



# Oregon State University

## REQUEST FOR QUALIFICATIONS #2019-000231

### GYMNASTICS PRACTICE FACILITY TENANT IMPROVEMENT DESIGN

ISSUE DATE: July 9, 2019

RFQ DUE DATE/TIME: July 30, 2019, at 2:00 PM  
Pacific Time

**\*OFFICE IS CLOSED DAILY FROM NOON TO 1:00  
PM**

VOLUNTARY PRE-SUBMITTAL CONFERENCE:  
July 18, 2019 at 2:00 PM Pacific Time at the  
Rear Loading Dock at 4100 SW Research Way,  
Corvallis, OR 97333.

QUESTION DEADLINE: July 23, 2019 at 5:00 PM Pacific Time

PROJECT NUMBER: 2189-18

**CONTRACT ADMINISTRATOR:**

Matt Hausman, Construction Contracts Officer  
Construction Contract Administration  
Oregon State University  
644 SW 13<sup>th</sup> St.  
Corvallis, OR 97333  
Phone: (541) 737-3401  
FAX: (541) 737-5546  
Email: [ConstructionContracts@oregonstate.edu](mailto:ConstructionContracts@oregonstate.edu)

**AWARD DECISION APPEALS:**

Hanna Emerson, Construction Contracts  
Manager  
Construction Contract Administration  
Oregon State University  
644 SW 13<sup>th</sup> St.  
Corvallis, OR 97333  
Phone: (541) 737-7342  
FAX: (541) 737-5546  
Email: [hanna.emerson@oregonstate.edu](mailto:hanna.emerson@oregonstate.edu)

It is the Bidder's responsibility to continue to monitor the [OSU Business and Bid Opportunities](#) website for Addenda. Failure to acknowledge any Addenda in the Transmittal Letter may cause your submittal to be considered non-responsive.

*OSU standards and policies govern this solicitation ([Procurement Thresholds and Methods](#), [Procurement Solicitations and Contracts](#)) unless otherwise referenced or stated.*

## **1.0 INTRODUCTION**

Oregon State University (“OSU” and “Owner”) is conducting a competitive ONE-STEP process to retain ONE (1) consultant team from the OSU Reserve program to provide professional design services for the **Gymnastics Practice Facility Tenant Improvement** project.

Owner will be accepting sealed submittals at Construction Contracts Administration, Oregon State University, 644 SW 13th Street, Corvallis, Oregon, until 2:00 PM local time, July 30, 2019 for the project located at 4100 SW Research Way in Corvallis, Oregon 97333. Interested firms can view this solicitation and the 2019-2023 Professional Consultant Reserve Contracting Program RFQ at [OSU Business and Bid Opportunities](#).

Oregon State University is seeking qualifications from integrated design teams headed by an architectural firm for the design and construction administration of a building remodel in Corvallis, OR. The architecture firm is free to sub-contract as necessary to ensure a complete design team, including but not limited to structural, mechanical, plumbing, electrical, fire protection, interior design, graphic design, audio/visual technology, and cost estimating.

Scope of services will include the following phases: Schematic Design, Design Development, Construction Documents, Bidding/Permit, Construction Administration, Project Closeout including Record Documents. Additionally, some support, in the form of graphic exhibits, models and text, may be required for the associated donor outreach program. Programming and conceptual design are complete and will be available for your review.

**A VOLUNTARY PRE-SUBMITTAL CONFERENCE** will be held on July 18, 2019 at 2:00 PM Pacific Time at the rear loading dock entry at 4100 SW Research Way, Corvallis, OR 97333. Attendance will be documented through a sign-in sheet prepared by OSU.

## **2.0 PROJECT DESCRIPTION**

Oregon State University’s Women’s Gymnastics Program is currently located on the eastern side of campus in the Gladys Valley Gymnastics Center. This facility, with a gymnastics practice studio of approximately 6,000 square feet, has served the team’s needs since 1992. While the staff and team have maximized the utilization of the current building’s layout, the facility lacks adequate square footage and apparatus to safely and effectively prepare Student Athletes for competition.

OSU is negotiating the purchase of an off-campus building to accommodate a new Gymnastics Practice Facility. Described as a typical large multi-tenant facility, the building in consideration is located at 4100 SW Research Way. The total square footage is approximately 40,000 SF with approximately half of the space (17,510 SF) leased to two other tenants. Upon purchase, OSU intends to continue leasing this portion of the building. The remaining area, described as the “area of work”, has been studied to verify that the space can effectively accommodate a new Gymnastics Practice Facility.

A new Gymnastics Practice Facility will expand the training capabilities of the Women’s Gymnastics Program and increase the usable Practice Studio area from approximately 6,000 SF in the Gladys Valley Gymnastics Center to approximately 15,775 SF while offering improved support facilities. Concept options within the “area of work” have determined that the space will safely accommodate the needed gymnastics apparatus and training equipment in the Practice Studio. Additional programmatic support spaces, coupled with existing facilities on campus, will significantly improve the efficiency and safety of the program and meet the requirements of the Women’s Gymnastics program.

Based on visual site review and inspection of the building, construction is sound and in good condition. The location, flexible open plan of the warehouse area, and multi-tenant usability are all

valuable property attributes. However, significant renovations to the building will be required to meet the needs of the Women’s Gymnastics program. Removal and replacement of existing floor slabs and shoring of affected footings are required to accommodate training apparatus landing pits and equipment. Existing mechanical, plumbing, and electrical systems within the area of work will need to be fully replaced to accommodate the new use. Existing interior construction within the area of work will need to be fully removed to allow for the new layout. The new construction and systems required can be accommodated in the building.

The preferred design concept was developed for conceptual cost estimating and conceptual imagery. This design concept, developed in collaboration with the Women’s Gymnastics Program, includes two primary components:

- 1) The Practice Studio with 15,775 SF to safely accommodate all apparatus and training activities. The Practice Studio was given priority during the development of the preferred concept.
- 2) Support spaces including: Team and Coaches Locker Rooms, Team Room, Offices, Meeting Spaces, Therapy, Cardio, Lobby, Restrooms, and Utility rooms.

Construction Delivery Method: Design-Bid-Build

Design and Construction Timeline:

	<b>Start Date</b>	<b>End Date</b>
<b>Schematic Design (includes Board of Trustees Meeting Jan. 2020)</b>	September 2019	January 2020
<b>Design Development (includes Board of Trustees Meeting Apr. 2020)</b>	January 2020	April 2020
<b>Construction Documentation Bidding/Permit</b>	April 2020 July 2020	July 2020 August 2020
<b>Construction (including Substantial Completion in April 2021)</b>	September 2020	May 2021
<b>Project Closeout</b>	May 2021	June 2021

**3.0 DESIGN STANDARDS**

The design of the Campus Operations Center must follow and incorporate OSU’s Design and Construction Standards, including OSU’s requirements for sustainable development.

**4.0 PROJECT SCHEDULE AND BUDGET**

Schematic Design is to begin immediately following contract implementation. OSU would like to have construction complete by December 2020 if possible. The projected direct construction budget is \$5.4M. This project has a construction budget slightly less than anticipated in the Feasibility Study; design will need to be developed to meet the \$5.4M construction budget.

## **5.0 COMPENSATION**

Compensation will be based on a total “not-to-exceed” amount for services and reimbursable expenses, with “not-to-exceed” maximums for the services required. The amount of compensation will be negotiated with the top-ranked firm(s). **No cost or price information is to be submitted with qualification responses.**

## **6.0 SCHEDULE**

The submittals for this RFQ will be evaluated/scored by a qualified committee which may include other non-scoring members who serve as advisors but do not score qualifications statements or interviews.

If applicable, interviews of short-listed finalists will occur following the receipt, review and scoring of the responses. In addition, further investigation of references may occur following the committee scoring in a one-step selection process or interviews of the short listed finalists in two-step selection process.

Schedule is as follows:

July 9, 2019	Issue RFQ
July 18, 2019 at 2:00 PM Pacific Time	Voluntary Pre-Submittal Conference
July 23, 2019 at 5:00 PM Pacific Time	Question Deadline
July 26, 2019	Issuance of Final Addenda (if necessary)
July 30, 2019 at 2:00 PM Pacific Time	Submittal Due Date/Time
Week of August 5, 2019	Estimated Notice of Intent to Award
September 1, 2019	Estimated Contract execution

## **7.0 INSTRUCTIONS TO OFFERORS**

Your response must be contained in a document not to exceed **twenty (20) pages (double-sided preferred on hard copy)** including pictures, charts, graphs, tables and text you deem appropriate to be part of OSU’s review of your response. Resumes of key individuals proposed to be involved in this Project are exempted from the twenty (20) page limit and must be appended to the end of your response. No supplemental information to the twenty (20) page response will be allowed. Appended resumes of the proposed key individuals, along with a Transmittal letter, table of contents, front and back covers, references required by Section 10.0 and blank section dividers will not be counted in the twenty (20) page limit.

Present information in the same order as the following evaluation criteria in Section 9.0 and include references required by Section 10.0. Your response must follow the format outlined below and **include a Transmittal/Cover Letter signed by an officer of your firm with the authority to commit the firm. Make sure to include contact information *including email* for communication purposes.** The response must be submitted in a soft-bound (no three-ring binders) format with page size of 8 ½ x 11 inches. No fold-outs other than one fold out Project schedule and one site logistics plan (not to exceed 11 x 17 inches each) may be included. The basic text information of the response should be presented in standard business font size, and reasonable (no less than one-inch) margins.

OSU may reject any submittal not in compliance with all applicable OSU solicitation procedures and requirements, and may cancel this solicitation or reject for good cause, all responses upon a finding by OSU that it is in the public interest to do so.

Note that throughout this procurement, OSU will not accept responses or queries that require OSU to pay the cost of production or delivery.

OSU is an AA/EEO employer.

Telephone, facsimile, or electronically transmitted submittals will not be accepted. Responses received after the closing date and time will not be considered.

## **8.0 EVALUATION PROCESS**

This RFQ will use a one-step process in the selection of a design team. Evaluations of written qualifications submitted in response to this RFQ will be used to determine an Apparent Successful Respondent and enter into negotiations for a contract.

## **9.0 EVALUATION CRITERIA**

The following questions constitute the evaluation criteria for the selection committee to score responses. Respond to each criterion in numerical order. For ease in scoring the responses, provide tabs keyed to each of the following criteria numbers. Indicate in writing the following information about your firm's ability and desire to perform this work.

1. Experience and Qualifications of the Firm (35 Points)
  - a. Provide a brief description of your firm and include information on the focus of the practice. List the relative projects your firm is currently contracted for and include what stage the projects are in terms of completion.
  - b. Describe your firm's experience with design and construction of higher education sports/athletics facilities.
  - c. Describe your firm's experience understanding, addressing, and prioritizing needs and requirements of students, staff and visitors.

2. Experience and Qualifications of the Team (30 Points)

Identify key personnel, including project designer and project manager along with those of subconsultants proposed (particularly mechanical (HVAC and plumbing), electrical, structural engineers, graphics designers, interior designers, and cost estimators), to be assigned to this project. Include proposed key personnel's project experience, with specific examples and identify their roles in the projects. Indicate current availability, proposed percentage of project involvement per project phase and indicate whether the proposed team has worked together on previous projects. Highlight the individuals who participated in the project examples.

3. Design Approach & Overall Schedule (25 Points)

Provide a narrative on your project approach for this type of project specifically and a detailed milestone schedule from start of Design through end of Construction based on the Design and Construction Timeline provided in Section 2.0.

4. Workforce Diversity Plan (10 Points)

Provide a description and identification of Minority Business Enterprise (MBE), Women Business Enterprise (WBE) or Emerging Small Business (ESB) certifications, if applicable for your firm and a description of your firm's nondiscrimination practices. Provide any historical information on MBE, WBE or ESB Joint Ventures, subcontracting or mentoring plan, and utilization history for projects completed within the past three (3) years.

Provide a narrative description of your current workforce diversity program/plan, and the plan for obtaining subcontracting and consulting diversity for this project. Include a description of the outreach program or plan, including a schedule of events and specific steps that will be taken to maximize broad based and inclusive participation and the plan to provide mentoring, technical or other business development services to subcontractors needing or requesting such services.

The successful respondent must perform the work and the contract with respect to diversity according to the means and methods described in its workforce plan described in the response, unless changes are requested and approved in writing in advance by OSU or are required by applicable laws, ordinances, codes, regulations, rules or standards.

## **10.0 OPTIONAL REFERENCE CHECKS**

### **OPTIONAL REFERENCE CHECKS (10 POINTS)**

If the selection committee determines the written responses are too close to score, the university has no recent experience working with a finalist or if the scoring indicates a tie, the committee will check the references provided by the respondent as required by this RFQ. Information obtained from references will be used in the committee's final scoring and will be based on the committee's understanding of how well each firm can meet the needs of the Project and University.

- a. In addition to responding to the evaluation criteria above, provide current contact information for references for each of the KEY PERSONNEL you propose for this Project. The references must represent at least one of each of the following: owners, sub-consultants and contractors. These references must relate to projects of a size, scope and/or complexity comparable to this Project. The references identified must have had direct contact with your team member.
- b. Also, provide current contact information for three owners, three sub-consultants, and three contractors to be used as references for your firm for this Project. Verify that the individuals identified have had direct contact with the referenced project. Do not include references from any firms or individuals included in your team for this Project or any references of OSU personnel. OSU may check with these references or other references associated with past work of your firm.

## **11.0 FINANCIAL RESPONSIBILITY**

OSU reserves the right to investigate and evaluate, at any time prior to award and execution of the contract, the submitting firms financial responsibility to perform the anticipated contract. Submission of a response will constitute approval for OSU to obtain any credit report information OSU deems necessary to conduct the evaluation. OSU will notify the firms, in writing, of any other documentation required, which may include, but need not be limited to: recent profit-and-loss history; current balance statements; assets-to-liabilities ratio, including number and amount of secured versus unsecured creditor claims; availability of short and long-term financing; bonding capacity and credit information. Failure to promptly provide this information may result in rejection of the submission.

OSU may postpone the award or execution of a contract or selection of finalists in order to complete its investigation and evaluation. Failure of a firm to demonstrate financial responsibility may render it non-responsible and constitute grounds for response rejection.

## **12.0 SUBMISSION**

Submit **ONE (1)** copy of your response, along with an electronic version on a thumb drive, to be received by the closing date and time listed in this document to:

Matt Hausman  
Construction Contract Administration  
Oregon State University  
644 SW 13th Ave  
Corvallis, OR 97333

Telephone, facsimile, or electronically transmitted submittals will not be accepted. Responses received after the closing date and time will not be considered.

**The electronic response must be sized appropriately for transfer (under 8 mb).**

## **13.0 REQUEST FOR CLARIFICATION OR CHANGE**

All requests for clarification and/or change regarding any information in this RFQ must be addressed either in writing or email to Matt Hausman at the address or email listed in this document no later than 5:00 PM Pacific Time on July 23, 2019. If you are unclear about any information contained in this document or its exhibits (Project, scope, response format, agreement terms, etc.), you are urged to submit those requests for formal clarification.

## **14.0 UNIVERSITY SOLICITATION PROCESS OR ACTION APPEALS**

Prospective respondents may submit a written appeal of a University solicitation process or action in accordance with OSU Standards & Policies ([Procurement Thresholds and Methods, Procurement Solicitations and Contracts](#)).

## **15.0 CHANGE OR MODIFICATION**

Any change or modification to the specifications or the procurement process will be in the form of an addendum to the RFQ and will be made available to all firms by publication at [OSU Business and Bid Opportunities](#). It is the responsibility of each firm to visit the website and download any addenda to this RFQ. No information received in any manner different than as described herein shall serve to change the RFQ in any way, regardless of the source of the information.

## **16.0 PROPRIETARY INFORMATION**

OSU will retain this RFQ and one copy of each original response received, together with copies of all documents pertaining to the award of a contract. These documents will be made a part of a file or record, which shall be open to public inspection after OSU has announced its intent to award a contract. If a response contains any information that is considered a trade secret under ORS 192.345(2), you must mark each trade secret with the following legend: **“This data constitutes a trade secret under ORS 192.345(2), and shall not be disclosed except in accordance with the Oregon Public Records Law, ORS Chapter 192.”**

The Oregon Public Records Law exempts from disclosure only bona fide trade secrets, and the exemption from disclosure applies only “unless the public interest requires disclosure in the particular

instance.”

Therefore, non-disclosure of documents or any portion of a document submitted as part of a response may depend upon official or judicial determination made pursuant to the Public Records Law.

In order to facilitate public inspection of the non-confidential portion of the response, material designated as confidential shall accompany the response, but shall be readily separable from it. Prices, makes, model or catalog numbers of items offered, scheduled delivery dates, and terms of payment shall be publicly available regardless of any designation to the contrary. Any response marked as a trade secret in its entirety shall be considered non-responsive and shall be rejected.

#### **17.0 PROJECT TERMINATION**

OSU is seeking to award a contract to an Architectural firm for all phases; however, OSU reserves the right to terminate the Project or contract during any phase in the Project.

#### **18.0 CERTIFICATION OF NONDISCRIMINATION**

By submission of a response, the respondent certifies under penalty of perjury that the respondent has not discriminated against minority, women or emerging small business enterprises in obtaining any required subcontracts.

#### **19.0 ENCLOSURES**

- Exhibit 1 - Sample OSU Reserve Contract for Professional Consultants
- Exhibit 2 - Feasibility Study dated May 02, 2019
- Exhibit 3 - Feasibility Study Appendix

End of RFQ



EXHIBIT 1

**SAMPLE RESERVE CONTRACT SUPPLEMENT**  
**OSU RESERVE CONTRACT FOR PROFESSIONAL CONSULTANTS**  
**SUPPLEMENT NO.:**  
**PROJECT NAME**

This Reserve Contract Supplement dated \_\_\_\_\_ (the “Supplement”) is entered into between:

“Consultant”:

and “Owner”:

OREGON STATE UNIVERSITY  
Construction Contract Administration  
644 SW 13<sup>th</sup> Ave.  
Corvallis, OR 97333

(each a “Party” and collectively, the “Parties”) pursuant to that certain Reserve Contract entered into between the Parties (the “Reserve Contract”). Capitalized terms have the meaning defined in the Reserve Contract unless further defined in this Supplement.

**1. DESCRIPTION OF THE PROJECT:** The project to which this Supplement pertains is described as follows: \_\_\_\_\_ (the “Project”).

**2. SERVICES TO BE PERFORMED:** The Consultant shall perform the following services on the Project: \_\_\_\_\_ (the “Services”). Contractor shall perform its Services according to the terms and conditions of this Supplement, the Reserve Contract, and Attachment 1, which are each incorporated herein by this reference.

All design Services will be performed in compliance with the Owner’s Design Criteria in effect as of the date of this Supplement.

The Project description, scope of Services, and the fee breakdown are outlined in the Qualification dated \_\_\_\_\_, and Signed by \_\_\_\_\_ (attached hereto and incorporated by this reference as “Exhibit 1”).

**3. SCHEDULE.** Consultant shall perform its Services according to the schedule developed in cooperation with the Owner in order to meet Project needs: \_\_\_\_\_ (the “Schedule”).

**4. INCORPORATED DOCUMENTS.** This Supplement, the Reserve Contract and Exhibit 1 are all intended to be complementary. However, any conflicts or discrepancies will be resolved utilizing the following descending order of precedence: 1) this Supplement excluding the Reserve Contract and

Exhibit 1, 2) the Reserve Contract excluding this Supplement and Exhibit 1, and 3) Exhibit 1 excluding this Supplement and Reserve Contract.

**5. COMPENSATION [Owner will choose A/B].**

[A] Owner shall compensate Consultant for Services and Reimbursable Expenses incurred by the Consultant in the performance of the Services on a Time and Materials basis in accordance with the Schedule of Charges and the provisions of this Supplement.

The Maximum Compensation for the Consultant's Services including the Reimbursable Expenses is \$ . This amount includes \$ for Services and \$ for Reimbursable Expenses.

[B] Owner shall compensate Consultant for Services and Reimbursable Expenses incurred by the Consultant in the performance of the Services on a Fixed Price basis in accordance with the Reserve Contract and the provisions of this Supplement.

The Maximum Compensation for the Consultant's Services including the Reimbursable Expenses is \$ . This amount includes \$ for Services and \$ for Reimbursable Expenses.

Total Maximum Compensation, including the cost of any Additional Services that the Parties may agree to through subsequent execution of a Supplement Amendment, shall not exceed the maximum allowable under OSU Standards.

**6. TERM.** This Supplement is effective on the date it has been Signed by every Party hereto and all required approvals have been obtained (the "Supplement Effective Date"). No Services shall be performed, or payment made, prior to the Supplement Effective Date.

Unless earlier terminated or suspended, Consultant shall perform its obligations according to this Supplement until Consultant's Services are completed and accepted by Owner. Consultant hereby agrees that the Services set forth in this Supplement may continue beyond the Term of the Reserve Contract and will be performed through final completion of Consultant's Services, including completion of all warranty work. The Parties expressly agree that they may execute a Supplement Amendment and extend the date which Consultant's Services may be completed, which may include a date beyond the Term of the Reserve Contract.

Termination or suspension does not extinguish or prejudice Owner's right to enforce the Supplement with respect to any breach by the Consultant that has not been cured.

**7. INSURANCE REQUIREMENTS.**

Prior to this Supplement Effective Date, Consultant shall provide Owner with Certificates of insurance maintained in full force and effect at Consultant's expense. Further, each insurance for which a Certificate is required shall be maintained for the duration of the Term of this Supplement including any extensions or Supplement Amendments that may extend the Term of this Supplement. Insurance purchased by Consultant must be consistent with the following:

- A. **Workers' Compensation** – The Consultant, its Sub-consultants, if any, and any other employers providing work, labor or materials under the Supplement are subject employers under the Oregon Workers' Compensation Law and shall comply with ORS 656.017, which requires such employers to provide Oregon Workers' Compensation coverage for all their subject workers working in Oregon unless it meets the exemption in ORS 656.126. Workers' Compensation coverage shall be maintained at all times with statutory limits and Employer's Liability insurance shall have minimum limits of \$500,000 each accident; \$500,000 disease-each employee; \$500,000 disease-policy limit.
- B. **Commercial General Liability** – The Consultant shall obtain, at the Consultant's expense, Commercial General Liability Insurance covering bodily injury and property damage. This insurance shall include personal injury, products and completed operations, contractual liability, premises liability, and coverage for the indemnity provided under the Reserve Contract and be made on an occurrence basis. Consultant shall provide proof of insurance demonstrating minimum limits indicated by the checked box below:
- \$2,000,000 per occurrence and \$4,000,000 in aggregate  
 \$      per occurrence and \$      in aggregate
- C. **Automobile Liability** – The Consultant shall obtain, at the Consultant's expense, Automobile Liability Insurance covering all owned, leased, or hired vehicles, as applicable. This coverage may be written in combination with the Commercial General Liability Insurance. Consultant shall provide proof of insurance with a minimum combined single limit of \$1,000,000 per occurrence or accident.
- D. **Professional Liability/Errors & Omissions** – The Consultant and sub-consultants, when applicable, shall provide Owner with proof of coverage for Professional Liability/Errors & Omissions insurance covering any damages caused by negligent error, omission, or any negligent act in regard to the Project, its plans, drawings, specifications and project manual, and all related work products of the Consultant. The policy may be either a practice-based policy or a policy pertaining to the specific Project. The Consultant shall provide proof of insurance of not less than the amounts indicated by the checked box below:
- \$2,000,000 per occurrence and \$4,000,000 in aggregate  
 \$      per occurrence and \$      in aggregate.

**8. OTHER TERMS.** Except as specifically modified by the Supplement, all terms of the Reserve Contract remain unchanged and apply to the Project and the Services.

**9. EXECUTION AND COUNTERPARTS.** The Supplement may be executed in several counterparts, each of which will be an original, all of which will constitute the same instrument.

**[Owner may Choose to omit] 10. PREVAILING WAGE RATES.** Consultant will be compensated for Services subject to prevailing wage rate law ("PWR Law") according to the following formula: the hourly rate specified in the Consultant's Schedule of Charges for that specific

Service, plus the difference between the prevailing wage rate for that Service at the time this Supplement is executed and the prevailing wage rate for that Service at the time that all qualifications to perform the Services set forth on this Supplement were due.

All prevailing wage rates used to calculate Consultant's compensation in this Section 10 will use the BOLI wage rates and requirements set forth in the following BOLI booklet (and any listed amendments to that booklet), which are incorporated herein by reference:

PREVAILING WAGE RATES for Public Works Contracts in Oregon, \_\_\_\_, 20\_\_, as amended \_\_\_\_, 20\_\_ [delete "as amended \_\_\_\_, 20\_\_" if there have been no amendments since last rate change], which can be downloaded at the following web address:

[[http://www.boli.state.or.us/BOLI/WHDPWR/pwr\\_book.shtml](http://www.boli.state.or.us/BOLI/WHDPWR/pwr_book.shtml)]

The Work will take place in \_\_\_\_\_ County, Oregon.

All other Services under this Supplement will be compensated at rates specified in the Schedule of Charges.

**[Owner may Choose to omit] 11. KEY PERSON(S).** Consultant's personnel identified below will be considered Key Person(s) and will not be replaced during the Project to which this Supplement pertains without the written permission of Owner:

\_\_\_\_\_

Further, Consultant agrees to the following:

- A. Upon Owner request, Consultant shall timely provide such additional information as Owner may reasonably request or require on the professional qualifications and experience of any Key Person.
- B. Any attempted substitution or replacement of a Key Person by the Consultant, without the written consent of Owner (which shall not be unreasonably withheld), will constitute a material breach of this Supplement. If Consultant intends to substitute personnel, a request must be given to Owner at least 30 days prior to the intended time of substitution. When replacements have been approved by Owner, Consultant shall provide a transition period of at least 10 working days during which the original and replacement personnel shall be working on the Project concurrently.
- C. Should the Key Person(s) become unavailable to the Consultant at any time, Consultant shall replace the Key Person with personnel or Sub-Consultants having substantially equivalent or better qualifications than the Key Person being replaced, as reasonably approved by Owner.
- D. Consultant shall remove any Key Person from the Project at the written, reasonable request of Owner. Such request shall provide Consultant a reasonable period of time to find a suitable replacement.

**Consultant hereby confirms and certifies that the representations, warranties and certifications contained in the Reserve Contract remain true and correct as of this Supplement Effective Date.**

IN WITNESS HEREOF, the Parties have duly executed this Supplement on the dates indicated below.

, Consultant

OREGON STATE UNIVERSITY, Owner

By: \_\_\_\_\_

By: Anita Nina Azarenko

Title: \_\_\_\_\_

Title: Associate Vice President for  
University Infrastructure and Operations

Date: \_\_\_\_\_

Date: \_\_\_\_\_

EXHIBIT 2

# OREGON STATE UNIVERSITY

## GYMNASTICS PRACTICE BUILDING

FEASIBILITY STUDY

May 02, 2019







## Participants

### 1.0 Executive Summary

- 1.1 Written Summary
- 1.2 Preferred Concept Plans
- 1.3 Cost Saving and Phasing Summary
- 1.4 Phasing Diagrams

### 2.0 Existing Conditions

- 2.1 Existing Building Summary
- 2.2 Existing Building Photos
- 2.3 Existing Drawings

### 3.0 Needs Assessment and Programming

- 3.1 Project Purpose, Mission, and Vision
- 3.2 Opportunities and Challenges of Existing Facility and Program
- 3.3 Space Program

### 4.0 Conceptual Design Studies

- 4.1 Test Fit Options

### 5.0 Preferred Concept

- 5.1 Concept Design
- 5.2 Systems Narratives
  - 5.2.1 Architectural Narrative
  - 5.2.2 Structural Narrative
  - 5.2.3 HVAC Narrative
  - 5.2.4 Plumbing Narrative
  - 5.2.5 Electrical Narrative
- 5.3 Conceptual Images
- 5.4 Cost Estimate Summary

## Appendices

- Meeting Notes
- Cost Estimate
- Mission and Precedent

PAGE LEFT INTENTIONALLY BLANK

**Oregon State University**

**Athletics**

Dan Bartholomae, *Deputy Athletic Director for Capital Projects and Internal Operations*

Marianne Vydra, *Deputy Athletics Director for Administration/SWA*

Ryan Bucher, *Associate Athletic Director for Facilities and Event Management*

Scott Barnes, *Vice President and Director of Intercollegiate Athletics*

**Athletics - Gymnastics**

Brian Amato, *Assistant Coach*

Michael Chaplin, *Associate Head Coach*

Tanya Chaplin, *Head Coach*

**University Facilities, Infrastructure and Operations**

Libby Ramirez, *University Architect/Manager, Capital Resources*

**Design Consultant Team**

**Woofter Architecture**

Miles Woofter

Willis DeWitt

**Catena Consulting Engineers**

Jared Lewis

**Alliant Systems**

Naji Saad

Sean Murray

**Oregon Electric Group**

Jeff Hamilton

**JMB Consulting Group, LLC**

Jon Bayles

## 1.0 executive summary

### 1.1 Written Summary

Oregon State University's Women's Gymnastics Program is currently located on the eastern side of campus in the Gladys Valley Gymnastics Center. This facility, with a gymnastics practice studio of approximately 6,000 square feet, has been serving the team's needs since 1992. While the staff and team have maximized the utilization of the current building's layout, the facility lacks adequate square footage and apparatus to safely and effectively prepare Student Athletes for competition.

OSU and the OSU Athletic Department are considering purchasing an off-campus building to accommodate a new Gymnastics Practice Facility. As of writing this study, the real estate purchase is in the due-diligence phase to evaluate the feasibility of the existing building to accommodate OSU Women's Gymnastics need. This Feasibility Study includes concept design studies, systems narratives and diagrams, and the associated estimated cost of the preferred concept, which was developed in a series of workshops with OSU.

Described as a typical large multi-tenant facility, the building in consideration is located at 4100 SW Research Way. The total square footage is approximately 40,000 SF with approximately half of the space (17,510 SF) leased to two other tenants. If the building is purchased, OSU intends to continue leasing this portion of the building. The remaining area, described as the "area of work", has been studied to verify that the space can effectively accommodate a new Gymnastics Practice Facility.

A new Gymnastics Practice Facility in Research Way Building (RWB) will expand the training capabilities of the Women's Gymnastics Program and increase the usable Practice Studio area from approximately 6,000 SF in the Gladys Valley Gymnastics Center to approximately 15,775 SF in the RWB while offering significantly better support facilities. Concept options within the "area of work" have determined that the space will safely accommodate the needed gymnastics apparatus and training equipment in the Practice Studio. Additional programmatic support spaces in the RWB, coupled with existing facilities on campus, will significantly improve the efficiency and safety of the program and meet the requirements of the Women's Gymnastics program.

Based on visual site review and inspection, the RWB's construction is sound and in good condition. The location, flexible open plan of the warehouse area, and multi-tenant usability are all valuable property attributes. However, significant renovations to the building will be required to meet the needs of the Women's Gymnastics program. Removal and replacement of existing floor slabs and shoring of affected footings are required to accommodate training apparatus landing pits and equipment. Existing mechanical, plumbing, and electrical systems within the area of work will need to be fully replaced to accommodate the new use. Existing interior construction within the area of work will need to be fully removed to allow for the new layout. The new construction and systems required can be accommodated by the RWB.

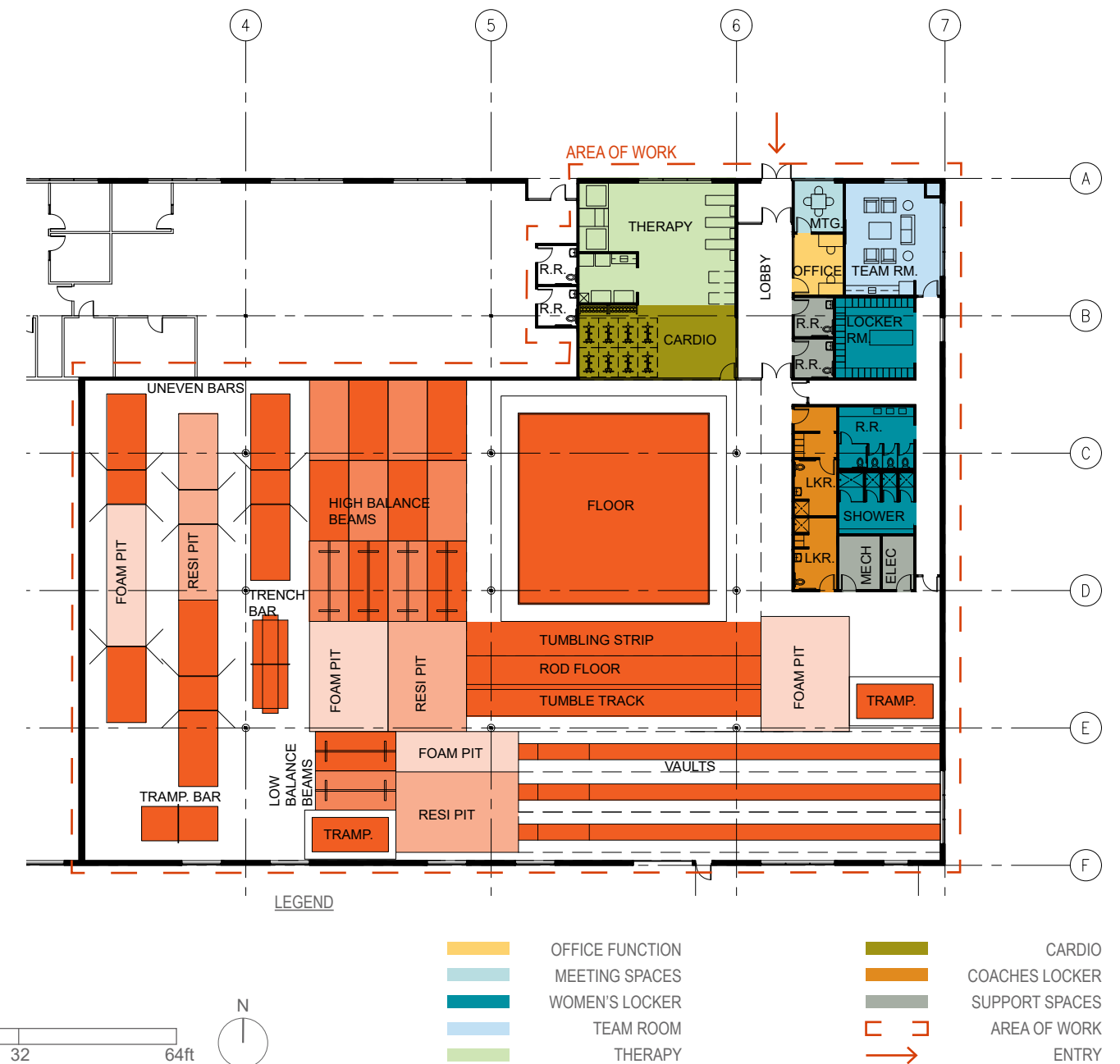
The included preferred design concept was developed for conceptual cost estimating and conceptual imagery. This design concept, developed in collaboration with the Women's Gymnastics Program, includes two primary components:

- 1) The Practice Studio with 15,775 SF to safely accommodate all apparatus and training activities. The Practice Studio was given priority during the development of the preferred concept.
- 2) Support spaces including: Team and Coaches Locker Rooms, Team Room, Offices, Meeting Spaces, Therapy, Cardio, Lobby, Restrooms, and Utility rooms.

The rough order of magnitude cost, based on the included scope of construction and the 6-week process to generate this study, is \$4,394,000 for direct construction cost. Total target CMGC construction costs (includes CMGC fee, general conditions, insurance, design and estimating contingency, and escalation) is \$6,082,470. Using the Oregon State University percentages for Indirect Owner Costs (includes Professional Services, Owner's Contingency, OSU Activities, FF&E, Permits Fees and Charges) totaling approximately 60% of total CMGC cost equals \$3,652,720. The result is estimated overall total project cost is \$9,737,190.

### 1.2 Preferred Concept Plans

The following plan diagram depicts the preferred concept. This concept is comprised of 20,654 SF of new construction.



## 1.0 executive summary

### 1.3 Cost Saving and Phasing Summary

The overall total project cost exceeds the current available funds and projected opportunities to raise additional funds. To address the estimated overall total project costs and the short fall in funds, the project team identified several cost saving opportunities and discussed the potential options to execute the project in phases.

Cost savings strategies include the following items along with an estimated overall project savings if indeed the savings can be realized:

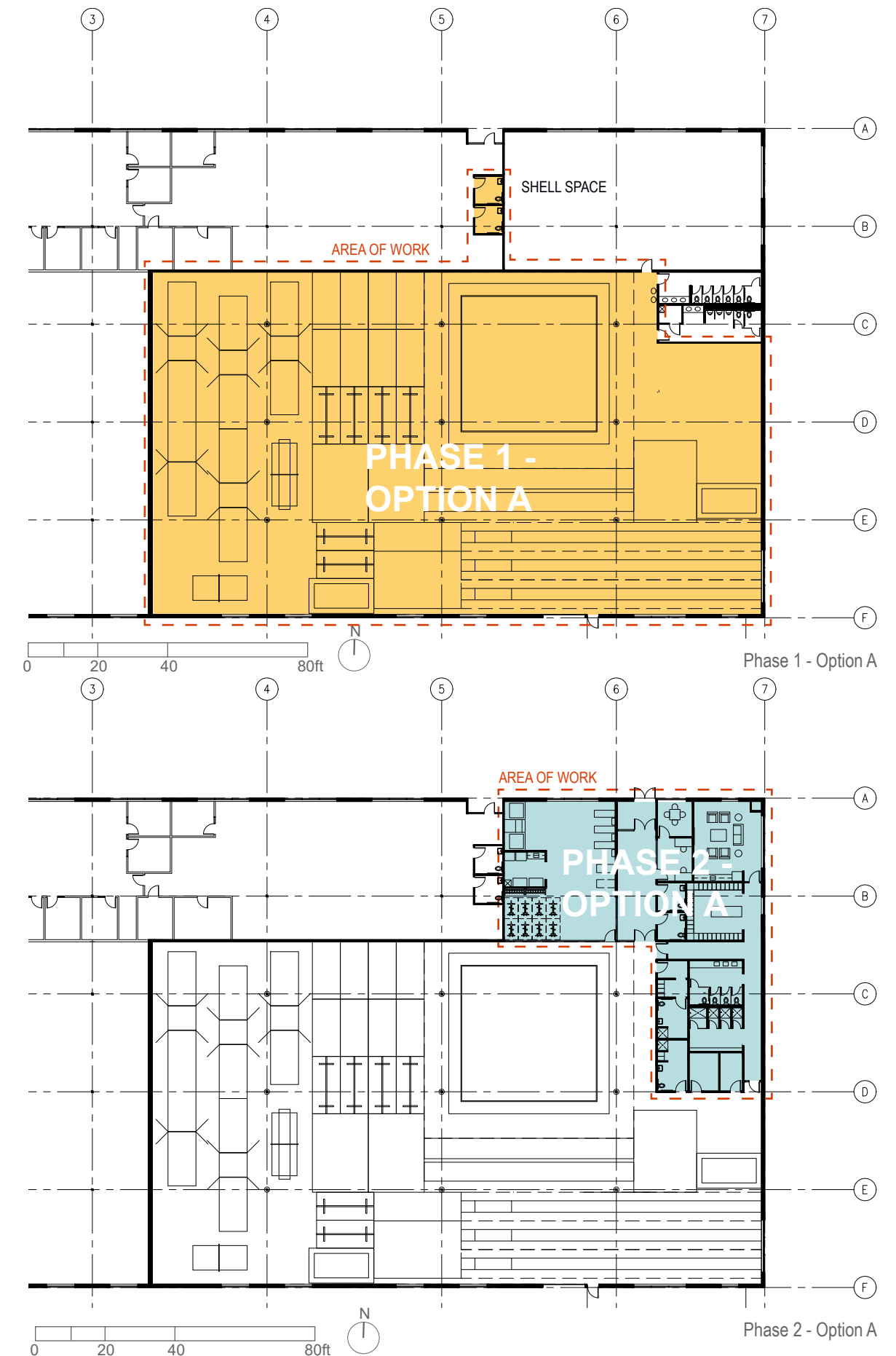
- 1) Reduce the quantity of enlarged exterior openings by only enlarging the new entry on the north side of the building. \$110,780.
- 2) Reduce the quantity of removed existing slab on grade and recess pit included to account for the Floor, Tumble Strip and Rod Strip. The finished floor for these elements would then be raised and sit on top of the existing slab on grade. \$287,710.
- 3) Eliminate 3 of 6 total added skylights. \$35,000.
- 4) Eliminate requirement to meet OSU Standard Electrical upgrade. \$41,410.
- 5) Reduce the overall cost allocation for interior construction by 10%. \$178,040.

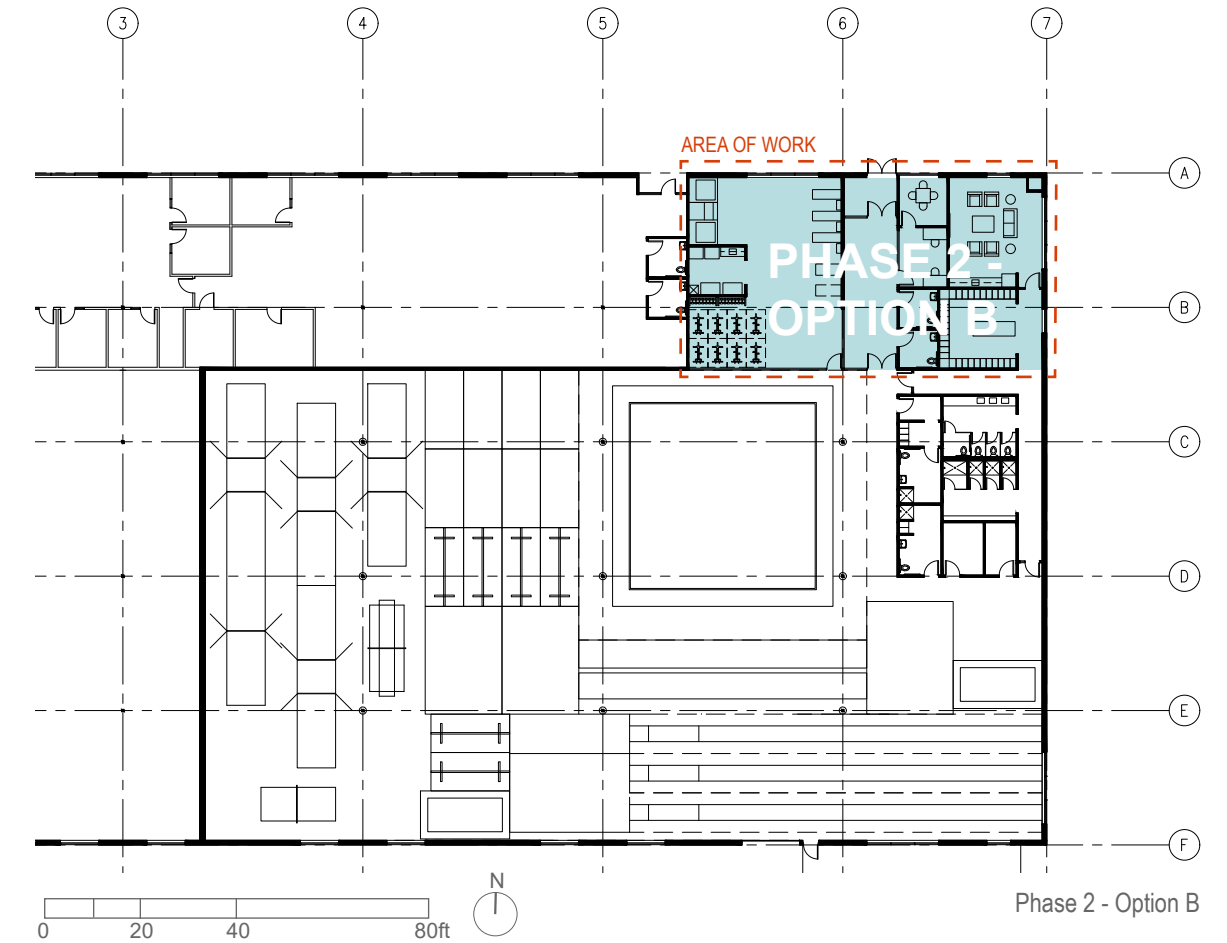
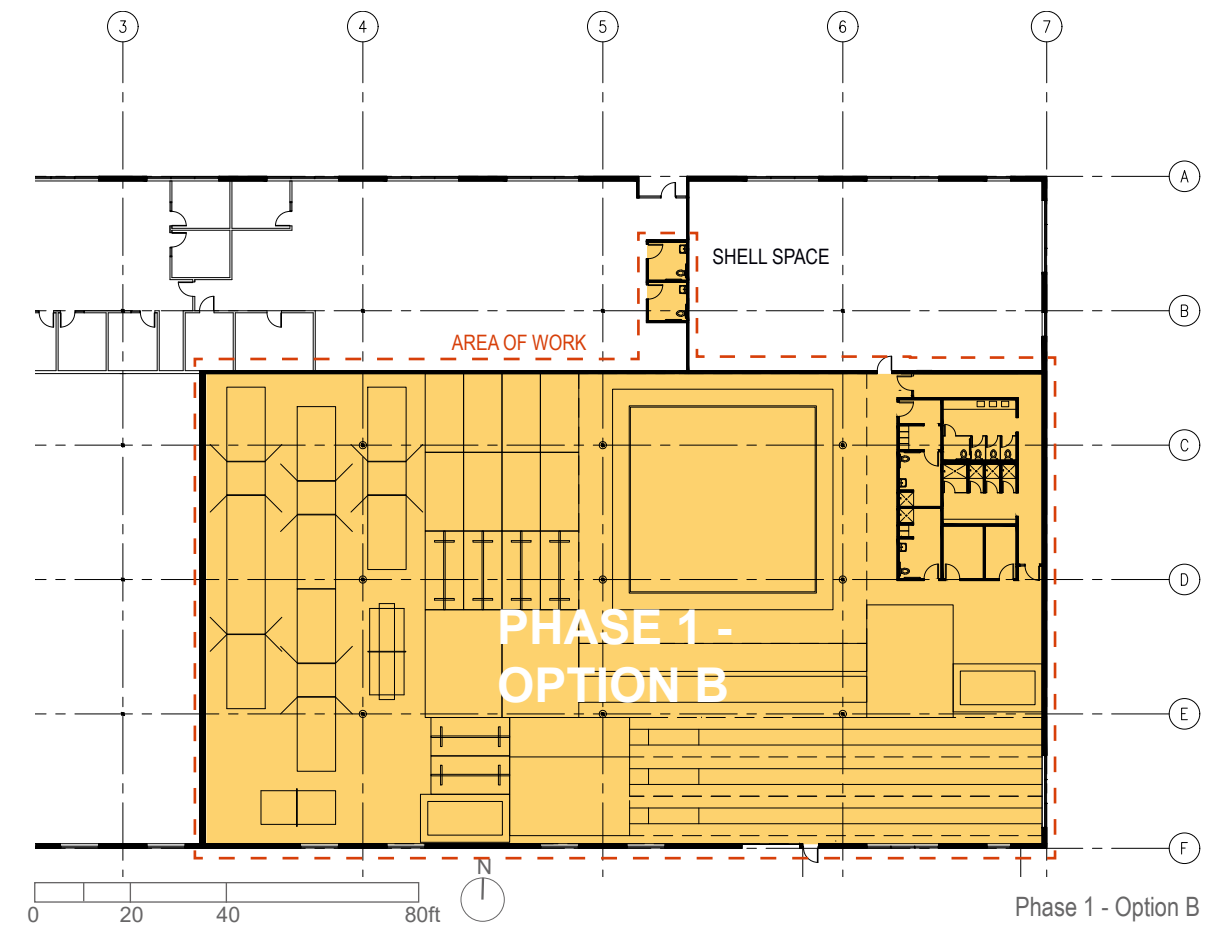
Taking all of the above overall project cost saving strategies the reduction in overall cost is \$674,690 and reduces the estimated overall project cost to \$8,665,330. This reduced cost is still in excess of the available funds and fund raising opportunity. As result it is recommended that phasing the project be consider in order make the gymnastics studio available for the team as soon as possible.

The included diagrams show two options to deliver the project in 2 phases. Phase 1 Option A would build the gymnastic practice studio while leaving the exiting entry/office area and restrooms that are currently located in the warehouse zone as is. This phase would include adding 2 restroom facilities for the adjacent tenant. Phase 2 would build out the required support spaces including the entry, offices, therapy and cardio area as the new locker and restrooms for coaches and athletes. Given the extent of the gap between budget, which includes fund raising opportunities and the included cost estimate, with out further study, it does not appear feasible to include the restroom and locker room area. We estimate that a phased approach could reduce the initial overall cost of the project to approximately \$6,410,000 due the significant reduction is Interiors and Services cost. A concern with this option is that the Phase 1 cost is well below budget and as a result, given the extent of work in Phase 2, the eventual cost to complete the project will be well above the current cost estimate for the ideal project represented by the Study. Additionally, Option A compromises the initial use and the impact on the gymnastics studio to complete Phase 2 would be significant, in addition to the above listed cost savings strategies.

As a result of the initial costs for Phase 1 Option A being well below budget and impact of Phase 2 work we developed Phase 1 and 2 Option B which demolishes the existing restroom in the warehouse area and completes the new locker room and shower area. This will allow the future construction of Phase 2 to be cleanly separated from the gymnastics studio. We estimate that a phased approach could reduce the initial overall cost of the project to approximately \$8,161,500. Refer to the adjacent diagrams for phasing concepts. To ensure the Phasing Option B is successful, cost saving strategies will have to be integrated early in the next design phase to meet the project budget.

### 1.4 Phasing Diagrams





## 2.0 existing conditions

### 2.1 Existing Building Summary

The existing Research Way Building is a single-story tilt concrete warehouse and office building constructed in 1995. It is located at 4100 SW Research Way in Corvallis, Oregon. The building houses two tenants and is utilized for laboratory, office, receiving/loading, and miscellaneous uses.

The design team reviewed existing documentation of the building and toured the facility on March 7, 2019 with representatives from Oregon State University. The site tour included the “area of work”, main electrical room, roof, and site. Based on observations of the building components accessible to view, the building appears to be in good condition. Additional descriptions of the existing buildings architectural, structural, mechanical, electrical, and plumbing systems are included in the Systems Narrative portion of this report - located in Section 5.2

### 2.2 Existing Building Photos



Interior



North Facade



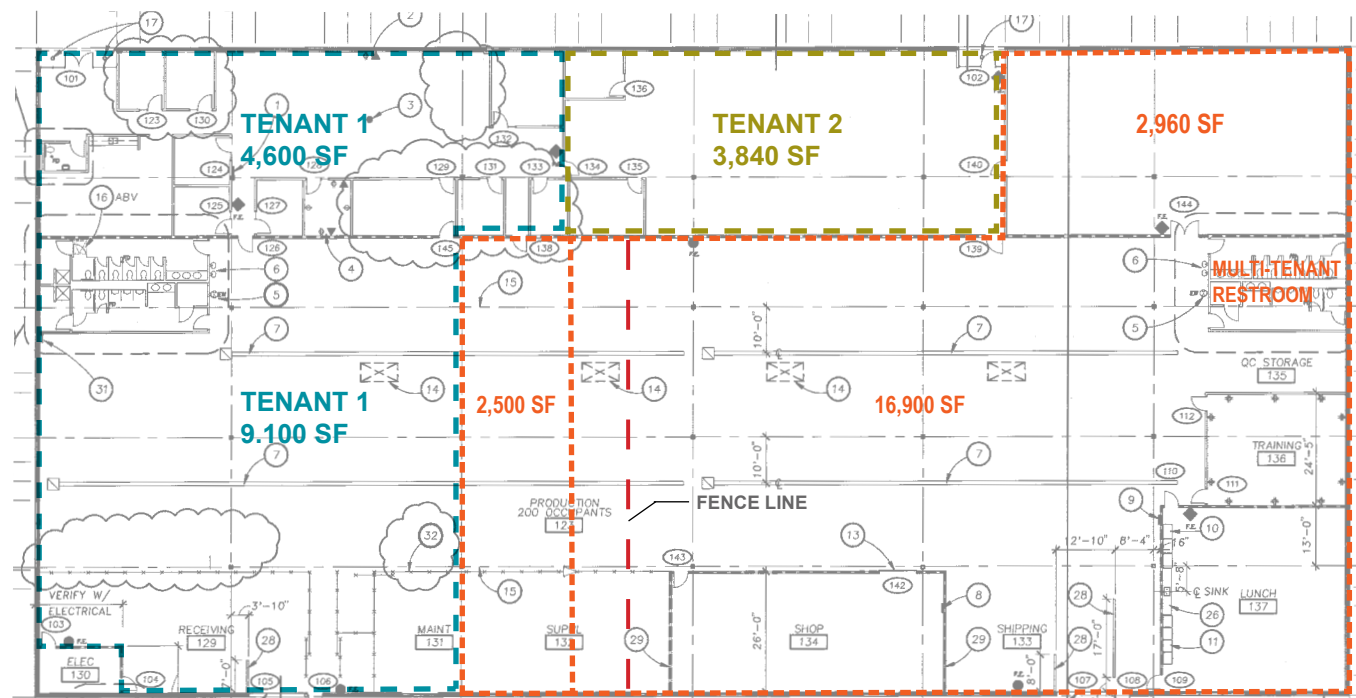
Roof



South Facade



Interior Warehouse Space



AREA SUMMARY:	TENANT AREA:	TOTAL GYMNASTICS AREA:
OVERALL BUILDING AREA: 285'X140' = 39,900 SF	TENANT 1: 4,600 SF 9,100 SF 13,700 SF	2,960 SF 16,900 SF 19,860 SF MINIMUM
	TENANT 2: 3,840 SF	+2,500 SF 22,360 SF MAXIMUM

Research Way Building - Area Diagram



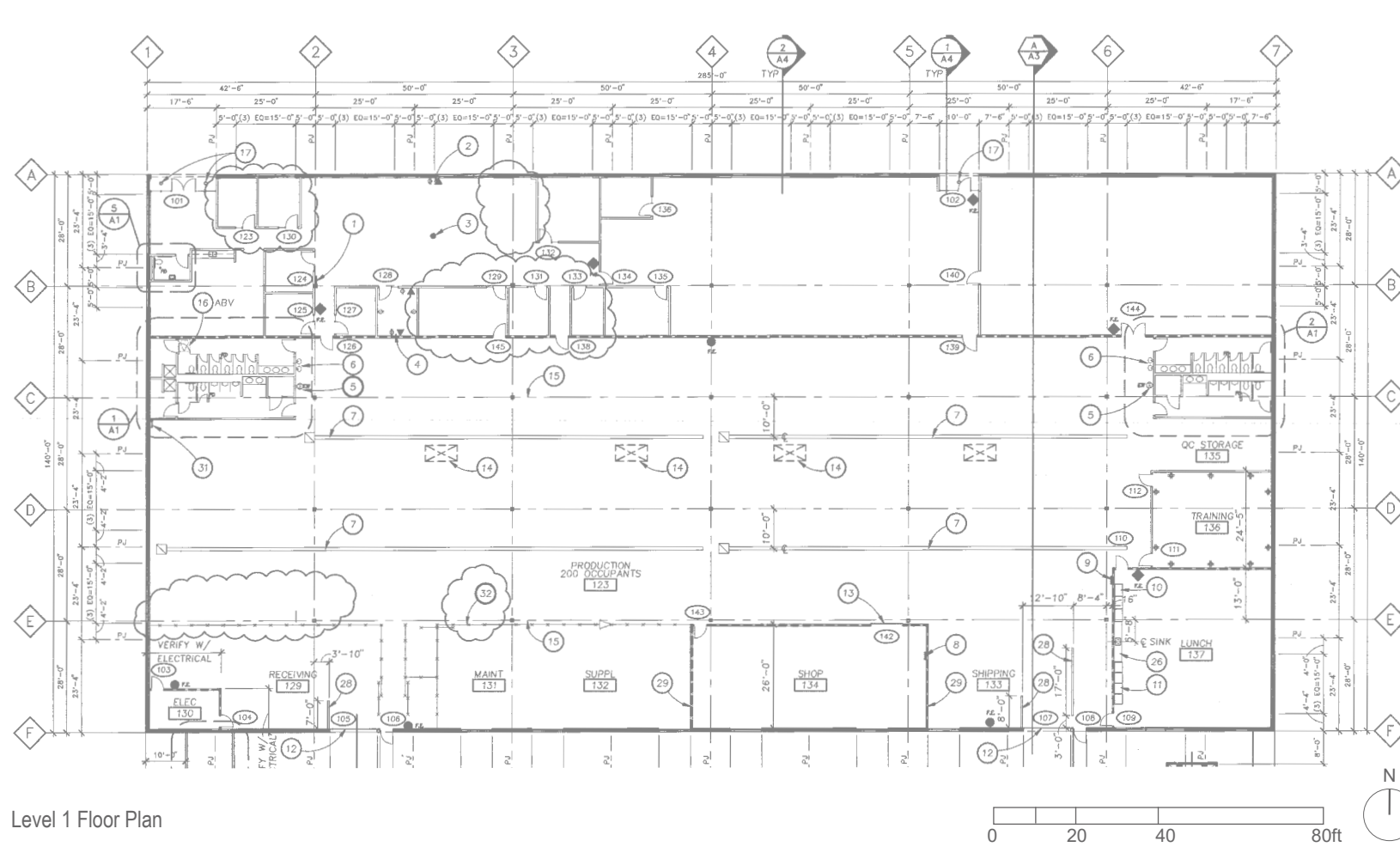
## 2.0 existing conditions

### 2.2 Existing Drawings

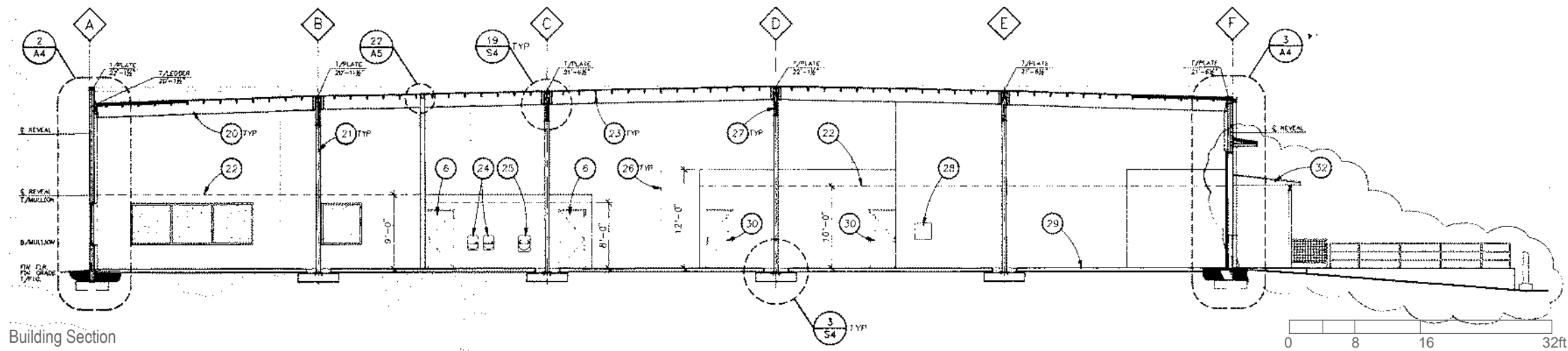
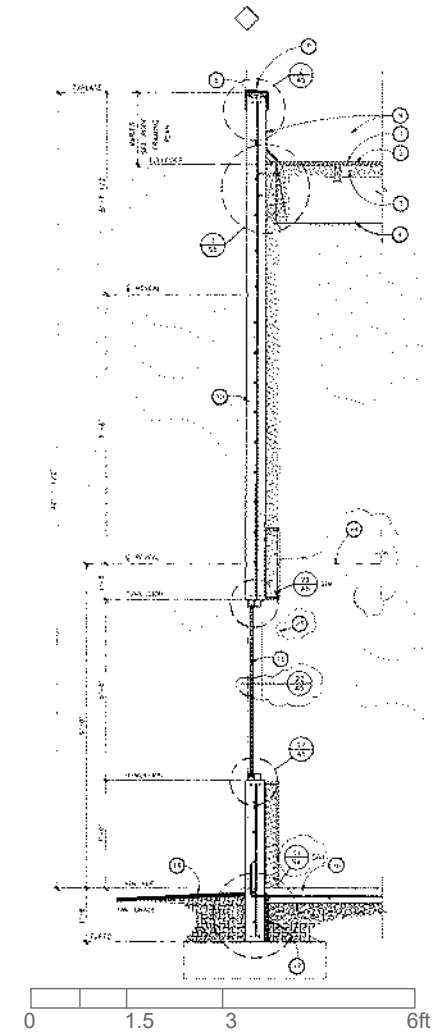
Existing construction documents for the RWB were acquired from the City of Corvallis Permit Records and the original architect - Mackenzie/Saito & Associates (now called Mackenzie). Files that were made available were reviewed by the design team.

Select drawings are shown in this report.

The existing documents indicate that a Geotechnical Report was generated for the original construction. At the time of writing this report, the report has not been made available. The City of Corvallis does not appear to have a record of this report. w+a contacted the Geotechnical Engineer who generated the original report, and they are searching through their archives and will share the report once found.



Level 1 Floor Plan



Building Section



### 3.0 needs assessment and programming

#### 3.1 Project Purpose, Mission, and Vision

##### PROJECT “PILLARS”

- Community
- Competitiveness
- Functionality & Student Athlete Wellness
- Recruiting

##### OREGON STATE UNIVERSITY “GYMNASTICS CENTER”

###### MISSION:

- “The Oregon State University Gymnastics Program is built upon a foundation of excellence and prides itself on bringing out the best in each of its student-athletes in all areas of life.”
- “To compete at the highest levels we need Beaver Nation to come together to bring life to the last piece of the puzzle - The OSU Gymnastics Center - which will provide top-tier functionality and student-athlete wellness to student-athletes while giving us an edge when recruiting the best talent in the country.”
- “Together the OSU Gymnastics community has built a program that we are all proud of, now we need a place we are proud to call home.”

*Champions - that is who we are, Championships - that is what we do, the right way, together.*

##### Process

Using a team-oriented approach, the design team engaged the client to identify needs and investigate opportunities and challenges. The bulk of this process included reviewing and discussing an OSU Gymnastics generated presentation identifying their need to expand their existing practice facility. This thoughtful and thorough presentation includes an assessment of the training area, peer institute precedent, and project pillars. Additionally, Gymnastics Practice facilities from peer institutes were included in the presentation and reviewed with the project team. Project Pillars from that presentation are identified and summarized below.

##### Project Pillars

###### Community

*“We are a reflection of our community. It is ingrained in each and everyone one of our past and present student-athletes just how special this community is, and when we are recruiting, that is our focal point with potential student-athletes. Our team, our University, our city, our state and beyond - there is nothing like Beaver Nation.”*

###### Competitiveness

*“To remain a competitive program and provide the best opportunity for success to our student athletes, we must keep up with current national trends in college gymnastics. Facilities have become one of the biggest trends for competitive programs around the country and must remain a priority for us in order to win Pac-12 National Championships.”*

###### Functionality and Student-Athlete Wellness

*“Our current facility does not allow us to function as efficiently as possible. With an increased difficulty level in our sport, we have outgrown our facility’s capacity to fit all necessary training equipment. Improved functionality and training equipment will help with student-athlete safety and recover.”*

###### Recruiting

*“All college gymnastics programs are vying for a limited number of top recruits and as part of that process every school has to do their best to highlight what their institution and program have to offer prospective student athletes. One of the aspects every school has to present is their facility. Many top recruits come from gyms, that as private businesses, are compelled to offer ever increasingly modern, large, and extensively equipped facilities. In their minds, this size and quality of training facility is a necessity to maintain and increase their skill level while in college.”*

It is the goal of this feasibility to determine if the Research Way building can offer the opportunity for OSU gymnastics to meet their project pillars.

#### 3.2 Opportunities and Challenges of Existing Facility and Program

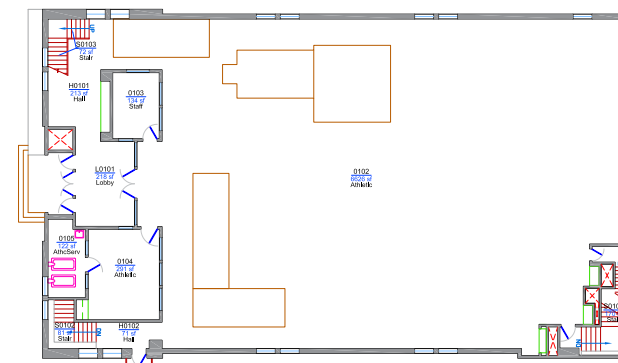


The OSU Gymnastics Center is currently housed in Gladys Valley. Formally the Mitchell Playhouse, the building was renovated and transformed into the Gladys Valley Gymnastics Center in 1992.

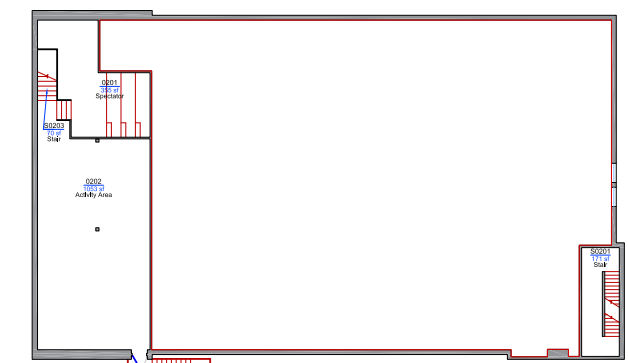
The project team reviewed existing equipment layout within the building and discussed the challenges faced by the coaches and student-athletes.

The challenges are fully described in the OSU Gymnastics generated presentation included in the Appendix, and are summarized below.

- Limited space necessitated over lap landing spaces. This creates waiting and potential safety issues.
- Some apparatus clearances are compromised due to the available space.
- The amount of training equipment available is limited by the space available and does not meet the Women’s Gymnastics program’s need.
- More space for a variety of landing surfaces is needed. Differing landing surface materials allows student-athletes to train at varying levels of development and/or stages of recovery from injury and reduces impact on their bodies.
- Existing balance beam area is divided. Ideally each type of apparatus is grouped together to allow for a better view by the coaches and a better unified training group.
- Visibility through the space is compromised by an above ground trench bar. Ideally the entire practice space is viewable from any point in the practice studio.
- The existing building has a rich history and charm. However, the age of the building creates challenges for interior climate control which is especially important for student-athletes in bare-feet and form fitting work out clothes.



first floor plan



second floor plan

Gladys Valley Gymnastics Center Plans



### 3.0 needs assessment and programming

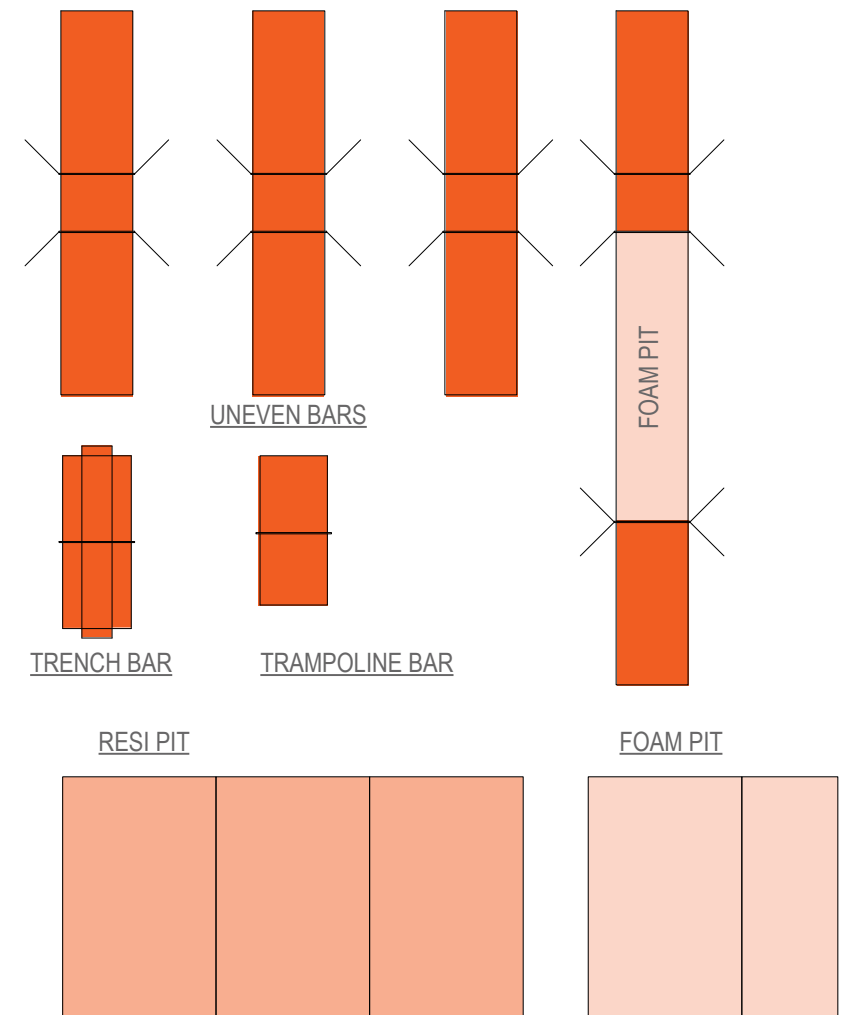
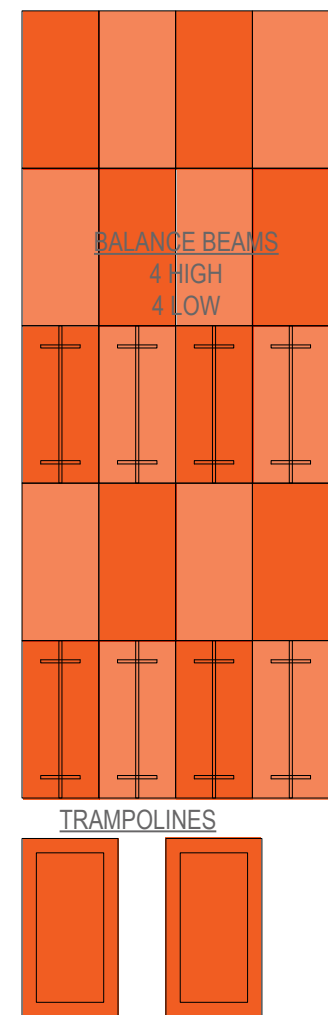
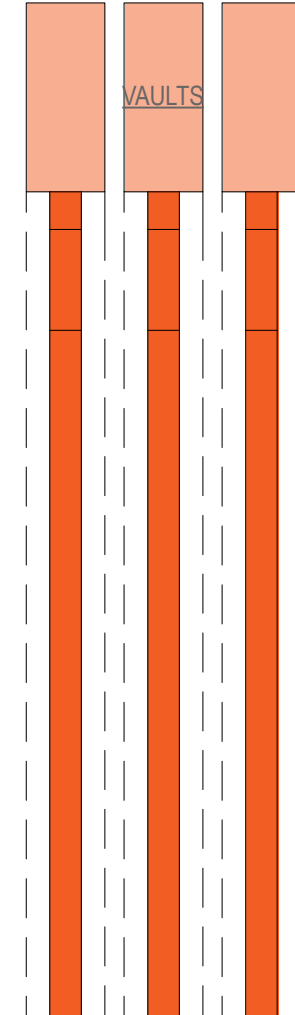
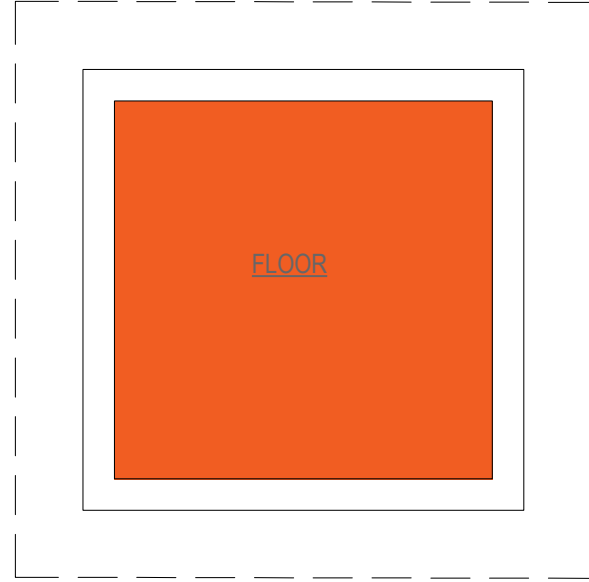
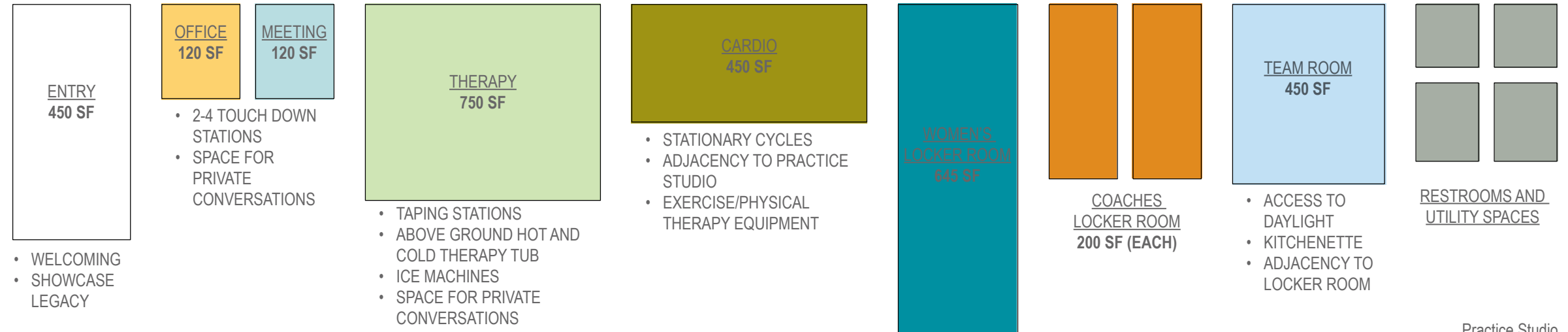
#### 3.3 Space Program

The design team and project stake holder team toured Gladys Valley Gymnastics Center, reviewed OSU Athletics' space assessment of the GVGC, researched and reviewed relevant precedent from peer institutions, reviewed previously generated test fists for an alternate building, and had discussions about design team generated test fit options. Following this process, area and functionality requirements were determined for both expanding existing programs and adding new program spaces and gymnastic equipment.

Given restrained foot print of the available space within RWB relative the space required for training apparatus, priority was given to the Practice Studio and Student Athlete Spaces. The additional support spaces receive secondary importance, and area and functionality requirements of these spaces were determined by balancing the ideal and the reality of the available space.

**LEGEND**

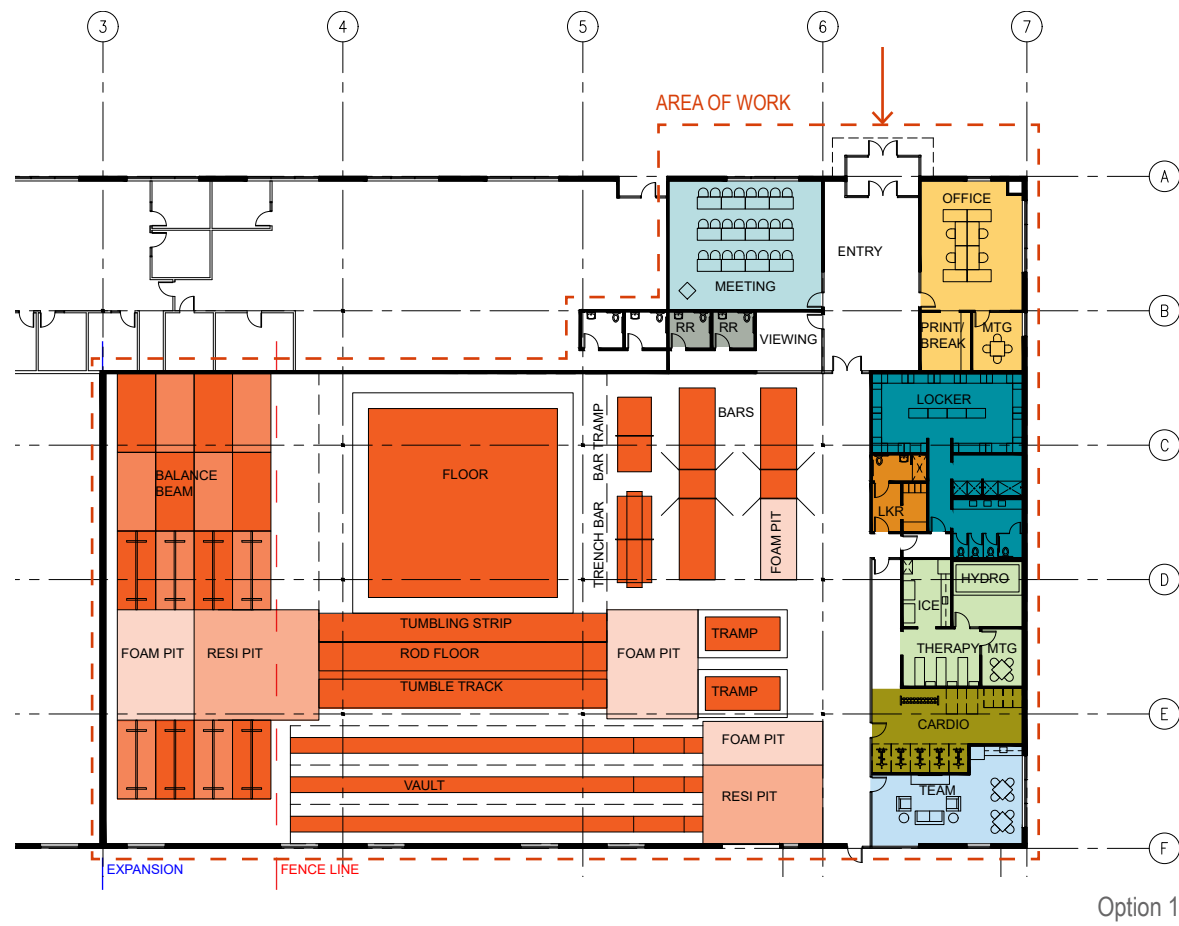
- OFFICE FUNCTION
- MEETING SPACES
- WOMEN'S LOCKER
- TEAM ROOM
- THERAPY
- CARDIO
- COACHES LOCKER
- SUPPORT SPACES
- GYMNASIIC EQUIPMENT
- AREA OF WORK
- ENTRY



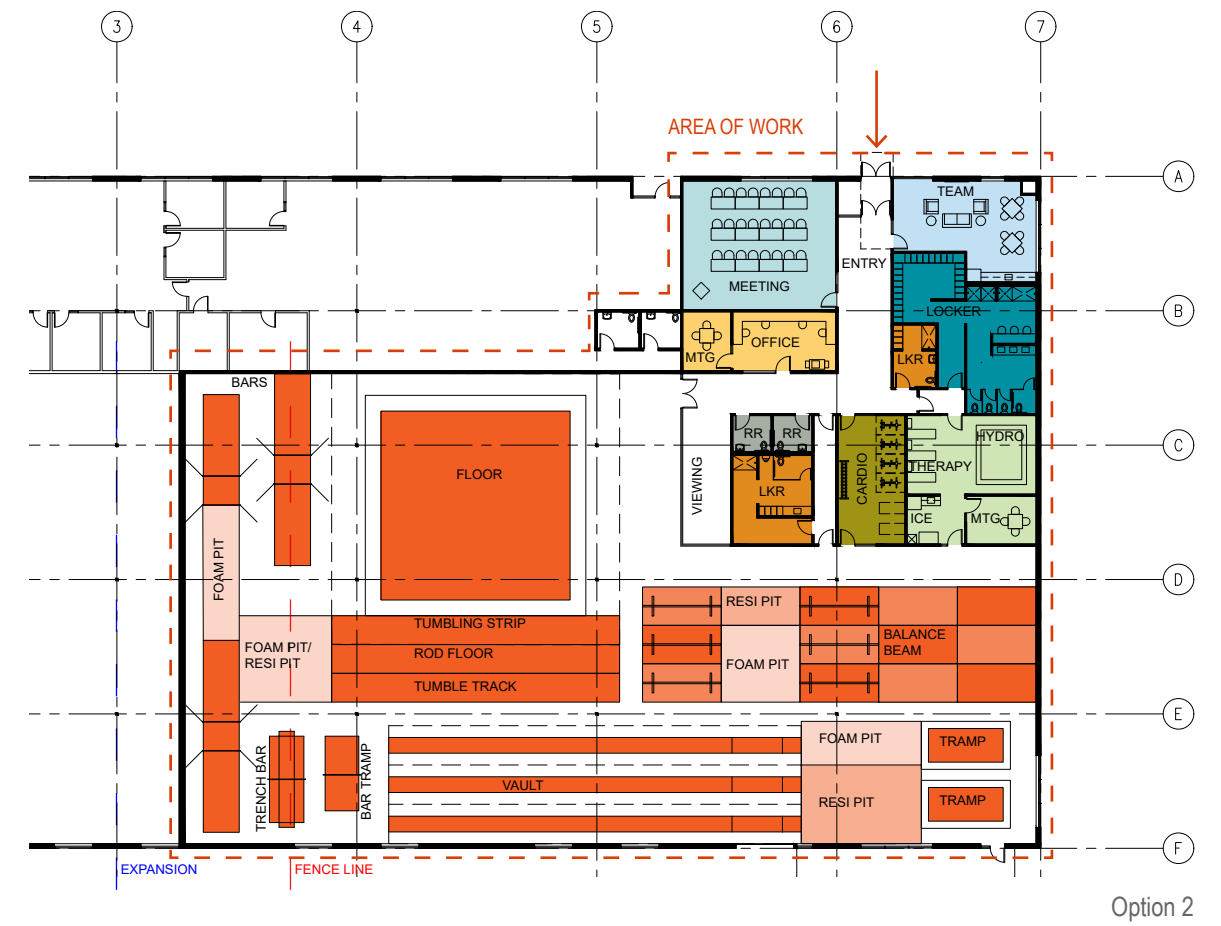
## 4.0 conceptual design studies

### 4.1 Test Fit Options

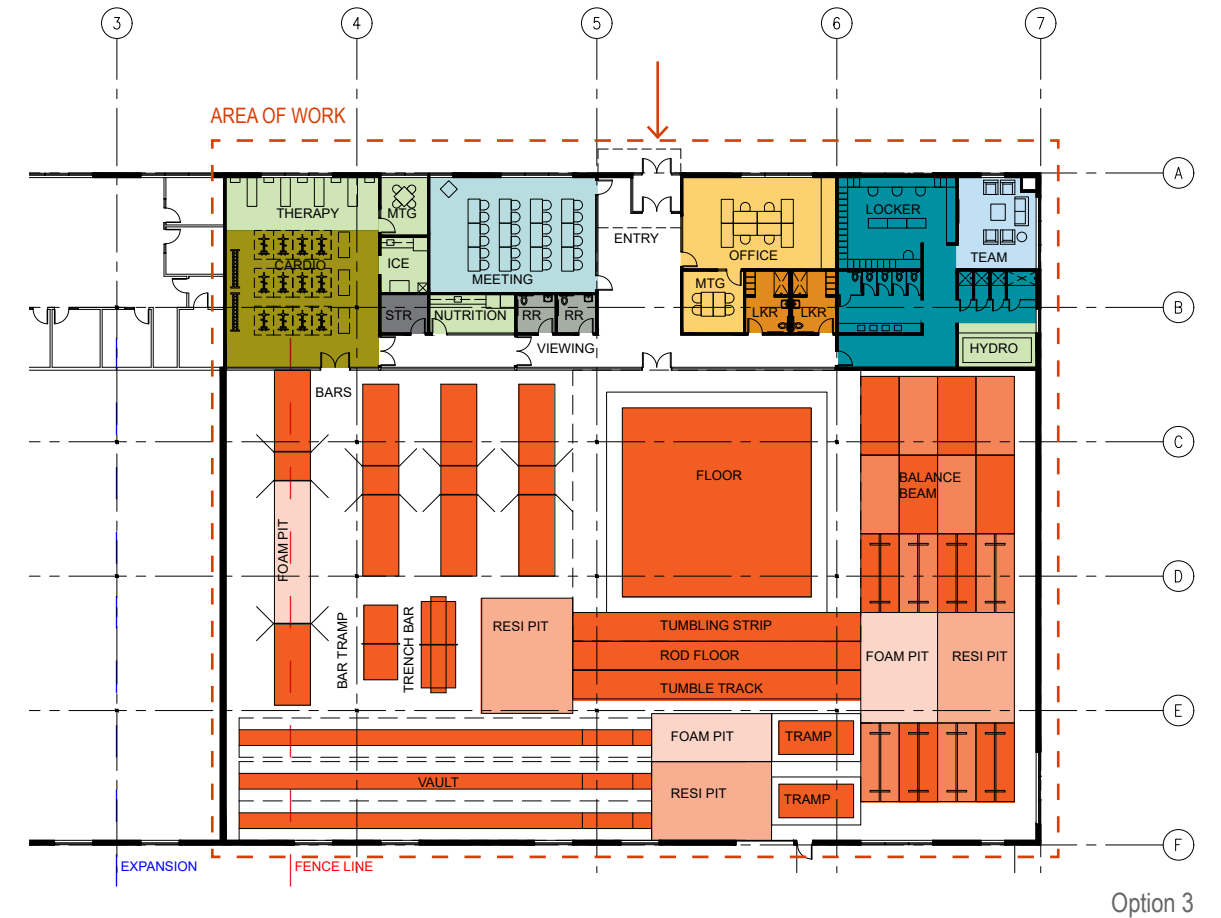
Multiple design concepts were explored to discover ways to achieve the program and the project team's goals within the given constraints of the Research Way Building. These options tested potential layouts, relationships, support space sizes, and allowed for review and discussion in the project team meetings. The evaluation of each and comparison between options contributed to the creation of a preferred scheme.



Option 1



Option 2



Option 3

#### LEGEND

- OFFICE FUNCTION
- MEETING SPACES
- WOMEN'S LOCKER
- TEAM ROOM
- THERAPY
- CARDIO
- COACHES LOCKER
- SUPPORT SPACES
- GYMNASTIC EQUIPMENT
- AREA OF WORK
- ENTRY



## 5.0 preferred concept

### 5.1 Concept Design

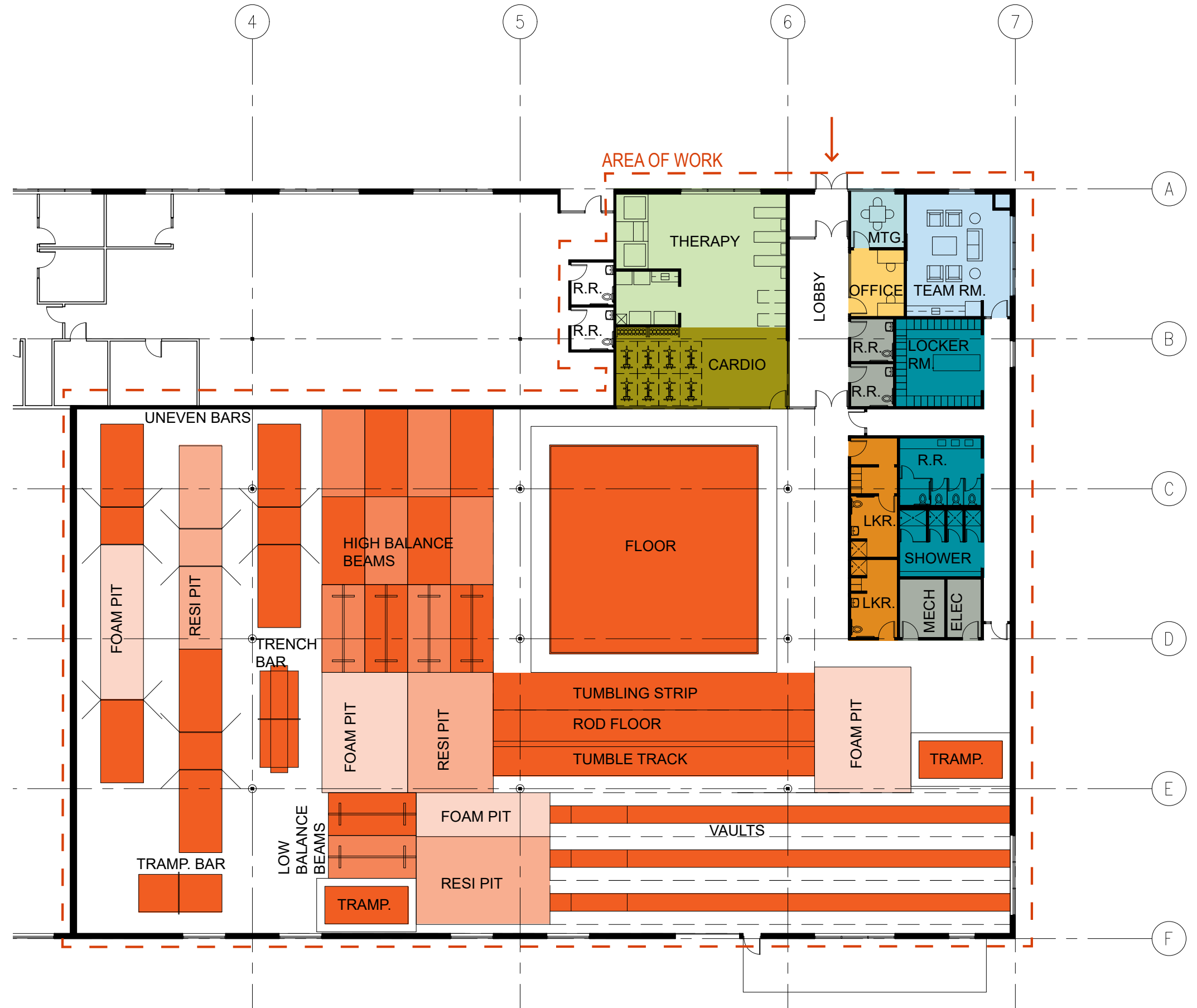
OSU stakeholder feedback on the design concept options resulted in the identification and generation of a preferred concept for further development with the design consultant team. A conceptual cost estimate was developed based on input from the design team and the documentation included in this report.

Due to the desire for OSU to utilize the building to generate revenue in addition to house the Women's Gymnastics Program, encroachment on existing tenant space was not desired. In addition, it was a project goal to limit the amount of expansion into the 2,500 SF space to the immediate west of the Practice Studio between Tenant 1 and the "area of work."

The Preferred Concept achieves the desired amount of gymnastics practice equipment. The Support Spaces, coupled with existing facilities on campus, offer the functionality required to support the activities in the practice space. Approximately 1,625 SF of additional warehouse space is available to Tenant 1.

#### LEGEND

- OFFICE FUNCTION
- MEETING SPACES
- WOMEN'S LOCKER
- TEAM ROOM
- THERAPY
- CARDIO
- COACHES LOCKER
- SUPPORT SPACES
- GYMNASTIC EQUIPMENT
- AREA OF WORK
- ENTRY



Floor Plan

## 5.0 preferred concept

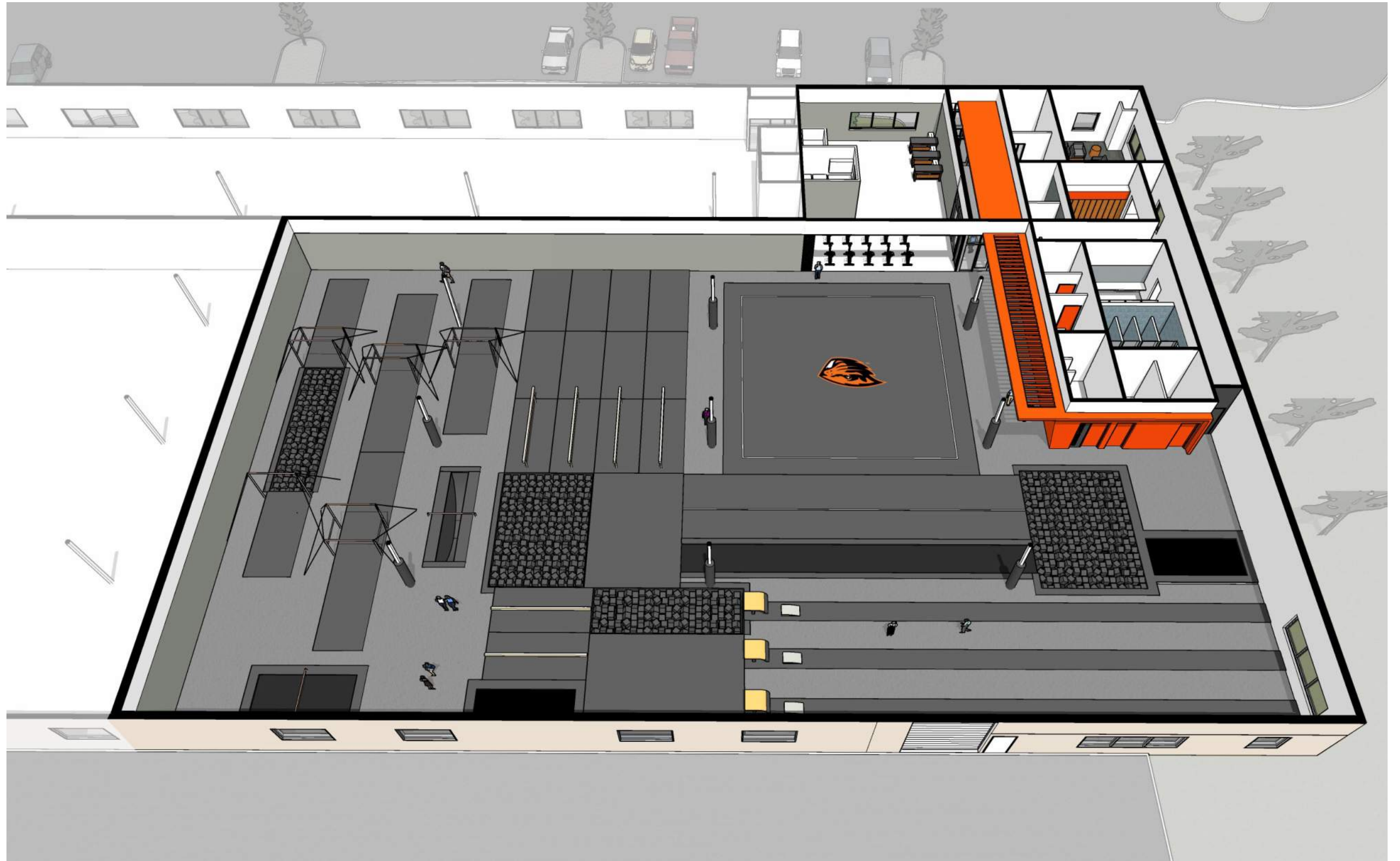
### 5.1 Concept Design (continued)

#### ORGANIZATIONAL PRINCIPLES

- The practice studio is the heart of the building and has priority
- Create clear and efficient circulation
- Provide access to daylight and views in regularly occupied spaces
- Provide proximity between the Cardio Room and the Practice Studio

#### DESIGN CONCEPTS

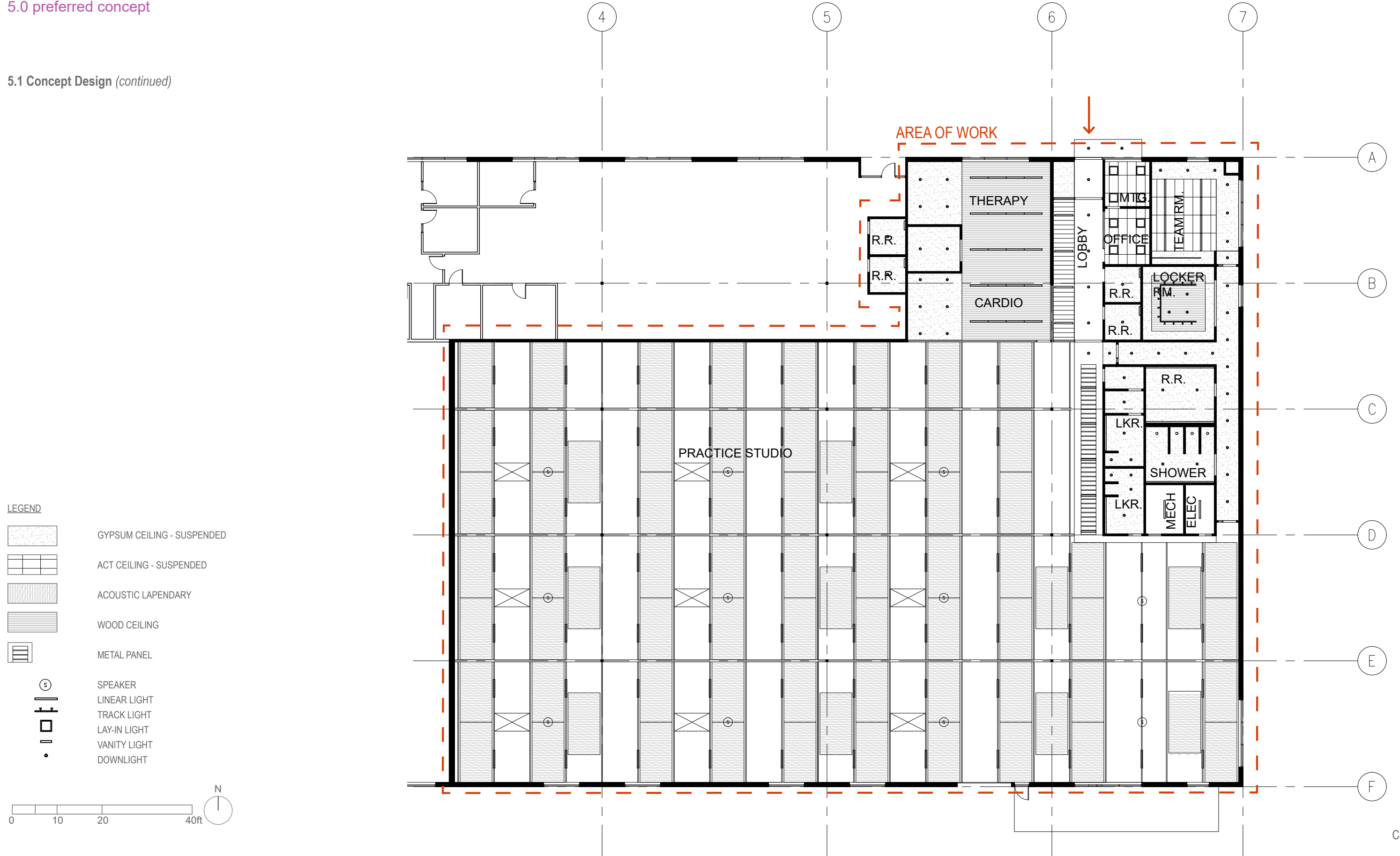
- Spaces are organized around a central circulation spine. This area is highlighted with an orange wall and canopy. The wall and canopy extends to the exterior to create the entry and the wall and canopy extends through the practice space. The vertical orange wall is tilted slightly to evoke the sense of dynamic movement in a gymnastic routine.



Axon View

5.0 preferred concept

5.1 Concept Design (continued)



Ceiling Plan

## 5.0 preferred concept

### 5.2.1 Architectural Narrative

#### Overview

The existing Research Way Building is a 39,900 SF single-story tilt concrete warehouse and office building originally constructed in 1995. It is located at 4100 SW Research Way in Corvallis, Oregon. The building houses two tenants and is utilized for laboratory, office, receiving/loading, and miscellaneous uses.

#### Existing Site and Landscape

The site is accessed off of Research Way Avenue with two points of vehicular entry. The site is relatively flat with minimal landscaping including lawn, deciduous trees, and low shrubbery. The bulk of the site consists of an approximately 76,000 SF flat asphalt paved parking lot that is present at the front and back of the site. An existing loading dock is located in the SE corner of the building along the south facade where garage doors connect the warehouse space to the rear parking lot. The site is open to neighboring sites without a fence or barrier.

The proximity to OSU's campus coupled with additional OSU own buildings on Research Way, make the location desirable for OSU.

#### Existing Construction

The existing floor construction consists of a 6" slab on grade. The exterior walls are load bearing 6.5" thick tilt concrete walls.

The roof structure consists of pre-manufactured steel trusses spanning between 6"x6"x1/4" tube steel columns, 2 1/2" x 18" wood purlins, 2x6 sub purlins, and 5/8" plywood sheathing. The roof structure is sloped and crickets to exposed downspouts on the north facade and sloped to an exposed gutter on the south facade. The roof is accessed via a roof access ladder in the western tenant space.

The exterior siding is painted concrete.

Existing interior construction consists of metal framed walls with painted gypsum board. Within the "area of work" the majority of the spaces are exposed to the underside of the roof structure and the floors are painted concrete. A shared tenant restroom is located on the east side of the building and is constructed of framed walls, epoxy paint flooring, and a painted gypsum board ceiling. A large meeting room and shared Break Room are located in the southeast corner of the building. The shared break room contains a suspended acoustical ceiling, vinyl composite tile flooring, plastic laminate casework, and painted



Exterior View

gypsum walls. All interior construction (partitions, ceilings, finishes, etc) within the "area of work" will need to be removed to accommodate the new use.

#### Existing Envelope

The exterior envelope consists of 6.5 inch concrete with a 5 inch furring wall filled with batt insulation in the stud cavity. Roof insulation at areas exposed to view consists of batt insulation with a vapor barrier between the roof sub purlins. No below slab insulation is present per the as-built documents. It does not appear that a below slab vapor barrier has been installed; however, existing documentation available is unclear.

Minimum exterior windows are present with the majority of the windows located on the north and south facade. Window construction is aluminum framed storefront glazing system with 1" insulated glass.

The roof membrane appears to be in reasonable shape. Some minor ponding of water was present at the time of the design team's visit which occurred after a recent rain.

#### Applicable Building Codes:

2014 Oregon Structural Specialty Code (OSSC)  
2014 Oregon Energy Efficiency Specialty Code (OEESC)  
2014 Oregon Mechanical Specialty Code (OMSC)  
2017 Oregon Electrical Specialty Code (OESC)  
2017 Oregon Plumbing Specialty Code (OPSC)  
2017 Oregon Fire Code (OFC)  
ADA 2010

#### Site Design

Minimum site design is anticipated and included in this feasibility and concept study. Per conversations with the project team, up to 30 students and staff are anticipated to drive to the facility for practice. Ample existing parking will be able to accommodate this need. Students may also bike to the facility. An existing pedestrian and bicycle path is located to the east of the building along Dunawi Creek. Additional bike parking will need to be added and should conform with Corvallis Zoning requirements.

#### Exterior Design

While the exterior design is minimum in scope, it is intended to express the importance of Gymnastics Center to the community as well as identify the building as part of Oregon State University.

The preferred concept necessitates a third point of entry on the north facade of the building. The existing window will be removed and the opening will be enlarged to accommodate a double set of doors. A new overhang is proposed to protect the doorway as well as give opportunities for signage and OSU brand recognition. This is envisioned as a "Beaver Orange" metal panel clad structure that relates to and physically connects to the central circulation spine that runs through the interior. Existing windows in the Practice Studio are proposed to be enlarged to allow in more daylight.

It is recommended that the exterior building be re-painted. This will help update the appearance of the building, and address any maintenance concerns with the building's facade.

Interest in providing a "PV" ready design was expressed by OSU. The existing roof structure was evaluated, and it is believed that the structure can accommodate the load of future photo voltaic (PV) panels. However, this will need to be closely evaluated when a PV supplier/designer is involved.

## 5.0 preferred concept

### 5.2.1 Architectural Narrative (continued)

#### Program and Interior Design

The Feasibility Study and Preferred Concept includes the following primary elements:

- Practice Studio
- Women's Locker Room (Locker Room, Shower Room, Restroom)
- Team Room
- Therapy
- Cardio Room
- Office
- Meeting Space
- Coaches Locker
- Public Restrooms
- Core Spaces (IT/Electrical Room, Mechanical Room)

The program is distributed on one level in approximately 20,654 SF.

#### Practice Studio Elements:

- Floor
- Tumbling Strip
- Rod Floor
- Tumble Track
- (3) Vaults
- (4) High Balance Beams
- (4) Low Balance Beams
- (2) Trampolines
- (4) Uneven Bars
- (1) High Bar
- Trench Bar
- Trampoline Bar
- Resi Pits/Foam Pits

The Practice Studio will contain the gymnastics apparatus required for practice and training. The space will have carpeting over an underlayment applied to the slab on grade floor. Walls will be framed walls with gypsum board. Framed walls adjacent to tenant space will require acoustical separation. Acoustical lapidaries are being proposed to minimize reverberation in the Practice Studio. Linear LED lights will be mounted to the existing roof purlins and (6) additional 4x8 skylights are proposed to be cut into the roof. A sound system capable of playing music has been requested by OSU. Additionally, the south exterior wall has been identified as an area for large format graphics and branding.

Given the multi-tenant nature of the building, acoustical isolation from the Practice Studio to the tenant space is critical. It is recommended that walls separating the Practice Studio from the tenant space be designed to achieve an STC rating of 60. Additionally, acoustical performance within the Practice Studio is also important for its functionality. It is recommended that the reverberation rate of the space be 1.7 seconds. The ceiling is the most effective location for acoustical treatment, and it is recommended that 7,000 SF of 2" thick lapidaries be applied to the ceiling.

#### Support Spaces

##### Women's Locker Room

The locker room space will allow student-athletes to change and store personal items during practice. The concept plan contains 24 wood lockers, carpet flooring, gypsum-board and wood ceilings, and opportunities for graphics to be applied above the lockers to a gypsum-board soffit.

##### Women's Shower Room

A total of (4) shower stalls and changing bench are included in the concept design. Stainless steel shower partitions will be placed between framed tile-clad walls. Tile flooring and walls are proposed for the Women's Shower room. The ceiling is to be painted gypsum board.

##### Women's Restrooms

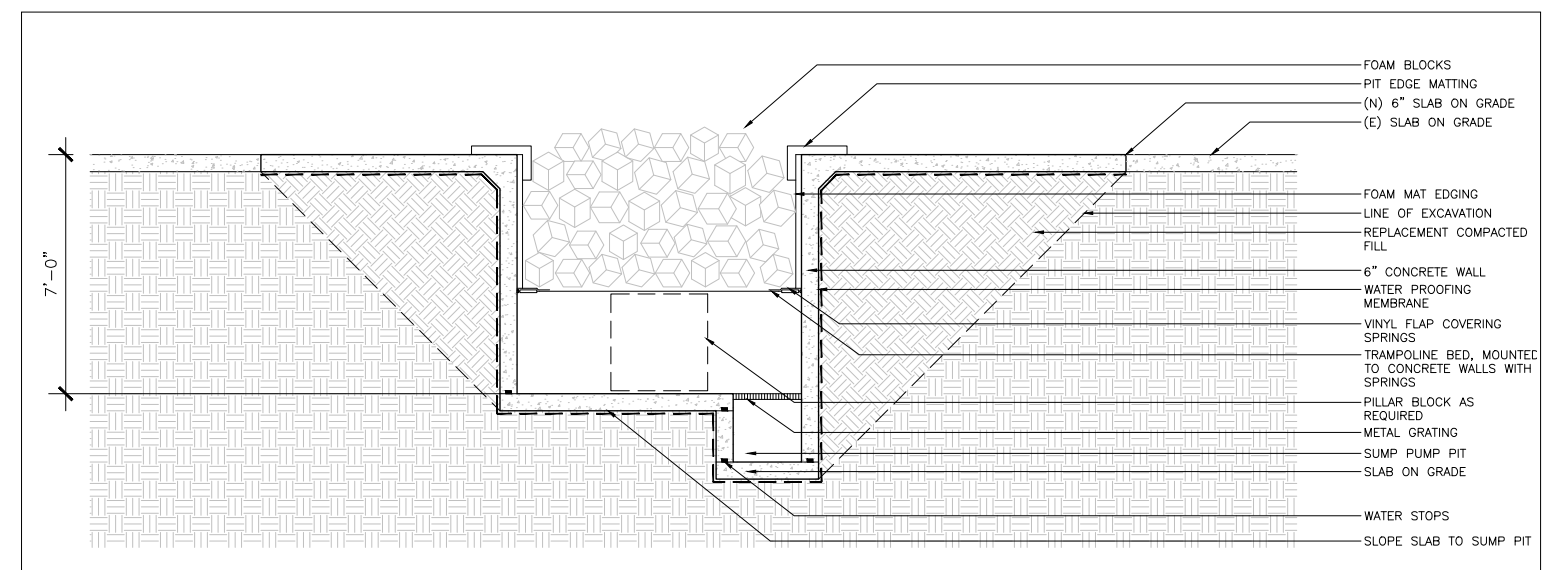
(4) water closets and (3) lavatories are included in the preferred concept. Stainless steel toilet partitions are recommended. Floor and wet walls are proposed to have ceramic tile. A continuous solid surface lavatory counter with a continuous mirror are proposed. The ceiling is to be painted gypsum board.

##### Team Room

The Team Room is a space envisioned for student-athletes to hang out and relax. Proximity to the Locker Room is desired. A small kitchenette with refrigerator, sink, dishwasher, and cabinetry is proposed. Soft furniture, carpet flooring, and a television are also proposed. The flooring at the kitchenette is proposed to be an epoxy floor. The ceiling is to be acoustical ceiling tile.

##### Therapy

The Therapy Room is a space for student athletes to receive treatment for injuries and preventative treatment. (3) taping tables and an above grade hot and cold hydro therapy tub are proposed. In addition, a clothes washer and dryer for cleaning uniforms, an ice machine, janitors sink, cabinetry, sink, and refrigerator are included in an enclosed room. The flooring should be easily cleanable, and accommodate wetness from the hydro therapy tube. Resilient athletic flooring and epoxy flooring near the hydrotherapy tub are proposed. The ceiling is to be a wood ceiling and painted gypsum board.



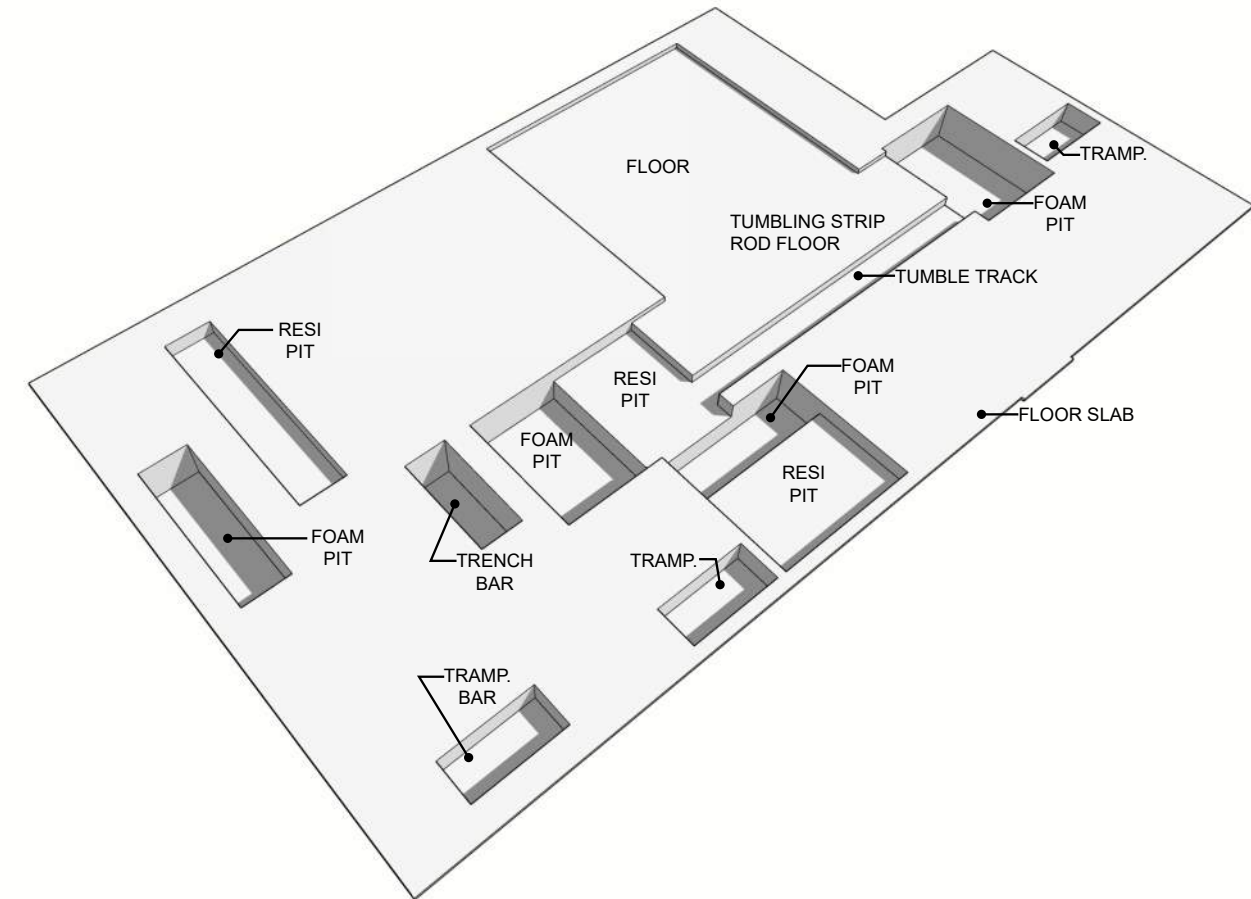
Foam Pit Section



## 5.0 preferred concept

### 5.2.1 Architectural Narrative (continued)

- **Cardio**  
The Cardio Room is a space for student athletes to warm up before practicing and/or perform physical therapy exercises. The flooring is to be resilient athletic flooring. The ceiling is to be a wood ceiling and painted gypsum board. Proximity to the Practice Studio and Therapy are important. It is envisioned that a large fold-able storefront system allow for the space to fully open to the Practice Studio when desired.
- **Office and Meeting Space**  
The office and meeting spaces are envisioned as a touch down location for staff and should accommodate 2-4 mobile workstations. The meeting room is to allow for private conversations for both students and staff. The flooring is to be carpeting and the ceiling is to be acoustical ceiling tile.
- **Coaches Locker**  
The coaches locker room should accommodate wood lockers, (1) shower, (1) water closet, and (1) lavatory. The flooring is to be epoxy paint and tile flooring. The walls are to be epoxy paint on gypsum board and tile. The ceiling is to be painted gypsum board.
- **Public Restrooms**  
The public restrooms offer convenient access visitors, students, and staff. The flooring is to be large format tile flooring. The wet wall is to have tile, and the remainder of the walls are to be painted gypsum board. The ceiling is to be painted gypsum board.
- **Mechanical, electrical and IT Rooms**  
These spaces are to have sealed concrete floors, painted gypsum walls, and painted gypsum ceiling.
- **Entry**  
The entry space should welcome student-athletes, staff, and guests. It is an opportunity to showcase the history of the Women's Gymnastics program and highlight the OSU Athletics program. Branding, graphics, and displays may be present. In addition, the space allows for guests to view the activities of the Practice Studio without entering the space. The flooring is to be polished concrete, the walls are to be painted gypsum and a metal panel clad central spine. The ceiling is to be metal panel and acoustical ceiling tile.



Slab Depressions at Practice Studio



Entry View

### 5.2.2 Structural Narrative

#### Scope

This pre-design structural narrative of the former Celwave R.F. Building in Corvallis, Oregon is meant to describe the existing structural system and to make recommendations related to the structure for the future gymnastics program practice facility renovation of the building. We understand Oregon State University will consider this information in their due diligence of the prospective property. To support the findings described below, we reviewed pertinent record drawing information made available to us, and performed field reconnaissance on March 7, 2019, to observe the general physical status of the building structure.

#### Building Description

The existing Celwave R.F. Building is a single-story building originally constructed in 1995 and is located at 4100 SW Research Way in Corvallis, Oregon. The overall dimensions of the building are approximately 140 feet by 285 feet. We understand the building has supported a combination wet laboratory, computational laboratory, office, receiving/loading dock, and miscellaneous back-of-house uses since its original construction. The original structural engineering of the foundation system and columns, roof framing, and exterior walls was completed by Mackenzie/Saito & Associates. It does not appear that the building was designed for any future horizontal or vertical addition.

The following summarizes structural system of the building:

##### Gravity Force-Resisting System:

- Roof: 5/8" plywood sheathing, 2x6 sub-purlins @ 24" o.c., 2 1/2" x 18" GL Purlins @ 8' o.c., steel open web joist girders, and tube steel columns.
- Ground Floor: 6" reinforced concrete slab on grade, with downturned edges at the building perimeter.
- Foundations: Isolated reinforced concrete spread footings at columns.

##### Lateral Force-Resisting System:

- Reinforced concrete tilt-up bearing shearwalls around the perimeter of the building.

The original design criteria for the building is as follows:

Applicable Code: 1991 Oregon Structural Specialty Code, based on the 1991 Uniform Building Code

##### Gravity Loading:

- Roof Live Load – 25 psf + snow drifting

##### Seismic Loading:

- Seismic Zone No. 3
- Occupancy Importance Factor, I = 1.0
- $R_w = 6$

##### Foundations:

- The General Structural Notes list a site specific geotechnical report by GeoEngineers dated June 16, 1995. Soil bearing capacity is listed as 2,500 psf..

#### Structural Condition

On March 7, 2019, we met with Woofter Architecture and members from Oregon State University to walk through and around the building. Most of the building structural components are exposed. Based on the general configuration of the building and the limited observations of structural components accessible to view, the as-constructed condition of the building appeared to be in general conformance with the information shown on the original drawings provided to us. We did not observe any signs of physical distress within the building. Please note that catena does not warrant or guarantee the condition of the existing construction, or that concealed problems do not exist.

#### Site Description and Seismicity

The Celwave R.F. Building is located on a generally level site. The DOGAMI Oregon HazVu statewide hazard map shows there to be a low risk of earthquake-induced liquefaction at the site and no risk of slope failure. The hazard map shows the nearest known active earthquake fault to be approximately 1.5 miles to the west-northwest of the site; therefore, we believe the risk of fault rupture during an earthquake to be negligible.

Since the original design and construction of the building, the knowledge of seismicity in the area has increased significantly and there has been considerable advancement in code-mandated seismic detailing. Therefore, inherent seismic vulnerabilities exist. If the building were designed in accordance with the current 2014 Oregon Structural Specialty Code (OSSC), the horizontal seismic design forces would be approximately 3.5 times those considered in the original design. Typical seismic deficiencies for buildings of this construction type occur between the anchorage of the roof diaphragm to the perimeter concrete walls. It appears the Celwave R.F. Building has out-of-plane anchorage deficiencies.

#### Proposed Use

It appears that the Gymnastics Practice Facility use falls within the current use for the Celwave R.F. Building. Therefore, we do not anticipate a future change in use or occupancy.

#### Proposed Modifications

The proposed modifications require the addition of pits of varying depth be added in areas of the gym floor. Pit depths are as little as 11 1/2" and as much as 8'-0". The addition of pits require removal of portions of the existing 6" slab-on-grade, shoring of five (5) existing spread footings supporting interior columns, and the addition of new concrete pit walls and slabs. Pit walls will likely require waterproofing and water stops at horizontal construction joints. The pit slabs will likely require sump pits and pumps to accommodate water accumulation within the pits.

#### Design Criteria

- 2014 Oregon Structural Specialty Code
- Risk Category II
- Seismic Design Category D
- Site Class D
- Seismic Importance Factor, IE = 1.00
- Ultimate Design Wind Speed, VULT: 120 miles per hour (3 second gust)

## 5.0 preferred concept

### 5.2.2 Structural Narrative (continued)

- Wind Exposure Category: B
- Snow Importance Factor, IS = 1.00
- Original footing basis of design bearing pressure = 2,500 psf.

#### Material Properties

- $F'_c = 4,000$  psi
- $F_y = 60,000$  psi

#### Mandatory Structural Retrofit Triggers

Any renovation to the Celwave R.F. Building should consider the possibility of code-mandated gravity or seismic rehabilitation measures.

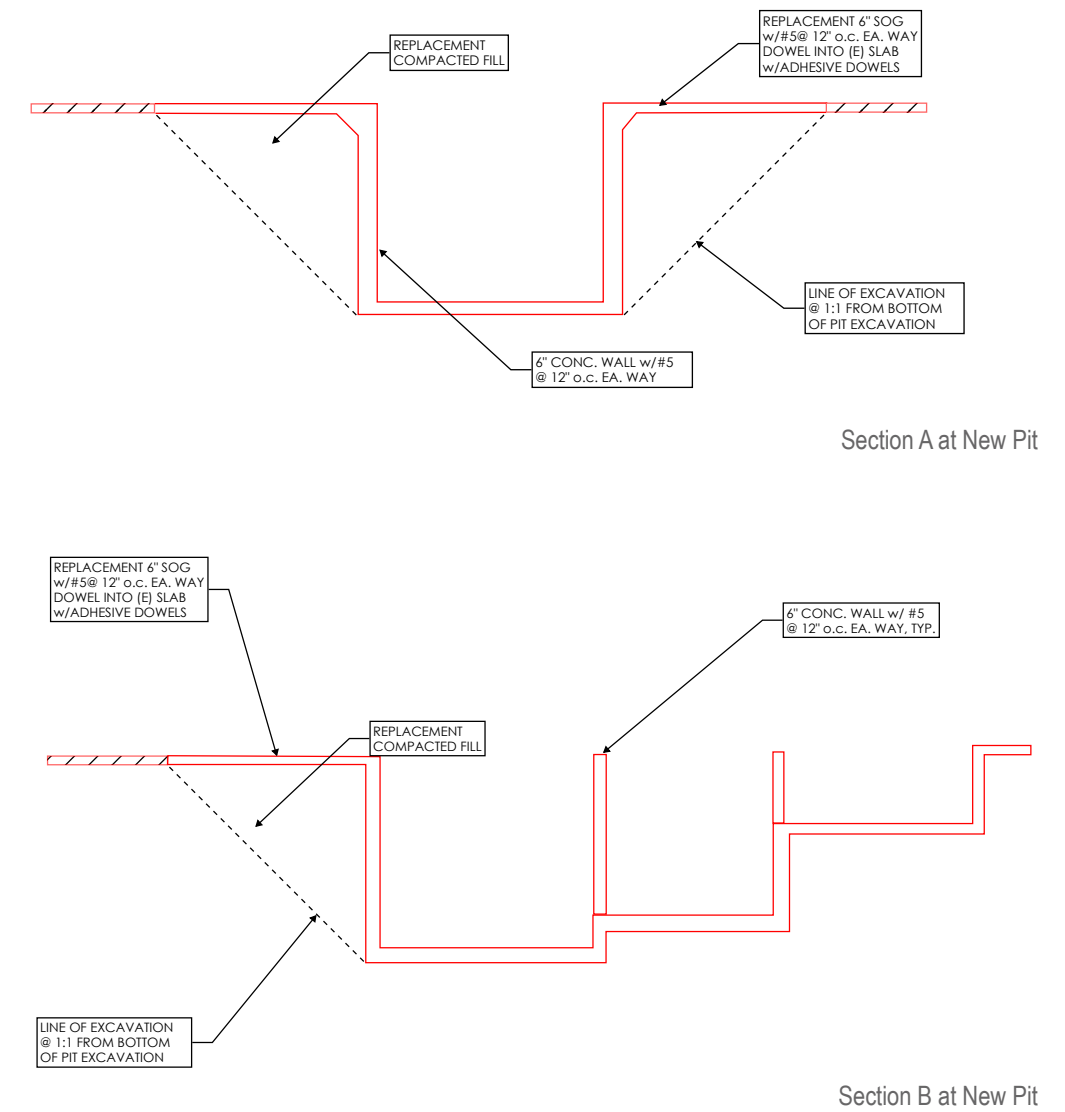
In accordance with OSSC sections 3403.3 and 3404.3, where any renovation measures decrease the capacity of, or increase the load demand on, any existing gravity load-carrying structural element by more than 5 percent since their original design and construction, those elements shall be evaluated and strengthened, if necessary, to meet the requirements of the Code for new construction.

For example, assume a new rooftop mechanical unit and corresponding concrete housekeeping pad is added to the roof. Any or all of the existing roof framing, the supporting column(s), the footings supporting load from these particular columns, and any connections along this load path may experience a 5 percent or greater increase in load demand from their original design due to the weight of the new mechanical unit, its pad, and any snow drifts that may accumulate along the perimeter of the unit. Where so, those specific elements and components would need to be evaluated against current Code requirements and retrofit if sufficient reserve capacity does not exist. Potential retrofit measures could include, but may not be limited to, welding reinforcing angles to the top chord, bottom chord, and select web members of affected open-web steel girders, adding glue-laminated material to the purlins and adding more, or deeper, sub-purlins, welding reinforcing plates to the affected column flanges, and expanding the size of affected footings.

Similarly, OSSC sections 3403.4 and 3404.4 mandate the structural evaluation and strengthening, if required, where any renovation measures decrease the capacity of, or increase the load demand on, any existing lateral force-resisting structural element by more than 10 percent since their original design and construction.

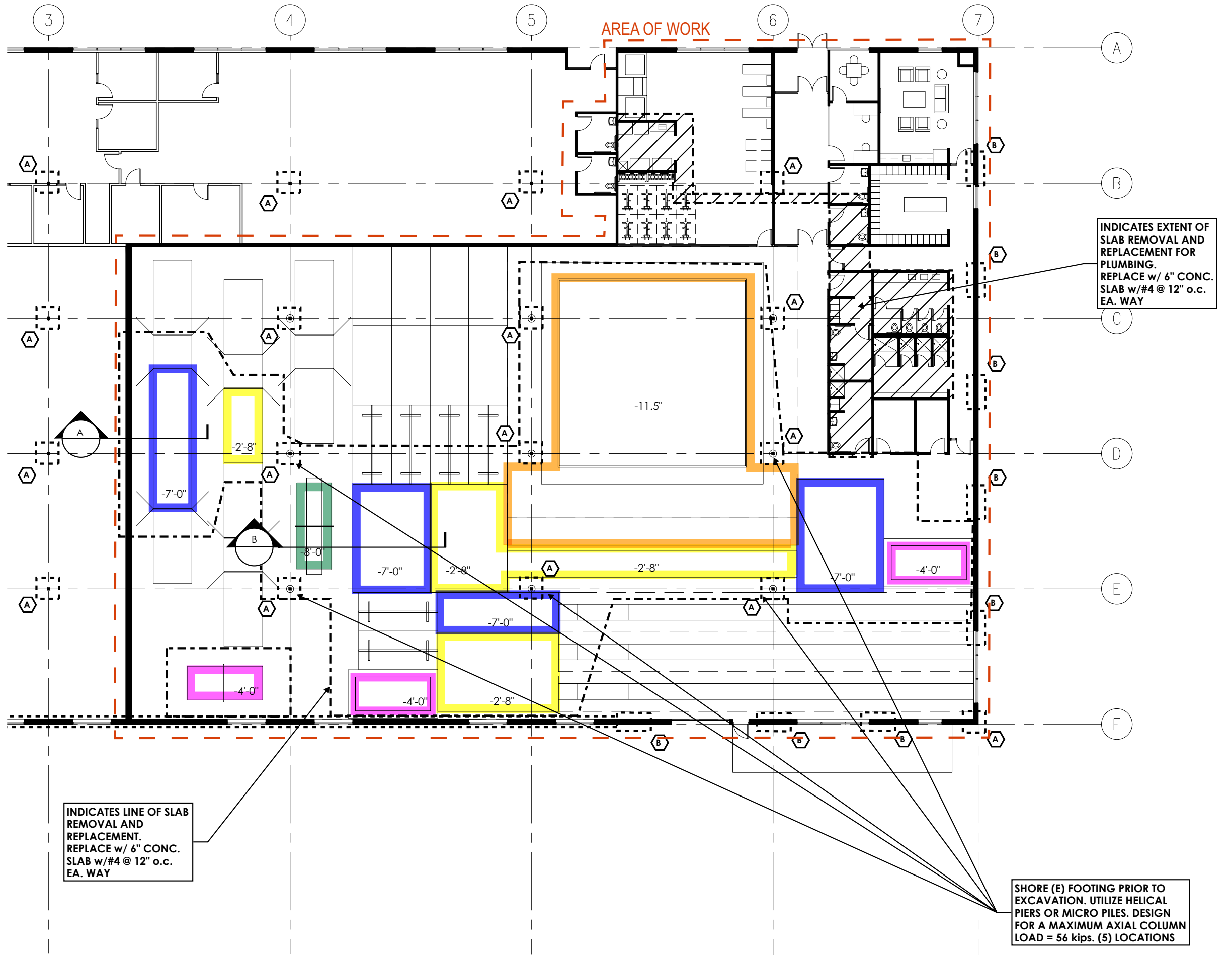
For example, the addition of new openings in the existing perimeter concrete walls reduces the lateral resistance of the walls. Reducing the capacity by increasing the opacity of the exterior elevations by more than 10 percent of the existing solid panel length of wall would trigger an evaluation of the building against current Code requirements and retrofit if sufficient reserve capacity does not exist.

The original design of the building does not appear to account for any vertical or horizontal building expansion. A vertical expansion will trigger a significant amount of structural strengthening work to the existing building, almost assuredly making it cost-prohibitive. We recommend that any horizontal expansion incorporate a seismic joint to avoid expensive structural strengthening work to the existing building.



5.0 preferred concept

5.2.2 Structural Narrative (continued)



## 5.0 preferred concept

### 5.2.3 HVAC Narrative

#### **HVAC Retrofit Scope:**

Mechanical Engineer(s) and Contractor(s) shall provide design and construction services and materials as required for complete and properly functioning Heating, Cooling and Ventilation systems to serve this facility. Specific details on system requirements are detailed in narrative below. All work shall be completed in accordance with local code requirements and identified owner standards and goals.

Major HVAC Systems and Components include:

- Replace (6) existing packaged rooftop heat/cool units w/ (6) new units
- Replace (4) existing rooftop exhaust fans with (3) new fans
- New ducted supply, return, and exhaust systems configured to serve new space arrangement
- New anti-stratification fans throughout open training space
- New HVAC operating and temperature controls for all systems and devices

#### **HVAC Design Conditions**

Outdoor Conditions (Table 1.1)		
2017 ASHRAE Fundamentals Handbook Weather Data: Corvallis, OR (WMO 726945)	Cooling 0.4% DB / MCWB	Heating 99.6% DB
	92.7° F. DB / 67.0° F. WB	24.7° F. DB

Indoor Conditions (Table 1.2)		
Space	Summer Conditions	Winter Conditions
Gymnastics Training Space	76° F. ± 2° F.	70° F. ± 2° F.
Lobby / Circulation Spaces	74° F. ± 2° F.	70° F. ± 2° F.
Locker & Shower Rooms	76° F. ± 2° F.	70° F. ± 2° F.
Mechanical & Electrical Rooms	80° F. ± 2° F.	60° F. ± 2° F.
Office & Meeting Rooms	74° F. ± 2° F.	70° F. ± 2° F.
Rehab / Cardio Spaces	76° F. ± 2° F.	70° F. ± 2° F.
Telcom & IT Rooms	80° F. ± 2° F.	80° F. ± 2° F.

#### **Applicable Codes:**

Code	Year
Oregon Mechanical Specialty Code (OMSC)	2014
Oregon Energy Efficiency Specialty Code (OEESC)	2014
Oregon Structural Specialty Code (OSSC)	2014
Oregon Fire Specialty Code (OFC)	2014

#### **Oregon State University - Construction Standards:**

As of this writing there is not clear direction as to if this project will be required to comply with OSU Facilities Standards for HVAC Systems Design and Construction. Assumption for current design and budgeting efforts is that project will not be required to comply with OSU Facilities Standards for HVAC Systems Design and Construction.

#### **Building Envelope Thermal Performance:**

Load calculations and system design are based on the thermal performance characteristics of the existing building envelope. A summary of current understanding/assumptions for these criteria is detailed below:

Building Envelope Thermal Characteristics	
Envelope Component	Thermal Performance
Existing Roof Insulation (Fiberglass Batt Insulation below roof deck)	R-19
Existing Concrete Perimeter Walls (Internal furring and batt insulation)	R-13
Unheated, Concrete, Slab-on-Grade Floor	No insulation
Existing Opaque Doors	U-0.70
Existing Windows/Fenestration	U-0.55, SHGC-0.50
New Windows/Fenestration	U-0.35, SHGC-0.40
New Skylights	U-0.60, SHGC-0.40

#### **HVAC Systems Overview:**

Requirements and basis of design for specific HVAC Systems and Components are detailed below.

#### **Primary Space Heating and Cooling**

- Primary Heat/Cool/Ventilation by Constant Volume Packaged Rooftop Units
  - Basis of Design: Carrier 'Weathermaker' with Electric (DX) Cooling and Natural Gas Heat
  - New packaged rooftop units to be installed in-place of existing units with manufacturer furnished curb adapters as required to allow reuse of existing curbs
  - Common features of new Rooftop Units:
    - Constant volume supply fan w/ either VFD or ECM controls for balancing
    - Electric (DX) cooling system w/ minimum 2-stage capacity control
    - Natural Gas heating system w/ minimum 2-stage capacity control
    - 100% Outdoor Air Economizer w/ barometric relief and dry-bulb control
    - Integrated digital operating controls
    - Space control by dedicated 7-day Programmable Digital Thermostat
- Preliminary Rooftop Unit Service and Sizing detailed below:
  - RTU-1: Proposed to serve east portion of Gymnastics Training Area Replace (E) 7.5-Ton Gas/Elec RTU w/ (N) 10-Ton Gas/Elec RTU Electrical requirements 460V/3Ph, MCA-24

## 5.0 preferred concept

### 5.2.3 HVAC Narrative (continued)

- RTU-2: Proposed to serve Locker/Shower Areas  
Replace (E) 4-Ton Gas/Elec RTU w/ (N) 4-Ton Gas/Elec RTU  
Electrical requirements 460V/3Ph, MCA-11
- RTU-3: Proposed to serve Team Room and Coaches Offices  
Replace (E) 3-Ton Gas/Elec RTU w/ (N) 4-Ton Gas/Elec RTU  
Electrical requirements 460V/3Ph, MCA-10
- RTU-4: Proposed to serve Cardio / Rehab Areas  
Replace (E) 10.0-Ton Gas/Elec RTU w/ (N) 5-Ton Gas/Elec RTU  
Electrical requirements 460V/3Ph, MCA-14
- RTU-5: Proposed to serve central portion of Gymnastics Training Area  
Replace (E) 17.5-Ton Gas/Elec RTU w/ (N) 17.5-Ton Gas/Elec RTU  
Electrical requirements 460V/3Ph, MCA-48
- RTU-6: Proposed to serve central portion of Gymnastics Training Area  
Replace (E) 15.0-Ton Gas/Elec RTU w/ (N) 17.5-Ton Gas/Elec RTU  
Electrical requirements 460V/3Ph, MCA-48

#### Exhaust Systems:

- EF-1: Locker / Shower Exhaust  
Dedicated constant volume exhaust system to provide continuous exhaust service for Locker and Shower areas and adjacent Bathrooms and utility closets.
  - Basis of Design: Greenheck G-123-VG (208V/1Ph, ½ HP)
    - Roof mounted, downflow configuration w/ spun-aluminum shroud
    - Direct drive ECM motor w/ integrated speed control for balancing
    - Standard manufacturer's curb for flat-roof installation
    - Field installed motorized isolation damper
    - Interlock w/ local RTU for start/stop scheduling
- EF-2: Cardio / Rehab Exhaust  
Dedicated constant variable volume exhaust system to serve Cardio and Rehab areas
  - Basis of Design: Greenheck G-095-VG (120V/1Ph, ¼ HP)
    - Roof mounted, downflow configuration w/ spun-aluminum shroud
    - Direct drive ECM motor w/ integrated speed control
    - Standard manufacturer's curb for flat-roof installation
    - Field installed motorized isolation damper
    - Interlock w/ local RTU for start/stop scheduling
    - Provide w/ wall switch for High/Low speed control
- EF-3: Adjacent Tenant Bathroom Exhaust  
Dedicated, constant volume exhaust system to provide continuous exhaust service for tenant bathrooms at adjacent tenant space.
  - Basis of Design: Greenheck G-080-VG (120V/1Ph, 1/10 HP)

- Roof mounted, downflow configuration w/ spun-aluminum shroud
- Direct drive ECM motor w/ integrated speed control for balancing
- Standard manufacturer's curb for flat-roof installation
- Field installed gravity backdraft damper
- Interlock w/ local RTU for start/stop scheduling

#### EF-4: Data Closet Heat Relief

Dedicated, constant volume exhaust system w/ thermostat control to provide air circulation through Data Closet as required to maintain space temperature.

- Basis of Design: Greenheck SQ-95-VG (120V/1Ph, 1/6 HP)
  - Indoor, ceiling-hung configuration
  - Direct drive ECM motor w/ integrated control for temperature maintenance
  - Provide w/ Interlock w/ remote Thermostat for start/stop control

#### Gymnastic Training Area - Supplemental HVAC Equipment:

- Ceiling Hung Anti-Stratification Fans  
Anti-Stratification fans function to eliminate thermal stratification within high-bay spaces. This provides benefits in terms of: increased occupant thermal comfort, reduced HVAC energy consumption and cost, reduced perceived airflow and drafts.
  - Basis of Design Airus: 'Air Pear' Model 60-EL (Total (7) Required)
    - Exposed Pendant Installation
    - 92% Efficient ECM Motor
    - 2000 SF Coverage
    - 120V/1Ph Power (2.2 Amps)
  - Provide w/ Manufacturer's wireless 'FanCenter' multi-fan control interface
- Ceiling Hung 'Chalk Eater' Air Purification Unit  
A Chalk Eater unit is a self-contained air filtration system for removing the air borne chalk and dust typically present in gymnastics training and performance areas. Use of these units provides benefits in terms of: improved indoor air quality for occupants, reduced time and cost for facility cleaning, elimination of chalk accumulation in electronic office and audio-visual equipment.
  - Basis of Design: Deary Gym Supply #DGS-CHALKEAT (Total (4) Required)
  - Unit is intended to be ceiling hung, can also support w/ high wall bracket
  - Each unit is 30" 36" x 31" and weighs 250 lbs
  - Will need to consider lift or ladder access for cleaning (IE not over or adjacent to pits or apparatus)
  - Requires 120V power connection w/ "#12" power cord
- Roof Mounted Barometric Relief Hood  
A barometric relief hood is required to allow flow of excess return air to exterior of building during economizer cooling operation. This relief strategy eliminates excess pressurization of building which can prevent door closure and automatic locking.
  - Basis of Design: Greenheck FGR Relief Hood (Preliminary size 36" x 36" throat)
    - Galvanized, roll-formed, steel hood construction
    - Standard manufacturer's curb for flat-roof installation
    - Integrated birdscreen at relief outlet
    - Field installed adjustable barometric relief damper

5.0 preferred concept

5.2.3 HVAC Narrative (continued)

- Field installed motorized isolation damper

- Pendent Style Round Supply Diffusers w/ Adjustable Core  
Round ceiling diffusers w/ adjustable core provide optimal distribution for high-bay spaces. Diffuser allows manual adjustment to improve distribution and vertical throw for heating applications.
  - Basis of Design: Titus TMRA-Type 3

*Supplemental HVAC Equipment:*

- Variable Air Volume Ceiling Diffusers  
VAV ceiling diffusers include integrated, non-powered controls which function to throttle heating or cooling supply to maintain temperature setpoints in spaces not communicating with system primary thermostat.
  - Basis of Design: Titus TRSQ-4 (Anticipated (2) Diffusers)
- Wall-Mount Electric Cabinet Unit Heater (Main Entry Vestibule)  
Wall-mounted electric cabinet heater functions to provide heating at entry vestibule
  - Basis of Design: Q-Mark Model AWH3150F (120V/1Ph, 1.5 KW)
  - Architectural Wall Cabinet w/ Heavy Duty Grille
  - Integral temperature control and disconnect switch
- Natural Gas Seismic Isolation Valve  
Seismic shutoff valve and flexible gas piping connection provide increase safety for natural gas system in event of seismic event. Gravity actuated isolation valve shuts off natural gas flow at beginning of seismic event.
  - Basis of Design: Koso California Valve
- Clothes Dryer Accessories  
In-line lint trap provides easy inspection and cleaning access to prevent lint accumulation within dryer exhaust duct.
  - Basis of Design: Ecco Products – Model 180

**HVAC Controls:**

No central controls or building automation system is proposed for this project. All HVAC equipment shall be provided with stand-alone programmable controls.

Coordinate with fire alarm contractor to configure the following HVAC equipment with central and/or local fire alarm system:

- Interlock all Rooftop Units with fire alarm system. Configure unit to shut down upon alarm from either on-board return air smoke detector, or from general fire alarm or smoke detector alarm from building system.

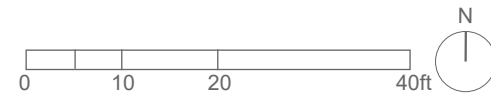
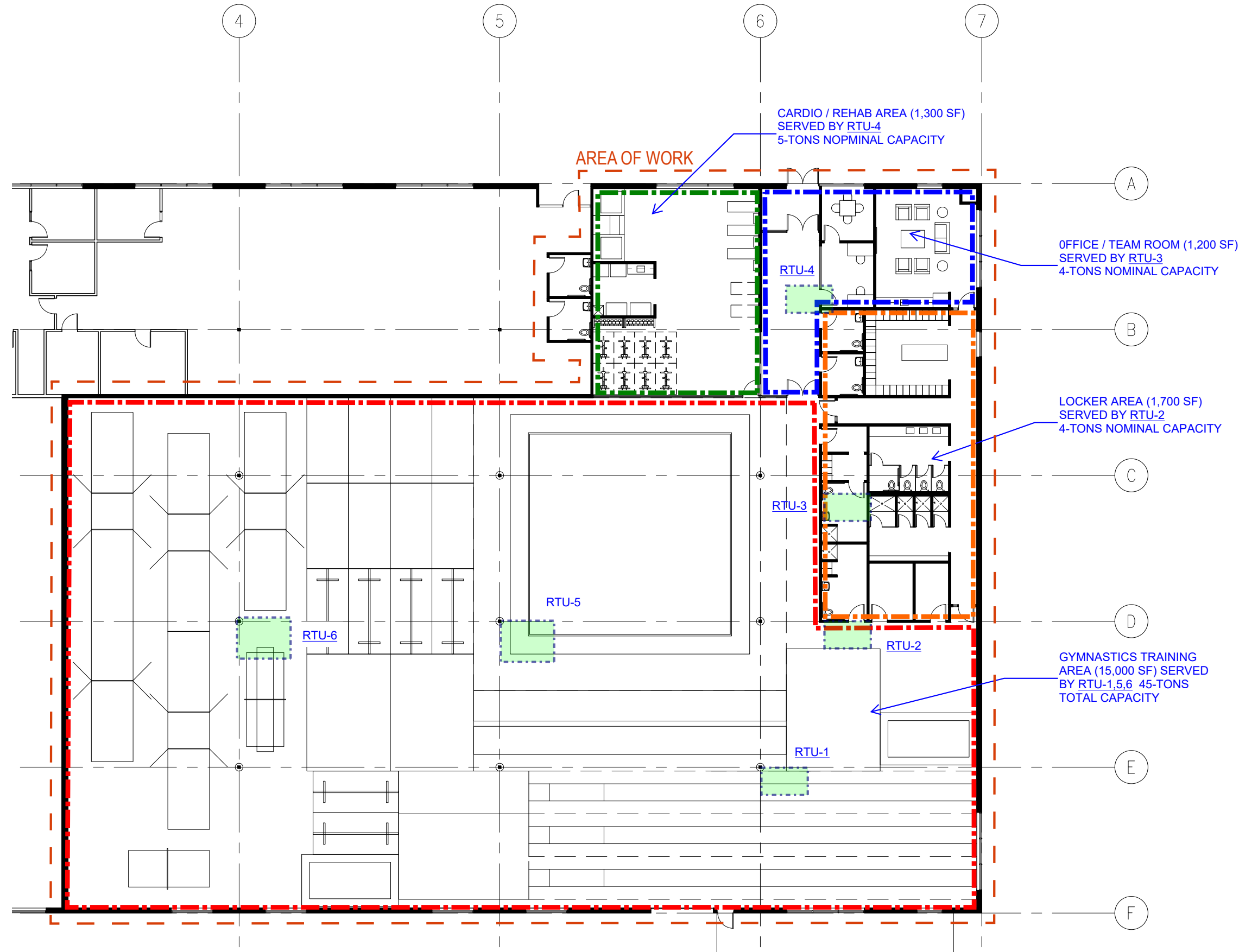
**HVAC Materials & Design Standards:**

HVAC Materials and Design Standards	
Item	Criteria
Low Pressure Ductwork (Supply, Return, Exhaust)	<b>Material:</b>
	<b>Interior Supply, Return, General Exhaust:</b> Galvanized Sheetmetal, Minimum Gauge and Fittings Per SMACNA Standards, SMACNA Pressure Class 1, Seal Class B, Spiral duct and Fittings (No Snaplock or adjustable elbow fittings)
	<b>Shower / Locker Exhaust:</b> Aluminum or Type 304 Stainless, Minimum Gauge and Fittings Per SMACNA Standards, SMACNA Pressure Class 1, Seal Class B Spiral duct and Fittings; No "Snaplock" Duct, Adjustable Elbows, or Ductboard
	<b>Insulation:</b> Supply duct within ceiling plenum: Minimum R-5 Insulation w/ continuous Vapor Barrier Jacket and Tape Sealed Seams. No insulation at exhaust  No insulation required at exposed supply duct, or interior return and exhaust systems
	<b>Sizing Criteria:</b> Static Loss - Maximum 0.1 Inches WC/100 FT Supply Main Velocity – Maximum 1,800 Feet/Minute Branch Duct Velocity – Maximum 1,500 Feet/Minute
Flexible Ductwork (Supply, Exhaust, Transfer)	<b>Material:</b> NFPA 90A/B and UL Standard 181 Rated, Factory Made Pre-Insulated Flex Duct w/ CPE inner liner, coated steel spring helix, fiberglass scrim/insulation and polyethylene vapor barrier.
	<b>Sizing Criteria:</b> Branch Duct Velocity – Maximum 1,500 Feet/Minute Maximum 8' Length, (2) 90° Bends

Item	Criteria
Natural Gas Piping	<b>Material:</b> Concealed Piping: Schedule 40 Black Steel pipe/fittings w/ welded joints Accessible Piping: Schedule 40 Black Steel pipe/fittings w/ threaded joints

5.0 preferred concept

5.2.3 HVAC Narrative (continued)



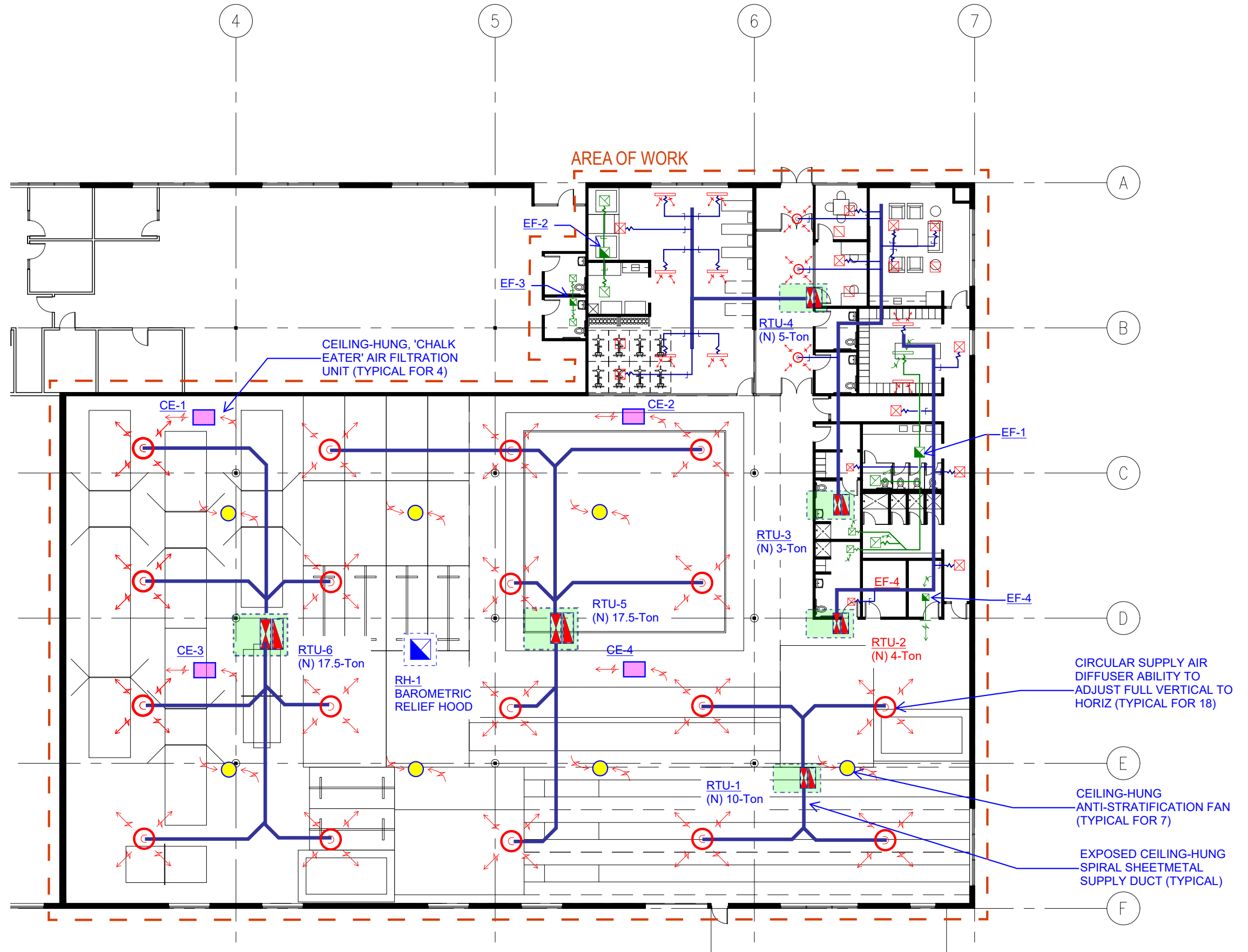


5.0 preferred concept

5.2.3 HVAC Narrative (continued)

ADD NEW GAS METER AT (E) SERVICE ENTRY ON WEST SIDE OF BUILDING.

EXTEND NEW DEDICATED GAS PIPING TO DISTRIBUTED ROOFTOP HVAC UNITS AND WATER HEATERS SERVING OSU GYMNASICS AREA





5.2.4 Plumbing Narrative

**Plumbing Retrofit Scope:**

Mechanical Engineer(s) and Contractor(s) shall provide design and construction services and materials as required for complete and properly functioning Plumbing systems to serve this facility. Specific details on system requirements are detailed in narrative below. All work shall be completed in accordance with local code requirements and identified owner standards and goals.

Major systems and components include:

- Domestic cold water and hot water service to all tenant fixtures and appliances in project
- Domestic hot water equipment and circulating system
- Sanitary sewer service to all to all tenant fixtures and appliances in project
- Existing storm drainage system tenant roof areas to remain without modifications
- Plumbing Fixtures
- Sump pumps, piping, remote drains, and controls at tenant recessed floor pits

**Applicable Codes:**

Code	Year
Oregon Plumbing Specialty Code (OPSC)	2017
Oregon Mechanical Specialty Code (OMSC)	2014
Oregon Energy Efficiency Specialty Code (OESC)	2014
Oregon Structural Specialty Code (OSSC)	2014
Oregon Fire Specialty Code (OFC)	2014

**Oregon State University – Construction Standards**

As of this writing there is not clear direction as to if this project will be required to comply with OSU Facilities Standards for HVAC Systems Design and Construction. Assumption for current design and budgeting efforts is that project will not be required to comply with OSU Facilities Standards for HVAC Systems Design and Construction.

**Plumbing Systems Overview**

The table below summarizes Plumbing Systems approach for all major systems. Additional information on specific system components is presented in subsequent sections.

Plumbing Systems Summary			
System	Service Size	Equipment	Distribution
<b>Domestic Cold Water (DCW)</b>	(e) 2" meter (e) 2-1/2" Service Main Delivery Pressure: TBD OSU Gymnastics Load: 105 CWFU (OPSC Table L-1), 70 gpm max. Additional Tenant Load: TBD		2" Meter at (e) Remote Water Service In-Ground Vault. 2-1/2" common DCW service main feeds entire building  Configure DCW service to OSU TI from new single point of connection to (e) service main  Provide manual DCW isolation valve and meter in accessible location within tenant space  Confirm w/ City Water Utility if project triggers new backflow preventer
<b>Domestic Hot Water</b>	1-1/2"HW, 3/4" HWR. 43 HWFU (OPSC Table L-1), 30 gpm max.  432 gph min first hour capacity.  350 GPH Recovery Rate at 100F DT	Gas Fired, high efficiency, tank-style Water Heater  DWH storage at 140F, Circulation at 120F  Expansion Tank  Recirc Pump  Master Mixing Valve (Set At 120F)	Water Heater, Recirc Pump, Expansion Tank, Master Mixing Valve at ground floor Janitor's Closet  Main risers with horizontal distribution per floor and CW/HW shutoff valves per unit.
<b>Sanitary Waste</b>	85 DFU, 4"SW Main		
<b>Storm Sewer</b>	NA	NA	(e) roof drainage system to remain. No modifications proposed as part of Tenant Buildout

5.0 preferred concept

5.2.4 Plumbing Narrative (continued)

**Plumbing System Components**

Minimum requirements and basis of design for specific Plumbing System Components are detailed below.

Plumbing System Fixtures, Equipment, and Appliances		
Item	Location	Criteria
Domestic Water Heater <b>WH-1</b>	Janitors Closet	AO Smith BTH 300 MXi or similar tank type condensing natural gas fired water heater, 300 MBH input, 120-gallon storage, with 350 gph recovery @ 100F rise.
Domestic Hot Water Expansion Tank <b>ET-1</b>	Janitors Closet	Amtrol ST-12C or similar thermal expansion tank, 6.4 gallon tank volume, for use with domestic hot water system.
Domestic Hot Water Recirculation Pump <b>RCP-1</b>	Janitors Closet	Grundfos or similar domestic hot water recirculation pump, size for 4 gpm @ 20' head.
Thermostatic Mixing Valve <b>MV-1</b>	Janitors Closet	1-1/2" Watts LFN170-M3 or similar hot water master tempering valve, 1-1/4" NPT inlets with check valves and 1-1/2" NPT outlet, max pressure drop of 10 psi at 47 gpm flow. Pipe with RCP-1 to maintain minimum flow requirements.
Recessed Floor Pit Sump Pump <b>SP-1</b>	Recessed Floor Pits (3 total)	Hydromatic VS 33M or similar automatic sump pump, size for 50 gpm @ 25' head, 1/3 hp motor. Provide w/ remote annunciator to alarm on operation
Plumbing Fixtures		<b>WC-1 Standard Watercloset:</b> Wall-Hung Flush Valve / Make/Model TBD <b>WC-2 ADA Watercloset:</b> Wall-Hung Flush Valve / Make/Model TBD <b>L-1 ADA Counter Mount Lavatory:</b> Manual Faucet / Make/Model TBD <b>L-2 ADA Wall-Hung Lavatory:</b> Manual Faucet / Make/Model TBD <b>S-1 ADA Counter Mount Sink:</b> Manual Faucet / Make/Model TBD <b>SH-1 Fiberglass Shower:</b> Manual 2.0 GPM flow, Make/Model TBD <b>SH-2 ADA Fiberglass Shower:</b> Manual 2.0 GPM flow, Make/Model TBD <b>MS-1 Floor-Mount Mop Sink:</b> Manual Faucet / Make/Model TBD <b>DF-1 ADA Drinking Fountain &amp; Bottle Filler:</b> / Make/Model TBD

Item	Location	Criteria
Owner Supplied Appliances		<b>Dishwasher:</b> Residential Make/Model TBD <b>Clothes Washer:</b> Residential Make/Model TBD <b>Electric Clothes Dryer:</b> Residential Make/Model TBD <b>Refrigerator w/ Ice maker:</b> Residential Make/Model TBD <b>Ice maker:</b> Commercial Make/Model TBD

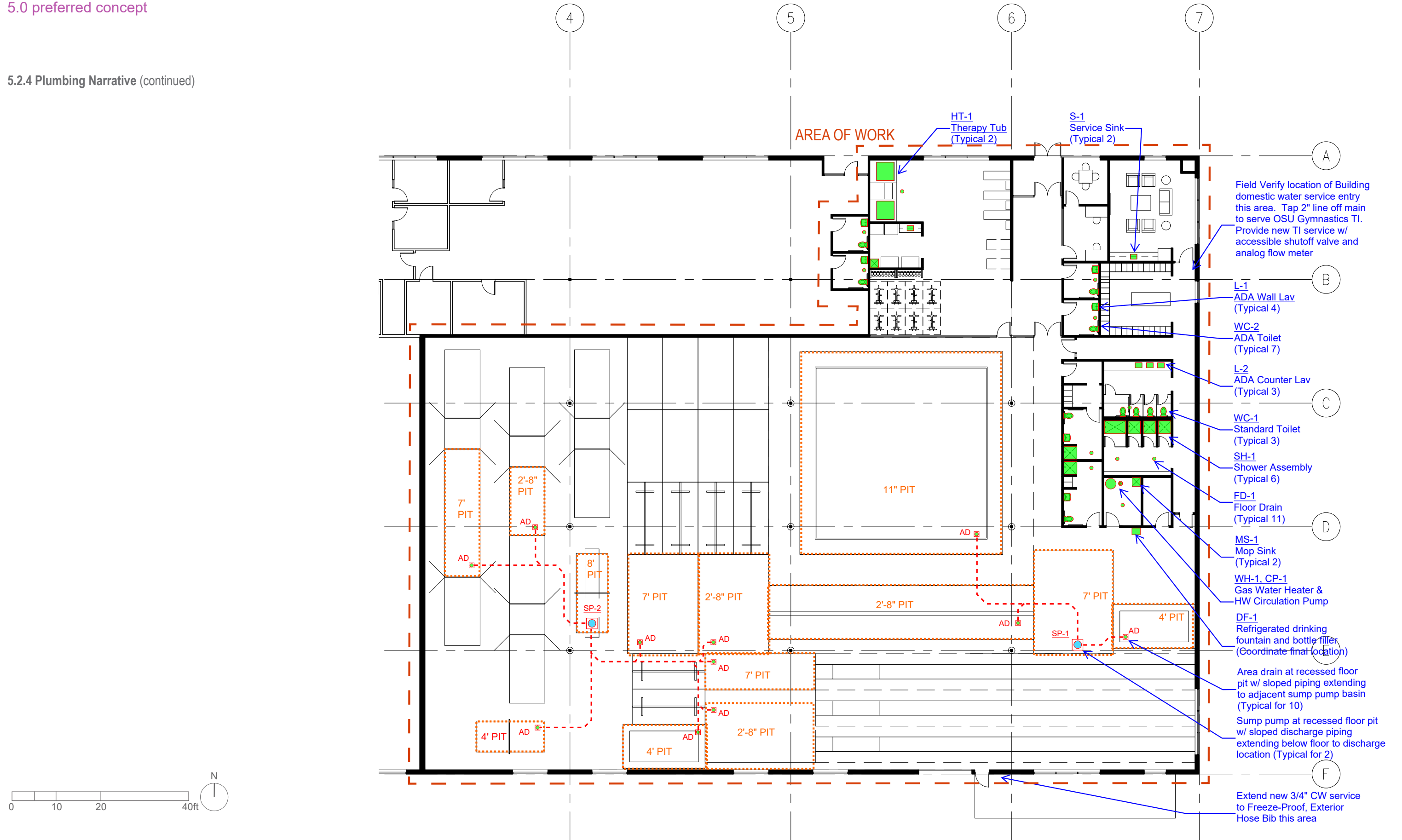
**Plumbing Materials & Design Standards**

The table below presents minimum standards for Plumbing piping and insulation materials.

Plumbing Materials and Design Standards (Table 5.1)	
Item	Criteria
Domestic Water Pipe	<b>Material:</b> Above Grade CW, HW > 2": Type L Copper w/ Solder Joints Above Grade CW, HW <= 2": PEX-a w/ ProPEX EP fittings Below Grade: Type L Copper w/ Solder Joints Trap Primer: PEX-a w/ ProPEX EP fittings  <b>Insulation:</b> CW, HW/HWR, including PEX-a piping Mains: 1" thick, max 0.27 BTU per inch/h x ft^2 x F Branch: 1/2" thick, max 0.27 BTU per inch/h x ft^2 x F  <b>Sizing Criteria:</b> CW: friction loss 3 PSI / 100' of pipe; max 8 feet/sec velocity HW friction loss 3 PSI / 100' of pipe; max 5 feet/sec velocity HWR friction loss 3 PSI / 100' of pipe; max 2 feet/sec velocity
Sanitary Sewer	<b>Material:</b> Above Grade Mains: No-Hub Cast Iron w/ standard couplings Above Grade Fixture Run-Outs: Schedule 40 ABS w/ solvent weld joints Below Grade: Schedule 40 ABS w/ solvent weld joints  <b>Sizing Criteria:</b> 2017 OPSC Table 7-5; 1/4" per foot slope
Sanitary Vent	<b>Material:</b> Above Grade: Schedule 40 ABS w/ solvent weld joints (non-plenum areas) Below Grade: Schedule 40 ABS w/ solvent weld joints  <b>Sizing Criteria:</b> 2017 OPSC Table 7-5

5.0 preferred concept

5.2.4 Plumbing Narrative (continued)



## 5.0 preferred concept

### 5.2.5 Electrical Narrative

#### **Electrical Scope:**

Major Electrical & Low Voltage Systems include:

- Demolition of existing electrical panels, transformers in the space.
- Existing feeder raceway will be re-used where possible with new wire and cable.
- Provide new electrical panels & transformers as required for new equipment and lighting loads (480/277V and 120/208V available). Existing building switchgear will be utilized to feed new panels.
- New LED lighting throughout facility with daylight sensors in the studio and local controls in other spaces.
- New 3KVA lighting inverter for emergency egress lighting.
- Utilize existing fire alarm system and modify as required for code compliant fire alarm system.
- Voice/Data cabling in office spaces. Includes cabling for wireless access points (WAPS) and (8) CATV locations.
- Access control for exterior doors, CCTV cameras for security (3 exterior cameras on the building and 3 interior cameras).
- Audio video systems include approximate (12) speakers with power & data to each speaker and a head end amplifier.
- Electrical power for equipment listed under Item 4 below.
- Power for sump pumps located in the pits. Sump pumps provided by others. Quantity to be determined

#### **Applicable Codes:**

Code	Year
National Electrical Code NFPA 70	2017
Oregon Electrical Specialty Code (OESC)	2017
Oregon Energy Efficiency Specialty Code (OEESC)	2014
National Electrical Manufacturers Code (NEMA)	N/A

#### **Oregon State University - Construction Standards:**

It is not clear if this project will be required to comply with OSU Facilities Standards for Electrical Systems Design and Construction. Assumption for budgeting purposes is that project will not be required to comply with OSU Facilities Standards.

#### **Electrical Power Systems Overview**

Mechanical equipment requiring power per Mechanical subcontractor.

RTU-1: Electrical requirements 460V/3Ph, MCA-24

RTU-2: Electrical requirements 460V/3Ph, MCA-11

RTU-3: Electrical requirements 460V/3Ph, MCA-10

RTU-4: Electrical requirements 460V/3Ph, MCA-14

RTU-5: Electrical requirements 460V/3Ph, MCA-48

RTU-6: Electrical requirements 460V/3Ph, MCA-48

EF-1: Locker / Shower Exhaust - Basis of Design: Greenheck G-123-VG (208V/1Ph, ½ HP)

EF-2: Cardio / Rehab Exhaust - Basis of Design: Greenheck G-095-VG (120V/1Ph, ¼ HP)

EF-3: Adjacent Tenant Bathroom Exhaust - Basis of Design: Greenheck G-080-VG (120V/1Ph, 1/10 HP)

EF-4: Data Closet Heat Relief - Basis of Design: Greenheck SQ-95-VG (120V/1Ph, 1/6 HP)

Ceiling Hung Anti-Stratification Fans - Basis of Design Airus: 'Air Pear' Model 60-EL (Total (7) Required)

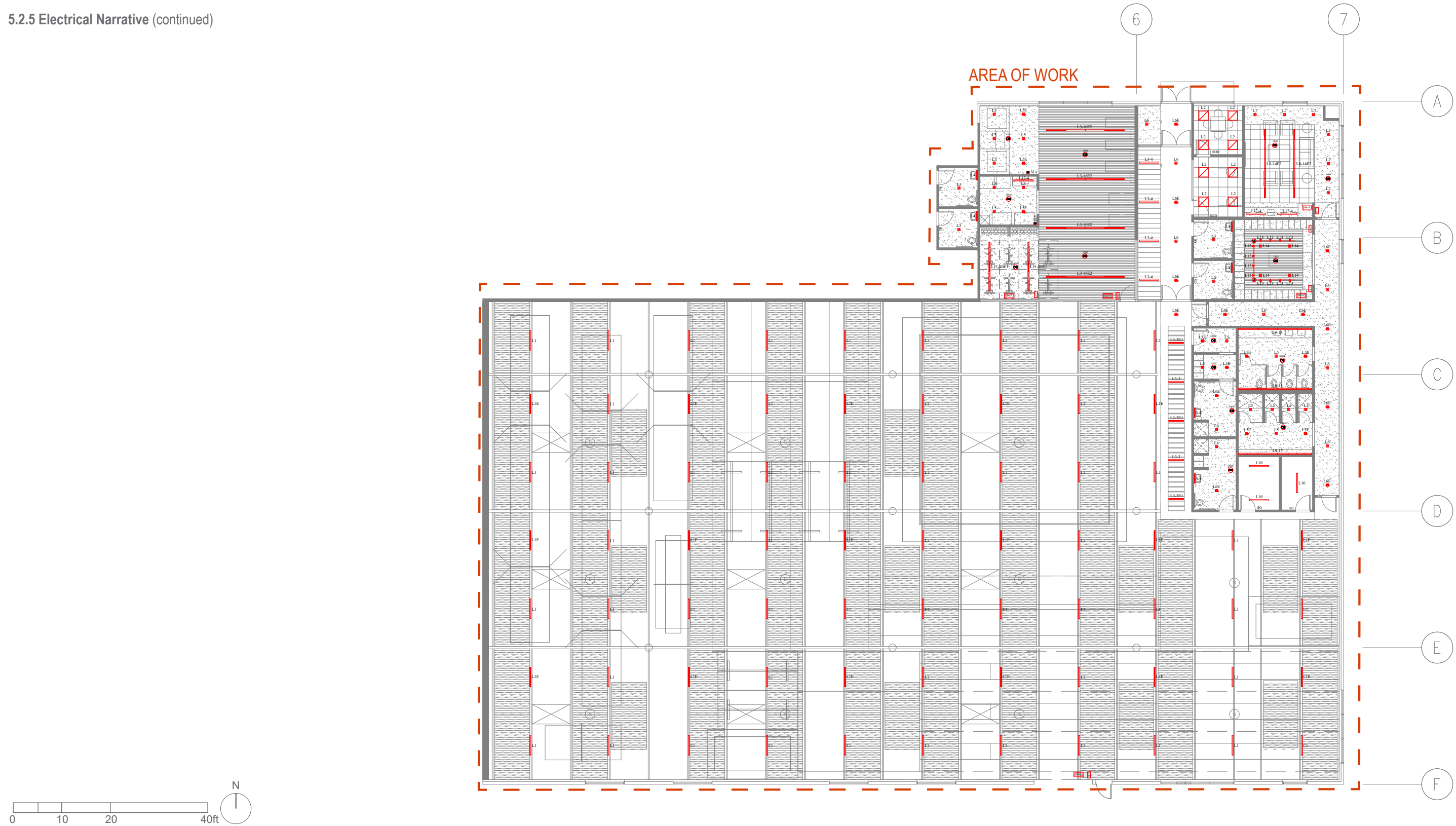
120V/1Ph Power (2.2 Amps)

Wall-Mount Electric Cabinet Unit Heater (Main Entry Vestibule) - Basis of Design: Q-Mark Model

AWH3150F (120V/1Ph, 1.5 KW)

Chalk Eaters (Qty. 4): Electrical Requirements 120V/1Ph, 20A, cord connected

5.2.5 Electrical Narrative (continued)



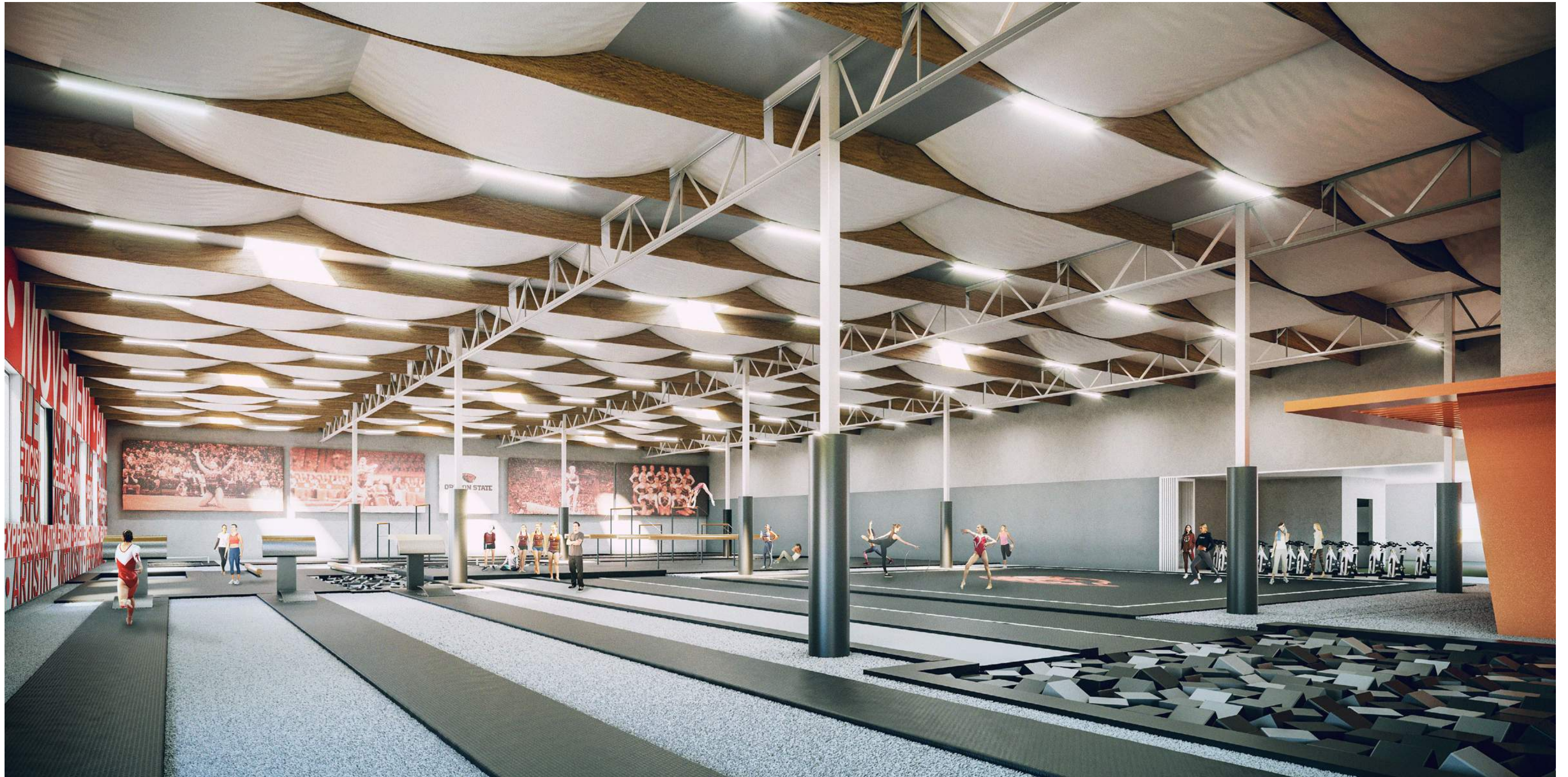
5.3 Conceptual Images



Practice Studio View 1



5.3 Conceptual Images



Practice Studio View 2

5.4 Cost Estimate Summary

Oregon State University Gymnastics Practice Facility  
 Building & Sitework  
 Corvallis, Oregon

Pre-design Cost Estimate R1  
 March 29, 2019  
 19-004.110

**BUILDING & SITEWORK Construction Systems and Assemblies Summary**

Enclosed Area 20,654 SF

		Base Bid	
		\$/SF	\$x1,000
A10	Foundations	46.32	957
A20	Basement construction	-	0
<b>A</b>	<b>SUBSTRUCTURE</b>	<b>46.32</b>	<b>957</b>
B	Shell		
B10	Superstructure	4.85	100
B20	Exterior enclosure	7.88	163
B30	Roofing	2.61	54
<b>B</b>	<b>SHELL</b>	<b>15.35</b>	<b>317</b>
C	Interiors		
C10	Interior construction	35.22	727
C20	Stairs	-	-
C30	Interior finishes	27.03	558
<b>C</b>	<b>INTERIORS</b>	<b>62.25</b>	<b>1,286</b>
D	Services		
D10	Conveying systems	-	-
D20	Plumbing	14.20	293
D30	Heating, Ventilation and Air Conditioning (HVAC)	26.20	541
D40	Fire protection systems	7.50	155
D50	Electrical	30.52	630
<b>D</b>	<b>SERVICES</b>	<b>78.42</b>	<b>1,620</b>
E	Equipment and furnishings		
E10	Equipment	0.15	3
E20	Furnishings	2.18	45
<b>E</b>	<b>EQUIPMENT AND FURNISHINGS</b>	<b>2.32</b>	<b>48</b>
F	Special construction and demolition		
F10	Special construction	-	-
F20	Selective demolition	3.00	62
<b>F</b>	<b>SPECIAL CONSTRUCTION AND DEMOLITION</b>	<b>3.00</b>	<b>62</b>
G	Building sitework		
G10	Site preparation	-	-
G20	Site improvements	-	-
G30	Site civil/Mechanical utilities	-	-
G40	Site electrical utilities	-	-
G90	Other site construction	-	-
<b>G</b>	<b>BUILDING SITEWORK</b>	<b>-</b>	<b>-</b>
<b>SUBTOTAL DIRECT COST</b>		<b>207.66</b>	<b>4,289</b>

Oregon State University Gymnastics Practice Facility  
 Building & Sitework  
 Corvallis, Oregon

Pre-design Cost Estimate R1  
 March 29, 2019  
 19-004.110

**BUILDING & SITEWORK Construction Systems and Assemblies Summary**

Enclosed Area 20,654 SF

		Base Bid	
		\$/SF	\$x1,000
Contingencies			
	Design & Estimating Contingency	10.00%	20.77 429
	Construction/Risk Contingency	0.00%	- -
	Escalation Contingency	6.71%	13.93 288
<b>SUBTOTAL SUBCONTRACT COST</b>			<b>242.35 5,006</b>
General			
	NSS/Job Services/Site Logistics	0.00%	- -
<b>SUBTOTAL</b>			<b>- -</b>
General			
	General Conditions	10.00%	24.24 501
	Fee	3.50%	8.48 175
	Preconstruction Fees - EXCLUDED	0.00%	- -
<b>SUBTOTAL</b>			<b>32.72 676</b>
<b>SUBTOTAL CONSTRUCTION COST</b>			<b>275.07 5,681</b>
Permits, Insurances, Bonds & Taxes			
	Bid Document Reproduction	0.00%	- -
	GC/CM P&P Bond	1.50%	4.13 85
	GL Insurance	1.50%	4.13 85
	Builder's Risk Insurance	0.00%	- -
	Plan Review - EXCLUDED	0.00%	- -
	Permit fees - EXCLUDED	0.00%	- -
	Allow for Green Energy Technology	1.50%	- 88
<b>TOTAL PROBABLE CONSTRUCTION COST</b>			<b>287.57 5,940</b>

Full Cost Estimate is included in Appendix.

## 1.0 executive summary

### 1.3 Cost Saving and Phasing Summary

Fees and Charges) totaling approximately 60% of total CMCG cost equals \$3,652,720. The result is estimated overall total project cost is \$9,737,190.

This overall total project cost exceeds the current available funds and projected opportunities to raise additional funds. To address the estimated overall total project costs and the short fall in funds, the project team identified several cost saving opportunities and discussed the potential options to execute the project in phases.

Cost savings strategies include the following items along with an estimated overall project savings if indeed the savings can be realized:

- 1) Reduce the quantity of enlarged exterior openings by only enlarging the new entry on the north side of the building. \$110,780.
- 2) Reduce the quantity of removed existing slab on grade and recess pit included to account for the Floor, Tumble Strip and Rod Strip. The finished floor for these elements would then be raised and sit on top of the existing slab on grade. \$287,710.
- 3) Eliminate 3 of 6 total added skylights. \$35,000.
- 4) Eliminate requirement to meet OSU Standard Electrical upgrade. \$41,410.
- 5) Reduce the overall cost allocation for interior construction by 10%. \$178,040.

Taking all of the above overall project cost saving strategies the reduction in overall cost is \$674,690 and reduces the estimated overall project cost to \$8,665,330. This reduced cost is still in excess of the available funds and fund raising opportunity. As result it is recommended that phasing the project be consider in order make the gymnastics studio available for the team as soon as possible.

The included diagrams show two options to deliver the project in 2 phases. Phase 1 Option A would build the gymnastic practice studio while leaving the exiting entry/office area and restrooms that are currently located in the warehouse zone as is. This phase would include adding 2 restroom facilities for the adjacent tenant. Phase 2 would build out the required support spaces including offices, locker room, coach's offices and therapy area. This option reduces the Phase 1 estimated construction cost to well with in budget at approximately \$Given the extent of the gap between budget, which includes fund raising opportunities and the included cost estimate, with out further study, it does not appear feasible to include the restroom and locker room area. We estimate that a phased approach could reduce the initial overall cost of the project to approximately \$6,410,000 due the significant reduction is Interiors and Services cost. A concern with this option that the eventual cost to complete the project with Phase 2, we be well above the current estimate to complete the ideal project represented by the Study. Additionally, Option A compromises the initial use and the impact on the gymnastics studio to complete Phase 2 would be significant. in addition to the above listed cost savings strategies.

As a result of the inital costs for Phase 1 Option A being well below budget and impact of Phase 2 work we developed Phase 1 and 2 Option B which demolishes the existing restroom in the warehouse area and completes the new locker room and shower area. This will allow the future construction of Phase 2 to be cleanly separated from the gymnastics studio. We estimate that a phased approach could reduce the initial overall cost of the project to approximately \$8,161,500. Refer to the adjacent diagrams for phasing concepts. To ensure the Phasing option B is successful, cost saving strategies will have to be integrated early in the next design phase to meet the project budget.

### 1.4 Phasing Diagrams

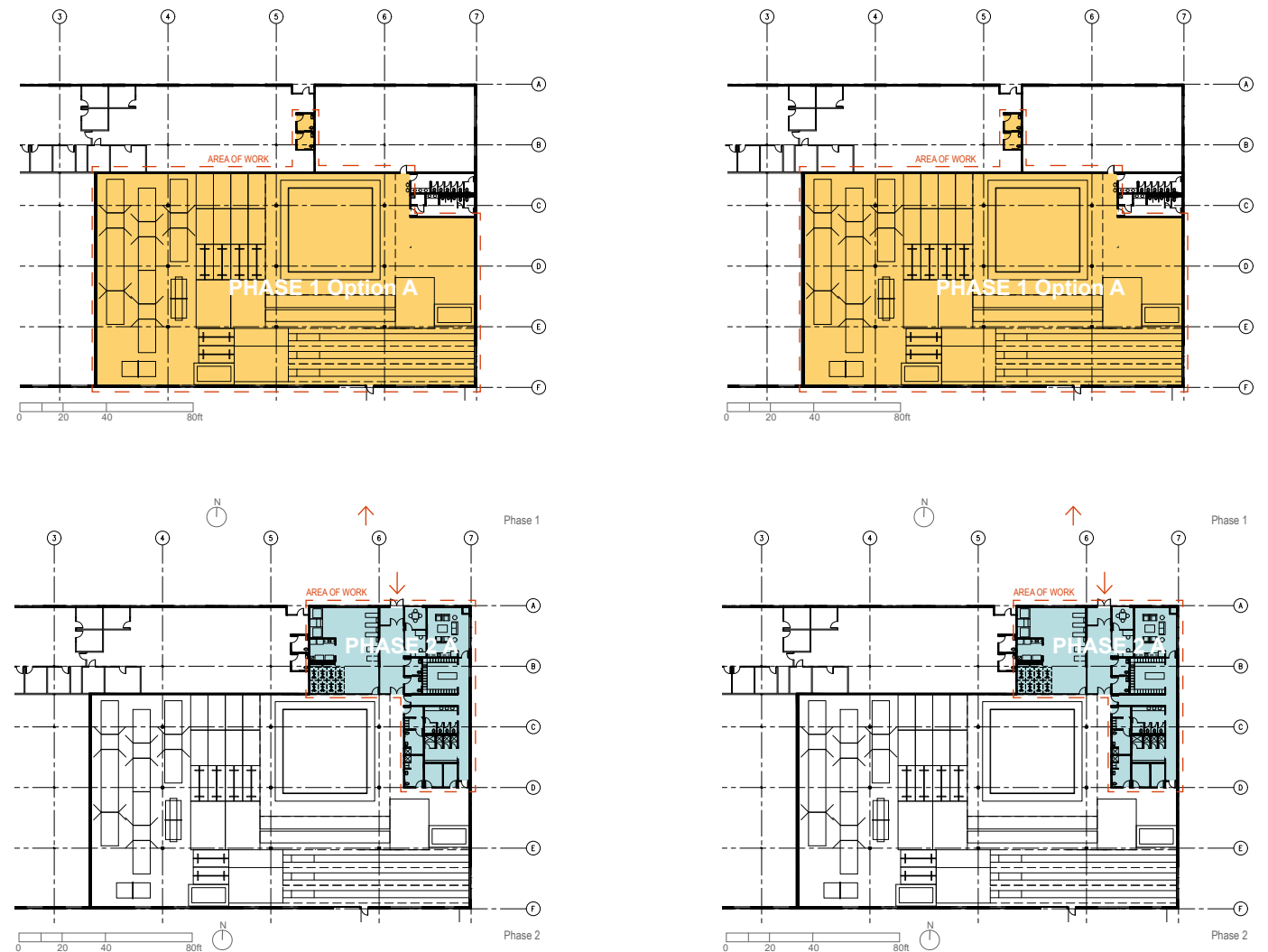


EXHIBIT 3



107 SE Washington St., Ste. 228  
Portland, Oregon 97214  
503 724 0111  
woofterarchitecture.com

meeting notes

**Project:** Oregon State University  
Gymnastics Practice Building – Feasibility Study

**Regarding:** Meeting 1 – Project Kick Off

**Location:** Gill Colosseum

**Date of Meeting:** March 07, 2019

**Attendees:** Libby Ramirez (LR), OSU-CPD                      Wills DeWitt (WD), w+a  
Dan Bartholomae (DB), OSU-ATH                      Miles Woofter (MW), w+a  
Michael Chaplin (MC), OSU-ATH                      Brian Amato (BA), OSU-ATH  
Tanya Chaplin (TC), OSU-ATH                      Ryan Bucher (RB), OSU-ATH  
Marianne Vydra (MV), OSU-ATH

Meeting notes are organized by meeting number/section number/item number and collected by according to issue/topic/action versus sequence of meeting. Please communicate any corrections or additions to the Architect within one week of issue.

**Mtg#/Sec#/Item#                      Issue/Topic/Action                      Responsible**

1. Overview

1.1.1	<p><u>Feasibility Study Goals</u></p> <ul style="list-style-type: none"> <li>OSU is currently in negotiations to purchase the Research Way Building. As part of that negotiation period, there is a 90 day “due-diligence” period to establish if the building will meet the needs of the OSU Gymnastics Program.</li> <li>w+a will review the existing building space, structure, and systems, and provide 3-4 test fit options to determine if the building will meet the needs of OSU.</li> <li>After the test fit options are reviewed with the project team, a preferred scheme will be selected and developed further. This development will include floor plans, ceiling plans, and conceptual imagery. Architectural, structural, mechanical, plumbing, electrical, and acoustical diagrams and narratives will also be generated. In addition, a conceptual cost estimate for the project will be generated.</li> <li>OSU is currently reviewing land use and zoning for the building with the City of Corvallis.</li> </ul>	w+a  OSU/w+a
-------	---	--------------------

2. Vision and Goals

1.2.1	<p><u>Goals</u></p> <ul style="list-style-type: none"> <li>The gymnastics legacy is important and should be highlighted.</li> <li>Alumni engagement is important, and alumni should feel at home in the new space.</li> <li>The gymnastics program is family oriented and has a strong sense of community.</li> <li>The broader community and donors should also feel at home in the building.</li> <li>Gymnastics is a unique and beautiful expression of athleticism and art. This should be emphasized with the project.</li> <li>OSU Gymnastics views their community as the team, OSU students, faculty, and staff, Corvallis, Salem, Portland and the greater northwest region.</li> <li>The facility should accommodate regional training camps.</li> <li>The facility will be utilized year-round. During the summer, OSU will host camps. This gives student athletics employment opportunities, engages the community, and helps with recruitment.</li> <li>The facility should help with recruitment. The facility needs to have comparable equipment to private clubs and peer institutes. In addition, the facility should “wow” people visiting.</li> <li>The facility should allow for learning at various levels of development and during various stages of recovery from injury. This will help unite the team so no one feels left out from practice and help improve athletes faster.</li> <li>Time and efficiency is important. The off-campus nature of this building creates loss in time during the commute from campus to the Research Way building. Athletes typically train for 20-26 hours a day. Having a facility with little to no overlap of spaces/equipment, allows for more efficient training.</li> <li>The facility should accommodate 24 athletes training.</li> <li>The facility should feel like a university facility and not a club facility.</li> <li>There should be pride in the new facility.</li> </ul>	
1.2.2	<p><u>Questionnaire</u></p> <ul style="list-style-type: none"> <li>Questionnaire has been completed and return. Responses were reviewed in meeting.</li> </ul>	
1.2.3	<p><u>Gladys Valley Center</u></p> <ul style="list-style-type: none"> <li>The gymnastics facility is currently housed in the Gladys Valley Center. The training needs of a modern student athlete have out grown this facility.</li> <li>GVC has charm and a rich history but has many challenges.</li> <li>It is difficult to maintain temperatures in GVC due to no insulation and single pane windows.</li> <li>The tight spaces and overlapped training areas in GVC create safety concerns for student athletes.</li> </ul>	

3. Precedent Review

1.3.1	<u>Precedent Review</u>	<ul style="list-style-type: none"> <li>LSU facility is considered the premier facility in college gymnastics training facility. OSU can provide drawing for facility.</li> <li>Additional facilities were reviewed and discussed in meeting.</li> </ul>
-------	-------------------------	---

4. Program

1.4.1	<u>Staples Study</u>	<ul style="list-style-type: none"> <li>OSU previously looked at another building for the Gymnastics Practice Facility. A test fit for the practice space was laid out and provided to the team. The amount and types of equipment included in the Staples Test fit is the minimum equipment needed to create a facility that is comparable to peer institutes and club facilities that many of the student athletes are accustomed to.</li> </ul>
1.4.2	<u>Program</u>	<ul style="list-style-type: none"> <li>Priority should be given to the student athlete space.</li> <li><u>Site:</u> Project should be able to accommodate 30 parking stalls. It is expected that most student athletes and coaches will drive to the facility. The Beaver Bus does not currently serve this area but may be available in the future. Local transit is available. Biking should be an option. Students will visit the facility once a day during the training period.</li> <li><u>Reception:</u> The reception area is the opportunity to make the first impression of the facility. It should be inspiring and highlight the legacy and history of the gymnastics program. The reception area is not going to be staffed. Video and other displays may be used to celebrate individual sport achievements.</li> <li><u>Branding and Graphics:</u> Branding and graphics will be important in the space.</li> <li><u>Viewing Area:</u> A viewing area outside of the studio for guests to view the practice space should be provided. It should be acoustically separated from the practice space and accommodate a small group – 20 people.</li> <li><u>Locker Room:</u> Locker room should accommodate 24 student athletes.</li> <li><u>Therapy and Cardio:</u> A small therapy and cardio room should be provided. This will be supplemental to the facilities already provided on OSU's campus. The therapy space should provide a hydro tube for cold water therapy. Ideally this would be an in-ground plunge pool and accommodate the full team at once. A small enclosed meeting space should be provided adjacent to therapy for one-on-one conversations. Taping tables should be provided.</li> <li><u>Team Meeting Room:</u> A team meeting space should be provided and accommodate 32 people. This space will serve as a meeting room, a place to review videos of the practice, and a media room for journalists.</li> <li><u>Offices:</u> Coaches and support staff offices will remain at OSU. However, a small open office area for 2-3 workstations should be provided. This space should include an enclosed meeting space for one on one meetings.</li> <li><u>Laundry:</u> A small laundry room should be provided.</li> </ul>

		<ul style="list-style-type: none"> <li><u>Nutrition Bar:</u> A small kitchenette should be provided.</li> <li><u>Team Lounge:</u> A team lounge should be provided and allow for space for students to work on homework, use a computer, and relax.</li> <li><u>Studio Space:</u> Equipment from the Staples Building test fit should be referenced in laying out facility.             <ul style="list-style-type: none"> <li>Practice Floor – it is ideal to recess floor into slab to prevent movement.</li> <li>Tumbling Strip – land in foam pit and resi pit</li> <li>Rod Floor - land in foam pit and resi pit</li> <li>Tumble Track - land in foam pit and resi pit</li> <li>8 balance beams – 4 high, 4 low, options to dismount to resi pit and foam pit.</li> <li>Bars: 3 uneven bars. 1 uneven bar with dismount into foam pit. 1 high bar with dismount into foam pit. 1 bar trampoline. 1 trench bar.</li> <li>Vault: 3 vaults – land in foam pit and resi pit. Vault floor should be raised on a wood athletic floor and not be placed directly on the concrete floor.</li> <li>Trampolines: 2 trampolines, land in foam pit and resi pit.</li> </ul> </li> <li><u>Mechanical System:</u> Mechanical system should meet code for temperature range.</li> <li><u>Acoustics:</u> Gymnastics training facility should be acoustically isolated as much as practical from remainder of building. Practice space should have acoustic absorption for sound reverberation control. A sound system will be provided.</li> </ul>
--	--	---

5. Schedule and Next Steps

1.5.1	<ul style="list-style-type: none"> <li>W+a will visit the Research Way Building with consultant team on 3/7.</li> </ul>	w+a/03-07
1.5.2	<ul style="list-style-type: none"> <li>Architectural concepts for OSU review.</li> </ul>	w+a/03-14
1.5.3	<ul style="list-style-type: none"> <li>Preferred concept to be developed based on 03/14 input by Tuesday 3/19.</li> </ul>	w+a/03-19
1.5.4	<ul style="list-style-type: none"> <li>Consultant work shop to review and incorporate systems – all consultants.</li> </ul>	w+a/03-21
1.5.4	<ul style="list-style-type: none"> <li>Concept design – floor plan, ceiling plan, systems diagrams and narratives complete by 03/28.</li> </ul>	w+a/03-28
1.5.5	<ul style="list-style-type: none"> <li>Cost estimate complete by 03/29.</li> </ul>	w+a/03-29
1.5.6	<ul style="list-style-type: none"> <li>Draft study to OSU by 04/02.</li> </ul>	w+a/04-02
1.5.7	<ul style="list-style-type: none"> <li>Final study and renderings to OSU 04/05-04/12.</li> </ul>	w+a/04-05

End of Notes



107 SE Washington St., Ste. 228  
Portland, Oregon 97214  
503 724 0111  
woofterarchitecture.com

meeting notes

**Project:** Oregon State University  
Gymnastics Practice Building – Feasibility Study

**Regarding:** Meeting 2 – Study Workshop #1

**Location:** Gill Colosseum Room 110

**Date of Meeting:** March 14, 2019

**Attendees:** Libby Ramirez (LR), OSU-CPD  
Dan Bartholomae (DB), OSU-ATH  
Michael Chaplin (MC), OSU-ATH  
Tanya Chaplin (TC), OSU-ATH  
Marianne Vydra (MV), OSU-ATH

Brian Amato (BA), OSU-ATH  
Ryan Bucher (RB), OSU-ATH  
Wills DeWitt (WD), w+a  
Miles Woofter (MW), w+a

Meeting notes are organized by meeting number/section number/item number and collected by according to issue/topic/action versus sequence of meeting. Please communicate any corrections or additions to the Architect within one week of issue.

Mtg#/Sec#/Item#	Issue/Topic/Action	Responsible
<b>1. General Discussion</b>		
2.1.1	Generally discussed US Gymnastic Association standards. wa to review standards  Soft cost specific to gymnastics equipment – apparatus, matts, foam pads, resi-pads. Typically Items not “attached”. OSU gymnastics/Athletic department will provide list of equipment. Reviewed Owner Furnished Contractor Installed (OFCl)  Discussed opportunity to hold Donor Events, Team Meetings, Recruit Dinners – multi-purpose events in video, classroom.	DW, MW ongoing BA, RB, 03/20/19 closed

2. Precedent Review

2.2.1	<p>LSU visit:</p> <ul style="list-style-type: none"> <li>Above ground hydrotherapy tub is ok. Portland State University utilized Grimm tub, which is the same manufacturer used at LSU. <a href="https://grimmscientific.com/">https://grimmscientific.com/</a></li> </ul>	
-------	--	--

	<ul style="list-style-type: none"> <li>Team area at LSU was the most used space</li> <li>Good separation of space for camp or club use from LSU Gymnastics team use</li> <li>Training/cardio connected to studio. Use of movable glass walls for connection is successful</li> <li>Tiered film room for 30 athletes</li> <li>Access control – key card or fob access to facility for student athletes</li> <li>Hydro tub has two chambers. One is hot one is cold.</li> <li>Locker room has 2 points of access and was a positive of the layout.</li> <li>Carpet flooring is provided throughout practice studio when mats are not present.</li> <li>Chalk stations are located with chalk exhaust system above to reduce spread of chalk dust.</li> </ul>	
2.2.2	Health and safety of student athletes is the priority. Safety in landing, running and jumping and fall safety/protection are all essential. Recessed or raised floor and pit systems to reduce impact. Various training and fall protection apparatus is also critical to assist with injured athlete recovery.	
2.2.3	wa will complete precedent pages for final report with a focus on LSU and the institutions included in the OSU Gymnastics Center document.	MW WD 4/12/19

3. General apparatus review

2.3.1	Mounting and anchoring of equipment to floor. Equipment likely OFCl primarily for anchoring.	
2.3.2	<p>Generally discussed gymnastic floor and apparatus systems:</p> <ul style="list-style-type: none"> <li>Rod Floor – suspended fiberglass rods span perpendicular to running track</li> <li>Tumble Track – suspended flooring system. Preferred manufacturer is Ross or AAI Equipment. wa to review. OSU to confirm/provide manufacturer information.</li> <li>Tumble Strip = same system as Floor Exercise.</li> <li>Pits: typically pit is designed with frame at 1-2’ above bottom to hold resi-pad and foam above pit floor.</li> <li>Balance Beam. 8’ clearance on sides, 27.5’ for run-up mount. Matts are actually 15’-6”</li> <li>Uneven Bar. Matts on both ends of UB are 8’x16’ with 4’x7’-6” spacer matt to accommodate Uneven Bar vertical attachment.</li> <li>Vault: 3’ wide runway with 30” clear on each side. 82-86’ runway</li> <li>At this time, special/custom order colors for floor mats are not desired.</li> </ul>	MW, WD, BA 04/05/19

4. Plan Diagram Review

2.4.1	<p><u>Option 1</u> Uses all of the potential available lease space of approximately 2,500 sf.</p>	
-------	---	--

	<p>Creates "L" shaped area for support spaces to maintain rectangular gymnastics studio and separate meeting/office area from studio/locker/therapy and cardio rooms.</p> <p><u>Studio</u></p> <ul style="list-style-type: none"> <li>Gymnastics Studio includes all program apparatus other than Uneven Bars. Only 2 (two) Uneven Bars provided. This is not ideal. Can offset UB to in order to add 1(one) set.</li> <li>Could compromise tramp pits in order to add UB.</li> </ul> <p><u>Therapy</u></p> <ul style="list-style-type: none"> <li>Ice room to large</li> <li>Meeting = exam room</li> <li>Ideally would like to have therapy open or with views to studio</li> </ul> <p><u>Option 2</u></p> <p>Uses a smaller portion of the potential available lease space, approximately 1,600 sf of the available 2,500 sf. Creates a square of program area for the support spaces resulting in an "L" shaped gymnastics studio</p> <p><u>General comments:</u></p> <ul style="list-style-type: none"> <li>Preferred team spaces to option 1</li> <li>Separation of public from team spaces is important</li> <li>Connection of cardio and therapy to studio is important and not as successful as option 1</li> </ul> <p><u>Studio:</u></p> <ul style="list-style-type: none"> <li>More apparatus are compromised and orientation to pits not as successful</li> <li>6 Balance Beam vs 8</li> <li>3 sets of Uneven Bars</li> </ul> <p><u>Option 3</u></p> <p>Prioritizes the Studio and provides all apparatus in a space that utilizes all of the 2,500 sf warehouse space. Assuming all of the support space is required, consider taking the additional office space to the north of the studio and not re-leasing this area to another tenant.</p> <p><u>General comments:</u></p> <ul style="list-style-type: none"> <li>Unsupervised hydro is an issue. Need to locate with Therapy.</li> <li>Team room needs to include nutrition station/counter/refrigerators, etc.</li> </ul> <p><u>Studio:</u></p> <ul style="list-style-type: none"> <li>Studio is priority and accounts for all apparatus/equipment.</li> <li>Studio could be laid out more efficiently, especially at Uneven Bars. Could compromise some clearances and run-up space. Could compromise on tramps, but other apparatus/quantity is necessary</li> </ul> <p><u>Next concept iterations to consider:</u></p> <ul style="list-style-type: none"> <li>Storage – need a small storage room</li> <li>Also, diagrams need to start to incorporate IT/Electrical/Mechanical</li> <li>Office areas can be smaller in all concept options</li> <li>Team area is considered more important than lockers</li> <li>Team and meeting/video room could be one room</li> </ul>	
--	--	--

	<ul style="list-style-type: none"> <li>Visibility from the exterior is an issue to consider.</li> </ul>	
--	---	--

**5. Schedule and Next Steps**

2.5.1	Cost – Rough Order of Magnitude only is needed by Friday March 29 Final Study and cost can follow early in April	MW 3/29/19
2.5.2	Draft Study including ROM will be provided on the 29th	MW 3/29/19
2.5.3	Given input today need to schedule draft review of schemes next week on 3/20 or 3/21 to established a preferred scheme for the Draft	MW 03/15/19
2.5.4	Consultant work session scheduled for 3/21	
1.5.4	Toured Gill Coliseum locker rooms following meeting – very helpful – Thank you!	

End of Notes





107 SE Washington St., Ste. 228  
Portland, Oregon 97214  
503 724 0111  
woofterarchitecture.com

meeting notes

**Project:** Oregon State University  
Gymnastics Practice Building – Feasibility Study  
**Regarding:** Meeting 3 – Study Workshop #2 Draft Study Review  
**Location:** Gill Colosseum Room 110  
**Date of Meeting:** April 2, 2019  
**Attendees:** Libby Ramirez (LR), OSU-CPD                      Brian Amato (BA), OSU-ATH  
Dan Bartholomae (DB), OSU-ATH                      Ryan Bucher (RB), OSU-ATH  
Michael Chaplin (MC), OSU-ATH                      Scott Barnes (SB), OSU-ATH  
Tanya Chaplin (TC), OSU-ATH                      Wills DeWitt (WD), w+a  
Marianne Vydra (MV), OSU-ATH                      Miles Woofter (MW), w+a

Meeting notes are organized by meeting number/section number/item number and collected by according to issue/topic/action versus sequence of meeting. Please communicate any corrections or additions to the Architect within one week of issue.

Mtg#/Sec#/Item#	Issue/Topic/Action	Responsible
<b>1. General Discussion</b>		
3.1.1	NCAA Regionals this weekend in Corvallis.	
<b>2. Draft Study Review</b>		
3.2.1	Based on input received from OSU on plan/test fit update sent on 3/20 and phone conversation 3/21 reviewed study content in general and then focused on the preferred concept plan. <ul style="list-style-type: none"> <li>Draft written content will be refined and updated.</li> <li>Precedent content and meeting notes will be included in appendix</li> <li>Discussed ceiling treatment with Lapendary acoustic panels. wa to forward product manufacturer information</li> </ul> wa to integrate chalk stations/chalk exhaust system above to reduce spread of chalk dust which has not been addressed in the draft or cost.	WD 4/4/19 MW 4/12/19

	<ul style="list-style-type: none"> <li>Cleaning of facility and chalk – Lapendary system is a concern. A better exhaust system will help but this will be an ongoing maintenance concern.                             <ul style="list-style-type: none"> <li>OSU requested additional information on lapendaries including images of acoustical lapendaries installed, finish material options, and maintenance information.</li> </ul> </li> <li>Generally reviewed technical issues associated with pits:                             <ol style="list-style-type: none"> <li>Pit edging needs to padding – resi-pads and clearance maintained.</li> <li>Steel angle and wire frame at foam pits should be held 12” above pit slab or bottom.</li> <li>Pit slabs will be sloped to drain or sloped to sump pump. Higher pits will be gravity drained to deeper sump pumps.</li> <li>Pits will be water proofed from the backside of form with expandable bentonite water proofing and water stopped at concrete joints. Below slab water proofing will also be present due to the low water table.</li> </ol> </li> <li>Reviewed architectural ceiling plans as opportunity to make facility feel like an NCAA building versus a club team gym.</li> <li>OSU requested that Study list project as being PV ready.</li> </ul>	MW 4/12/19
3.2.2	Discussed narratives – OSU Construction Standards (architectural, mechanical and electrical) are noted as not applicable to this project given the location of property and type of building construction. OSU noted that at this juncture in the project this is acceptable in all areas other than Electrical. wa to add note and cost to electrical.	MW 4/12/19
3.2.3	Brian noted that slab depression plans requires a few corrections: <ol style="list-style-type: none"> <li>Note tramp depths at 4'-0”</li> <li>Add resi-pit at Uneven Bars</li> </ol>	MW 4/12/19
3.2.4	Discussed existing building and potential code (zoning or building) issues with City of Corvallis: <ul style="list-style-type: none"> <li>OSU Capital Construction team has evaluated the site for required site improvements and included an allowance of \$150,000 – this includes City required street frontage improvements.</li> <li>Signage will need to be reviewed and incorporated with approval from City.</li> </ul>	
3.2.5	Reviewed 3-d model images to address several design items: <ul style="list-style-type: none"> <li>Brand expression on arrival is very important. Needs be clear to recruits that they have arrived on OSU ground and the gymnastics practice facility. Discussed the existing Gladys Valley Bronze sculpture. Sculpture will have to be relocated from Gladys Valley to Gill or Research Way, or potential to another location. OSU to review.</li> <li>Discussed images. Important to include in Study and perhaps larger image with fund raising graphics the 3-d plan view showing the studio and apparatus layout.</li> </ul>	WD 4/12/19 MW 4/12/19

	<ul style="list-style-type: none"> <li>Reviewed existing window openings at studio and concluded that for better of daylight and view to make openings larger by expanding vertically toward the roof system.</li> <li>wa will include multiple screen shot views in the Study from the 3-d model including entry.</li> <li>Leave coiling door as solid but replace for insulation value.</li> <li>Incorporate openness between cardio/therapy and studio with sliding glass door system. Connectedness of studio to therapy very important for recovering athletes.</li> <li>For fundraising most important to prioritize interior views of studio. wa to generate options by Thursday am for review and selection by OSU team by Monday</li> </ul>	<p>WD 4/12/19</p> <p>WD 4/12/19</p> <p>WD 4/12/19</p> <p>WD 4/6/19</p> <p>OSU 4/11/19</p>
3.2.6	Design team and OSU to consider viable opportunities for phasing the project to allow the work the be expedited ASAP while allowing for additional fund raising if possible and necessary. General discussed an option but concluded that potential options could be more effectively addressed at the beginning of the next phase of design.	

**3. Cost Summary, Time Line and Next Steps**

3.3.1	<p>OSU distributed overall project cost summary:</p> <ul style="list-style-type: none"> <li>Direct construction cost is number form initial Study ROM provided 3/29/19</li> <li>Includes CMGC delivery method</li> <li>Includes academic technology and gymnastics equipment</li> <li>Assumes some finance charges and fees</li> </ul> <p>Numbers are within anticipated cost for overall project.</p>	
3.3.2	<p>Overall project schedule generally reviewed:</p> <ul style="list-style-type: none"> <li>Complete current study mid to end of April.</li> <li>Scope of work will require OSU RFQ to Architects / Engineers on OSU Retainer. Typically, an eight (8 -10) week process (create RFQ, Responses to RFQ, Review Responses and select.) to select. Therefore April, May and June</li> <li>Schematic Design start in June or July.</li> <li>CMGC Selection July/August</li> <li>Design and Documentation 6-9 months (July, Aug, Sept, Oct, Nov, Dec 2019 – Best Case, Jan, Feb, Mar 2020 - More realistic)</li> <li>Permitting and bidding expediated by CMGC delivery in construction schedule.</li> <li>Construction 9 months. (Apr, May, June, July, Aug, Sept, Oct, Nov. December 2020) Occupy winter term-January 2021. Fall 2020 very challenging and likely not realistic.</li> </ul>	MW 3/29/19
3.3.3	<p>Study, work to date and project will be teed up at the May board meeting</p> <p>Building is in the procesed of being purchased.</p> <p>Improvements for Gymnastics will officially go to the Board for approval in October</p>	

End of Notes





Oregon State University  
GYMNASTICS PRACTICE FACILITY  
Corvallis, Oregon

PRE-DESIGN  
COST ESTIMATE R1  
March 29, 2019



**JMB CONSULTING GROUP**

4320 29th Avenue W  
Seattle, Washington 98199  
Tel: 206.708.7280

March 29, 2019

Miles Woofter  
Woofter Architects  
107 SE Washington Street  
Suite 228  
Portland, Oregon 97214

**Re: Oregon State University**  
**Subject: Gymnastics Practice Facility**  
**Corvallis, Oregon**

Dear Miles:

In accordance with your instructions, we enclose our cost estimate for the project referenced above. This cost estimate is a statement of reasonable and probable construction cost. It is not a prediction of low bid.

We would be pleased to discuss this report with you further at your convenience.

Sincerely,

Jon Bayles

*JMB Consulting Group LLC 19-004*

Enclosures

***BASIS OF COST ESTIMATE R1***

Conditions of Construction

The pricing is based on the following general conditions of construction

A start date of March 2020

A construction period of 9 months

The general contract procurement method will be hard bid

Pricing assumes a minimum of (3) bidders in all trades

There will not be small business set aside requirements

Pricing assumes all FF&E will be removed, stored and re-installed by Owner

The contractor will be required to pay prevailing wages

***EXCLUSIONS***

Seismic, ADA upgrades or Building envelope upgrades

Upgrades to building to meet OSU design and facilities standards

Site work

Owner supplied and installed furniture, fixtures and equipment

Hazardous material handling, disposal and abatement except as identified

Compression of schedule, premium or shift work, and restrictions on the contractor's working hours

Tap fees, street use fees, electrical consumption charges

Design, testing, inspection or construction management fees

Architectural and design fees

Third party commissioning

Assessments, taxes, finance, legal and development charges

Environmental impact mitigation

Builder's risk, project wrap-up and other owner provided insurance program except as identified

Land and easement acquisition

Also see detail of each estimate

**OREGON STATE UNIVERSITY SUMMARY**

Building Gross GSF		20,654 SF
Direct Construction Cost	\$	4,376,801
Site Improvements	\$	-
<b>SUBTOTAL</b>		<b>4,376,801</b>
Design & Estimating Contingency	\$	428,902
Escalation Contingency	\$	287,671
<b>SUBTOTAL</b>		<b>716,574</b>
Fee	\$	175,196
General Conditions	\$	500,560
Construction/Risk Contingency	\$	-
<b>SUBTOTAL</b>		<b>675,756</b>
GC/CM P&P Bond + GL Insurance	\$	170,441
<b>TARGET CM/GC</b>		<b>5,939,572</b>
<b>\$/SF</b>		<b>287.57</b>

**OVERALL SUMMARY**

	Gross Square Footage	\$ / SF	\$x1,000
<b>Building &amp; Sitework</b>	20,654 SF	287.57	5,940
<b>TOTAL Building &amp; Sitework Construction</b>	<b>20,654 SF</b>	<b>287.57</b>	<b>5,940</b>

appendix - cost estimate

Oregon State University Gymnastics Practice Facility  
 Building & Sitework  
 Corvallis, Oregon

Pre-design Cost Estimate R1  
 March 29, 2019  
 19-004.110

**BUILDING & SITEWORK AREAS**

Areas	SF
Enclosed Areas	
Level 1	20,654
SUBTOTAL, Enclosed Area	<u>20,654</u>
<b>TOTAL GROSS FLOOR AREA</b>	<b><u>20,654</u></b>

Oregon State University Gymnastics Practice Facility  
 Building & Sitework  
 Corvallis, Oregon

Pre-design Cost Estimate R1  
 March 29, 2019  
 19-004.110

**BUILDING & SITEWORK Construction Systems and Assemblies Summary**

Enclosed Area 20,654 SF

		Base Bid	
		\$/SF	\$x1,000
A10	Foundations	46.32	957
A20	Basement construction	-	0
<b>A</b>	<b>SUBSTRUCTURE</b>	<b>46.32</b>	<b>957</b>
B	Shell		
B10	Superstructure	4.85	100
B20	Exterior enclosure	7.88	163
B30	Roofing	2.61	54
<b>B</b>	<b>SHELL</b>	<b>15.35</b>	<b>317</b>
C	Interiors		
C10	Interior construction	35.22	727
C20	Stairs	-	-
C30	Interior finishes	27.03	558
<b>C</b>	<b>INTERIORS</b>	<b>62.25</b>	<b>1,286</b>
D	Services		
D10	Conveying systems	-	-
D20	Plumbing	14.20	293
D30	Heating, Ventilation and Air Conditioning (HVAC)	26.20	541
D40	Fire protection systems	7.50	155
D50	Electrical	30.52	630
<b>D</b>	<b>SERVICES</b>	<b>78.42</b>	<b>1,620</b>
E	Equipment and furnishings		
E10	Equipment	0.15	3
E20	Furnishings	2.18	45
<b>E</b>	<b>EQUIPMENT AND FURNISHINGS</b>	<b>2.32</b>	<b>48</b>
F	Special construction and demolition		
F10	Special construction	-	-
F20	Selective demolition	3.00	62
<b>F</b>	<b>SPECIAL CONSTRUCTION AND DEMOLITION</b>	<b>3.00</b>	<b>62</b>
G	Building sitework		
G10	Site preparation	-	-
G20	Site improvements	-	-
G30	Site civil/Mechanical utilities	-	-
G40	Site electrical utilities	-	-
G90	Other site construction	-	-
<b>G</b>	<b>BUILDING SITEWORK</b>	<b>-</b>	<b>-</b>
<b>SUBTOTAL DIRECT COST</b>		<b>207.66</b>	<b>4,289</b>

appendix - cost estimate

Oregon State University Gymnastics Practice Facility  
Building & Sitework  
Corvallis, Oregon

Pre-design Cost Estimate R1  
March 29, 2019  
19-004.110

**BUILDING & SITEWORK Construction Systems and Assemblies Summary**

Enclosed Area 20,654 SF

		Base Bid	
Contingencies			
Design & Estimating Contingency	10.00%	20.77	429
Construction/Risk Contingency	0.00%	-	-
Escalation Contingency	6.71%	13.93	288
<b>SUBTOTAL SUBCONTRACT COST</b>		<b>242.35</b>	<b>5,006</b>
General			
NSS/Job Services/Site Logistics	0.00%	-	-
<b>SUBTOTAL</b>		<b>-</b>	<b>-</b>
General			
General Conditions	10.00%	24.24	501
Fee	3.50%	8.48	175
Preconstruction Fees - EXCLUDED	0.00%	-	-
<b>SUBTOTAL</b>		<b>32.72</b>	<b>676</b>
<b>SUBTOTAL CONSTRUCTION COST</b>		<b>275.07</b>	<b>5,681</b>
Permits, Insurances, Bonds & Taxes			
Bid Document Reproduction	0.00%	-	-
GC/CM P&P Bond	1.50%	4.13	85
GL Insurance	1.50%	4.13	85
Builder's Risk Insurance	0.00%	-	-
Plan Review - EXCLUDED	0.00%	-	-
Permit fees - EXCLUDED	0.00%	-	-
Allow for Green Energy Technology	1.50%	-	88
<b>TOTAL PROBABLE CONSTRUCTION COST</b>		<b>287.57</b>	<b>5,940</b>

Oregon State University Gymnastics Practice Facility  
Building & Sitework  
Corvallis, Oregon

Pre-design Cost Estimate R1  
March 29, 2019  
19-004.110

CSI	Description	Quantity	Unit	Rate	Total
<b>A - Substructure</b>					
<b>A10 Foundations</b>					
A1020	Special other foundations				
	Underpinning	5	ea	15,000.00	75,000
A1030	Slabs on grade				
	Slab on grade	9,022	sf	9.40	84,807
	Premium for dowels	650	ea	45.00	29,250
	Trench + restore for plumbing	1	ls	15,000.00	15,000
	Trenches, pits & bases				
	Pit walls, concrete	3,820	sf	90.00	343,800
	Pit bottom, concrete	5,926	sf	20.00	118,520
	Pits, waterproofing	9,746	sf	18.00	175,428
	Pits, ladder	1	ls	5,000.00	5,000
	Allow for trenches/sumps	1	ls	15,000.00	15,000
	Excavation, cut/load	688	cy	100.00	68,796
	Haul spoils	894	cy	20.00	17,880
	Backfill walls	136	cy	60.00	8,151
					<b>956,632</b>
<b>B - Shell</b>					
<b>B10 Superstructure</b>					
B1010	Floor construction				
	Misc metals/connectors	8,950	lb	3.70	33,115
	Pads/curbs/misc concrete	20,654	gsf	0.25	5,164
B1020	Roof construction				
	Roof framing				
	Flat roof construction				
	Roof framing allowance	20,654	sf	3.00	61,962
<b>B20 Exterior enclosure</b>					
B2010	Exterior walls				
	Exterior wall construction				
	Upgrade envelope for energy code			EXCLUDED	
	Clean/seal/paint exterior	19,125	sf	2.50	47,813
	Roof Screens			EXCLUDED	
	Canopies			EXCLUDED	
B2020	Exterior windows				

appendix - cost estimate

Oregon State University Gymnastics Practice Facility  
 Building & Sitework  
 Corvallis, Oregon

Pre-design Cost Estimate R1  
 March 29, 2019  
 19-004.110

CSI	Description	Quantity	Unit	Rate	Total
	Glass & glazing Demo+enlarge+new glazing/doors	9	ea	10,000.00	90,000
B2030	Exterior doors				
	Solid exterior doors	EXCLUDED			
	Existing openings				
	Change out hardware	1	ls	20,000.00	20,000
	ADA operators	1	ea	5,000.00	5,000
<b>B30</b>	<b>Roofing</b>				
B3010	Roof coverings				
	New skylight, units	6	ea	9,000.00	54,000
	Upgrade envelope for energy code	EXCLUDED			
	Roof scuttles	EXCLUDED			
	Roof anchors/tie-offs	EXCLUDED			
					<b>317,053</b>
<b>C - Interiors</b>					
<b>C10</b>	<b>Interior construction</b>				
C1010	Partitions				
	Fixed partitions				
	Patch existing partitions	1	ls	20,000.00	20,000
	MS framing + GWB	490	lf	500.00	245,000
	Demising wall	240	lf	937.50	225,000
	Backing and blocking	20,654	sf	0.50	10,327
	Glazed walls	87	lf	845.00	73,515
	Premium for operable glazed walls	32	lf	440.00	14,080
C1020	Interior doors				
	Interior doors, frames & hardware				
	New HM/WD Frames+Doors+Hdwre, per leaf	10	ea	2,250.00	22,500
	Glazed entrance	9	ea	4,000.00	36,000
C1030	Fittings specialties				
	Fabricated toilet partitions				
	Toilet partitions	4	ea	1,100.00	4,400
	Protective guards, barriers & bumpers				
	Wall and corner protection	20,654	sf	0.20	4,131
	Identifying devices				

Oregon State University Gymnastics Practice Facility  
 Building & Sitework  
 Corvallis, Oregon

Pre-design Cost Estimate R1  
 March 29, 2019  
 19-004.110

CSI	Description	Quantity	Unit	Rate	Total
	Signage & graphics	20,654	sf	2.00	41,308
	Amenities and convenience items				
	Toilet & bath accessories				
	Toilet rooms	1	ls	10,000.00	10,000
	Storage room shelving	EXCLUDED			
	Office shelving	EXCLUDED			
	Lockers	18	ea	850.00	15,300
	Fire extinguishers & Cabinets	3	ea	450.00	1,350
<b>C30</b>	<b>Interior finishes</b>				
C3010	Wall finishes				
	Paint	31,010	sf	1.10	34,111
	Patch/repair existing	1	ls	10,000.00	10,000
	Tile	1,872	sf	20.00	37,440
	Wall pads, etc	20,654	sf	0.25	5,164
C3020	Floor finishes				
	Flooring				
	Floor prep/protect/level	20,654	sf	1.50	30,981
	Prep concrete floors to remain	11,632	sf	3.00	34,896
	Tile	1,326	sf	16.00	21,216
	Resilient flooring including moisture mitigation	1,818	sf	18.00	32,724
	Carpet/VCT/Polish conc	7,200	sf	6.00	43,200
	Bases	1	ls	9,800.00	9,800
C3020	Ceiling finishes				
	Ceiling finishes				
	ACT	675	sf	8.50	5,738
	GWB	2,862	sf	20.00	57,240
	Wood/metal	1,690	sf	45.00	76,050
	Paint existing OTS	20,654	sf	3.50	72,289
	Lapendary	7,000	sf	12.50	87,500
					<b>1,285,759</b>
<b>D - Services</b>					
<b>D20</b>	<b>Plumbing</b>				
	Sanitary fixtures and connection piping	20,654	sf	4.45	91,910
	Sanitary waste, vent and service piping	20,654	sf	6.75	139,415
	Water treatment, storage and circulation	20,654	sf	1.05	21,687



appendix - cost estimate

Oregon State University Gymnastics Practice Facility  
 Building & Sitework  
 Corvallis, Oregon

Pre-design Cost Estimate R1  
 March 29, 2019  
 19-004.110

CSI	Description	Quantity	Unit	Rate	Total
	Gas distribution	20,654	sf	0.95	19,621
	Surface water drainage		N/A		
	Trade demolition	20,654	sf	0.75	15,491
	Testing	20,654	sf	0.25	5,164
<b>D30</b>	<b>Heating, Ventilation and Air Conditioning (HVAC)</b>				
	Air handling equipment	20,654	sf	5.20	107,401
	Add for chalk eaters	4	ea	5,000.00	20,000
	Air distribution and return	20,654	sf	10.10	208,605
	GRD's and Louvers	20,654	sf	0.65	13,425
	Controls	20,654	sf	4.00	82,616
	Independent exhaust ventilation	20,654	sf	1.90	39,243
	Ceiling fans	20,654	sf	1.45	29,948
	Supplemental heating and cooling	20,654	sf	0.18	3,718
	Trade demolition	20,654	sf	1.25	25,818
	Testing, adjusting and balancing	20,654	sf	0.50	10,327
<b>D40</b>	<b>Fire protection systems</b>				
D4010	Fire protection sprinkler systems				
	Fire sprinkler systems - Contractor Design/Build				
	Wet pipe sprinkler system, above ceiling	20,654	sf	3.00	61,962
	Wet pipe sprinkler system, below ceiling	20,654	sf	4.50	92,943
<b>D50</b>	<b>Electrical</b>				
D5010	Electrical service and distribution				
	Main service and distribution, etc.	20,654	sf	2.50	51,635
	Emergency or uninterrupted power (Lighting inverte	20,654	sf	0.25	5,164
	Machine and equipment power	20,654	sf	2.25	46,472
	Add for chalk eaters	4	ea	1,250.00	5,000
	User convenience power	20,654	sf	2.00	41,308
	Trade demolition	20,654	sf	1.00	20,654
	Testing	20,654	sf	0.55	11,360
	Grounding	20,654	sf	0.20	4,131
	Add for OSU Standards to TI only, if applicable	20,654	sf	0.45	9,294
D5020	Lighting and branch wiring				
	Lighting fixtures including conduit and wire	20,654	sf	10.00	206,540
	Lighting controls	20,654	sf	2.00	41,308
	Add for OSU Standards to TI only, if applicable	20,654	sf	0.60	12,392

Oregon State University Gymnastics Practice Facility  
 Building & Sitework  
 Corvallis, Oregon

Pre-design Cost Estimate R1  
 March 29, 2019  
 19-004.110

CSI	Description	Quantity	Unit	Rate	Total
D5030	Communications and security systems				
	Telephone and communications systems	20,654	sf	2.15	44,406
	Distributed Antenna system	20,654	sf	1.25	25,818
	Television systems	20,654	sf	0.30	6,196
	AV Systems - rough-in	20,654	sf	0.25	5,164
	AV Systems - Equipment and wiring	1	ls	15,000.00	15,000
	Fire alarm system - modify existing	20,654	sf	1.50	30,981
	Access control/intruder detection	20,654	sf	0.90	18,589
	CCTV systems, rough-in and cabling only	20,654	sf	1.00	20,654
	Add for OSU Standards to TI only, if applicable	20,654	sf	0.40	8,262
					<b>1,619,618</b>
	<b>E - Equipment and Furnishings</b>				
<b>E10</b>	<b>Equipment</b>				
E1010	Commercial equipment				
	Laundry & drycleaning equipment		EXCLUDED		
	Washer & dryer set		ls		
E1020	Institutional equipment				
	Visual display boards	1	ls	3,000.00	3,000
	AV, scoring equipment, etc.		FF&E		
E1090	Other equipment				
	Food service equipment		FF&E		
	Residential appliances		N/A		
	Window washing roof anchors/bases		EXCLUDED		
	Allow for OFCI		EXCLUDED		
<b>E20</b>	<b>Furnishings</b>				
E2010	Fixed furnishings				
	Casework	1	ls	40,000.00	40,000
	Window treatments				
	Manual shades	1	ls	5,000.00	5,000
	Interior shades, manual		EXCLUDED		
					<b>48,000</b>
	<b>F - Special Construction and Demolition</b>				
<b>F20</b>	<b>Selective demolition</b>				
	Interior demo	20,654	sf	3.00	61,962
	Hazmat abatement		EXCLUDED		

appendix - cost estimate

Oregon State University Gymnastics Practice Facility  
Building & Sitework  
Corvallis, Oregon

Pre-design Cost Estimate R1  
March 29, 2019  
19-004.110

---

<i>CSI</i>	<i>Description</i>	<i>Quantity</i>	<i>Unit</i>	<i>Rate</i>	<i>Total</i>
					<hr/> 61,962



**OREGON STATE**<sup>TM</sup>  
**GYMNASTICS**

Gymnastics Center

## Oregon State University “Gymnastics Center”

### Mission Statement:

The Oregon State University Gymnastics Program is built upon a proud foundation of excellence and prides itself on bringing out the best in each of its student-athletes in all areas of life.

### Mission Statement Continued:

To **COMPETE** at the highest levels we need BEAVER NATION to come together to bring life to the last piece of the puzzle – The OSU Gymnastics Center – which will provide top-tier **FUNCTIONALITY** and student-athlete wellness to student-athletes while giving us an edge when **RECRUITING** the best talent in the country.

### Mission Statement Continued:

Together the OSU Gymnastics **COMMUNITY** has built a program that we are all proud of, now we need a place we are proud to call home.

Champions – that is who we are,  
Championships – that is what we do,  
the right way, **TOGETHER**

## Project “Pillars”

- Community
- Competitiveness
- Functionality & Student Athlete Wellness
- Recruiting

## Project “Pillars”

### - Community

We are a reflection of our community. It is ingrained in each and every one of our past and present student-athletes just how special this community is and when we are recruiting that is our focal point with potential student-athletes. Our team, our University, our city, our state and beyond – there is nothing like BEAVER NATION

## Project “Pillars”

### - Competitiveness

To remain a competitive program and provide the best opportunity for success to our student athletes, we must keep up with current national trends in college gymnastics. Facilities has become one of the biggest trends for competitive programs around the country and must remain a priority for us in order to win Pac-12 and National Championships

## Project “Pillars”

### - Functionality & Student-Athlete Wellness

Our current facility does not allow us to function as efficiently as possible. With an increased difficulty level in our sport we have outgrown our facility’s capacity to fit all necessary training equipment. Improved functionality and training equipment will help with student-athlete safety and recovery.

## Current Facility: Competitiveness

The Gladys Valley Gymnastics Center at approximately 6,000 sq feet has been serving the team's needs for the past 23 years. While the staff and team has maximized the utilization of the current building's layout, the current facility lacks adequate square footage to keep the team in the most up to date, efficient and safest training environment.

Currently the limited square footage leads to some areas being used by multiple events and/or training groups at the same time. This causes the athletes on different events to have to alternate turns, causing an unavoidable amount of "waiting" for turns. With limited workout hours this alone causes a competitive disadvantage to the program. Additionally without very close monitoring this is a potential safety hazard. This additional safety concern dictates the coaches and athlete having to spend time and energy to avoid possible collisions while working in share spaces.

## Current Facility: Functionality & Student-Athlete Wellness

Additionally the lack of space also dictates that certain industry wide standard pieces of apparatus and safety equipment are only available for limited time or in some cases not at all. These additional training apparatus and stations are vital for two reasons.

First, at any point in the training cycle there may be individual athletes in different stages of learning necessary skills, combinations, and routines. Currently there are multiple events where we can only offer one or two training options at a time when three or more options should always be available. In some cases we can accommodate those varied training setups at times but not at the same time as competitive set ups and in some case not at all because we simply don't have industry wide standard equipment due to space restrictions.

Second minimizing impact on the student athlete's body and bringing back previously injured athletes is vital to any college gymnastics program's success. Limited or lack of availability of varied landing surfaces and certain training apparatus hampers the programs ability to minimize impact on the student athletes body and to get injured athletes back into the lineup.

Although the staff has worked tirelessly to mitigate the impact of these challenges it would make sense to have a facility that works for the program not one the program has to work to overcome.

## Current Facility: Functionality & Student-Athlete Wellness

Student athlete well being and optimum athletic performance are dependent on many factors. Some of those factors are more obviously apparent to the causal observer than others. One of the most subtle but vitally important factors affecting the training of gymnasts is workout environment.

With athletes training in bare feet and form fitting workout clothing, small differentiations in temperature can greatly affect the athletes ability to train effectively and can even compromise their safety. The age and historic construction of the current facility, including things like single pane hand blown glass windows, add to it's character and charm but makes heating/cooling and maintaining a stable optimum training temperature nearly impossible. Lack of air conditioning in the summer months and little or no insulation in the winter months are substantial challenges to providing a proper training environment. Currently the staff and student athletes makes due and the athletes learn to work through the challenges, without complaint, but we expect a high level of performance from them and should hold ourselves to same standard as it relates to the training environment we provide for them.

## Current Facility: Recruiting

Finally, all college gymnastics programs are vying for a limited number of top recruits and as a part of that process every school has to do their best to highlight what their institution and program have to offer prospective student athletes. One of the aspects every school has to present is their facility. Many top recruits come from gyms, that as private businesses, are compelled to offer ever increasingly modern, large, and extensively equipped facilities. In their minds this size and quality of training facility is a necessity to maintain and increase their skill level while in college.

During recruiting the staff highlights the positive aspects of the current facility and cite the success the program has had while training there, but recruits and their families directly compare the facility, size, equipment, layout, environment, and amenities with those institutions competing for their commitment. Oregon State University's website currently states:

*"Oregon State gymnasts train in the Gladys Valley Gymnastics Center, a top-notch gymnastics-only facility."*

With a new facility Oregon State can redefine "top-notch" and have a facility that equals the quality of the program it will house and the institution it represents. A new quality facility will give the staff an additional "selling point" for attracting more five star recruits in order to continue and further the gymnastics program's winning tradition at Oregon State University.

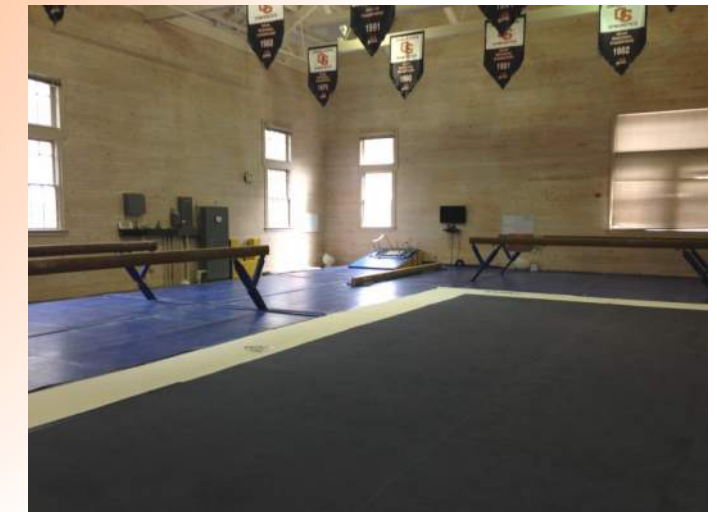


## Current Areas Needing Improvement

- Single Vault Station
  - Limited Number of Athletes per group
  - One landing Surface at any one time limiting skill acquisition and skill mastery
  - Can not accommodate athletes who need to be competition ready and athletes in developmental training phase and/or athletes returning from injury at the same time
- Shared space for Beam and Tramp landings
  - Causes Athletes on separate stations to have to wait for each other to take their turn
  - Causes a “log jam” of athletes and coaches working in the same area

## Current Areas Needing Improvement

- Divided Beam Area
  - Limits coaches view of entire group
  - Inherently splits what should be one training group
  - Limits number of viable mat set ups thereby limiting skill acquisition and skill mastery



## Current Areas Needing Improvement

- Shared space for Floor, Tumbling Strip and Bar landings
  - Causes Athletes on three separate stations to have to wait for each other to take their turn
  - Causes a “log jam” of athletes and coaches working in the same area
  - Presents a safety concern due to intersecting paths of travel during skills and routines



## Current Areas Needing Improvement

- Limited number of bar sets over varied landings
  - Can not use all landing surfaces at any one time
  - Can not accommodate athletes who need to be competition ready and athletes in developmental training phase and/or athletes returning from injury at the same time
- Trench Bar above Ground
  - Limits view of coaches to other athletes in the gym
  - Puts athletes and coaches a a higher level above the floor and increased danger when learning new skills

# UNIVERSITY of ALABAMA

"The Alabama gymnastics program utilizes some of the finest athletics facilities in the nation and those facilities continue to get better all the time. The Frances Smith Gymnastics Practice Facility Long one of the most spacious and well-designed training gyms in the nation, the Frances Smith Gymnastics Practice Facility was revitalized during the summer of 2012, giving it a new look that included all new crimson matting among other amenities. "Since we moved in after the 1996 season, our facility has been one of the best in the nation, but this summer's renovations really took it to a new level," Sarah Patterson said. "When you step inside, you're in a facility worth of champions." The new look includes reminders of the Crimson Tide's rich championship heritage, including larger than life murals of the Tide's 2012 NCAA Championship team and the 2011 Southeastern Conference Championship team, as well as several Alabama legends. The passageway that leads from the gym, also features seven images that are highlighted by words that define Crimson Tide gymnastics' tradition of excellence. "As we were preparing for this renovation, we asked our alumni to help us come with words that defined what Alabama gymnastics was all about," Sarah Patterson said. "We were able to incorporate the seven words that they came up with - tradition, family, excellence, heart, service, champions and leadership - throughout our facilities. I think it's one of the more meaningful testaments to what our program stands for." The Tide's team suite also received some upgrades during 2012, including new hot and cold therapy tubs in the gymnastics training room. "Expanding our training room's therapy room to include both hot and cold tubs is one of those things that will pay immediate dividends in terms of helping our ladies recover after practices," Sarah Patterson said. "It's just another way we can help them be the best that they can be." All aspects of the complex come together in a marriage of form and function that gives Alabama a training edge. That is important to the coaching staff, which spent countless hours in designing the 12,500-square foot gym, but the most important aspect of the space isn't readily apparent to the casual observer. "Our facility was designed to totally minimize and alleviate impact on the gymnasts," Sarah Patterson said. "Not only is it a beautiful facility, but if you look closely, you will notice that it was designed with the gymnasts' bodies in mind." Multiple soft landing pits are available for all four apparatus, giving the Tide the freedom to train skills in enhanced safety. It also gives Alabama the capability of teaching a variety of skills at the same time. "We have the equipment and space to choose how we want to run practice," David Patterson said. "We can split into two or three groups or we can all be on one event if we are having an intra-squad. It gives us the freedom to do that or to have everyone on four different events at the same time. We have the room and the staff to do that and be effective with it. Also, we put enough diverse things into the design of the facility where it is very helpful in terms of teaching new skills." The main practice area includes an in-ground trampoline and tumbling strips. The sound system that drives the Tide's practices is top-notch, surrounding the floor exercise area with the same level of sound Alabama will encounter in a meet setting. The practice gym also includes a state of the art video analysis system, provided by the Tide's booster organization, The Medalist Club. "It is an unbelievable tool in the gym," Bryan Raschilla said. "It's like having three extra coaches." The system has several playback and analysis options that are in use every day in practice and allows the coaches to provide instant feedback on a routine. Having three complete systems in the gym running at all times allows the coaches and gymnasts constant analysis. The system also helps compress the time it takes to make a change to a skill or routine, allowing the gymnasts to get more out of each practice. "It's a huge help for us," senior All-American Ashley Priess said. "It allows you to make corrections quicker, which ultimately helps you improve faster and more efficiently." In addition to a variety of playback options, the coaches can also compare and contrast routines using a variety of tools within the Dartfish Pro software. "If we really want to get in-depth and break down technique and skills we can use the system's SimluCam and StroMotion features which were both used at the Olympic Games," Raschilla said. The video system is just the newest addition to Alabama's state-of-the-art training facility, which is part of the Coliseum annex completed in 1996. The main practice space boasts a design that is at once attractive and extremely functional. The equipment is all arranged to make the flow of practice extremely fluid. There are five uneven bars stations, six balance beams, two vaults and an oversized floor in place. A separate 2,000-square foot aerobics/dance studio is connected to the main practice area and includes the crimson Tide's cardio equipment as well as a separate sound system that is utilized during the Tide's workouts. In addition to a fully equipped training room, the Tide's team suite includes the locker room as well as a team room that includes study and computer stations and a meeting space. "Our goal is to always ensure that our ladies have everything that they need to be successful and our team suite is part of that commitment," Sarah Patterson said. "From a study area and team meeting room to having a training room positioned between our practice gym and competition arena, our facilities are amazing."



Rod Floor & Tumbl Trak



4 Uneven Bar Sets, with varied dedicated landings



In-ground bar trench



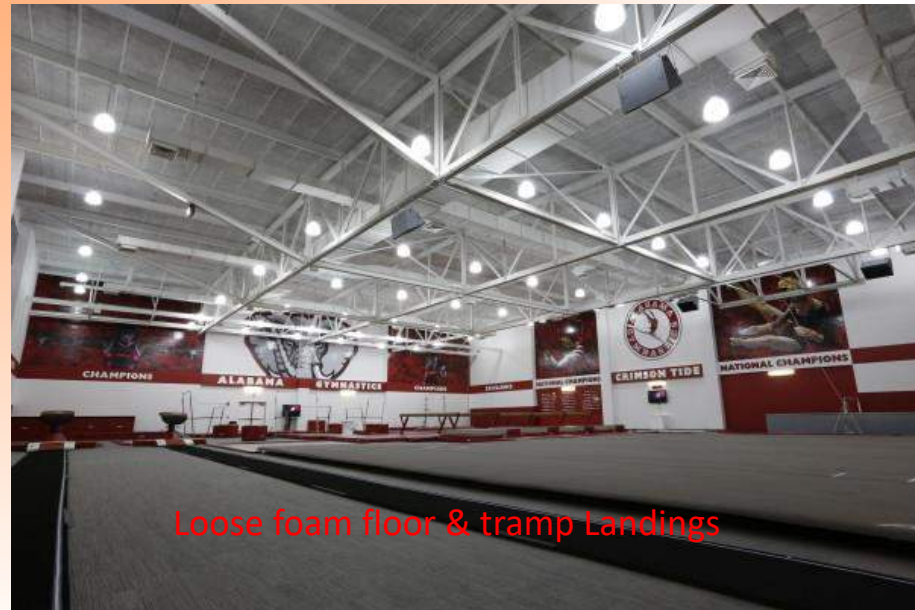
3 Vault Stations w/ varied, dedicated landing surfaces



No Shared Spaces



6 Beam Stations



Loose foam floor & tramp Landings

### UNIVERSITY of MICHIGAN

“The 22,000-square-foot facility, is the practice and training home of the Michigan women’s gymnastics program. The state-of-the-art complex, opened in 2002, has 17,000 square feet of training area which is outfitted with the latest in gymnastics training equipment, including resi- and free-foam pits for each event. There is an additional 5,000 square feet which houses a training room, offices for the coaching staff, a locker room, a team lounge, and a study area for the student-athletes.”



3 Vault Stations, Rod Floor, TumbI Trak



No Shared Space



5 high beams. Dedicated, varied beam landings



Loose foam floor & tramp Landings



4 Uneven Bar Sets, with varied dedicated landings



In-ground bar trench



3 Vault Stations w/ varied, dedicated landing surfaces



UNIVERSITY of GEORGIA

“Not only do Georgia's gymnasts have the opportunity to compete and draw record crowds to Stegeman Coliseum, but they also get to practice in what is **undoubtedly is the finest facilities in the nation.** Three years ago, the Gym Dogs moved into the state-of-the-art Suzanne Yoculan Gymnastics Center in the Coliseum Training Facility attached to Stegeman Coliseum. The Suzanne Yoculan Gymnastics Center consists of a **16,000 square-foot practice gym** in addition to state-of-the-art locker rooms, offices and **student-athlete study areas** along several other amenities, including a theater style meeting room and a team lounge that make it **the best place a college gymnast can train.**”

- **16,000 square-foot practice gym** - **2,200 square-foot locker room** - **Large team meeting room** - **Self-contained training areas for each apparatus** - **Three vaults, two with resi-pit landing areas and one with deep foam pit** - **In Ground Trench bar** - **Four sets of uneven bars** - **In-ground trampoline and tramp-bar** - **60-foot rod floor and tumble back leading to resi- or deep foam pit**



6 BB, Tumbi Trak, Rod Floor, 3 Vault Tables, 6 bar stations, loose foam FX and Tramp Landing, No Shared Space



Team Meeting Room



## AUBURN UNIVERSITY

“The gymnastics training gym occupies 14,770 square feet of the McWhorter Center. This training room was designed to give the Tigers everything they need to compete at the highest level. The training room includes:

- Four vaulting areas
- Four uneven bars
- Two single bars (pit and strap)
- A channel (trench) bar and trampoline bar station
- Seven balance beams (resi and loose foam)
- Two resi-pit tumbling strips
- 48' x 48' floor
- 40' in-ground Tumbl-Trak
- 44' rod floor into loose foam
- An in-ground trampoline with resi and loose foam
- 4 DVR recording systems
- Over 30 cardio station”

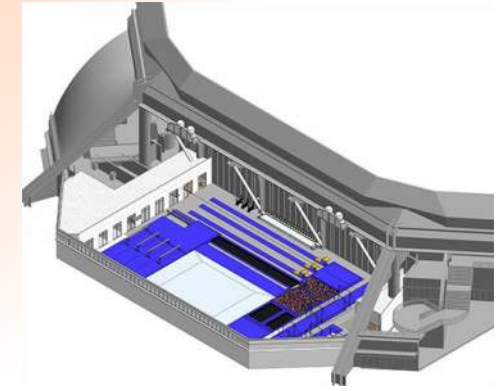
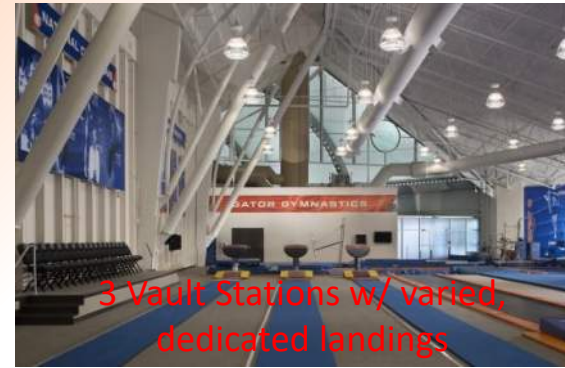
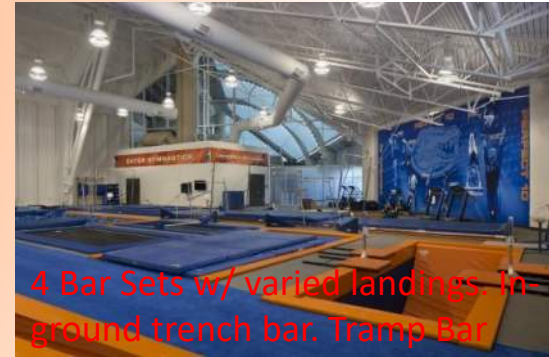




UNIVERSITY of FLORIDA - "18,000 square feet – an addition of 6,600 square feet for the Gators to utilize while training and conditioning. The coaches' offices move from the lower level of the O'Connell Center to the facility. The upgrades and additions for the facility include:

- New offices for coaching and support staff adjacent to the studio
- Office area includes main lobby welcoming visitors with seating, graphics and team recognition
- A new training room and nutrition bar for student-athletes
- Three vaults, two with resi-pit landing areas and one with a deep-foam pit
- Four balance beams plus two supplemental practice beams
- Four sets of uneven bars.
- A 50' x 50' floor exercise area
- An in-ground trampoline and tramp-bar
- An in-ground tumble trampoline and 60-foot rod floor leading to deep foam pit.
- A channel pit with spotting platforms
- A single bar trainer over foam pit
- High-definition video recorders and monitors at each workout station – allowing instant feedback for coaches and gymnast
- Cardio exercise equipment within studio space"





## UNIVERSITY of MISSOURI

“The Missouri Gymnastics team and Golden Girls opened the state-of-the art Tiger Performance Complex on Oct. 21, 2011. The 25,000 square foot facility is used as a practice facility for both the gymnastics team (15,000 sq ft) and the Golden Girls. The building houses offices for the gymnastics and Golden Girls' staff as well as a lounge area for each squad, a training room, a cardio exercise area and storage areas. In addition, both teams have locker room areas and a shower facility. The Tiger Performance Complex boasts the latest in training equipment for both squads, aiding in the success of the teams and future student-athletes to come. The gymnastics team now has three vault runways and several uneven bar areas for the gymnasts to use. Another feature that benefits the team is the addition of several pits, including resi pits and foam blocks on each event, to help with the teaching of new and more complex skills.”



## UNIVERSITY of PITTSBURGH

“At almost 12,000 square feet, it is second-largest training facility in the East Atlantic Gymnastics League and one of the largest in the Northeast Region. There are two complete vaulting set-ups, one of which lands into a respi pit and one into foam block. Three sets of uneven bars are being used at the new facility including one over a respi pit. There is also a single bar over a foam block/resi pit and a trench bar system. The new facility houses five balance beams, complete with mount and dismount areas, space for low beams, stacked beams and beam dismounts into pits. A full floor exercise includes tumbling pits off the end and a rod floor/tumble trac into a respi pit. Next to the respi pit is an in-ground trampoline and added features to the facility include space for lockers, bench seating, cardio equipment and music center as well as mirrors and record boards.

The new Gymnastics Training Center allows for the equipment to remain in place at all times. It includes new resi and foam pits, allowing for safer training. The gymnasts are able to attempt higher-level skills because they are in a safer environment. In addition to the difficulty level the gymnasts have been able to train at, the facility has allowed the coaches to recruit higher-level gymnasts. The setup and equipment have been appealing to many top-notch gymnasts because they know they will be able to maintain their current level of difficulty as well as improve.”



## LSU Old Facility\*

- 18,143 square feet of training space
- Private locker room
- Squad meeting room
- Self-contained training areas for each apparatus
- In Ground Trench bar
- 4 sets of uneven bars
- Tramp-bar
- Foam pit/Resi/ Solid landing from uneven bars
- Three vaults, two with resi-pit landing areas and one with a deep-foam pit
- Conditioning/Aerobic room

\*Replaced by new facility

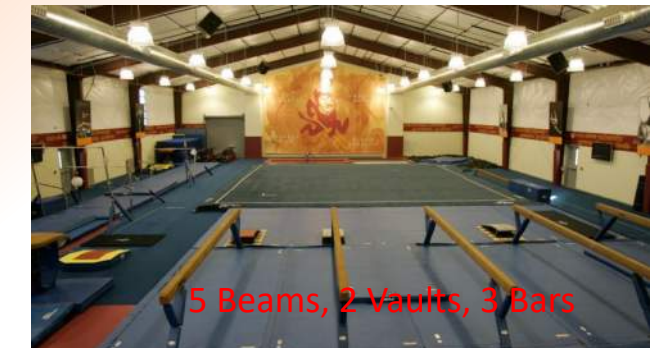
## UNIVERSITY of ARIZONA

- “The Gymnastics Training Facility, opened in 1994, and expanded in 2008, is **one of the nation's premiere training centers**, boasting the following features:
- A large tumbling/vaulting pit with the pit area located at the end of the floor exercise diagonal.
  - Stratum/Palmer floor exercise system with adjacent **40-foot rod tumbling strip**.
  - **Three uneven bar stations**: one regular set with official mats, **one set over a resi-pit** and a single rail over a loose foam pit (with over-head spotting belts).
  - **Six balance beams, including a high beam over a raised platform for working difficult skills and another for working various dismounts located next to the pit.**
  - A variety of springboards, safety mats and a reflex vaulting horse.
  - **Forty-foot Tumbl-Trak (trampoline tumbling apparatus).**
  - In-floor trampoline with Aussie string bed.
  - All gymnastics apparatus are manufactured by American Athletic Inc., which produces the same equipment used at the NCAA Championships.
  - Fully carpeted gym floor area.
  - Biomechanic analysis equipment in the workout facility.”



## ARIZONA STATE UNIVERSITY

- A large tumbling foam pit
- Stratum/Palmer floor exercise system with adjacent 40-foot rod tumbling strip.
- Three uneven bar stations: one regular set with official mats, one set over a resi-pit and a single rail over a loose foam pit. In-ground trench bar
- Five balance beams, including a high beam over a raised platform for working difficult skills and another for working various dismounts located next to the pit.
- 2 Vault stations Resi & Pit Landing
- Tumbl-Trak with Resi & Foam Landings
- In-floor trampoline with Aussie string bed.



# STANFORD UNIVERSITY

“The 14,000 square foot facility is the home of the Stanford Women’s Gymnastics Team. The gym is equipped with a regulation Floor, 4 Uneven Bar stations, 5 Beam stations and 2 vaulting stations. In addition there is an in-ground trampoline and in-ground 50 ft Tumble Trak.”



## UNIVERSITY of UTAH

“The Utah gymnasts train in possibly the finest gymnastics facility in the nation. The Dumke Gymnastics Center, which opened in 1998, is an 18,000-square foot stand-alone structure designed exclusively for the Utah women’s gymnastics team. The gymnasts enjoy all of the latest models of gymnastics equipment and matting (loose foam, as well as resipits for each apparatus area). Three vault stations. The facility is also equipped with high-tech automated video playback and bungee systems, and custom-designed sound, lighting and ventilation systems. The Dumke Center is a completely self-contained gymnastics training facility with a locker room, athletic training and rehabilitation room, aerobics and lounge area, and a strength and conditioning level.”



