

THE ARIZONA BOARD OF REGENTS

for and on behalf of

NORTHERN ARIZONA UNIVERSITY

REQUEST FOR QUALIFICATIONS for CONSTRUCTION MANAGER AT RISK SERVICES

McCONNELL HALL RENOVATION & LANDSCAPE UPGRADE Project #09.620.251

DUE DATE/TIME: Thursday, August 14, 2025, at 2:00 PM Arizona Time

ARIZONA BOARD OF REGENTS TRI UNIVERSITY MASTER CONTRACTS STANDARD FORM 2021 EDITION

Time and Date of Pre-Submittal Conference
Deadline for Inquiries
Time and Date Set for Submittal

Wednesday, July 30, 2025, at 11:00 AM Arizona Time
Thursday, August 7, 2025, at 4:00 PM Arizona Time
Thursday, August 14, 2025, at 2:00 PM Arizona Time

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DIVISION I – ADVERTISEMENT

Arizona Board of Regents ("ABOR"), for and on behalf of Northern Arizona University ("University" and/or "Owner"), extends an invitation to interested construction manager at risk (CMAR) firms to submit in writing their qualifications to provide pre-construction and construction services for the **McConnell Hall Renovation** & Landscape Upgrade, NAU Project #09.620.251 on the NAU Flagstaff Campus. This solicitation follows the methodology prescribed by Section 3-804 of the ABOR Policy Manual.

This Request for Qualifications (RFQ) is for the CMAR's pre-construction and construction services for the interior renovation of and exterior improvements to McConnell Hall, a Campus Living Community on the NAU Flagstaff Mountain Campus. The interior renovation will include upgrades to lighting, flooring, and the vanities within the bedrooms, as well as updates to the communal bathroom and shower areas to enhance privacy. The project also considers the potential installation of an elevator to boost accessibility within the building. Additionally, the project involves a potential update to the building's electrical, plumbing, and domestic hot water systems to address deferred maintenance issues. An electrical load study will be conducted to identify necessary infrastructure improvements. Exterior improvements will focus on creating an ADA-compliant sidewalk to ensure accessibility to/from the building.

Owner is seeking a CMAR with experience in construction of similar projects in a higher education environment and with residence halls. Firms submitting a Statement of Qualifications (SOQ) in response to this RFQ must demonstrate comparable project-type experience and capability utilizing the CMAR delivery method, or comparable capability. The successful firm awarded a contract may be awarded additional work at Owner's discretion for any other modifications or renovations at the project site through the warranty period of the project.

The proposed construction budget is \$8 million.

Any Offeror proposing to perform pre-construction and construction services must be appropriately licensed and registered, or in the process of obtaining licensure and registration, in the State of Arizona at the time of submission of the Qualifications.

An optional pre-submittal conference will be held on Wednesday, July 30, 2025, at 11:00 AM Arizona time, as a virtual meeting via Teams. Details on how to join the Teams meeting are located in Division III of this RFQ.

Optional site visits at McConnell Hall will be available to prospective Offerors on Tuesday, August 5, 2025, with two sessions at 10:00 AM–12:00 PM and 1:00–3:00 PM, respectively. **Advance registration** for the site visits is **mandatory**. To register, email Kevin McElwee (kevin.mcelwee@nau.edu) no later than 5:00 PM on Wednesday, July 30, 2025, indicating a **preferred** time window (10AM–12PM or 1–3PM). We will assign teams to appropriate time windows. Pre-registered prospective Offerors may send a **maximum of three (3) team members** to the site visit. Further details on the site visits will be made available to prospective Offerors following registration. All vehicles parking on campus must have a permit. See https://in.nau.edu/university-transit-services/ for more information and to purchase a parking permit. NAU will not provide passes for this event.

Individuals or firms wishing to visit campus outside of the optional site visits may do so on their own (note the parking permit requirements indicated above), but NAU will not entertain any conversation outside of the process outlined in this document.

SCHEDULE OF DEADLINES (all times are Arizona local time)

Advertise for Services: Thursday, July 24, 2025

Pre-Submittal Conference (optional, via Teams): Wednesday, July 30, 2025, at 11:00 AM

Site Visits (optional): Tuesday, August 5, 2025, 10AM–12PM & 1PM–3PM

RFQ CMAR

McConnell Hall Renovation &Landscape Upgrade Project #09.620.251 Qualifications Due:

Thursday, August 14, 2025, by 2:00 PM

Interviews with Shortlisted Firms (at Owner's discretion):

Wednesday, September 10, 2025 (tentative)

Begin Contract Period:

October 2025

RFQ packages may be obtained from the NAU Planning, Design & Construction Bids & RFQs webpage at https://in.nau.edu/facility-services/pdc/bids-rfqs/ after 3:00 p.m. local time on Thursday, July 24, 2025.

Sealed Qualifications are due no later than 2:00 PM Arizona time on Thursday, August 14, 2025. Responses to the RFQ shall be received at Facility Services (Bldg. #77), at the Front Reception Desk, 501 E. Pine Knoll Drive, Flagstaff, Arizona 86011 (https://in.nau.edu/university-transit-services/maps/) or by mail to: Northern Arizona University, Box 6016, Flagstaff, Arizona, 86011. Attention: Kevin McElwee, Contracts Analyst, PDC. If mailing the SOQ by courier (e.g., FedEx or UPS), please use the street address noted above.

Received sealed Qualifications will be opened immediately following the 2:00 PM deadline, and Planning, Design & Construction shall publicly announce the names of those firms submitting a response to this RFQ on the Teams meeting link provided in Division VI of this RFQ. In-person attendance at this meeting shall not be permitted.

No telephonic, electronic, or facsimile Offer shall be considered. Offers received after the date and time set for opening will be rejected. The University reserves the right to extend the time and date set for opening.

The Board of Regents reserves the right to reject any or all SOQs, to waive or decline to waive any irregularities in any SOQ, or to withhold the award for any reason it may determine. Women-owned and minority-owned firms are encouraged to apply. Persons with a disability may request a reasonable accommodation.

All correspondence relating to this project should be addressed to:

NAU Facility Services Attention: Kevin McElwee Box 6016 Northern Arizona University Flagstaff, Arizona 86011

Email: kevin.mcelwee@nau.edu

ARIZONA BOARD OF REGENTS

By: <u>Jeff McKay</u>

VP of Capital Planning and Campus Operations

DIVISION II – PROJECT DESCRIPTION AND SCOPE OF SERVICES

ARIZONA BOARD OF REGENTS REQUEST FOR QUALIFICATIONS (RFQ)

Arizona Board of Regents ("ABOR"), for and on behalf of Northern Arizona University ("University" and/or "Owner"), extends an invitation to interested Construction Manager at Risk (CMAR) firms to submit in writing their qualifications to provide pre-construction and construction services for the McConnell Hall Renovation & Landscape Upgrade, NAU Project #09.620.251 on the NAU Flagstaff Campus. This solicitation follows the methodology prescribed by Section 3-804 of the ABOR Policy Manual.

Any firm(s) proposing to perform Construction Manager at Risk services must be appropriately licensed and registered in the State of Arizona by the Registrar of Contractors at the time of submission of the Qualifications.

This project will be built using Construction Management at Risk services. The Owner intends to form a team (consisting of the Owner, the Design Professional, and the contracted Construction Manager at Risk firm ("CMAR")) that will work together in a cooperative and mutually supportive manner for the benefit of all the members of the team. Owner is looking specifically for an Offeror with the demonstrated ability to operate as a team member in a Construction Manager at Risk project delivery method arrangement.

Well qualified CMAR teams will also have specific pre-construction and construction experience within the last ten (10) years that includes successfully completing projects on a university campus with similar scopes of work.

PROJECT DESCRIPTION

The project involves the interior renovation of and exterior improvements to McConnell Hall, a Campus Living Community on the NAU Flagstaff Mountain Campus. The interior renovation will include upgrades to lighting, flooring, and the vanities within the bedrooms, as well as updates to the communal bathroom and shower areas to enhance privacy. The project also considers the potential installation of an elevator to boost accessibility within the building. Additionally, the project involves a potential update to the building's electrical, plumbing, and domestic hot water systems to address deferred maintenance issues. An electrical load study will be conducted to identify necessary infrastructure improvements.

Exterior improvements will focus on creating an ADA-compliant sidewalk to ensure accessibility to/from the building.

The proposed construction budget is likely to be \$8,000,000.

PROJECT SCHEDULE

Guaranteed Maximum Price (GMP): January 2026

Substantial Completion: August 2026

Final Completion: December 2026

PROJECT LOCATION AND SITE DESCRIPTION

Northern Arizona University is located on a volcanic plateau at the base of the San Francisco Peaks, the highest mountains in Arizona. The 829-acre main campus is located in Flagstaff, Arizona. Flagstaff is a four-season city located at an elevation of 7,000 feet. Because the campus is at an elevation of 7,000 feet, the climate is vigorous, with cold winters and mild summers. Diurnal temperature changes are considerable,

resulting in average first and last occurrences of 32 °F in September and June. Temperature extremes range from -32 °F to 97 °F, with average minimums in January of 14 °F. The mountain campus includes approximately 170 buildings with more than 6.9 million square feet, including buildings in the Arizona Normal School Historic District, which exceeds 90 years of age. The University is governed by the Arizona Board of Regents (ABOR) and is a fully accredited institution of higher learning supported by the State of Arizona.

SCOPE OF SERVICES

Proposed services for this project include design phase construction management (pre-construction) and construction services.

The contracted Construction Manager at Risk will begin in an agency support role for design phase services. At some point prior to construction, the CMAR will assume the risk of delivering the project through a guaranteed maximum price (GMP) contract.

After agreement on the GMP, the contract agreement shall become a contract for construction and warranty services. The University may terminate the contract if the GMP is not agreed by Owner and CMAR. The CMAR will be responsible for construction means & methods and will be required to solicit bids from prequalified subcontractors to perform the work using the Owner's subcontractor selection process. The CMAR may also compete to self-perform limited amounts of work. Complete construction services include all labor and materials to provide a complete project.

Details of the scope of the required services will be furnished to the selected firm at the time a fee Statement of Qualifications is requested. However, listed below are a sample of services that may be required under this project.

A. Preconstruction/Design phase services by the CMAR may include the following:

- incorporate University design guidelines and technical standards;
- provide detailed cost estimating and knowledge of marketplace conditions;
- provide for construction phasing and scheduling that will minimize interruption to Owner operations;
- provide project planning and scheduling;
- advise the team on choosing sustainable building materials in an effort to meet Owner's commitment to our Sustainability Action Plan (https://Owner.edu/green-Owner/sap-home/);
- provide alternate systems evaluation and constructability studies;
- advise the Owner of ways to gain efficiencies in project delivery;
- provide long-lead procurement studies and initiate procurement of long-lead items;
- prepare GMP package(s);
- assist in the permitting processes;
- participate with the Owner in a process to set goals and prequalification meetings for subcontractor participation;
- select subcontractors/suppliers for this project;
- protect the Owner's expectations of quality and safety, and sensitivity to environmental factors.

B. Construction phase services by the CMAR shall include at a minimum, but are not limited to:

- incorporate University design guidelines and technical standards;
- construct the project on schedule and within budget;
- bond and insure the construction;
- coordinate with various Owner departments, other agencies, utility companies, etc.;
- arrange for procurement of materials and equipment;
- schedule and manage site operations;
- bid, award, and manage all construction-related contracts while meeting the Owner bid requirements, including subcontractor participation goals;
- provide quality controls;
- prepare meeting minutes and daily reports, and maintain up-to-date records;

- address all Owner, state, and federal permitting requirements;
- work in a cooperative manner to address any changes that may arise during construction;
- provide all required close-out documents, and;
- maintain a safe work site for all project participants and ensure public safety.

DIVISION III - OPTIONAL PRE-SUBMITTAL CONFERENCE AND OPTIONAL SITE VISIT

An optional Pre-Qualifications Conference will be held online as follows:

DATE:	Wednesday, July 30, 2025 (pre-registration required)
TIME:	11:00 AM Arizona time
LOCATION:	https://events.teams.microsoft.com/event/069e4f6d-77c3-49f5-93b1- a12be064116e@27d49e9f-89e1-4aa0-99a3-d35b57b2ba03

The conference may be recorded and information on accessing the recording may be posted as soon as possible following the conference on the following webpage: https://in.nau.edu/facility-services/pdc/bids-rfgs/.

At this pre-submittal conference, University staff will discuss the scope of work, general contract issues, and respond to questions from the attendees. As University staff will not be available to respond to individual inquiries regarding the project outside of this pre-submittal conference, it is strongly recommended that interested firms attend the pre-submittal conference.

Neither Offerors, nor members of their team, shall communicate concerning this project with selection committee members, students, and employees of the University, except as stipulated above. <u>Failure to abide by this requirement may result in the rejection of the Offeror's Statement of Qualifications.</u>

Optional site visits at McConnell Hall will be available to prospective Offerors on Tuesday, August 5, 2025, with two sessions at 10:00 AM–12:00 PM and 1:00–3:00 PM, respectively. Advance registration for the site visits is mandatory. To register, email Kevin McElwee (kevin.mcelwee@nau.edu) no later than 5:00 PM on Wednesday, July 30, 2025, indicating a preferred time window (10AM–12PM or 1–3PM). We will assign teams to appropriate time windows. Pre-registered prospective Offerors may send a maximum of three (3) team members to the site visit. Further details on the site visits will be made available to prospective Offerors following registration. All vehicles parking on campus must have a permit. See https://in.nau.edu/university-transit-services/ for more information and to purchase a parking permit. NAU will not provide passes for this event.

DIVISION IV - SELECTION CRITERIA

The Owner intends to utilize a Construction Manager at Risk project delivery method for this project. In this delivery method, the CMAR team is selected using a qualifications-based selection process. It is the Owner's intent to select the Offeror that is most favorable in all respects, as assessed through the following selection criteria, to achieve the successful realization of this project.

Upon ranking of the most-qualified Offeror, the Owner will negotiate a fee for Pre-Construction Phase services. During the Pre-Construction Phase, a Guaranteed Maximum Price (GMP) will be prepared and negotiated.

A selection committee will evaluate the Statement of Qualifications submitted in response to this RFQ.

Basis of award: The selection committee will evaluate the Statement of Qualifications submitted in response to this RFQ based on a series of criteria identified under Evaluation Criteria. Offerors determined to be most qualified to perform the specified CMAR services will be short-listed and may be sent an invitation to attend an interview. Interviews, if held, will be conducted in accordance with the requirements set out in Section 3-804 of the ABOR Policy Manual and may be held by Teams video conference or in person.

Evaluation Criteria:

The evaluation criteria will relate to the qualifications of the Offeror to perform the services under this RFQ. This evaluation will be based on the following:

<u>Criteria</u>	Maximum Points
(A) Introduction	5
(B) Prime Firm Project Experience	30
(C) Additional Project Experience	15
(D) Prime Team Member Experience	25
(E) Understanding of the Project	40
(F) Project Management Controls and Team Approach	20
(G) Work Location	5
(H) Overall Evaluation of the Firm	10
(I) Submittal Certification	0
(J) Résumés	0
TOTAL	150

The Statement of Qualifications submitted should be fully self-contained and include the information requested below, *listed in order and index tabbed* the same. Additional response formatting requirements are outlined in Division V – Submittal Requirements.

(A) INTRODUCTION (5 points maximum):

- 1) Please provide an introduction highlighting the prime firm's or (if a legal joint venture) prime team's qualifications for this particular project.
 - a) If your firm is teaming with another firm, the relationship needs to be clearly identified in this section. Only legal teaming relationships will be recognized. Teams that are arranged as a single prime firm are preferred.
 - b) Any firms that are submitting as a joint venture or another legal partnering agreement must submit the contract for the formal arrangement before an interview, if shortlisted (do not submit as part of the Qualifications package).

- 2) Indicate the following information for the primary point(s)-of-contact of the prime firm:
 - a) Name
 - b) Telephone number
 - c) Direct email address email with this point-of-contact will be Owner's primary form of communication with the firm, so ensure accuracy.
- 3) List the Arizona professional and contractor licenses held by the firm/team and the key personnel who will be assigned to this project. Provide the license number and explain if held by an individual or the firm.
- 4) Provide an organization chart that represents the intended roles, responsibilities, authorities, and relationships. Please include all key members of the team.
- 5) Identify any contract or subcontract held by the firm or officers of the firm that has been terminated within the last five years. Identify any claims arising from a contract that resulted in litigation or arbitration within the last three years. Briefly describe the circumstances and the outcomes.
- 6) Provide a statement on surety letterhead from an A- or better surety company describing the Company's bonding capacity, as a separate page in the introduction section.

(B) PRIME FIRM PROJECT EXPERIENCE (30 points maximum):

1) Identify a **minimum of three (3) and a maximum of five (5) comparable projects** in which the firm served as the CMAR during design and construction.

The listed projects must demonstrate, through previously completed work, that the firm has developed expertise to provide pre-construction and construction services as required for this project.

For each project listed, please provide:

- a) A description of the project, including the name of the owner, the project square footage, the project location, the year it was built, and at least one picture. The description must include how many seats the recital hall (or equivalent-type space) has, the project's LEED rating, and if the project site was occupied during construction or adjacent to an occupied building.
- b) The role of the firm on the project, specifying services provided during the pre-construction phase (i.e., cost estimating, scheduling, value engineering, etc.).
- c) The original construction budget per the construction agreement, actual bid or GMP amount, and the final construction amount. If the final construction amount is greater than the bid/GMP amount, differentiate between owner-requested change orders and those attributable to construction costs. Also indicate the amount of all contractor's contingency (including both design and construction contingencies) used on the project.
- d) The original project schedule by listing design phase start date, construction start date, and Substantial Completion date. Compare the *contractual* dates with *actual* respective dates. Explain any differences between original and actual project schedule milestones.
- e) The name and role of individuals from the proposed team who worked on each project listed in this section.
- f) The name and current phone number of the owner's project manager or other owner representative for the project.

A higher evaluation weighting will be applied to those firms who can substantiate successful demonstrated experience on:

- Comparable projects utilizing a CMAR project delivery method and that are renovations as opposed to new construction.
- Comparable projects that were sustainably constructed.
- Comparable projects with institutions of higher education, in particular, ones that have included residence halls.
- Comparable projects at similar climates and elevations.
- Projects that have included significant accessibility upgrades (e.g., elevator additions, ADA compliance).
- Comparable projects that were completed five (5) or fewer years ago.
- Comparable projects that were of a similar size and programming.

(C) ADDITIONAL PROJECT EXPERIENCE (15 points maximum):

1) List all CMAR projects awarded to your firm by Northern Arizona University, Arizona State University, and the University of Arizona during the last two years, all projects currently ongoing, and/or all projects for which your firm has been selected but are not yet under contract. For each project, provide the project description, award date (note if pending), construction cost, status of completion, and estimated completion date. As part of the selection process, the University has the responsibility of taking into account the size and complexity of the project under consideration, the resource investment of the Offeror in current work, and the amount or quality of previous work recently performed for the University, in order to extend CMAR project delivery method opportunities to a broad representation of qualified firms.

(D) PRIME TEAM MEMBER EXPERIENCE (25 points maximum):

- 1) Identify the specific individuals from the prime construction firm who are proposed to be assigned to this project. Clearly identify the following specific individual(s) responsible for the following roles:
 - a) the person who will be responsible for day-to-day management of the project, and coordination and communication with the University during all phases of design and construction:
 - b) the person(s) who will lead the pre-construction phase;
 - c) the person(s) who will lead the construction phase;
 - d) the superintendent;
 - e) the person(s) who will lead the project documentation efforts.

A higher evaluation weighting will be applied to those firms who can substantiate and ensure that the same person will lead the design and construction phase.

2) For each key person identified, list their length of time with the firm and at least two comparable projects in which they have played a primary role. If a project selected for a key person is the same as one selected for the firm in Section B above, provide just the project name and the role of the key person.

For other projects, provide the following:

- a) Description of project
- b) Role of the person
- c) Contractor method (e.g., General Contractor, Construction Manager at Risk, Design-Build)
- d) Project's original contracted construction cost and final construction cost
- e) Construction start and completion dates
- f) Project owner

- g) Reference information (current name with telephone number for each project listed)
- 3) Describe the current workload and availability of key staff to service the project (include existing projects, pending projects, and this proposed project). Also, complete the following chart for a visual depiction of the workload. Expand as necessary.

Team Member	Role	Preconstruction	Construction
Name	Project Director	xx%	xx%
Name	Preconstruction Manager	xx%	xx%
Name	Construction Project Manager	xx%	xx%
Name	Superintendent	xx%	xx%
Name	Other Roles	xx%	xx%

Note that your firm will need to notify Owner of any substantial change in anticipated workload. Further, substituting different team members at any point in the project will require both notification and approval of Owner.

4) Describe the experience this proposed team has working together on previous projects. Include the following chart for a visual depiction of past experience. Expand as necessary.

Team Member	Role	Project 1	Project 2	Project 3	Additional projects as needed
Name	Project Director	[Indicate what percentage of time was spent on project and in what role]			
Name	Preconstruction Manager				
Name	Construction Project Manager				
Name	Superintendent				
Name	Other Roles				

A higher evaluation weighting will be applied to those firms that can substantiate the proposed team having experience working together on past similar projects.

(E) UNDERSTANDING OF THE PROJECT (40 points maximum):

- 1) Discuss the major opportunities and challenges your team has identified on this project and describe how you intend to address those issues.
- 2) Provide a few examples of construction cost reductions achieved through creative value engineering.
- 3) Describe how you ensure close collaboration with the design professional and the Owner in the preconstruction phase.
- 4) Other than projects previously listed, describe in detail the team's experience and approach to identifying, assessing, and resolving deferred maintenance issues in comparable buildings.

(F) PROJECT MANAGEMENT CONTROLS AND TEAM APPROACH (20 points maximum):

- 1) Attachment D to this Request for Qualifications contains a link to the Northern Arizona University Construction Manager at Risk Contract, which includes requirements on subcontractor selection (General Conditions, Section 2.2.4.6).
 - a) Describe how you intend to implement this subcontractor selection plan, including your recommendations for subcontractor trades to be selected by qualifications only vs. qualifications and bids, and discuss the benefit that your subcontractor selection plan provides to the project.
 - b) Which subcontractors/trades would you intend to select during the pre-construction phase and why?

2) Budget Methodology and Cost Control

- a) Define how estimates of probable construction cost are established and maintained with respect to the Owner's project budget. Describe how estimates are calculated and updated in real time.
- b) Explain how constructability reviews, value engineering, and other design phase cost controls will be utilized.
- c) Define how change orders and other potential add-on costs during the construction phase will be avoided and controlled. Describe how change order requests from subcontractors will be reviewed and processed quickly.

3) Quality Control

- a) How does your team minimize the knowledge gap from preconstruction to construction between team members?
- b) Summarize your approach to quality control and quality assurance during construction of the project, especially as these relate to design and construction under Flagstaff's climate conditions and with regard to the University's *Design Guidelines and Technical Standards*.

4) Schedule Control

a)

b) Detail your familiarity with using PMWeb for data management (e.g., RFIs, ASIs, submittals).

5) Sustainability

- a) Summarize your firm's approach to sustainability, in particular, with regard to constructing projects that are durable, maintainable and provide solutions that are realistic from a budgetary standpoint.
- b) Describe how your team will assist in incorporating life cycle planning, energy efficiency, durability, water conservation, and other sustainable design aspects into this project.

6) Site Logistics

 a) Highlight any key points or challenges the CMAR will need to address with regard to the logistics of this project site.

- b) Detail your intended approach to construction laydown for this project (identifying appropriate storage locations, managing inventory, and coordinating material deliveries to avoid delays).
- c) Explain your strategies for managing site security and safety.
- 7) Describe your firm's program for Veteran employment.
- 8) Describe what makes your firm stand out above your peers, and why your firm should be chosen as the most qualified Offeror for this project.

(G) WORK LOCATION (5 points maximum):

- Indicate the proximity of the Offeror's office to the Northern Arizona University campus in Flagstaff, Arizona and the home office location of key staff on this project. Detail any logistical challenges your current location presents as related to the project location and describe how those challenges would be addressed.
- 2) Define the team's familiarity with the project area and its knowledge of the local labor and materials markets.

(H) OVERALL EVALUATION OF THE FIRM (10 points maximum):

This is the overall evaluation of the firm/team and its perceived ability to provide the required services, as determined by the evaluation committee members, including with account for any client references obtained by the committee or given by the Design Professional. **No submittal response** is required for this criterion.

- (I) SUBMITTAL CERTIFICATION (0 points not included in maximum page count):
 Include completed Attachment A RFQ Submittal Certification and Attachment B No
 Participation in Boycott of Israel Certification found in Part II of this Request for Qualifications.
- (J) RÉSUMÉS (no separate points points to be attributed to project team scores):

Résumés will help determine the level of skills and qualifications of each proposed individual related to this specific type of project. Résumés for each key team member shall contain employee information only and no additional company information. Résumés shall include the individual's project experience, including the size, a brief description, and cost of projects. Résumés shall be limited to a maximum length of one (1) page per person. Résumés should not include project pictures or general firm information.

DIVISION V – SUBMITTAL REQUIREMENTS

Firms interested in the above project should submit a Statement of Qualifications using the format listed in Division IV, in order and index tabbed to match. **Failure to follow instructions regarding format may result in rejection of Offer.**

The Statement of Qualifications (SOQ) shall be submitted as:

- One (1) complete SOQ in letter (8.5" x 11") format, using double-sided printing, spiral bound, and clearly marked as original, and two (2) copies clearly marked as copies, for a total of three (3).
- One (1) digital copy of the complete SOQ in a single PDF file on a USB flash drive.
- Use a font size no less than 10 points.
- Limit SOQ to twenty-five (25) pages. Included in the page count are a cover letter and responses to Division IV Items A through G. Item H (Overall Evaluation of the Firm) does not require a response. Item I (Submittal Certification) and Item J (Résumés) are excluded from the twenty-five (25) page count. A page is defined as any side of the paper that has content (i.e., a piece of paper printed with information on both sides is considered two pages). Front and back covers, Table of Contents pages and tabbed divider pages will not be counted if they do not contain submittal information. Résumés should not include project pictures or general firm information.
- On the outside of the sealed submittal package, display the Offeror's name, along with the NAU project title and project number.

The Statement of Qualifications should be sent or delivered to:

Facility Services, Building #77
(southwest corner of Pine Knoll Drive/San Francisco Street)
Front Reception Desk
Flagstaff, Arizona

- or -

Northern Arizona University PO Box 6016 Flagstaff, Arizona, 86011

- or for FedEx/UPS/other courier -

NAU Facility Services 501 E. Pine Knoll Dr. Building 77, Main Entrance Reception Desk Flagstaff, Arizona, 86011

Attention: Kevin McElwee, Contracts Analyst, Planning, Design & Construction

Note: THE OFFEROR SHALL NOT SUBMIT OR COMMUNICATE IN ANY FORM TO THE UNIVERSITY ANY INFORMATION ON FEES, PRICE (HOURLY RATES), MAN-HOURS, OR ANY OTHER ASSOCIATED COST INFORMATION. ARIZONA LAW PROHIBITS THE UNIVERSITY FROM CONSIDERING ANY INFORMATION ON FEES, PRICE (HOURLY RATES), MAN-HOURS, OR ANY OTHER COST INFORMATION DURING THE REQUEST FOR QUALIFICATIONS (RFQ) COMPETITION. Accordingly, any Statement of Qualifications that contains any information of this type will be deemed non-responsive and will not be considered. This exclusion of information applies to the Offeror's Statement of Qualifications, to any discussion/interview, and to all other aspects of the RFQ competition.

Please be advised that failure to comply with the following criteria may be grounds for disqualification:

- The specified number of originals and/or copies of the SOQ
- Adherence to the maximum page requirement for the SOQ
- Deposit of SOQ in correct location
- No submission of pricing information (which is not allowed at the RFQ stage)
- Provision of required information
- No inappropriate communication (see "Restriction on Communications" in Division VII)

<u>DIVISION VI – THE SELECTION PROCESS AND PROJECT SCHEDULE</u>

<u>SELECTION PROCESS</u>. A Selection Committee will evaluate and score each submitted Statement of Qualifications to arrive at a shortlist of no less than three (3) and no more than five (5) Offerors to participate in interviews. The University reserves the right to determine the interview process an optional component and proceed, at its discretion, to verify references. If an interview is held, the Selection Committee may secure additional information and additional reference checks or visit completed projects following the interview.

SCHEDULE OF DEADLINES (all times are **Arizona local time**)

Advertise for Services: Thursday, July 24, 2025 (in *Glendale Star*)

Pre-Submittal Conference (optional, via Teams): Wednesday, July 30, 2025, at 11:00 AM

Site Visits (optional): Tuesday, August 5, 2025 (10AM–12PM & 1PM–3PM)

Deadline for Inquiries: Thursday, August 7, 2025, by 4:00 PM

Qualifications Due: Thursday, August 14, 2025, by 2:00 PM*

Interviews with Short-listed Firms (at Owner's discretion): Wednesday, September 10, 2025 (tentative)

CMAR Selection: September 2025

Begin Contract Period: October 2025

Construction Start: May 2026

Construction Complete: August 2026

Qualifications Opening meeting link

Meeting ID: 252 992 096 372 8

Passcode: 7qC2pK32

^{*} Received sealed qualifications will be opened immediately following the 2:00 PM deadline on August 14, 2025, and Planning, Design & Construction shall publicly announce the names of those firms submitting a response to this RFQ on the Teams meeting link provided below. In-person attendance at this meeting shall not be permitted.

DIVISION VII – GENERAL INFORMATION

<u>DEFINITIONS</u>. All definitions are per the ABOR Policy Manual, the CMAR Standard Form Agreement, and the University's Design Guidelines and Technical Standards, unless otherwise defined within.

<u>SOLICITATION OF QUALIFICATIONS BY FACILITY SERVICES</u>. All solicitations are performed in accordance with University policies and procedures.

<u>INFORMAL QUESTIONS</u>. If you have informal questions about technical formatting regarding your Statement of Qualifications or if you have informal questions about the procurement process, please contact: Kevin McElwee, tel.: (928) 523-8692.

The University will answer informal questions verbally. The University makes no warranty of any kind as to the correctness of any verbal answers and uses this process solely to provide minor clarifications rapidly. Verbal statements or instructions shall not constitute an amendment to this RFQ. Offerors shall not rely on any verbal responses from the University. If you have formal questions about any part of this Request for Qualifications that could result in a material issue or a formal amendment to this RFQ, see "INTERPRETATIONS AND ADDENDUMS" below.

INTERPRETATIONS AND ADDENDUMS. Should an Offeror find any ambiguity, inconsistency, or error in the Request for Qualifications, or should the Offeror be in doubt as to its meaning, they shall at once notify the Contracts Analyst indicated below in writing (contact information below), who will send a written addendum by email to all Offerors who are on record with Facility Services as having requested to be on the NAU Contractor Listserv. All addendums will also be posted on the NAU website at: https://in.nau.edu/facility-services/pdc/bids-rfqs/. Neither the University nor its representatives will be responsible for verbal instructions or information. Interpretation or correction of the RFQ will be made only by written addendum. The University is not responsible for any other explanations or interpretations of the RFQ.

If an Offeror on the final shortlist fails to receive any addendum, or should fail to acknowledge receipt of same, the Offeror shall have the option of staying on the final shortlist under the terms of the Request for Qualifications or of withdrawing from the final shortlist, in which event the next most qualified Offeror will be added to the final shortlist. The Owner is not responsible for assuring delivery of addendums to any Offeror. Failure to receive addendums or failure to acknowledge receipt shall not constitute a basis for claim, protest, or reissue of the Request for Qualifications.

This RFQ, the Qualifications of the successful Offeror(s), and any addendums issued by the Owner during the RFQ period are to be included in and will become a part of the agreement when awarded. Offeror shall acknowledge receipt of addendums in the space provided on the RFQ Submittal Certification (Attachment A).

All formal inquiries or requests for significant or material clarification or interpretation, or notification to the University of errors or omissions relating to this RFQ must be directed in writing, by email, to:

Kevin McElwee, Contracts Analyst Planning, Design and Construction Facility Services Northern Arizona University Box 6016 Flagstaff, AZ 86011

Email: kevin.mcelwee@nau.edu

Such requests must be submitted on a copy of the RFQ Inquiry Form in Attachment C to this RFQ. All formal inquiries must be submitted before the deadline for inquiries indicated above. Failure to submit inquiries by

Project #09.620.251

this deadline may result in the inquiry not being answered.

<u>RESTRICTION ON COMMUNICATIONS</u>. Neither Offerors nor members of their team shall communicate concerning this project with Selection Committee members, students, and employees of the University, except as stipulated above. **Failure to abide by this requirement may result in the rejection of Offeror's Statement of Qualifications**.

<u>PROPRIETARY INFORMATION</u>. If Offeror submits any information considered proprietary, it must be placed in a separate envelope and marked "Proprietary Information". If Owner concurs, this information will not be considered public information. Owner's Legal Counsel is the final authority as to the extent to which material is considered proprietary or confidential. The Owner assumes no liability for disclosure or use of unmarked data. Unless identified, information submitted in response to this RFQ may be disclosed pursuant to the applicable Arizona Public Records Law and applicable Arizona Revised Statues.

<u>PROFESSIONAL LICENSE/REGISTRATION IN ARIZONA</u>. Any individual or firm that is proposing to perform pre-construction and construction services must be appropriately licensed / registered in the State of Arizona at the time of submission of the Statement of Qualifications.

<u>RELATED WORK.</u> The successful firm awarded a contract may be awarded additional work at Owner's discretion for any other modifications or renovations at the project site through the warranty period of the project, which may be authorized under a separate contract.

OFFERORS INTERESTED IN MORE THAN ONE RFQ RESPONSE. No person, firm, partnership, or corporation shall be allowed to submit as a prime firm/team member on more than one (1) Statement of Qualifications for services on the same project. A person, firm, partnership, or corporation that has submitted as a subcontractor to an Offeror is disqualified from submitting a Statement of Qualifications for the project as a prime Offeror. A person, firm, partnership, or corporation shall be allowed to submit a subcontractor Statement of Qualifications to more than one (1) Offeror.

<u>OBLIGATIONS</u>. This RFQ does not obligate the Owner to pay any costs incurred in the preparation and submission of Qualifications, nor to enter into an agreement with any of the applicants.

<u>WITHDRAWAL OF STATEMENT OF QUALIFICATIONS</u>. Statement of Qualifications may be withdrawn either personally or by written request at any time before the scheduled date and time set for receipt.

<u>RETURN OF STATEMENT OF QUALIFICATIONS</u>. Owner will not return any Statement of Qualifications that are submitted.

AWARD OR REJECTION OF STATEMENT OF QUALIFICATIONS. Owner has the right to cancel this Request for Qualifications, to reject any or all Statements of Qualifications, and to waive or decline to waive any irregularities in any submitted Statement of Qualifications, or to withhold the award for any reason it may determine in the best interest of Owner and also reserves the right to hold open any or all Statements of Qualifications for a period of ninety (90) days after the date of opening thereof and the right to accept a Statement of Qualifications not withdrawn before the scheduled opening date.

ACCEPTANCE OF CONTRACT DOCUMENTS. NAU has developed standard forms of Construction Contracts. If selected as the CMAR for this project, Offeror agrees to execute this form of Contract Documents. Provisions in a Statement of Qualifications that conflict with, and/or exceptions to, and/or requests for changes in, the University's contract terms, special conditions, exhibits and/or other Contract Documents may result in that SOQ being considered nonresponsive and rejected. By submitting a Statement of Qualifications, Offeror also acknowledges its understanding and agreement that the University may make changes in the standard form of Contract Documents and that therefore the form of Contract Documents presented to the successful Offeror may be different from the form of Contract Documents referenced above, in which case the successful Offeror will be given the opportunity to review the changes.

<u>CONTRACT DOCUMENTS</u>. The Contract Documents may include, without limitation, this RFQ, any addendums to this RFQ issued by the University, the SOQ of the successful Offeror, and such other terms as the University determines are in its best interest and appropriate for the project.

<u>SITE VISIT</u>. In advance of negotiating an agreement for preconstruction services, the highest-ranked Offeror will be requested to participate in a site visit with representatives of the Owner to become familiar with the project site and to discuss the Owner's needs. The Offeror's key team members for the project shall attend the meeting. Prior to the meeting, the highest-ranked Offeror will have received from the Owner available project documentation, including estimated budgets, DP project deliverables, drawing formats and other relevant information that the Owner deems appropriate.

NEGOTIATION OF THE AGREEMENT. The University may proceed to negotiate a contract for services at a compensation which the Owner determines to be fair and reasonable. In making this decision, the University may take into account the estimated value of the scope of services, the complexity, and the professional nature of the services to be rendered. If Owner is unable to negotiate a satisfactory contract with the Offeror considered to be the most qualified, at a price determined to be fair and reasonable, negotiations with that Offeror will be formally terminated. Owner may then undertake negotiations with the next most qualified Offeror in sequence until an agreement is reached or a determination is made to reject all Statements of Qualifications. The Owner will negotiate a fixed fee for preconstruction services. Prior to any construction, a guaranteed maximum price (GMP) and construction phase fee will be negotiated. If a GMP is successfully negotiated, the preconstruction contract will be amended to incorporate the established construction phase fee and GMP into the Agreement.

When a Guaranteed Maximum Price is agreed upon by the Owner and the CMAR, the contract will become a contract for construction. If negotiations for a Guaranteed Maximum Price are not successful, the Owner may terminate the contract.

DELIVERY OF INSURANCE POLICIES OR CERTIFICATES AND EXECUTION OF AGREEMENT. Promptly after selection of the most responsible and responsive Offeror, Offeror will begin creating a priced proposal based on the CMAR Agreement to be executed by the successful Offeror. This CMAR Agreement will be in the form of Attachment D hereto or Owner's then-current form of agreement. The successful Offeror shall execute and return to Owner the Agreement within ten (10) days after receipt of the Agreement issued after negotiation of the priced proposal. Failure to return the executed copies of the Agreement may result in the rejection of the successful Offeror's Statement of Qualifications and withdrawal of the award. Within three (3) days of issuance of the CMAR Agreement, the successful Offeror shall deliver to Owner the required insurance policies or certificates in a form satisfactory to Owner. Failure to do so may result in the rejection of the successful Offeror's Statement of Qualifications and withdrawal of the award.

<u>REGULATIONS</u>. Should fee negotiations result in an agreement, the agreement will be subject to all the provisions of the University Procurement Code as issued by the Arizona Board of Regents, and will include all the terms, clauses, and conditions required by the University Procurement Code.

<u>AIR POLLUTION</u>. In accordance with an executive order titled "Air Pollution Emergency Proclamation" and modified by the Governor of Arizona on July 16, 1996, the Owner requests that all products used in the performance of any agreement that results from this solicitation be of low- or no-content reactive organic compounds, to the maximum extent possible.

<u>SMALL AND DISADVANTAGED BUSINESS.</u> The University is committed to the development of Small Business and Small Disadvantaged Business (SB & SDB) suppliers. If subcontracting is necessary, the Offeror shall make every effort to use SB & SDB in the performance of any contract resulting from this Request for Qualifications. Include a statement within your firm's Statement of Qualifications as to whether or not any of your subcontractors falls under either of these categories.

<u>POLICIES.</u> Owner's policies are listed online at: https://nau.edu/university-policy-library/. Offeror shall abide by Owner's policies when performing work on behalf of Owner.

PROTESTS. The University believes that it can best maintain its reputation for treating contractors and/or suppliers in a fair, honest, and consistent manner by conducting solicitations in good faith and by granting competitors an equal opportunity to win an award. If Offeror feels that the Owner has fallen short of these goals, Offeror may submit a protest pursuant to the Arizona Board of Regents procurement procedures, Section 3-809, in particular Section 3-809C. This paragraph does not include all the provisions of the ABOR procedures, but it does provide information to initiate a protest. First, Offerors must be an "interested party." An "interested party" is an actual or prospective contractor submitting a Statement of Qualifications whose direct economic interest may be affected by the issuance of a solicitation, the award of an agreement, or by the failure to award an agreement. Whether an actual prospective contractor has a *direct* economic interest will depend upon the circumstances in each case. At a minimum, the interest must be substantial and must be tangibly affected by the administrative action or proposed action concerned in the case. Second, Offeror must submit the protest in a timely manner. In procurements requesting Statement of Qualifications, protests based upon alleged errors, irregularities, or improprieties in a solicitation that are apparent before the closing date for receipt of initial Statement of Qualifications.

Protests concerning improprieties that do not exist in the initial solicitation, but that are subsequently incorporated into the solicitation, shall be filed by the next closing date for receipt of Statement of Qualifications following the incorporation. In cases other than those just covered, protests shall be filed no later than ten (10) days after an agreement is awarded in connection with the procurement action. Failure to file a protest in a timely manner shall be deemed a waiver of all rights. Third, and finally, protests shall be in writing and shall include the following information: (1) the name, address, area code, telephone number, and fax number of the protestor; (2) the signature of the protestor or its representative; (3) identification of the solicitation or agreement number; (4) a detailed statement of the legal and factual grounds of the protest, including copies of relevant documents; and (5) the response or relief requested. Protests should be directed to:

Becky McGaugh
Associate Vice President, Procurement & Stores
Contracts, Purchasing, and Risk Management
Northern Arizona University
Building #98B
Box 4124
545 E. Pine Knoll Drive
Flagstaff, AZ 86011

Tel.: (928) 523-6415 Fax: (928) 523-9441

Email: becky.mcgaugh@nau.edu

Please note that the University takes protests very seriously and expects Offerors to do so as well. Frivolous protests will not result in any gain for the Offeror and shall not be considered.

<u>COOPERATIVE PURCHASING AGREEMENTS</u>. An award of contract resulting from this RFQ may be extended for use to other municipalities and government agencies of the state. Any such usage by other municipalities and government agencies must be in accordance with the ordinance, charter and/or rules and regulations of the respective political entity. Any public agencies not identified within this RFQ who wish to cooperatively use the contract are subject to the approval of Offeror.

Owner is a member of S.A.V.E. (Strategic Alliance for Volume Expenditures), which consists of numerous municipalities, counties, universities, colleges, schools, cities, and other Arizona state agencies. These

RFQ CMAR	McConnell Hall Renovation &Landscape Upgra	do
these agencies and a successful Offeror.	,,,,,,,,,,,	
from proposers at the prices, terms, and condi	litions contained in contracts originated between any and all	of
allowed by A.R.S. § 11-952 and § 41-2632. Th	ne IGAs permit purchases of material, equipment, and service	es
COOPERATIVES ARE ACTIONED UNIONALI INTERIORS	ernmental Agreements (IGA) in accordance with provision	ΠS

ATTACHMENTS

ATTACHMENT A: RFQ SUBMITTAL CERTIFICATION

ATTACHMENT B: NO PARTICIPATION IN BOYCOTT OF ISRAEL CERTIFICATION

ATTACHMENT C: RFQ INQUIRY FORM

ATTACHMENT D: CONSTRUCTION MANAGER AT RISK AGREEMENT

ATTACHMENT E: OWNER PROJECT REQUIREMENTS

ATTACHMENT F: TOPOGRAPHIC SURVEY

ATTACHMENT G: AS-BUILT DRAWINGS

ATTACHMENT H: FACILITY CONDITION ASSESSMENT REPORT

ATTACHMENT A: RFQ SUBMITTAL CERTIFICATION

(Date)	
Facility Services Northern Arizona University Flagstaff, AZ 86011	
contract resulting from this request. The names of any and all public officers or em	dge: Check one. zona University who has, or whose relative has, a substantial interest in any ployees of Northern Arizona University who have, or whose relative has, a sequent to this Statement of Qualifications are identified by name as part of
	<u>IS NOT</u> currently debarred, suspended, or proposed for debarment by any ity of any change in this status, should one occur, until such time as an award
	vidual warrants to the University that they have completed an internal onnel and resources to complete this project, should their firm or an
	rell Hall Renovation & Landscape Upgrade and after carefully reviewing all , the undersigned agrees to furnish such goods/services in accordance with
THE FOLLOWING ADDENDUMS ARE HEREBY ACKNO	WLEDGED AS FOLLOWS:
ADDENDUM NUMBER: DATED:	ADDENDUM NUMBER: DATED:
ADDENDUM NUMBER: DATED:	ADDENDUM NUMBER: DATED:
Owner and Construction Manager at Risk (including the construction manager at risk, all of which are attached to undersigned agrees to execute this agreement, subject on that any exceptions taken to the agreement that are not a undersigned's Qualifications as non-responsive. The under	e undersigned has read Owner's current Standard Form Agreement Between e CMAR General Conditions), which contain provisions applicable to the the RFQ. If selected as the construction manager at risk for this project, the ly to the exceptions listed in the space below. The undersigned understands accepted and/or approved by the Owner may be a basis for rejection of the signed also understands that Owner may make changes in the standard form sented to the successful Offeror may be different from the agreement attached yen the opportunity to review the changes.
List any objections to agreement here or attach a sepa	rate sheet behind this certification:
(Firm)	(Address)
(Signature required)	(Phone number)
(Print name)	(Email)

(Federal TIN)

(Title)

ATTACHMENT B: NO PARTICIPATION IN BOYCOTT OF ISRAEL CERTIFICATION

No Boycott of Goods or Services from Israel. If the Goods/Services provided under this Agreement include the acquisition of services, supplies, information technology, or construction with a value of at least \$100,000 and Supplier is engaged in for-profit activity and has 10 or more full-time employees, then, to the extent required by ARS § 35-393.01, Supplier certifies it is not currently engaged in, and during the term of this Agreement will not engage in, a boycott of goods or services from Israel.

Name of Offeror			
Name of Contact		Title of Contact	
Address 1		Address 2	
City	State	Zip Code	
		-	
Telephone Number		Email address, if available	
() -		@ .	
Print Name of Offeror's	Authorized Agent	Signature of Offeror's Authorized Agent	
Title of Offeror's Authorized Agent		Date	

AN AUTHORIZED AGENT OF THE OFFEROR SHALL SIGN THE NO PARTICIPATION IN BOYCOTT OF ISRAEL CERTIFICATION

<u>ATTACHMENT C: RFQ INQUIRY FORM</u> (Pre-Submittal Questions, General Clarifications, etc.)

PROJECT NAME:	McConnell Hall Renovation & Landscape Upgrade
PROJECT NUMBER:	09.620.251
INQUIRY DEADLINE:	Thursday, August 7, 2025, by 4:00 PM
QUESTIONS ON:	ORIGINAL RFQ PACKAGE or ADDENDUM #
SECTION NUMBER: _	
WRITER:	
	PHONE NUMBER:
COMPANY:	
QUESTIONS:	

ATTACHMENT D: CONSTRUCTION MANAGER AT RISK AGREEMENT

The current Construction Manager at Risk Standard Form Agreement and General Conditions are available for review at: https://in.nau.edu/facility-services/pdc/dp-contract/ under "Contracts".

ATTACHMENT E: OWNER PROJECT REQUIREMENTS

Owner Project Requirements document, Version April 29, 2025 (see below)

Owner Project Requirements:

McConnell Hall Renovations

Project No. 09.620.251

1.0 Project Overview

1.1 Project Description

McConnell Hall is scheduled for a series of renovations aimed at improving accessibility, addressing deferred maintenance issues, and enhancing occupant comfort and safety. Major scope items include lighting upgrades, flooring replacements, bathroom and shower area renovations (to increase privacy), potential elevator installation, ADA sidewalk improvements, and updates to the building's plumbing and domestic hot water systems. An electrical load study will be performed to determine necessary infrastructure improvements.

Project stakeholders emphasize the need for timely project delivery to avoid further cost escalation due to deferred maintenance. Project management will coordinate closely with Facilities and design teams to ensure that all critical items (e.g., elevator addition, hot water system replacement) are addressed effectively and align with budgetary constraints.

1.2 Project Goals

- 1. **Accessibility**: Improve building accessibility via potential elevator installation and an ADA-compliant sidewalk.
- 2. **Safety & Code Compliance**: Ensure upgrades meet all applicable code requirements (2021 Building Code, local codes, and ADA standards).
- 3. Occupant Experience: Enhance occupant comfort, privacy (especially in shower areas), and convenience.
- 4. **Deferred Maintenance Reduction**: Address plumbing, domestic hot water, and electrical infrastructure needs to reduce the backlog of maintenance issues and future costs.
- 5. **Energy Efficiency**: Incorporate energy-efficient lighting, fixtures, and infrastructure where possible; conduct load study to guide future electrical upgrades.
- 6. **Maintainability**: Implement systems and design solutions that are maintainable, accessible for repairs, and cost-effective over the building's life cycle.
- 7. **Timely Delivery & Budget Adherence**: Prioritize renovations to avoid cost inflation and manage the budget effectively while achieving project objectives.

2.0 Building Description and Use

- 1. **Primary Use**: McConnell Hall is used primarily for student residence purposes, including sleeping rooms, communal restrooms/showers, study areas, and common spaces.
- 2. Occupant Load:

- o Typically houses students during academic semesters.
- Occupancy peaks at the start of fall/spring terms and may include limited occupancy in summer for camps or conferences.

3. Operational Hours:

- The residence hall operates continuously throughout the academic year (24/7 access for residents).
- Note: Construction or disruptive work may need to be scheduled to minimize impact on residents (e.g., during breaks or phased renovations).

3.0 HVAC & Mechanical Systems

3.1 Scope of Work

- Plumbing & DHW: Replace or upgrade aging domestic hot water equipment (e.g., plate and frame heat exchangers or new water heaters), address P-trap and stack issues, and resolve known leaks/backups.
- Ventilation & Exhaust: Ensure proper ventilation in renovated shower areas (especially if higher stalls or individual shower rooms are introduced).
- **Future Coordination**: Depending on the results of the electrical load study and occupant needs, minor HVAC or mechanical adjustments might be required to support new layouts or code requirements.

3.2 Performance Requirements

1. Heating & Domestic Hot Water:

- Provide reliable hot water supply with adequate capacity to handle peak usage (showers, restrooms).
- Address reliability issues by replacing old equipment and ensuring robust maintenance access.
- Domestic hot water systems shall be designed and sized based on an entering water temperature of 160°F from the campus steam loop. Systems must reliably meet peak demand under these conditions without requiring supplemental heating.

2. Ventilation & Indoor Air Quality:

- Shower areas must be well-ventilated to control humidity and prevent mold or odors.
- Any code-required fresh air rates or exhaust requirements for communal restrooms must be met or exceeded.

3.3 Control Systems

- Integrate or update existing building controls, if applicable.
- Ensure new domestic hot water equipment (or other mechanical systems) is tied into existing BAS (if present) or local controls for monitoring.

3.4 Equipment Redundancy & Resilience

- Evaluate whether backup or redundant hot water systems are necessary based on usage patterns and criticality of resident satisfaction.
- Ensure new equipment is sized and configured to handle potential surges during peak times (e.g., mornings, evenings).
- Domestic hot water systems shall incorporate redundancy to ensure continuous operation during equipment maintenance or unexpected failures. Redundant systems should be sized appropriately to maintain service without interruption during peak demand periods.

3.5 Commissioning Requirements

- A Commissioning Authority (CxA), whether internal or third-party, should verify any new domestic hot water or ventilation systems.
- Testing, Adjusting, Balancing (TAB) of new or modified mechanical systems.
- Functional testing and confirmation that new systems meet code and occupant needs.

4.0 Building Envelope

- **Note**: Major envelope work is not currently in scope unless required to support the elevator addition or ADA sidewalk modifications.
- If any exterior penetrations occur (e.g., for an external elevator tower), ensure envelope integrity (weatherproofing, insulation) is maintained or improved.

5.0 Plumbing Systems

- Domestic Hot Water:
 - Replace aging equipment (plate and frame or other options).
 - o Ensure new systems meet demand without risking scalding or shortages.
- P-trap & Stack Issues:
 - o Investigate and resolve known plumbing defects (backups, leaks).
 - o Incorporate maintenance access points to simplify future repairs.
- Cost & Budget:
 - Typical replacements are estimated at \$60k-\$80k; refine once system design is confirmed.

6.0 Electrical & Controls

1. Electrical Load Study

- Priority: Conduct load study to determine current usage and capacity for expansions (elevator, upgraded lighting, additional circuits).
- o Identify potential need for new panels or additional circuits.
- Evaluate conduit capacity to accommodate new wiring if elevator or other expansions proceed.

2. Lighting Upgrades

- Continue converting to LED lighting for energy efficiency.
- o Update fixtures in hallways, common areas, restrooms as part of renovations.

3. Building Automation / Controls

- o Integrate new or modified equipment into an existing BAS if feasible.
- Provide occupant sensors or controls where beneficial for energy management.

7.0 Sustainability & Energy Efficiency

1. Energy-Efficient Systems

- Select domestic hot water equipment with high efficiency.
- o Optimize lighting retrofits (LEDs, occupancy sensors).

2. Water Conservation

- o Incorporate low-flow fixtures if restrooms/showers are upgraded.
- o Ensure new plumbing systems address leaks and reduce water waste.

8.0 Code & Regulatory Requirements

1. 2021 Building Code & Local Amendments

 Elevator installation and ADA sidewalk modifications must comply with all relevant building and accessibility codes.

2. ADA Compliance

- o Key focus on entryways, sidewalks, and elevator for vertical circulation.
- Shower stall modifications should address accessibility in at least one stall per restroom.

3. Life Safety & Egress

Renovations involving corridor changes or the addition of an elevator may impact egress paths. Ensure code compliance for occupant safety.

9.0 Commissioning & Project Delivery

1. Commissioning Authority (CxA)

o Involve early to confirm design, submittals, and final system tests, especially for any major plumbing, domestic hot water, or ventilation changes.

2. Commissioning Plan

- o Outline responsibilities, schedule, testing procedures, and documentation.
- Engage relevant trades (electrical, mechanical, plumbing) in the commissioning activities.

3. Training & Handover

- Provide training for facilities and maintenance staff on new domestic hot water systems, elevator operations (if added), and any special controls.
- o Deliver O&M manuals, as-built documentation, and warranties.

10.0 Operations & Maintenance

Roles & Responsibilities:

- o Facilities Management will oversee day-to-day operations.
- External contractors may be retained for specialized elevator maintenance or major plumbing work.

• Maintenance Accessibility:

• Ensure new shower areas, hot water equipment, and elevator machine rooms are readily accessible for repairs and inspection.

• Work Order Analysis:

 Continue to track and categorize maintenance issues in McConnell using a regression or root-cause approach (as planned) to proactively address recurrent problems.

11.0 Project Budget & Schedule

1. Budget

- Overall budget must accommodate elevator addition (if approved), plumbing replacements, ADA improvements, and lighting/flooring upgrades.
- Early cost estimates for DHW replacements (\$60k-\$80k) inform budget. Elevator costs vary significantly based on internal vs. external design.

2. Schedule

- Prioritize the electrical load study in the spring semester to guide summer/fall design decisions.
- Coordinate with academic breaks (winter or summer) for disruptive work in bathrooms, common areas, or elevator installation.
- Factor lead times for elevator procurement (if applicable).

12.0 Outstanding Questions & Next Steps

1. Elevator Feasibility

- o Decide on internal vs. external installation.
- o Conduct structural evaluation for internal option (removing a room on each floor).
- o Perform cost-benefit analysis for each approach.

2. Electrical Load Study (Gabriel)

- o Confirm timeline, scope, and final deliverables.
- o Determine if new panels or circuits are required after load study results.

3. Plumbing Detailed Investigation (Gabriel)

- o Get input from Juan on P-trap and stack issues.
- o Evaluate short- and long-term solutions for backups or leaks.

4. Shower Privacy

- o Evaluate design modifications (higher stalls vs. individual shower rooms).
- o Confirm ventilation requirements if rooms or stalls are fully enclosed.

5. ADA Sidewalk

- Define scope for the northwest side walkway.
- Confirm tie-ins with existing sidewalks/entrances.

6. Domestic Hot Water (Joshua)

o Compare final replacement options, costs, and installation timelines.

7. Cost & Prioritization

Develop a phased approach to address critical items first (e.g., DHW, safety/ADA upgrades) while budgeting for long-term solutions (elevator, plumbing).

8. Work Order Regression Analysis

- o Review historical data for McConnell.
- o Identify high-frequency problems to guide final renovation priorities.

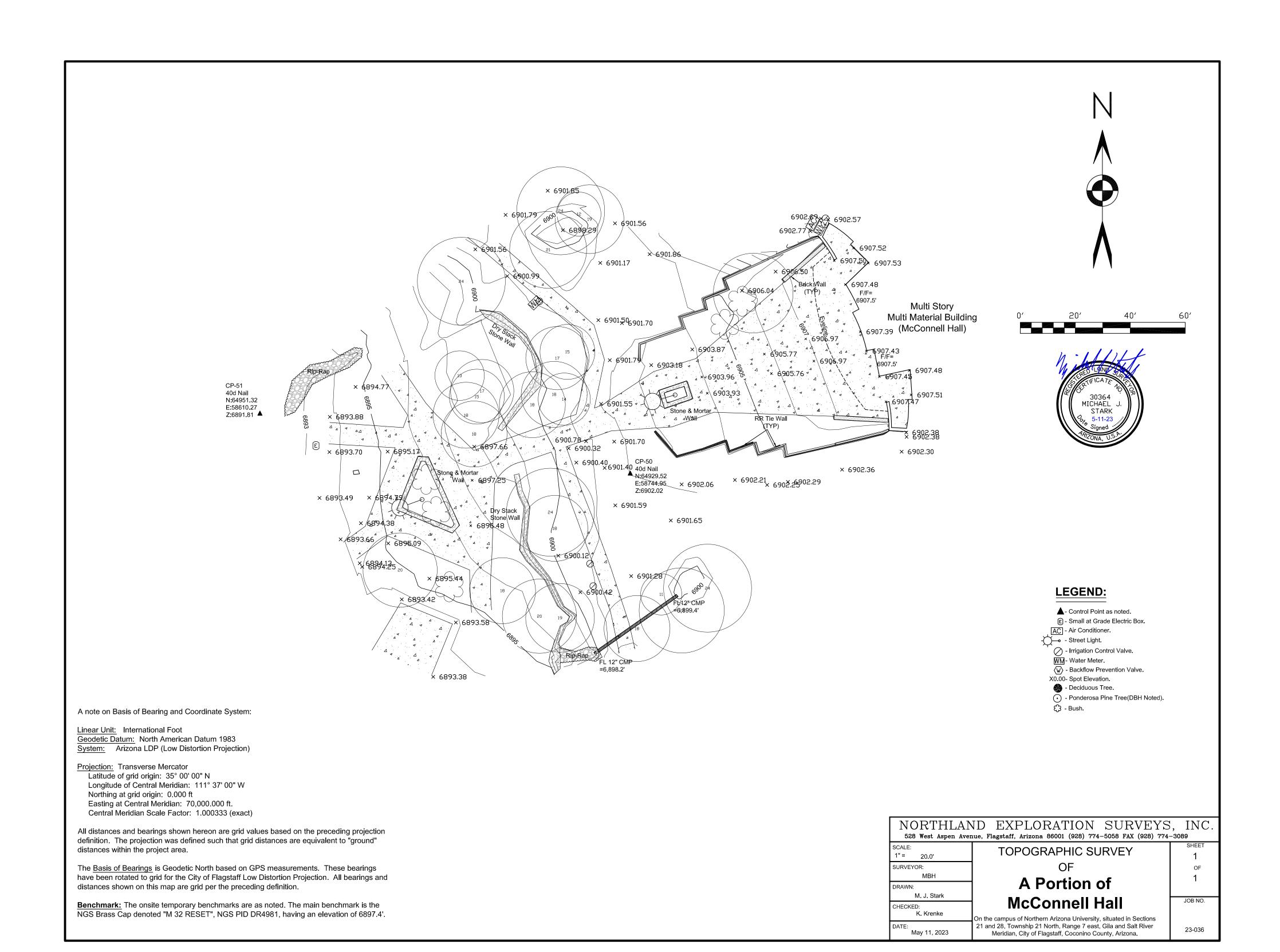
13.0 Approval

Signature & Date

- Building Owner / Authorized Representative
- Project Manager / Design Team Lead
- Commissioning Authority

ATTACHMENT F: TOPOGRAPHIC SURVEY

McConnell Hall Topographic Survey dated May 11, 2023, completed by Northland Exploration Surveys, Inc. (see below)



ATTACHMENT G: AS-BUILT DRAWINGS

McConnell Hall As-Built Drawings completed by Guirey, Srnka & Arnold Architects dated May 22, 1969

These documents may be accessed at the following link: https://acrobat.adobe.com/id/urn:aaid:sc:VA6C2:3f395eed-af99-4d24-8fd7-b31053d83e86

ATTACHMENT H: FACILITY CONDITION ASSESSMENT REPORT

McConnell Hall Facility Condition Assessment Report completed by McKinstry Essention, LLC and dated October 2022



Facility Condition Assessment Report McConnell Hall

FLAGSTAFF, AZ

OCTOBER 2022

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TOP FIVE ISSUES	
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Executive Summary

The contents of this report present the results of the Facility Condition Assessment (FCA) performed on McConnell Hall on the Northern Arizona University campus. This assessment was performed as part of a multibuilding assessment the period of December 9th, 2021 – January 5th, 2022. The Department of Planning, Design & Construction and the Campus Living Department at Northern Arizona University intend to utilize the findings of this report to prioritize maintenance efforts as well as plan for future maintenance and replacement costs associated with these facilities.

FACILITY SUMMARY

McConnell Hall is located at 324 E Pine Knoll Dr, Flagstaff, AZ 86001. The building was constructed in 1971, with a total floor area of 160,132 SF.

The most recent major renovation occurred in 2021 and consisted of the replacement of the heating water generation system, heating devices, and HVAC controls. McConnell Hall is used primarily for student housing and is provided high temperature hot water from the South Heating and Cooling Plant.

CAPITAL PLAN SUMMARY

The estimated replacement costs for equipment expected to fail within the next ten years is shown below, broken up into three separate plans. These plans are the 3-year plan, 5-year plan, and 10-year plan. Each plan includes the equipment expected to fail during these periods, based on the observed condition of the equipment at the time of the assessment.

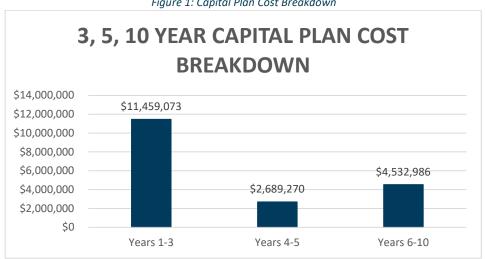


Figure 1: Capital Plan Cost Breakdown

Table 1: 3, 5, 10 Year Plan Costs

В	LDG	FACILITY NAME	YEARS 1-3	YEARS 4-5	YEARS 6-10
	ID	FACILITY NAIVIE	REPLACEMENT COST	REPLACEMENT COST	REPLACEMENT COST
	62	McConnell Hall	\$11,459,073	\$2,689,270	\$4,532,986



Findings

TOP FIVE ISSUES

The list below presents the top five issues for the building assessed, based on asset condition, occupancy impact and observed remaining life. Items on these lists likely need immediate replacement or maintenance to reduce further negative occupant impact. Note, in some instances there were fewer than five issues considered immediate.

62 - McConnell Hall

1. Upgrade the Domestic and Wastewater Systems

The domestic hot water generation and distribution system appears to be dated between the 1970s-late 1990s and is due for replacement. This includes the heat exchangers, distribution pumps, and mixing valves. Additionally, the water supply and wastewater piping are original and due for replacement/extensive repair within 5 years.

The following assets are included within this measure:

- DHW Heat Exchanger 1 (FCAID-620019)
- DHW Heat Exchanger 2 (FCAID-620020)
- DHW Pump 1 (FCAID-620026)
- DHW Pump 2 (FCAID-620027)
- DHW Pump 3 (FCAID-620028)
- DHW Storage Tank (FCAID-620029)
- Plumbing Wastewater (FCAID-620023)
- Plumbing Water Supply (FCAID-620024)
- Thermostatic Mixing Valve 1 (FCAID-620021)
- Thermostatic Mixing Valve 2 (FCAID-620022)

Estimated Remaining Life: 1-3 years Estimated Replacement Cost: \$1,941,140







2. Upgrade Outdated HVAC Equipment

The HVAC system was generally updated within the last few years however, several assets were excluded from historical projects and are now due for upgrades. This includes two air handling units, exhaust fans, and HVAC piping in general.

The following assets are included within this measure:

- Bypass Feeder (FCAID-620039)
- EF-10 (FCAID-620071)
- Heat Exchanger Room Exhaust (FCAID-620072)
- HV-1 (FCAID-620034)
- HV-2 (FCAID-620035)
- Plumbing Compressed Air (FCAID-620101)
- Plumbing Heat Recovery Water (FCAID-620100)
- Plumbing HTHW (FCAID-620103)
- RAF-1 (FCAID-620105)

Estimated Remaining Life: 2-3 years Estimated Replacement Cost: \$1,334,610



3. Update the Branch Wiring, Lighting and Outdated Electrical Distribution Equipment

The electrical distribution wiring and lighting (interior and exterior) throughout the building is original or was installed circa 2000 and now due for replacement. Replacing existing lighting with LED lighting will reduce the facility's electrical costs substantially.

The following assets are included within this measure:

- Branch Wiring (FCAID-620108)
- Exterior Lighting Wall Packs, Incandescent (FCAID-620109)
- Interior Lighting Fluorescent (FCAID-620111)
- Kitchen Panel (FCAID-620116)

Estimated Remaining Life: 2-3 years Estimated Replacement Cost: \$3,737,960





4. Replace the Exterior Windows

The exterior windows are original and have surpassed their typical industry life. Additionally, damaged screens were noted on many of the exterior windows. Replacing these windows (with high efficiency windows) can reduce annual energy expenses and improve occupant comfort.

The following assets are included within this measure:

• Exterior Windows - Aluminum Framed (FCAID-620003)

Estimated Remaining Life: 2 years Estimated Replacement Cost: \$351,670



5. Update the Fire Suppression System

The fire suppression equipment and piping appear to be original to construction (1970). It is recommended that this system is replaced or extensivity retrofitted ensure proper functionality.

The following assets are included within this measure:

Wet Fire Sprinkler System (FCAID-620107)

Estimated Remaining Life: 3 years Estimated Replacement Cost: \$2,824,890





Summary Table

The Building Summary Table presented on the following page assigns a composite Overall Priority Score to the building assessed. Priority Scores range from 5 (low priority) to 25 (high priority), and are based on condition, occupant impact, energy impact, estimated replacement cost, and observed remaining life. In addition to the Overall Priority Score, each Subsystem category within the site is assigned a Priority Score. The Subsystem scores are color coded to reflect the level of priority: $\le 10 = \text{Green}$, 11-15 = Yellow, $\ge 16 = \text{Red}$. Each Subsystem category includes a general narrative section under the Description column.



62 - MCCONNELL HALL



62 - MCCONNELL HALL

BUILDING TYPE: Dorm
YEARS BUILT: 1971
GROSS SQUARE FOOTAGE: 160,132
DATE ASSESSED: 12/18/2021
OVERALL PRIORITY SCORE: 14.1

SUBSYSTEM	DESCRIPTION	PRIORITY SCORE
A10 - Foundations	The foundation is original to 1971 construction and appears to be in average condition.	14.0
B20 - Exterior Enclosure	Exterior masonry walls are original, and in average condition. Damage was noted to the northeast corner, likely due to impact. The exterior metal doors appear to have been updated circa 2000 and are in fair condition. Exterior metal windows are original and in poor condition.	12.2
B30 - Roofing	The EPDM roofing appears to have been replaced in 2010.	14.0
C10 - Interior Construction	The interior drywall walls and ceilings are original, and in expected condition for age. The interior doors, including the dorm room doors, appear to have been replaced within the last few years and are in good condition.	13.3
C20 - Stairs	There are ten stairwells within the building, which are all original. No major deficiencies were noted in the stairwells.	13.0
C30 - Interior Finishes	The interior flooring appears in good condition, including the carpeting, tile work and VCT surfaces.	10.9
D20 - Plumbing	Domestic hot water is provided by two high-temperature hot water to domestic hot water heat exchangers, which are original and in poor condition. Two water softeners installed in 2019 serve the domestic water supply. Generally, the water supply and wastewater piping are original to construction.	14.8
D30 - HVAC	Much of the building's HVAC equipment (including unit heaters, radiators, pumps, and fan coil units) was replaced in 2020/2021. However, the high temperature to hot water heat exchangers are original and in poor condition.	11.8
D40 – Fire Protection	The wet fire suppression system is original, and due for upgrades/replacements over the next 3 years.	18.0
D50 - Electrical	Most of the building's electrical distribution equipment (panels, transformers, switchboards) was replaced in the early 2000s or circa 2020. Interior lighting consists mostly of fluorescent fixtures which are nearing end-of-life and should be replaced with LED fixtures for energy savings. The fire alarm system appears somewhat dated, and will likely require updates in the coming years.	18.3

System priority scored from 5 (low priority) to 25 (high priority) based on condition, occupant impact, energy impact, estimated replacement cost, and observed remaining life. [\leq 10 = green, 10.1-15.9 = yellow, \geq 16 = red]







APPENDIX A: 3-Year Plan Asset Lists

The individual assets associated with each 3-Year Plan are shown below, sorted from highest to lowest priority score.

62 - MCCONNELL HALL

ASSET ID	DESCRIPTION	SUBSYSTEM	OBSERVED REMAINING LIFE (YRS)	REPLACEMENT COST	PRIORITY SCORE
620111	Interior Lighting - Fluorescent	D50 - Electrical	2	\$2,493,415	21
620003	Exterior Windows - Aluminum Framed	B20 - Ext. Enclosure	2	\$351,669	18
620107	Wet Fire Sprinkler System	D40 - Fire Prot.	3	\$2,824,889	18
620110	Fire Alarm System	D50 - Electrical	3	\$1,268,806	18
620034	HV-1	D30 - HVAC	3	\$113,724	17
620023	Plumbing - Wastewater	D20 - Plumbing	3	\$745,815	16
620024	Plumbing - Water Supply	D20 - Plumbing	3	\$1,101,228	16
620035	HV-2	D30 - HVAC	3	\$65,825	16
620108	Branch Wiring	D50 - Electrical	3	\$1,233,817	16
620026	DHW Pump 1	D20 - Plumbing	2	\$6,806	15
620027	DHW Pump 2	D20 - Plumbing	2	\$6,806	15
620028	DHW Pump 3	D20 - Plumbing	2	\$6,806	15
620020	DHW Heat Exchanger 2	D20 - Plumbing	1	\$22,494	14
620102	Plumbing - Heating Water	D30 - HVAC	3	\$896,819	14
620105	RAF-1	D30 - HVAC	3	\$13,200	14
620109	Exterior Lighting - Wall Packs, Incandescent	D50 - Electrical	2	\$7,402	14
620071	EF-10	D30 - HVAC	3	\$13,200	13
620116	Kitchen Panel	D50 - Electrical	2	\$3,327	13
620039	Bypass Feeder	D30 - HVAC	2	\$769	12
620103	Plumbing - Steam	D30 - HVAC	3	\$138,414	12
620072	Heat Exchanger Room Exhaust	D30 - HVAC	2	\$6,823	11
620100	Plumbing - Heat Recovery Water	D30 - HVAC	3	\$80,546	11
620101	Plumbing - Compressed Air	D30 - HVAC	3	\$5,290	10
620019	DHW Heat Exchanger 1	D20 - Plumbing	2	\$22,494	9
620021	Thermostatic Mixing Valve - 1	D20 - Plumbing	2	\$4,997	9



ASSET ID	DESCRIPTION	SUBSYSTEM	OBSERVED REMAINING LIFE (YRS)	REPLACEMENT COST	PRIORITY SCORE
620022	Thermostatic Mixing Valve - 2	D20 - Plumbing	2	\$4,997	9
620029	DHW Storage Tank	D20 - Plumbing	2	\$18,696	9
	Total Years 1-3 Replacement Cost			\$11,459,073	







5-Year Plan Asset Lists

Appendix B: 5-Year Plan Asset Lists

The individual assets associated with each 5-Year Plan are shown below, sorted from highest to lowest priority score.

62 - MCCONNELL HALL

ASSET ID	DESCRIPTION	SUBSYSTEM	OBSERVED REMAINING LIFE (YRS)	REPLACEMENT COST	PRIORITY SCORE
620007	Interior Ceilings - Drywall	C10 - Int. Construct.	5	\$2,128,795	14
620008	Interior Wall Construction - Drywall	C10 - Int. Construct.	5	\$560,475	14
Total Years 4–5 Replacement Cost			\$2,689,270		







10-Year Plan Asset Lists

Appendix C: 10-Year Plan Asset Lists

The individual assets associated with each 10-Year Plan are shown below, sorted from highest to lowest priority score.

62 - MCCONNELL HALL

ASSET ID	DESCRIPTION	SUBSYSTEM	OBSERVED REMAINING LIFE (YRS)	REPLACEMENT COST	PRIORITY SCORE
620025	Plumbing Fixtures	D20 - Plumbing	9	\$2,272,433	14
620004	Exterior Doors - Hollow Metal, Single	B20 - Ext. Enclosure	9	\$35,525	11
620005	Exterior Doors - Hollow Metal, Double	B20 - Ext. Enclosure	9	\$40,601	11
620016	Interior Flooring - Carpet	C30 - Int. Finishes	10	\$2,184,427	11
Total Years 6-10 Replacement Cost			\$4,532,986		







Approach and Methodology

Appendix D: Approach and Methodology

RATINGS METHODS AND SCORING

To allow Northern Arizona University more flexibility in prioritizing its capital planning efforts, McKinstry has developed the following metrics which assign a score to each asset.

Condition

Condition ratings are presented for each asset as a score of 1-5. Scores are based upon a visual inspection during the building evaluation period. A score of 1 signifies that the asset is in great, "like new" condition. A score of 2 indicates that the asset is in good condition. A score of 3 signifies that the asset is in expected "average" condition based off function and the age of the asset. A score of 4 signifies that the asset is in poor condition, in need of repair, and will require replacement soon. A score of 5 signifies that the asset is in very poor or failed condition and in need of imminent replacement.

Occupant Impact

Occupant Impact scores are presented for each asset on a scale of 1-5. This metric considers occupant comfort as well as health and safety risks associated with the equipment if it were to fail. For example, if an air handler serving a critical space in the building fails, and there is no backup unit to serve the space, the asset will receive a score of 5, indicating a severe occupant impact. If an air handler fails that serves a common area, and there is a backup unit present, the asset will receive an Occupant Impact score of 3, signifying a moderate impact to the occupants of the building. An Occupant Impact score of 1 will be assigned to an asset that serves a typically unoccupied area (such as a mechanical room or basement corridor) such that if it were to fail, the asset would not have a significant impact on the occupants of the building.

SCORE	OCCUPANT IMPACT SCORE
1	Failure poses no significant occupant impact.
2	Failure poses low occupant impact.
3	Failure poses moderate occupant impact. Asset serves non-critical area or has backup.
4	Failure poses high occupant impact.
5	Failure poses severe occupant impact. Asset serves critical area and has no backup.

Energy Impact

Energy Impact scores are presented for each asset on a scale of 1-5. Each of the assets within the scope of this assessment were evaluated based on the amount of energy impact the equipment were to have if replaced with a new item. There are three aspects to be considered in the Energy Impact score: cost of energy, carbon footprint, and impact to local emissions. These aspects are weighted at 20% for cost of energy, 50% for carbon footprint, and 30% for emissions impact.

For example, if a pump motor that is well beyond its expected useful life fails, the replacement for that pump motor will be substantially more energy efficient due to advances in technology and engineering since the time that the original pump motor was installed. Such an asset will receive a score of 5 since replacement of the asset will necessarily result in increased energy efficiency. Another example of an asset that would receive an Energy Impact score of 5 is a dated fluorescent lighting fixture that will be replaced with a much more energy efficient LED lighting fixture. Items such as a roof access hatch or carpet flooring will receive an Energy Impact score of 1, as their replacements will not gain any energy efficiency. An example of an asset that will receive an Energy



Impact score of 3 is a heat exchanger that is well beyond its expected useful life. Replacement of this asset will not increase energy efficiency due to technological improvements made during the lifespan of the asset, but replacement of a new like item will increase energy efficiency to the system solely due to that new asset operating at peak efficiency.

SCORE	ENERGY IMPACT SCORE
1	Replacement of asset results in little or no energy impact
2	Replacement of asset results in low energy impact
3	Replacement of asset results in moderate energy impact
4	Replacement of asset results in high energy impact
5	Replacement of asset results in severe energy impact

Industry Life Expectancy

The designed life expectancy for a given asset is determined using a combination of widely accepted industry standards including ASHRAE and BOMA, as well as a manufacturers' database of equipment life expectancies. This value is expressed in number of years.

Observed Remaining Life

The Observed Remaining Life is also expressed in number of years and takes into consideration the function and operating environment of the asset, as well as a determination based upon a visual inspection of the asset. The Observed Remaining Life value may vary from the Design Life value. For example, a secondary heat exchanger that has been well maintained may have an Observed Remaining Life that is greater than the expected Design Life. Likewise, a primary chilled water pump that has not been well maintained, and shows visual signs of premature wear and tear, may have an Observed Remaining Life that is less than the expected Design Life.

SCOPE

The scope of this facility condition assessment includes the major mechanical, electrical, and plumbing equipment as well as exterior envelope and interior finish items deemed to have a significant impact upon the operation and occupancy of the buildings. Building superstructure, site, appliances, and kitchen equipment were excluded from the assessment.

The table below lists the general asset types included within the scope of this assessment. Also shown is the corresponding Uniformat code, which has been used to catalog equipment based on type and intended use.



UNIFORMAT CODE	CATEGORY DESCRIPTION
A10	Foundations
B20	Exterior Vertical Enclosures (i.e., walls, windows, doors)
B30	Exterior Horizonal Enclosures (i.e., roof, skylights, hatches)
C10	Interior Construction (interior doors)
C20	Stairways
C30	Interior Finishes (flooring, wall, and ceiling finishes)
D10	Conveying (i.e., elevators)
D20	Plumbing (i.e., water heating, pumps, compressed air)
D30	Heating, Ventilation and Air Conditioning
D50	Electrical (panels, transformers, switchgear)

COST ESTIMATING

Each asset receives an Estimated Replacement Cost, presented in dollars. The Estimated Replacement Cost includes the material cost of the asset and the installation of that asset. This information is intended to assist in the prioritization and resource allocation associated with maintenance and capital replacement projects. Cost estimates are determined using specific characteristics of each asset (tonnage, motor size, capacity, etc.) along with one of several cost information data sets. These data sets include industry standards, localized RSMeans data, and data sourced through McKinstry's construction division. Additionally, site specific construction and equipment invoices have been utilized as available. All estimated costs are based upon 2021 figures.

