adjustable storage racks, trolleys, and hold for sports and outdoor equipment. Workbenches with storage cabinets. Ventilated, flammable storage cabinet. Residential refrigerator, dishwasher, high capacity and high heat clothes washer and dryer in storage area. Drying racks/bars in storage area.

Technology: Flat screen TV with computer station in trip planning library/lounge.

### Entry Lounge Space

Programming Intent: entry lounge and reception area for building users for waiting, lounging and socializing.

Finishes: carpet or tile floor finish. Wall finishes consisting of painted drywall or special feature wall. Ceilings to be 10'-0" high minimum, double height space preferred, with 2x4 acoustical ceiling tile.

Furnishings and equipment: Flexible soft furnishings, movable tables and chairs. Day use lockers behind security point.

Technology: Flat screen TVs for digital signage, floor and wall boxes with power and data for student laptop use.

### Events Entry

Programming Intent: entry and reception area for large events and conferences, as well as lounge space when there are no events.

Finishes: carpet or tile floor finish. Wall finishes consisting of painted drywall or special feature wall. Ceilings to be 10'-0" high minimum, with 2x4 acoustical ceiling tile.

Furnishings and equipment: Flexible soft furnishings, movable tables and chairs.

Technology: Flat screen TVs for digital signage, floor and wall boxes with power and data for student laptop and event use.

### Locker Rooms / Toilet Rooms

Programming Intent: Support of individual academic and recreation users, intramural sports, and recreation center programming with separate, designated locker room spaces for both MSU Denver Athletics and HPS faculty and staff.

Finishes: Poured, seamless, epoxy flooring with integral cove. Wall finishes to be largely painted concrete block with full height porcelain wall tile in wet areas, plumbing walls, shower areas. Ceilings to be painted exposed structure, min 10'-0" high in locker areas. Provide moisture resistant hard-lid ceilings in all wet areas.

Specialties: Toilet accessories, mirrors, shower curtains with rods. Electric hand dryers and electric hair dryers. Vented phenolic lockers and fixed wood benches.

### HPS & Recreation Office Suites

Programming Intent: Instructional support space for academic and recreation programming, administrative organizational and supervision support space. Entry control, supervision of public and group activity areas.

Finishes: Carpeted floors with rubber base, painted gypsum board walls, suspended acoustical ceiling tile at 8'-0" above finished floor min.

Exterior windows, views, and day-lighting and day light harvesting are desirable where possible. Windows to be provided with mini-blind coverings.

Furnishings and Equipment: Office furnishing per campus standards and conventions.





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