STATE OF COLORADO
OFFICE OF THE STATE ARCHITECT
STATE BUILDINGS PROGRAM

REQUEST FOR QUALIFICATIONS
FOR
ARCHITECTURAL/ENGINEERING/CONSULTING SERVICES

For The

Trinidad State College

For The

Romero Residence Hall - Phase 2

REQUEST FOR QUALIFICATIONS
FOR
ARCHITECTURAL/ENGINEERING/CONSULTING SERVICES

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ARCHITECTURAL/ENGINEERING/CONSULTING SERVICES
REQUEST FOR QUALIFICATIONS
DEPARTMENT OF EDUCATION

I. INTRODUCTION

A. PROJECT DESCRIPTION

The Trinidad State College is currently undertaking a two-phase project to upgrade the Romero Residence Hall. Phase I, which installs air conditioning in each dorm room, is currently underway.

This RFP is being issued for Phase II of the project. Phase II will include bathroom renovations, implementing accessibility improvements, upgrading plumbing fixtures, improving building energy performance with window replacements, replacing exterior doors, adding new interior finishes, add external metal trellis shades to the building façade and updated entry signage.

Trinidad State College will be using the Integrated Project Delivery Method – CMGC approach to project delivery. Through the use of an Architect and a Construction Manager/General Contractor, a Guaranteed Maximum Price (GMP) will be established in conjunction with the [agency/institution]. The CM/GC will evaluate, among other things, availability of materials and labor, project schedule, project costs as they relate to the established budget, and constructability, and will work with the Architect throughout the value engineering phases of the project. The selection process for the CM/GC will begin following the selection of the Architect.

This project has a total budget of $3,000,000, which includes design and construction costs. Design is expected to start early April 2023 and complete in December 2023. Construction will commence in January 2024 and complete no later than August 1st, 2024, in order to be open for the Fall 2024 semester.

Please note that upon successful completion of services, TSC may ask that your firm extend their services for any additional scope of work directly related to this project, should funding become available.

B. SELECTION PROCESS

The selection of an architect/engineer/consultant will be conducted in accordance with the Colorado Revised Statutes, 24-30-1401 et. seq. The process will involve two stages: submittals will be screened and scored. A limited number of firms will be short listed and invited to participate in oral interviews. The Trinidad State College will attempt to negotiate a contract with the highest ranked firm following the interview segment. Following is additional information relative to the selection process:

1. Mandatory Pre-submittal Conference: To ensure sufficient information is available to firms preparing submittals, a mandatory pre-submittal conference has been scheduled. The intent of this conference is to tour the site and to have [agency/institution] staff available to discuss the project. Firms preparing submittals must attend and sign-in in order to have their submittals accepted. The pre-submittal conference will be held at:

Romero Residence Hall
Trinidad State College
600 Prospect Street,
Trinidad, CO 81082
(Romero is located at the corner of 4th Ave and Pine St.)

February 22, 2023 at 11am

2. Architect/Engineer/Consultant's Submittals: Specific requirements for submittals and scoring criteria are detailed in II. SUBMITTAL REQUIREMENTS. In order to facilitate review, one (1) copies of submittals must be provided. Submittals must be received at:

   Hard Copies to:
   Penny Bueno, Purchasing
   Trinidad State Junior College
   600 Prospect Street
   Trinidad, CO 81082

   Electronic Copy to: clara,owinje@nv5.com
   Cc: geoff.graham@nv5.com, Danny.Rogers@trinidadstate.edu

   Deadline for receipt (whether mailed or hand delivered) is March 6, 2023 at 5pm.

   Late submittals will be rejected without consideration. The Trinidad State College and the State of Colorado assume no responsibility for costs related to the preparation of submittals.

3. Screening Panel/Short List: Submittals will be evaluated by a panel of individuals selected in accordance with state policies. The panel will review and score the submittals. Firms ranked the highest will be invited to an oral interview. It is anticipated no fewer than three (3) or no more than three (3) will be interviewed.

Oral Interviews. It is anticipated that oral interviews will be conducted during the week of March 20, 2023. Interviews will be conducted virtually. The time for interviews is to be determined. Key personnel from the firm and major consultants who will be directly involved with the project should attend the interview. The interview panel will, in particular, be interested in knowing about the project approach proposed and in meeting the individuals who will act as the primary contacts with the Trinidad State College.

C. SCHEDULE

Following is a detailed schedule of events for the RFQ process and an outline of the schedule for the balance of the project.

Advertisement	February 6, 2023
Mandatory Pre-submittal Conference/ Tour	February 22, 2023
Date Email Questions Due	February 27, 2023
Date Email Answers Issued	March 1, 2023
RFQ Submittal Due	March 6, 2023
Interview List Released	March 10, 2023
Oral Interviews (as scheduled)	March 20, 2023
Negotiation of A/E Contract	March 23 – April 11, 2023

Contract Approval (projected)	April 11, 2023
Anticipated A/E professional Services - Start	Mar. 27, 2023
Anticipated Construction Services – Start - Finish	Jan. 1, 2024 / July 31, 2024

II. SUBMITTAL REQUIREMENTS

Firms will be judged not only on their past experience for the type of work involved, but also on their ability to address issues critical to the success of the project requirements outlined in this RFQ document. **(Note that the primary focus of the prequalification evaluation will be the firm(s) capability and the primary focus of the oral interview will be the proposed Project Management Team members capabilities.)** Following are elements that will be used to evaluate each firm's qualifications:

A. PROJECT TEAM

Identify the project principal, the project manager, key staff and subconsultants. Present a brief discussion regarding how the team's qualifications and experience relate to the specific project.

- ❑ Qualifications and relevant individual experience.
- ❑ Unique knowledge of key team members relating to the project.
- ❑ Experience on projects as a team.
- ❑ Key staff involvement in project management and on-site presence.
- ❑ Time commitment of key staff.
- ❑ Qualifications and relevant subconsultant experience.

B. FIRM/TEAM CAPABILITIES

- ❑ Are the lines of authority and coordination clearly identified?
- ❑ Are essential management functions identified?
- ❑ Are the functions effectively integrated? (e.g., subconsultants' role delineated)?
- ❑ Current and projected work load.

Note: Organization charts and graphs depicting your capacity may be included.

C. PRIOR EXPERIENCE

Use this portion of your submittal to describe relevant experiences with the project type described in this RFQ document and various services to be provided.

- ❑ Experience of the key staff and firm with projects of similar scope and complexity.
- ❑ Demonstrated success on past projects of similar scope and complexity.
- ❑ References.

Note: Include the name and current telephone number of the owner's project manager for every project listed.

D. PROJECT APPROACH

For the project and services outlined in the RFQ document, describe how you plan to accomplish the following project control and management issues:

- ❑ Budget Methodology/Cost Control.
  - Establish and maintain estimates of probable cost within owner's established budget.
  - Control consultant contract costs
  - Coordinate value engineering activities
- ❑ Quality Control Methodology.
  - Insure State procedures are followed
  - Improve energy efficiency through the use of an integrated design process, life cycle costing, the use of an energy standard (current OSA energy code) and the specification of energy efficient materials, systems, and equipment
  - Insure the project is designed for durability and maintainability
- ❑ Schedule.
  - Manage the required work to meet the established schedule

E. **WORK LOCATION**

Describe where the prime and subconsultants will do the key work elements of this project.

- ❑ Proximity of firms office as it may affect coordination with the State's project manager and the potential project location.
- ❑ Firm's familiarity with the project area.
- ❑ Knowledge of the local labor and material markets.

Appendix A

STATE BUILDINGS PROGRAM
PRELIMINARY SELECTION/EVALUATION FORM
ARCHITECT/ENGINEERING/CONSULTANT SERVICES

QUALIFICATION BASED SELECTION (This form is to be used in the first step, i.e. short listing, of an architectural/engineering/consulting services selection process.)

Evaluator #:_____ Date:_____
Name of Firm:_____
Name of Project:_____

RFQ REFERENCE
MINIMUM REQUIREMENTS Y ____ N ____

If the minimum requirements have not been met, specify the reason(s):
_____
_____

Acknowledgment and Attestation included: Y _____ N _____

SCORE (PROJECT SPECIFIC QUALIFICATIONS): Weight[2] x Rating[3] = Score

1. PROJECT TEAM[1]

- ❑ Qualifications and relevant individual experience. 3_____x_____=____
- ❑ Unique knowledge of key team members relating to the project. 3_____x_____=____
- ❑ Experience on projects <u>as a team</u>. 5_____x_____=____
- ❑ Key staff involvement in project management and on-site presence. 3_____x_____=____
- ❑ Time commitment of key staff. 4_____x_____=____
- ❑ Qualifications and relevant subconsultant experience. 4_____x_____=____

2. FIRM CAPABILITIES[1]

- ❑ Are the lines of authority and coordination clearly identified 3_____x_____=____
- ❑ Are essential management functions identified? 3_____x_____=____
- ❑ Are the functions effectively integrated (e.g., subconsultants' roles delineated?) 3_____x_____=____
- ❑ Current and projected work load. 5_____x_____=____

3. PRIOR EXPERIENCE[1]

- ❑ Experience of the key staff and firm with projects of similar scope and complexity. 5_____x_____=____
- ❑ Demonstrated success on past projects of similar scope and complexity. 5_____x_____=____
- ❑ References. 3_____x_____=____

4. PROJECT APPROACH[1]

- ❑ Budget methodology/cost control. 5_____x_____=____
- ❑ Quality control methodology. 3_____x_____=____
- ❑ Schedule maintenance methodology. 3_____x_____=____

5. WORK LOCATION[1]

- ❑ Proximity of firm's office as it may affect coordination with the state's project manager and the potential project location. 2_____x____=_____
- ❑ Firm's familiarity with the project area. 3_____x____=_____
- ❑ Knowledge of the local labor and material markets. 3_____x____=_____

TOTAL SCORE: _____[4]

NOTES:

1. **Criteria**: Agencies/Institutions are encouraged to include additional criteria that reflect unique characteristics of the project under each category to help determine the submitter's overall qualifications.
2. **Weights**: Agency/Institutions to assign weights, using whole numbers, to all criteria on evaluation forms for inclusion into RFQ document and prior to evaluations.
3. **Ratings**: Evaluator to assess the strength of each firms qualifications and assign a numerical rating of 1 to 5 with 5 being the highest rating 0 is missing information. (Use whole numbers)
4. **Total Score**: Includes the sum of all criteria. Note: a passing score (as a percentage of the total points available) is optional and should be assigned by the agency/institution prior to evaluation.

Appendix A1

STATE BUILDINGS PROGRAM
ORAL INTERVIEW SELECTION/EVALUATION FORM
ARCHITECTURAL/ENGINEERING/CONSULTANT SERVICES

QUALIFICATION BASED SELECTION (This form is to be used in the second step, i.e. oral interview, of an architectural/engineering/consulting services selection process.)

Evaluator #:_____ Date:_____
Name of Firm:_____
Name of Project:_____

SCORE (OVERALL QUALIFICATIONS)[1]:	Weight[2] x Rating[3] = Score
1. PROJECT TEAM[1]	5 x _____ = _____
2. TEAM CAPABILITIES[1]	3 x _____ = _____
3. PRIOR EXPERIENCE[1]	4 x _____ = _____
4. PROJECT APPROACH[1]	4 x _____ = _____
5. WORK LOCATION[1]	2 x _____ = _____
TOTAL SCORE:	_____[4]

NOTES:

1. **Criteria**: Agencies/Institutions are encouraged to include additional criteria that reflect unique characteristics of the project under each category to help determine the submitter's overall qualifications.
2. **Weights**: Agency/Institutions to assign weights, using whole numbers, to all criteria on evaluation forms for inclusion into RFQ document and prior to evaluations.
3. **Ratings**: Evaluator to assess the strength of each firms qualifications and assign a numerical rating of 0 to 5 with 5 being the highest rating. (Use whole numbers), 0 is missing information.
4. **Total Score**: Includes the sum of all criteria. Note: a passing score (as a percentage of the total points available) is optional and should be assigned by the agency/institution prior to evaluation.

Appendix A2

STATE BUILDINGS PROGRAM
FINAL RANKING MATRIX

QUALIFICATION BASED SELECTION
(This form is to be used separately to rank and determine the most qualified architectural/engineering/consulting services firm for both the preliminary and interview evaluations.)

FIRM	**QUALIFICATIONS SCORE[1]**						**CUMULATIVE[2] TOTAL SCORE**	**RANK[3]**
	EVAL #1	EVAL #2	EVAL #3	EVAL #4	EVAL #5	EVAL #6		

NOTES:
1. Insert total score from each evaluator's PRELIMINARY SELECTION AND INTERVIEW SELECTION/EVALUATION FORMS. DO NOT combine scores of the two evaluations.
2. Add all evaluators' total scores to determine the cumulative score. NOTE: Each firm's cumulative total score should be as a percentage of the total points available.
3. Rank all firms with the highest scoring firm being the most qualified.

Appendix B

ARCHITECT/ENGINEER/CONSULTANT CONTRACT
(STANDARD OR CM/GC FORMAT)

STATE OF COLORADO
OFFICE OF THE STATE ARCHITECT
STATE BUILDINGS PROGRAM

ARCHITECT/ENGINEER AGREEMENT
CONSTRUCTION MANAGER/GENERAL CONTRACTOR

(STATE FORM SC-5.2)

STATE AGENCY:	Insert Department's or IHE's Full Legal Name
DEPARTMENT ID:	XXXX
CONTRACT ID #:	Insert CMS Number & Encumbrance Number
PROJECT #:	Insert OSC Project Number
PROJECT NAME:	Insert Project Name as provided by the State Controller's Office
VENDOR NAME:	Insert Contractor's full Legal Name including "Inc.", "LLC" etc.

STATE OF COLORADO
OFFICE OF THE STATE ARCHITECT
STATE BUILDINGS PROGRAM

ARCHITECT/ENGINEER AGREEMENT
CONSTRUCTION MANAGER/GENERAL CONTRACTOR
(STATE FORM SC-5.2)

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SIGNATURE PAGE

THE PARTIES HERETO HAVE EXECUTED THIS AGREEMENT

Each person signing this Agreement represents and warrants that the signer is duly authorized to execute this Agreement and to bind the Party authorizing such signature.

*Persons signing for Architect/Engineer hereby swear and affirm that they are authorized to act on Architect/Engineer's behalf and acknowledge that the State is relying on their representations to that effect. **Principal is not** a recognized title and will not be accepted.

Project Number/Name: Insert OSC Project Number followed by Project Name

CMS Contract ID No.: Insert CMS Number & Encumbrance Number

ARCHITECT/ENGINEER* INSERT-Legal Name of Contractor _____ By: Name & Title of Person Signing for Consultant Date: _____	**STATE OF COLORADO** Jared S. Polis, Governor INSERT-Name of Agency or IHE INSERT-Name & Title of Head of Agency or IHE _____ By: Name & Title of Person Signing for Agency or IHE Date: _____
DEPARTMENT OF PERSONNEL & ADMINISTRATION STATE BUILDINGS PROGRAM State Architect (or authorized delegate) _____ By: Name & Title of SBP Delegate Date: _____	**LEGAL REVIEW** Philip J. Weiser, Attorney General By:_____ Assistant Attorney General Date: _____

In accordance with §24-30-202, C.R.S., this Contract is not valid until signed and dated below by the State Controller (or an authorized delegate) or the Title of IHE CFO per the Fiscal Rules of the individual Institution of Higher Education

STATE CONTROLLER
Robert Jaros, CPA, MBA, JD

By:_____
Name of Agency or IHE Delegate-Please delete if contract will be routed to OSC for approval

Effective Date:_____

STATE OF COLORADO
OFFICE OF THE STATE ARCHITECT
STATE BUILDINGS PROGRAM

ARCHITECT/ENGINEER AGREEMENT
CONSTRUCTION MANAGER/GENERAL CONTRACTOR
(STATE FORM SC-5.2)

Department ID: Insert Dept. Code Contract ID #: Insert Contract ID Project #: insert Project #

PARTIES. THIS AGREEMENT is entered into by and between the STATE OF COLORADO, acting by and through the Insert Department's or IHE's Full Legal Name hereinafter referred to as the Principal Representative, and Insert Contractor's full Legal Name including "Inc.", "LLC" etc. having its offices at **Street address, City, State and Zip Code**hereinafter referred to as the Architect/Engineer.

EFFECTIVE DATE AND NOTICE OF NONLIABILITY. This Agreement shall not be effective or enforceable until it is approved and signed by the State Controller or its designee (hereinafter called the "Effective Date"), but shall be effective and enforceable thereafter in accordance with its provisions. The State shall not be bound by any provision of this Contract before the Effective Date, and shall have no obligation to pay Architect/Engineer for any Work performed or expense incurred before the Effective Date.

RECITALS:

WHEREAS, the Principal Representative intends to procure Insert Project Name as provided by the State Controller's Officehereinafter called the Project; and

WHEREAS, authority exists in the Law and Funds have been budgeted, appropriated, and otherwise made available, and a sufficient unencumbered balance thereof remains available for payment In Fund Number Insert Fund Number Here, Account Number Insert Account Number here; and

WHEREAS, the State has **Appropriated** and the Principal Representative has been authorized to expend the total sum of Insert dollar value written in words Dollars ($_____) for this project including all professional services, construction/improvements, project contingencies, furnishings, movable equipment, reimbursable expenses and miscellaneous expenses; and

(WHEREAS, funds are available for only a portion of the services defined herein, as more fully described in the funding Condition Precedent clause in Article 3.5)

WHEREAS, the Principal Representative has established the **Fixed Limit of Construction Cost** in the amount of Insert dollar value written in words Dollars ($_____) and

WHEREAS, the Construction Manager/General Contractor shall establish a **Guaranteed Maximum Price** that is within this Fixed Limit of Construction Cost as established by the Principal Representative, at the completion of the Design Development Phase; and

WHEREAS, the Architect/Engineer was selected and determined to be the most qualified, and fees were negotiated in accordance with the provision of Title C.R.S. § 24-30-1401 et seq., as amended; and

NOW THEREFORE,
The Principal Representative and the Architect/Engineer, for the considerations hereinafter set forth, agree as follows:

1 ARTICLE 1 BASIC SERVICES OF THE ARCHITECT/ENGINEER

1.1 THE SERVICES

1.1.1 The Architect/Engineer's services shall be provided in conjunction with the services of the Construction Manager/General Contractor, hereinafter referred to as Construction Manager or CM, as set forth in the Contract between the State and Construction Manager, hereinafter referred to as the Construction Manager Contract. The Architect/Engineer's services shall consist of _____ design phases hereinafter set forth and include normal architectural, structural, mechanical, electrical and civil engineering services; landscaping if any; space planning/interior layout; and any other services included in this Agreement as delineated in the proposal letter dated _____ , submitted by the Architect/Engineer, which is attached hereto and made a part hereof by reference as Exhibit A. Numerous exhibits developed over a period of time are also attached to and made a part of this Agreement, some of which may be in conflict with other exhibits or portions of this Agreement. In the event of any conflict in any of these, the greater service shall be included in the professional services provided and the contract sum without additional compensation to be superseded by applicable amendment sum or supplement.

1.1.2 In the performance of the professional services, the Architect/Engineer acknowledges that time is critical for Project delivery and that portions of the work shall have their design completed as separate Bid Packages and ready for construction before other portions of the work are fully designed. It is further recognized that this accelerated approach to construction utilizing the services of an Architect/Engineer and a Construction Manager/General Contractor is a unique concept and that its feasibility requires maximum cooperation between all parties. It is also recognized that the services to be rendered by the Construction Manager and the interrelationships and coordinative aspects thereof are not traditional. The Architect/Engineer has, however, reviewed the Construction Manager Contract and accepts the terms thereof as expressing a workable concept. In furtherance thereof, in the event there appears to be a duplication, overlap, or conflict of responsibility or duties between the Architect/Engineer and the Construction Manager, or an absence of designation, the question shall be submitted to the Principal Representative for determination. The Architect/Engineer shall abide by the decision of the Principal Representative provided it does not require the performance of services beyond what was reasonably contemplated and accepted by the Architect/Engineer as its responsibility.

1.1.3 The Architect/Engineer further acknowledges that the Fixed Limit of Construction Cost recited above as the Principal Representative's expenditure limit is intended to cover the entire cost of the Project and is sufficient therefore and has been fully appropriated. The Architect/Engineer therefore agrees to cooperate fully with the Principal Representative in the design and construction aspects to keep within these limitations.

1.1.4 The number of Bid Packages shall be established at _____. Should the Principal Representative request additional or fewer Bid Packages than the established number, the cost involved in development of additional or the deletion of proposed bid packs shall be reflected in an Amendment to the Agreement for Additional Services.

1.1.5 The Architect/Engineer shall participate in sessions at the close of Schematic Design Phase, Design Development Phase, and as Construction Documents are finalized for each Bid Package. These Project Design Review Sessions shall be attended by the Architect, and a representative of the Principal Representative. The purpose of the Project Design Review Sessions is to (1) confirm consistency with the design intent; (2) confirm complete, coordinated, constructible and cost-effective designs for all disciplines (e.g. architectural, structural, mechanical, electrical); (3) confirm that the design documents are code compliant; (4) endeavor to confirm that all Work has been included and described in sufficient detail to confirm complete pricing of the Work; and (5) allow for phased construction. The Architect/Engineer shall collect all design review comments

from the various participants, provide reports to the Principal Representative, and confirm that with the issuance of each progress set of design documents all comments have either been incorporated or resolved to the satisfaction of the Principal Representative.

1.1.6 The Architect/Engineer shall participate in formal value engineering workshops at the end of the Schematic Design Phase and the Design Development Phase, bringing multidiscipline cost estimating and design experts to evaluate alternative designs, systems and materials.

1.1.7 The Architect/Engineer shall make certain to the best of its knowledge, information and belief, that the drawings and specifications prepared by it are in compliance with the Approved Codes as adopted by State Buildings Program (as a minimum standard) as indicated in **Exhibit C**, Approved Codes. Other more restrictive standards as specified by the Principal Representative are as indicated in **Exhibit C**. Drawings and specifications are to be reviewed by the State's approved Code Review Agents at the appropriate phases and with the required information as described in the attached Code Compliance Reviews, **Exhibit D**.

1.2 QUALIFICATIONS

1.2.1 The services shall be performed by the Architect/Engineer or by consultants licensed or registered by the State of Colorado as required by law. If these special consulting services are to be performed by professionals in the Architect/Engineer's employ, then the services must currently be and have been for at least two (2) years previously, regularly a service of the Architect/Engineer's organization.

1.2.2 In the event the Architect/Engineer does not have as part of its regular staff and services certain professional consultants and consulting services, such as but not limited to, architectural, structural, mechanical, electrical, civil, landscaping, and/or space planning/interior layout, then such consulting services shall be performed by practicing professional consultants.

1.2.3 All professional consultants, staff or practicing, must be retained for the duration of the Project, provided, however, that acceptable replacements must have prior approval, in writing, by the Principal Representative which approval shall not be unreasonably withheld.

1.2.4 Prior to designating a professional to perform any of these services, the Architect/Engineer shall submit the name, together with a resume of training and experience in work of like character and magnitude of the project being contemplated, to the Principal Representative, and receive approval in writing therefrom.

1.2.5 No consultant shall be engaged or perform work on the Project wherein a conflict of interest exists, such as being connected with the sale or promotion of equipment or material which may be used on the Project, provided, however, that in unusual circumstances and with full disclosure to the Principal Representative of such interest, the Principal Representative may permit a waiver, in writing, in respect to the particular consultant.

1.2.6 The Architect/Engineer shall designate all of its consultants in **Exhibit A**, which list may only be modified in accordance with paragraph 1.2.4 or 1.2.5.

1.3 PRE-DESIGN PHASE

1.3.1 As designated and defined in the Architect/Engineer's Proposal **Exhibit A**.

1.4 SCHEMATIC DESIGN PHASE

1.4.1 The Architect/Engineer or its duly authorized representative shall attend regular meetings with the Principal Representative and the Construction Manager, and such additional meetings as the Principal Representative may request or as may be requisite to a complete understanding of the Project. All regular meetings shall be scheduled by the Architect/Engineer with the agreement of the Construction Manager and approval of the Principal Representative. The Architect/Engineer shall document all such conference notes and distribute same to the Principal Representative.

1.4.2 The Architect/Engineer shall review the design program furnished by the Principal Representative and/or as prepared under separate contract by the Architect/Engineer, including the approved Facilities Program Plan, to ascertain the requirements of the Project and shall refine the design program in accordance with **Exhibit E**, reviewing and confirming the understandings of these requirements and other design parameters with the Principal Representative.

1.4.3 During the progress of the Schematic Design Phase, the Architect/Engineer shall keep the Construction Manager informed of changes in requirements or in materials, equipment, component systems and types of construction as the drawings and specifications are developed so that the Construction Manager can formulate the Estimates of Construction Cost and the Guaranteed Maximum Price appropriately.

1.4.4 The Architect/Engineer shall review with the Principal Representative and Construction Manager site use and improvements, selection of materials, building systems and equipment, construction methods, and methods of Project delivery.

1.4.5 Based on the mutually agreed upon design program and the Fixed Limit of Construction Cost, the Architect/Engineer shall prepare, for acceptance by the Principal Representative, Schematic Design Documents consisting of drawings, outline specifications and other documents illustrating the scale and relationship of Project components. Schematic Design Documents shall be prepared in sufficient detail and number to come to an agreement on the basic design of the Project.

1.4.6 At intervals appropriate to the progress of the Schematic Design Phase, the Architect/Engineer shall provide copies of schematic design studies for the Construction Manager's review, monitoring, and input, for the in-progress work and any completed components thereof, which will be completed so as to cause no delay to the Architect/Engineer. The purpose of such input shall address efficiency of materials, constructability, availability of components and compatibility of systems.

1.4.7 At intervals appropriate to the progress of the Schematic Design Phase, the Architect/Engineer shall provide the Principal Representative with copies of all materials, documents, and studies necessary to permit the Principal Representative to monitor, review, provide input to, and any necessary acceptance of, the Schematic Design Phase in progress and completed components thereof. This reviewing process shall be made so as to cause no delay to the Architect/Engineer. The Architect/Engineer shall respond in writing to the Principal Representative's comments resulting from this reviewing process.

1.4.8 At the completion of the Schematic Design Phase, the Architect/Engineer shall:

a) Provide ( ) complete sets of drawings, outline specifications and construction materials, and such other documents necessary to fully illustrate the Schematic Design Phase to the Principal Representative and solicit its acceptance;

b) Provide ( ) complete sets of drawings and (1 reproducible) complete set, outline specifications and construction materials, and such other documents necessary for the Construction Manager to prepare an estimate of the cost of construction;

c) Assist the Construction Manager in reviewing and verifying such Estimates of Construction Cost;

d) Independent of the Construction Manager, prepare and submit to the Principal Representative a construction cost estimate which will serve as a Statement of Probable Cost.

1.4.9 The Architect/Engineer shall also prepare a written report, accompanied by drawings, setting forth the following as a minimum:

a) Analysis of the structure as it relates to the Approved Codes as defined in Exhibit D, including responses to the State's Code Review Agent;

b) Recommend site locations and scope of site development;

c) Correlation of spaces with approved State standards;

d) Conceptual drawings of floor plans, elevations, section, and site plan;

e) Conceptual drawings and descriptions of project plumbing, mechanical and electrical systems as necessary;

f) Area computations, gross square footage and net square footage, and volume;

g) Outline of proposed construction materials;

h) Review of time anticipated for the Construction Phase(s);

i) Written description of the bid packaging strategy agreed upon with the Construction Manager/General Contractor.

1.4.10 The above Schematic Design data shall be subject to the acceptance in writing by the Principal Representative, Construction Manager and State Buildings Program.

1.4.11 Architect/Engineer shall also assist the Construction Manager in the preparation of the Construction Manager's written report at the end of the Schematic Design Phase summarizing the Construction Manager's value engineering activities.

1.5 DESIGN DEVELOPMENT PHASE

1.5.1 Based on the written acceptance of the Schematic Design Documents and any adjustments authorized by the Principal Representative in the design program or the Fixed Limit of Construction Cost, if any, the Architect/Engineer shall prepare, for acceptance by the Principal Representative and State Buildings Program the Design Development Documents consisting of drawings, outline specifications, and other documents to fix and describe the size and character of the entire Project as to architectural, structural, mechanical, and electrical systems, materials, and such other elements as may be appropriate. The Design Development Documents shall be developed in sequence replicating the proposed Bidding Packages.

1.5.2 During the progress of the Design Development Phase the Architect/Engineer shall keep the Construction Manager informed of changes in requirement or in materials, equipment, component systems and types of construction as the drawings and specifications are developed so that the Construction Manager can formulate the Estimates of Construction Cost and the Guaranteed Maximum Price appropriately.

1.5.3 At intervals appropriate to the progress of the Design Development Phase, the Architect/Engineer shall provide copies of Design Development studies for the Construction Manager’s review, monitoring and input, to the in-progress Work and any completed components thereof, which will be completed so as to cause no delay to the Architect/Engineer. The purpose of such input shall address efficiency of materials, systems, and components; constructability within acceptable means; availability of materials, systems, and components; and cost control.

1.5.4 At intervals appropriate to the progress of the Design Development Phase, the Architect/Engineer shall provide the Principal Representative with copies of all materials, documents, and studies necessary to permit the Principal Representative to monitor, review, provide input to, and any necessary acceptance of, the Design Development Phase in progress and completed components thereof. This reviewing process shall be made so as to cause no delay to the Architect/Engineer. The Architect/Engineer shall respond in writing to the Principal Representative’s comments resulting from this reviewing process.

1.5.5 At the completion of the Design Development Phase, the Architect/Engineer shall provide:

a) _____complete sets of drawings, outline specifications and construction materials, and such other documents necessary to fully illustrate the Design Development Phase to the Principal Representative and solicit its acceptance.

b) _____ complete sets of drawings and (1 reproducible) complete set, outline specifications and construction materials, and such other documents necessary for the Construction Manager to prepare an estimate of the cost of construction.

1.5.6 The Architect/Engineer shall prepare a written report and drawings outlining in detail Design Development Documents from the accepted Schematic Design study. The report, when submitted for acceptance by the Principal Representative and the Construction Manager shall include as a minimum:

a) Analysis of the structure as it relates to the Approved Codes defined in **Exhibit D**, including responses to the State's Code Review Agent;

b) Site development drawings, defining the proposed scope of development including earthwork, surface development, and utility infrastructure;

c) Plans in one-line format of the proposed structural, mechanical, and electrical systems as necessary to define size, location and quality of equipment, materials, and constructions;

d) Floor plans including proposed movable equipment and furnishings and exterior elevations;

e) Cut-sheets and/or samples of proposed materials, equipment and system components including all such items normally specified under the Construction Specifications Institute, Specifications Format Divisions;

f) Proposed architectural finish schedule, HVAC, plumbing and electrical fixture schedules;

g) Outline specifications, using CSI format, identifying conditions of the contract, materials, and standards;

h) Review of the time anticipated for the Construction Phase(s).

i) These documents shall be of sufficient detail to allow the Construction Manager to enter into an agreement for the execution of the construction based on a Guaranteed Maximum Price.

1.5.7 The Architect/Engineer shall assist the Construction Manager in the preparation of the Construction Manager’s written report at the conclusion of the Design Development Phase summarizing the Construction Manager’s value engineering activities.

1.5.8 The Architect/Engineer shall make certain that to the best of its knowledge, information, and belief the drawings and specifications prepared by it are in full compliance with applicable codes, regulations, laws and ordinances, including both technical and administrative provisions thereof. Such drawings and specifications shall conform to the list of Approved Codes as defined in **Exhibit C.** If the Architect/Engineer shall deviate from such codes, regulations, law or ordinance, without written authorization to do so from the Principal Representative, then the Architect/Engineer shall, at its own expense, make such corrections in the Construction Documents as may be necessary for compliance.

1.5.9 The final Design Development Documents, revised as required by the Construction Manager's approved Guaranteed Maximum Price established within the recited Fixed Limit of Construction Cost, shall be subject to acceptance in writing by the Principal Representative and State Buildings Program.

1.5.10 Independent of the Construction Manager, the Architect/Engineer shall prepare and submit a construction cost estimate which will serve as an update of the Statement of Probable Construction Cost.

1.6 CONSTRUCTION DOCUMENTS PHASE

1.6.1 Based on the Principal Representative and State Buildings Program accepted Design Development Documents and any further adjustments in the scope or quality of the Project or in the Construction Manager's Guaranteed Maximum Price, if any, authorized by the Principal Representative, the Architect/Engineer shall prepare, for acceptance by the Principal

Representative, Construction Documents consisting of drawings and specifications setting forth in detail the requirements for the construction of the Project.

1.6.2 During the progress of the Construction Document Phase, the Architect/Engineer shall keep the Construction Manager informed of any changes in requirements or in construction materials, systems or equipment.

1.6.3 At intervals appropriate to the progress of the Construction Document Phase, the Architect/Engineer shall provide copies of documents for the Principal Representative and the Construction Manager's review, monitoring and input to the in-progress Construction Document Phase and any completed components thereof, which will be completed so as to cause no delay to the Architect/Engineer. These intervals shall be no fewer than at 50% and 95% completion of the Construction Documents Phase. The Architect/Engineer shall respond in writing to the Principal Representative's review comments.

1.6.4 These Construction Documents, when each Bid Package is submitted for approval, shall include:

a) (_____) complete sets and (1 reproducible) complete set of architectural, civil, site development, structural, mechanical and electrical drawings as appropriate to assist in the definition of the submitted Bid Package;

b) Complete Bidding Documents including architectural, structural, mechanical and electrical specifications for that Bid Package. The format for these technical specifications shall be the current edition of *MasterFormat* published by the Construction Specifications Institute;

c) The title sheet shall contain the International Building Code (I.B.C.) occupancy type, construction type, gross square footage and net square footage, and gross building volume;

d) Each Bidding Package, as appropriate, shall contain a Code Compliance Plan as per **Exhibit D**, Code Compliance Reviews, that defines area separation, fire and smoke barriers, exits, exit passages, and exit enclosures.

1.6.5 The Architect/Engineer shall assist the Construction Manager in preparation of the Construction Manager's written report summarizing the Construction Manager's value engineering activities through the completion of this phase of the work.

1.6.6 The final Construction Documents shall be subject to the final acceptance by the Principal Representative, Construction Manager and State Buildings Program in writing.

1.7 BIDDING PHASE

1.7.1 The Architect/Engineer, following the Principal Representative's and State Buildings Program' approval of the Construction Documents, shall assist the Construction Manager in obtaining bids conforming to the requirements of C.R.S. § 24-103-202(7), as amended, by rendering interpretations and clarifications of the drawings and specifications in appropriate written form. The Architect/Engineer shall assist the Construction Manager in conducting mandatory pre-bidding conferences with all principal bidders and pre-award conferences with successful bidders.

1.7.2 The Architect/Engineer shall consult with and make recommendations to the Principal Representative pertaining to the Construction Manager's proposed subcontractors.

1.7.3 In addition to the copies required for the preceding design phases, the Architect/Engineer shall furnish copies of the Construction Documents for each Bid Package as follows, subject to limitations hereinafter set forth:

a) For Bidding Documents: (_____) sets and (1 reproducible) complete set to confirm distribution among contractors and subcontractors in accordance with the advertisement for bids.

b) For Contract Documents: The Principal Representative will require (_____) sets of Contract Documents. The Contract Documents for each Bid Package, bearing the professional seal and signature of the Architect/Engineer and the appropriate responsible professional engineering

consultants, are to be signed by the Construction Manager and Principal Representative at each contract signing conference. The Architect/Engineer acknowledges that prior to the contract signing conference and State Buildings Program authorizing the Notice to Proceed to Commence Construction Phase State Form SBP-7.26 a Letter of Compliance must be obtained from the State's Code Review Agent verifying that the contract Documents and all addenda, value engineering recommendations and all other changes to the bidding documents are in compliance with the applicable codes as adopted by State Buildings Program as indicated in **Exhibit C.**

c) For Construction: The Construction Manager shall be furnished with (_____) sets or partial sets of the Contract Documents to insure prompt prosecution of the work.

d) (_____) complete sets of drawings and specifications shall be the maximum required to be furnished by the Architect/Engineer. The Principal Representative will pay for all other sets of documents or partial sets of documents required at the cost of reproduction.

1.7.4 The Architect/Engineer shall assist the Principal Representative and Construction Manager in the preparation of the necessary bidding information, bidding forms and amendments to the Construction Manager Contract, to include the respective Bid Packages.

1.7.5 The Architect/Engineer shall assist the Principal Representative and Construction Manager in connection with the Principal Representative's responsibility for filing documents required for approvals of governmental authorities having jurisdiction over the Project.

1.7.6 At the completion of each bidding package, the Architect/Engineer shall prepare independent of the Construction Manager and present to the Principal Representative an update of the Design Development Statement of Probable Construction Cost for each specific Bid Package and the project total.

1.7.7 Prior to the Authorization to Commence Construction Phase for the first Bid Package, the Architect/Engineer and the Construction Manager shall certify that the entire Project has been completed through at least the Design Development Phase of the Architect/Engineer's Agreement and the Construction Manager shall certify that the sum of all proposed individual Bid Package Guaranteed Maximum Prices total the Project Guaranteed Maximum Price. This Project Guaranteed Maximum Price shall be equal or less in sum to the Fixed Limit of Construction Cost. It is agreed that only when those conditions are met and accepted by the Principal Representative may the Authorization to Commence Construction Phase be issued for the first Bid Package.

1.8 CONTRACT ADMINISTRATION PHASE FOR MULTIPLE SEPARATE BID PACKAGES

1.8.1 The Construction Phase will commence with the award of the initial Bid Package and, together with the Architect/Engineer's obligation to provide basic services under this Agreement, will end upon expiration of the one (1) year warranty period from the Notice of Substantial Completion or the Notice of Partial Substantial Completion of the construction.

1.8.2 The Architect/Engineer shall provide the Contract Administration and perform all of the duties to be provided by the Architect/Engineer for the Project as set forth in this Agreement and in the Contract Documents. The Architect/Engineer acknowledges that while most of the construction of the Project will be constructed through the Construction Manager, the State has reserved the right to perform portions of the work on the Project through its own forces or through separate contractors. The Architect/Engineer expressly agrees to perform all of the same services set forth herein and in the Contract Documents with the Construction Manager for any and all separate contractors engaged by the Principal Representative to perform work designed by the Architect/Engineer on the Project.

1.8.3 The Architect/Engineer and Construction Manager shall advise and consult with the Principal Representative during the construction phases. All instructions and written communications with the Construction Manager shall be copied to the Principal Representative. The Architect/Engineer

shall have authority to act on behalf of the Principal Representative only to the extent provided in the Contract Documents.

1.8.4 The Architect/Engineer and its structural, mechanical and electrical engineers will visit the site at intervals appropriate to the stage of construction or otherwise agreed by the Principal Representative in writing to become generally familiar with the progress and quality of the Work to determine in general if the Work is being performed in a manner indicating that the Work when completed will be in accordance with the Contract Documents. Observation may extend to all or any part of the Work and to the preparation, fabrication or manufacture of materials. However, the Architect/Engineer shall not be required to make exhaustive or continuous on-site inspections to check the quality of the Work. On the basis of observation as an architect/engineer, the Architect/Engineer shall keep the Principal Representative informed of the progress and quality of the Work, and shall endeavor to guard the Principal Representative against defects and deficiencies in the Work.

1.8.5 If through no fault of the Architect/Engineer, trips to observe construction during the Construction Phase of the project are required in excess of those reasonably necessary to perform all Architectural/Engineering services described herein, the Architect/Engineer's compensation for the Construction Administration Phase shall be adjusted as an Additional Service for the cost to the Architect/Engineer of such trips, and paid in accordance with Article 3.2.

1.8.6 The Architect/Engineer shall provide notice to the Principal Representative of specific visits to be made during the various phases of construction and provide a written report of conditions observed, instructions given, and actions agreed to.

1.8.7 If requested by the Principal Representative, the Architect/Engineer shall provide, in addition to the above, a full-time representative on site during all regularly scheduled work hours. This representative shall have a minimum of 10 years' experience in work closely related to construction management/general contractor construction field administration and shall be approved by the Principal Representative in writing. If requested by the Principal Representative, the Architect/Engineer's compensation for the Contract Administration Phase shall be adjusted as an Additional Service and paid in accordance with paragraph 3.2.4. The Construction Manager shall provide the full-time representative with a suitable private office supported with standard office equipment including access to copiers, fax machines, etc.

1.8.8 From the time of the Construction Manager's on-site mobilization to the issue of the final Notice of Final Acceptance, the Architect/Engineer, or an appropriate consultant, shall observe for contract compliance, the following without limitation:

a) Bearing surfaces of excavations before concrete is placed;

b) Reinforcing steel after installation and before concrete is placed;

c) Structural concrete;

d) Laboratory reports on all concrete testing;

e) Structural steel during and after erection and prior to its being covered or enclosed;

f) Steel welding;

g) Mechanical and plumbing work following its installation and prior to its being covered or enclosed;

h) Electrical work following its installation and prior to its being covered or enclosed;

i) Compaction testing reports;

j) Any special or quality control testing required in the Contract Documents.

1.8.9 The observation contemplated in this article does not include the responsibility to conduct testing but does include the responsibility to confirm that tests were conducted as required in the Documents as well as a review of the test results.

1.8.10 The Architect/Engineer shall exercise due diligence to safeguard the State against defects, deficiencies, noncompliance with the Contract Documents, and/or unsatisfactory workmanship. If, in the opinion of the Architect/Engineer, the Work is not being carried out in a sound, efficient, workmanlike and skillful manner, the Architect/Engineer shall promptly notify the Principal Representative and Construction Manager setting forth the reasons.

1.8.11 The Architect/Engineer shall keep accurate records with respect to the construction on the Project including fiscal accounting, changes in the work, directives, and other documentation to establish a clear history of the Project.

1.8.12 If at any time the Architect/Engineer delegates any of its responsibility for the observation of the Work to some other person, such other person must be properly qualified by training and experience to observe the work. The Principal Representative and State Buildings Program may review and approve the qualifications of all persons in writing, other than the Architect/Engineer, performing the functions of the Architect/Engineer in respect to the services required by this Agreement.

1.8.13 The Principal Representative and State Buildings Program may also have a representative observing the construction and its progress. Nothing contained herein shall in any way relieve the Architect/Engineer of its responsibilities for Contract Administration.

1.8.14 The Architect/Engineer shall attend all weekly or periodic job progress meetings.

1.8.15 The Architect/Engineer shall not be responsible for, nor have control or charge of, construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Project. The Architect/Engineer shall not be responsible for, nor have control over, the acts or omissions of the Construction Manager, subcontractors, any of their agents or employees, or any other persons performing any part of the construction, nor shall the Architect/Engineer be responsible for the Construction Manager's obligations.

1.8.16 The Architect/Engineer shall at all times have access to the construction wherever it is in preparation or progress.

1.8.17 The Architect/Engineer shall assist the Principal Representative in the review of the Construction Manager's Schedule of Values submitted in accordance with the Contract Documents. Further the Architect/Engineer shall attend a conference with the Construction Manager and the Principal Representative to finalize the Schedule of Values. The finalized Schedule of Values will serve as the basis for progress payments and will be incorporated into the form of Project Applications for Payment acceptable to the Architect/Engineer and the Principal Representative. The Architect/Engineer shall further participate in any revisions to the Schedule of Values as provided in the Contract Documents.

1.8.18 The Architect/Engineer shall see to the proper issuance of State form SC-7.2 used as the Construction Manager's Project Certificate and Application for Payment. The Architect/Engineer will, within five (5) working days after the receipt of each Project Application for Payment, review the Project Application for Payment and either execute a Project Certificate and Application for Payment to the Principal Representative for such amounts as the Architect/Engineer determines are properly due, or notify the Principal Representative and Construction Manager in writing of the reasons for withholding a Certificate.

1.8.19 The execution and issuance of a Project Certificate and Application for Payment, State form SC-7.2 shall constitute a representation by the Architect/Engineer to the Principal Representative that, based on the Architect/Engineer's observations at the site and on the data comprising the Construction Manager's Project Application for Payment, the construction has progressed to the

point indicated; that, to the best of the Architect/Engineer's knowledge, information and belief, the quality of construction is in accordance with the Contract Documents and that the Construction Manager is entitled to payment in the amount certified. However, the issuance of a State form SC-7.2, Construction Manager's Project Certificate for Payment shall not be a representation that the Architect/Engineer has made any examination to ascertain how or for what purpose the Construction Manager has used the monies paid on account of the previously issued Certificates.

1.8.20 The Architect/Engineer shall be the interpreter of the requirements of the Contract Documents and the judge of the performance thereunder by the Construction Manager and all subcontractors. The Architect/Engineer shall render interpretations necessary for the proper execution or progress of construction, with reasonable promptness.

1.8.21 All interpretations and decisions of the Architect/Engineer shall be consistent with the intent of, and reasonably inferable from the Contract Documents, and shall be in writing or in graphic form and the Architect/Engineer shall send a copy to the Principal Representative and Construction Manager.

1.8.22 The Architect/Engineer's decision in matters relating to artistic effect shall be final if consistent with the intent of the Contract Documents and neutral in terms of cost impact.

1.8.23 The Architect/Engineer shall have authority to reject constructed work which does not conform to the Contract Documents, and whenever, in the Architect/Engineer's reasonable opinion, it is necessary or advisable for the implementation of the intent of the Contract Documents, the Architect/Engineer shall have authority to require special inspection or testing of constructed work in accordance with the provisions of the Contract Documents, whether or not such constructed work be then fabricated, installed or completed; but the Architect/Engineer shall take such action only after consultation with the Principal Representative. However, the Architect/Engineer's authority to act under the Contract Documents and any decision made by the Architect/Engineer in good faith either to exercise or not to exercise such authority shall not give rise to any duty on the part of the Architect/Engineer to the Construction Manager, any subcontractor of any tier, any of their agents or employees, or any other person performing any of the construction.

1.8.24 The Architect/Engineer shall review and approve or take other appropriate action upon Construction Manager's submittals such as shop drawings, product data and samples as indicated in the Contract Documents, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Architect/Engineer's action shall be taken with such reasonable promptness as to cause no delay in the Work or in the activity of the Principal Representative, Construction Manager or separate contractors, while allowing sufficient time in the Architect/Engineer's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities or for substantiating instructions for installation or performance of equipment or systems designed by the Construction Manager, all of which remain the responsibility of the Construction Manager to the extent required by the Contract Documents. The Architect/Engineer's review shall not constitute approval of a specific item nor indicate approval of an assembly of which the item is a component. When professional certification of performance characteristics of materials, systems or equipment is required by the Contract Documents, the Architect/Engineer shall be entitled to rely upon such certification to establish that the materials, systems or equipment will meet the performance criteria required by the Contract Documents.

1.8.25 All changes in the work shall be documented on Change Order or Amendment State forms SC-6.31 and SC-6.0, supplied by the Principal Representative, and the Architect/Engineer shall keep a current record of all variations or departures from the Agreement as originally approved.

1.8.26 The Architect/Engineer shall prepare all Change Orders and Amendments for the Principal Representative and recommend for approval or disapproval in accordance with the Contract Documents, the Contract Sum, the Contract Time and Code Compliance. If necessary the Architect/Engineer shall prepare, reproduce and distribute drawings and specifications to describe Work to be added, deleted or modified. The Architect/Engineer shall review all requests for changes in the Work with such reasonable promptness as to cause no delay in the Work or in the activities of the Principal Representative, Construction Manager or separate contractors, while allowing sufficient time in the Architect/Engineer's professional judgment to permit adequate review.

1.8.27 The Architect/Engineer shall prepare and issue Emergency Field Change Orders as required by the Principal Representative, but such Emergency Field Change Orders shall be issued only in accordance with the policies of State Buildings Program to order extra work or make changes in the case of an emergency that is a threat to life or property or where the likelihood of delays in processing a normal Change Order will result in substantial delays and or significant cost increases for the Project. Emergency Field Change Orders are not to be used solely to expedite normal Change Order processing absent a clear showing of a high potential for significant and substantial cost or delay.

1.8.28 When the Work is substantially complete in the opinion of the Construction Manager, the Construction Manager is required to file a written Notice with the Architect/Engineer with an attached preliminary punch-list of remaining items to be completed or corrected. The Architect/Engineer shall thereafter notify State Buildings Program and the Principal Representative, that the work, in the opinion of the Construction Manager, is substantially complete under the terms of the Contract. This Notice shall receive prompt action by the notified parties.

1.8.29 When the Architect/Engineer determines after review of the Construction Manager's written Notice that the Work or a portion of the Work is ready for an inspection to determine whether the Work is substantially complete, the Architect/Engineer with the Principal Representative and the Construction Manager shall, within ten days of receipt of the Construction Manager's Notice, conduct a final inspection to determine whether the Work is substantially complete and in accordance with the requirements of the Contract Documents. State Buildings Program shall be notified of the final inspection. If the construction has been completed to the required state, a punch list shall be made by the Architect/Engineer in concert with the Principal Representative and Construction Manager in sufficient detail to fully outline to the Construction Manager:

a) Work to be completed, if any;

b) Work not in compliance with the Drawings or Specifications, if any;

c) Unsatisfactory work for any reason, if any;

d) Date for Completion of the Punch List Items.

1.8.30 If the Architect Engineer determines, after consultation with the Principal Representative, that the Work or a portion of the Work is complete, then the Architect/Engineer shall prepare the Notice of Substantial Completion, State form SBP-07 which the Architect Engineer shall transmit in writing to the Construction Manager and the Principal Representative for signature. The required number of copies of the punch list must be countersigned by the Construction Manager and the Principal Representative and will then be transmitted by the Architect/Engineer to the Construction Manager, the Principal Representative, and State Buildings Program. The Construction Manager shall immediately initiate such remedial work as may be necessary to correct any deficiencies or defective work shown by this report, and shall promptly complete all such remedial work in a manner satisfactory to the Architect/Engineer and State Buildings Program.

1.8.31 The Principal Representative may require the Architect/Engineer to make a reasonable number of additional inspections to confirm the completion of the punch list by the Construction Manager.

1.8.32 The Notice of Substantial Completion, or the Notice of Partial Substantial Completion, shall establish the Date of Substantial Completion or the Date of Partial Substantial Completion and such date shall be the date of commencement of the Construction Manager's twelve month guarantee, except to the extent stated otherwise in accordance with the limited exceptions provided in the General Conditions of the Contract. The Notice of Substantial Completion, or the Notice of Partial Substantial Completion, shall state the responsibilities of the Principal Representative and the Construction Manager for security, maintenance, heat, utilities, property insurance premiums and damage to the finished construction as required. The Notice of Substantial Completion, or the Notice of Partial Substantial Completion, shall be submitted to the Principal Representative and the Construction Manager for their written acceptance of the responsibilities assigned to them in such Notice. The Notice of Substantial Completion, or the Notice of Partial Substantial Completion, shall attach and incorporate the Architect/Engineer's final punch list and Construction Manager's schedule for the completion of each and every item identified on the final punch list.

1.8.33 The Principal Representative shall have the right to take possession of and to use any completed or partially completed portions of the Work, even if the time for completing the entire Work or portions of the Work has not expired and even if the Work has not been finally accepted, and the Architect/Engineer shall fully cooperate with the Principal Representative to allow such possession and use. Such possession and use shall not constitute an acceptance of such portions of the work. Prior to any occupancy of the Project, an inspection shall be made by the Architect/Engineer, State Buildings Program and the Construction Manager. Such inspection shall be made for the purpose of ensuring that the building is secure, protected by operation safety systems as designed, operable exits, power, lighting and HVAC systems, and otherwise ready for the occupancy intended and the Notice of Substantial Completion has been issued for the occupancy intended. The inspection shall also document existing finish conditions to allow assessment of any damage by occupants. The Architect/Engineer shall assist the Principal Representative in completing and executing State Form SBP-01 Notice of Approval of Occupancy/Use, prior to the Principal Representative's possession and use. Any and all areas so occupied will be subject to a final inspection.

1.8.34 The Construction Manager shall forward the completed close-out documents to the Architect/Engineer for signature. Upon receipt from the Construction Manager of written notice that the Architect/Engineer's final punch list is sufficiently complete the Architect/Engineer shall make a final inspection of work remaining on the final punch list and prepare the Pre Acceptance Checklist State form SBP-05. The Architect/Engineer upon receipt and verification that the close-out documents and the items of work are complete, shall prepare and forward to the Principal Representative a letter (including the signed close-out documents) stating that to the best of the Architect/Engineer's knowledge, information and belief, and on the basis of observations and inspections, the Work, or designated portion thereof, has been completed in accordance with the terms and conditions of the Contract Documents and is ready for the issuance of a Notice of Acceptance or Notice of Partial Acceptance as appropriate. A Notice of Partial Acceptance shall be based only upon the work for which a Notice of Partial Substantial Completion has been executed and all necessary items of work and other requirements have been completed.

1.8.35 Upon receipt from the Architect/Engineer of the letter recommending issuance of a Notice of Final Acceptance or a Notice of Partial Final Acceptance, the Principal Representative shall sign the Notice of Acceptance, State form SC-6.27, and forward to the Construction Manager for its approval and signature. The date of the Notice of Acceptance shall establish the date of final completion of the project. The Notice of Acceptance must be fully executed before final payment is authorized or the project advertised for Final Settlement.

1.8.36 The Architect/Engineer shall receive and forward to the Principal Representative for review, written warranties and related close-out documents assembled by the Construction Manager and reviewed and approved by the Architect/Engineer as consistent with the Contract Documents. A summary of all such requirements shall be located consistently within individual sections of the Specifications. When such materials have been received and approved the Architect/Engineer shall certify the Construction Manager's Final Application for Payment and forward the same to the Principal Representative.

1.8.37 Except as otherwise agreed below in 1.9, POST CONSTRUCTION PHASE, the Architect/Engineer, the Principal Representative and the Construction Manager shall make at least two complete inspections of the work after the work has been accepted. One such inspection, the Six-Month Warranty Inspection, shall be made approximately six (6) months after the Date of Substantial Completion or the Date of Partial Substantial Completion; and another such inspection, the Eleven-Month Warranty Inspection, shall be made approximately eleven (11) months after the Date of Substantial Completion or the Date of Partial Substantial Completion. The Principal Representative shall schedule and so notify all parties concerned, including State Buildings Program, of these inspections.

1.8.38 Written lists of defects and deficiencies and reports of these observations shall be made by the Architect/Engineer and forwarded to the Construction Manager, and all of the other participants within ten (10) days after the completion of each observation. The Construction Manager is obligated in its agreement with the Principal Representative to immediately initiate such remedial work as may be necessary to correct any deficiencies or defective work shown by this report, and shall promptly complete all such remedial work in a manner satisfactory to the Architect/Engineer and the Principal Representative. The Architect/Engineer shall follow through on all list items and notify the Principal Representative when such have been completed.

1.9 POST CONSTRUCTION PHASE

1.9.1 (As designated and defined in the Architect/Engineer's Proposal **Exhibit A**.)

2 ARTICLE 2 REIMBURSABLE EXPENSES

2.1 REIMBURSEMENT

2.1.1 Reimbursable expenses are in addition to the compensation for Basic and Additional Services and include actual expenditures made by the Architect/Engineer and Architect/Engineer's employees, associate Architect/Engineer, and consultants in the interest of the Project. Pay requests for reimbursable expenses shall be submitted with receipts, statements or other acceptable supporting data. The Architect/Engineer understands and agrees that a not-to-exceed dollar amount as enumerated in line (H) of Paragraph 3.1 has been established for all reimbursable expenses.

2.1.2 The Architect/Engineer shall be reimbursed for:

a) All copies over those as required in accordance with the provisions in Articles 1.3, Pre-Design Phase; 1.4 Schematic Design Phase; 1.5, Design Development Phase; and 1.6, Construction Documents Phase; 1.7, Bidding Phase, and 1.8, Contract Administration for each of the Bid Packages;

b) The cost of all items furnished by the Architect/Engineer in accordance with paragraphs 3.2.5, and 3.2.6 as requested by the Principal Representative;

c) Fees of special consultants, if their employment is authorized in advance by the Principal Representative for other than the required architectural, structural, mechanical, electrical and civil engineering services; landscaping, if any; space planning/interior layout; and any other services included in this Agreement;

d) Expense of data processing and photographic production techniques when used in connection with Additional Services;

e) Expense of long distance telecommunications related to the performance of Basic Services;

f) Expense of renderings, models and mock-ups requested by the Principal Representative other than those described in the designated services;

g) Expense of mail, deliveries, mileage for local travel other than that necessary for the performance of Basic Services, and expense travel for special consultants as per Article 1 Basic Professional Services. Reimbursement of travel expenses is to be based on reasonable and necessary travel costs within the limits of State/Federal per diem rates as published in the travel section of the State Controller's Fiscal Rules, Meal and Incidental Per Diem Rates, Appendix A1;

h) Expense of any additional insurance coverage or limits, including professional liability insurance, requested by the Principal Representative in excess of that required in Article 8.

3 ARTICLE 3 BASIS OF COMPENSATION

3.1 PAYMENT

The total compensation for Basic Services fees (**b** through **f**), including a not-to-exceed price for Reimbursable Expenses and, if applicable, Pre-Design and Post Construction Services fees (a and/or g), shall be allocated as follows:

A.	Pre-Design Phase (if applicable)	_____
B.	Schematic Design Phase	_____
C.	Design Development Phase	_____
D.	Construction Documents Phase	_____
E.	Bidding Phase	_____
F.	Contract Administration Phase	_____
G.	Post Construction Phase (if applicable)	_____
H.	Reimbursable Expenses (Not to Exceed)	_____
	TOTAL COMPENSATION	$0.00

3.1.1 Payments to the Architect/Engineer shall be made monthly based upon Architect/Engineer's performance and progress, through a properly executed Application for Payment (SC-7.1). Payments shall be due per C.R.S. § 24-30-202(24) (correct notice of amount due), within forty-five (45) days of receipt by the Principal Representative of the Applications for Payment.

3.2 ADDITIONAL COMPENSATION

3.2.1 The Scope of Services to be provided pursuant to this Agreement includes all architectural and engineering services described herein, all services to be provided by the Architect/Engineer as described in **Exhibit A,** Architect/Engineer's Proposal including items which under usual contracting for Architectural/Engineering services could be considered as additional services, and reimbursable items excepting those specifically identified in Article 5 of this Agreement to be reimbursed. All compensation set forth in Article 3.1 hereof shall fully compensate the Architect/Engineer and there shall be no further reimbursement or payment therefore, other than for Additional Services as hereinafter described. For purposes of this Agreement, Additional Services are defined as those not included within the Scope of Services as set forth in Article 3.1

or reasonably inferable therein, are not consistent with the approved Project program, and are specifically requested and approved in writing by the Principal Representative.

3.2.2 Subject to the provisions of paragraphs 6.5.1 and 6.5.2, if the Architect/Engineer is caused Additional Service, drafting or other expense due to changes ordered by the Principal Representative or by other circumstances beyond the Architect/Engineer's control and not occasioned by any neglect or default of Architect/Engineer, then the Architect/Engineer shall be reimbursed for such Additional Service.

3.2.3 Direct personnel expense is defined as the direct salaries of all the Architect/Engineer's personnel engaged on the Project, and the portion of the cost of their mandatory and customary contributions and benefits related thereto, such as employment taxes and other statutory employee benefits, insurance, sick leave, holidays, vacations, pensions and similar contributions and benefits.

3.2.4 The cost of such Additional Service including Principal Architect/Engineer's time, shall be paid at the agreed upon rates shown in the attached Wage Rate Schedule, **Exhibit B**.

3.2.5 3For Additional Services of consultants, including associate Architect/Engineer, structural, mechanical, electrical and civil engineering services, the multiple 1.15 times the amounts billed to the Architect/Engineer for such services.

3.2.6 In addition, the Architect/Engineer shall also be reimbursed as described in Article 2.1 and paid as detailed in paragraph 3.2.2 related to the Additional Services.

3.2.7 The Architect/Engineer shall maintain an accurate cost accounting system as to all such additional expenses and shall make available to the Principal Representative all records, canceled checks and other disbursement media to substantiate any and all requests for payments hereunder.

3.2.8 The expenditures under this provision shall be disapproved unless the Architect/Engineer first shall have filed with the Principal Representative an estimate of the maximum cost of such Additional Service and been authorized, in writing, by the Principal Representative to proceed. If such an estimate is filed with the Principal Representative, then payment shall not exceed the maximum cost estimated by the Architect/Engineer and approved by the Principal Representative.

3.2.9 3Payment for such Additional Services shall be monthly upon presentation of the Architect/Engineer's statement of services rendered.

3.3 PAYMENTS WITHHELD

3.3.1 No deductions shall be made from the Architect/Engineer's fee on account of penalty, liquidated damages, or other sums withheld from payments to the Construction Manager or on account of changes in Construction other than those for which the Architect/Engineer is held legally liable.

3.4 ARCHITECT/ENGINEER'S ACCOUNTING RECORDS

3.4.1 Records of the Architect/Engineer's Direct Personnel, Consultant, and Reimbursable Expense pertaining to this Project and records of accounts between the Principal Representative and Construction Manager shall be kept on a generally recognized accounting basis and shall be available to the Principal Representative or his authorized representative at mutually convenient times and extending to three (3) years after final payment under this Agreement.

3.5 CONDITION PRECEDENT

3.5.1 At the time of the execution of this Agreement, there are sufficient funds budgeted and appropriated to compensate the Architect/Engineer only for performance of the services through and including Insert the phases that have been fully funded Therefore, it shall be a Condition Precedent to the Architect/Engineer's performance of the remaining services specified in Insert the parts of Article 1.2 that describes the services not fully funded and the State's liability to pay

for such performance, sufficient funding must be appropriated and made available to the Principal Representative for the Project prior to _____ and, as a further Condition Precedent, a written Amendment is entered into in accordance with the State of Colorado Fiscal Rules, stating that additional funds are lawfully available for the project. If either Condition Precedent is not satisfied by _____, the Architect/Engineer's obligation to perform services for Insert the scope pf work or phases that will be completed as part of the Condition Precedent and the State's obligation to pay for such service is discharged without liability to each other. If funding is eventually made available after_____, the Architect/Engineer has no right to perform services under Insert the parts of Article 1 that describes the services not fully funded of this Agreement and the state has no right to require the Architect/Engineer to perform the said services.

4 ARTICLE 4 TIME

4.1 DESIGN SERVICES SCHEDULE

4.1.1 The Architect/Engineer shall perform Basic and Additional Services as expeditiously as is consistent with professional skill and care and the orderly progress of the Project. The Architect/Engineer shall submit for the Principal Representative's approval, a schedule (Design Services Schedule), **Exhibit A**, for the performance of the Architect/ Engineer's services which may be adjusted as required as the Project proceeds, and which shall include allowances for periods of time required for the Principal Representative's review and approval of submissions and for approvals of authorities having jurisdiction over the Project. The Architect/Engineer shall consult with the Construction Manager to coordinate the Architect/Engineer's time schedule with the Project Schedule. This schedule, when approved by the Principal Representative, shall not, except for reasonable cause, be exceeded by the Architect/Engineer.

4.2 TERM

4.2.1 The term of this Agreement will end upon expiration of the one (1) year warranty period, or upon subsequent completion and acceptance by the Principal Representative of the Warranty Work identified or in progress at the end of such one (1) year warranty period, following the date of the Notice of Acceptance for the last remaining portion of work.

5 ARTICLE 5 PRINCIPAL REPRESENTATIVE

5.1 THE RESPONSIBILITIES

5.1.1 The Principal Representative shall provide full information regarding requirements for the Project through the State Buildings Program delegate, including assisting in developing a completed Design Program/Facilities Program Plan, **Exhibit E**, which shall set forth the State's design objectives, constraints and criteria, including space requirements and relationships, flexibility and expandability, special equipment and systems and site requirements. If a State Buildings Program delegate has not been authorized, then the Principal Representative together with State Buildings Program will designate an individual to act on behalf of the Principal Representative as designated in Article 12.11.

5.1.2 The Principal Representative shall establish the Fixed Limit of Construction Cost.

5.1.3 The Principal Representative shall designate a representative authorized to act in the Principal Representative's behalf with respect to the Project as indicated in Article 12.11. The Principal Representative, acting by and through such designated representative shall examine the documents submitted by the Architect/Engineer and shall render decisions pertaining thereto promptly to avoid unreasonable delay in the progress of the Architect/Engineer's services.

5.1.4 The Principal Representative shall retain a Construction Manager to manage and construct the Project. The Construction Manager's services, duties and responsibilities will be as described in the Construction Manager Contract. Once executed, the terms and conditions of the Construction Manager Contract will not be modified without notification to the Architect/Engineer.

5.1.5 The Principal Representative shall furnish a legal description and a certified land survey of the site giving, as applicable, grades and lines of streets, alleys, pavements and adjoining property; rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries and contours of the site; locations, dimensions and complete data pertaining to existing buildings, other improvements and trees; and full information concerning location of service and utility lines, both public and private, above and below grade, including inverts and depths.

5.1.6 The Principal Representative shall furnish the services of geotechnical engineers or other technical or highly specialized consultants when such services are deemed necessary by mutual agreement between the Principal Representative and the Architect/Engineer. Such services shall include test borings, test pits, soil bearing values, percolation tests, air and water pollution tests, ground corrosion and resistivity tests including necessary operations for determining subsoil, air and water conditions, with reports and appropriate professional recommendations.

5.1.7 The services, information, surveys and reports as required and described in the preceding paragraphs 5.1.1 through 5.1.6, shall be furnished at the Principal Representative's expense, and the Architect/Engineer shall be entitled to rely upon their accuracy and completeness.

5.1.8 The Principal Representative shall furnish such legal, accounting and insurance counseling services as may be necessary for the Project, including such auditing services as the Principal Representative may require to verify the Project Applications for Payment or to ascertain how or for what purposes the Construction Manager has used the monies paid by or on behalf of the Principal Representative. This shall not relieve the Architect/Engineer of reviewing the Construction Manager's Application for Payment for consistency with the current Schedule of Values.

5.1.9 If the Principal Representative observes or otherwise becomes aware of any fault or defect in the Project, or nonconformance with the Contract Documents, prompt written notice thereof shall be given by the Principal Representative to the Architect/Engineer.

5.1.10 The Architect/Engineer recognizes that the Principal Representative is a governmental body with certain procedural requirements to be satisfied. The Architect/Engineer has and will make reasonable allowance in its performance of services for such additional time as may be required for approvals and decisions by the Principal Representative and any other necessary government agency. Such time shall be identified in the preliminary project schedule including, without limitation, time for the State's Code Review consultants.

5.1.11 In the review process of the final Design Development Documents and Construction Documents for each Bid Package, the Architect/Engineer expressly agrees to the following times for concurrent review by the Principal Representative and the Construction Manager:

5.1.11.1 A period of Insert number of days written in words ( ) working days for the review of the Design Development Documents plus an additional Insert number of days written in words ( ) working days for final development of the Guaranteed Maximum Price.

5.1.11.2 A period of Insert number of days written in words ( ) working days at 50% and 95% completion of the construction documents together with an additional Insert number of days written in words ( ) working days after receipt of all bid documents for each bid package.

6 ARTICLE 6 CONSTRUCTION COSTS

6.1 BUDGETING AND FIXED LIMIT OF CONSTRUCTION COST

6.1.1 The Principal Representative shall provide a preliminary Project Budget to the Architect/Engineer which shall set forth a dollar amount available for the total Construction Cost of the Project, and include contingencies for bidding and construction and other costs which are the responsibility of the Principal Representative. The Architect/Engineer shall assist the Construction Manager in evaluating the Principal Representative's preliminary project budget.

6.1.2 A Fixed Limit of Construction Cost for the Project shall be established by the Principal Representative incorporating the portion of the Project Budget for construction of all elements of the Project designed or specified by the Architect/Engineer. The Fixed Limit of Construction Cost for the Project shall be subject to change only by the determination, in writing, of the Principal Representative.

6.2 CONSTRUCTION COST

6.2.1 When preparing any Estimates of Construction Cost or Statement of Probable Construction Cost, such documents shall include, but without duplication:

a) All labor, materials, equipment, tools, construction equipment and machinery, water and heat utilities, transportation, construction easements, and other facilities and services necessary for the proper execution and completion of the Project, whether temporary or permanent, and whether or not incorporated or to be incorporated into the Project;

b) At current market rates, including a reasonable allowance for overhead and profit, the cost of labor and materials furnished by the Principal Representative;

c) Any State furnished equipment which has been designed, specified, selected or specifically provided for by the Architect/Engineer;

d) The Construction Manager's compensation for on-site personnel services and the cost of work provided by the Construction Manager;

e) All bond and property insurance premiums; and

f) Contingencies for bidding, price escalation, and construction as set forth above.

6.2.2 The Statement of Probable Construction Cost shall not include the compensation of the Architect/Engineer, the Architect/Engineer's consultants or any other sums due the Architect/Engineer under this Agreement, the costs of land, rights of way, financing or other costs which are the responsibility of the Principal Representative, or equipment installed by the Principal Representative under separate contract unless the Architect/Engineer is required by the Principal Representative to prepare drawings and specifications and observe the installation of such equipment.

6.3 CONSTRUCTION MANAGER COST ESTIMATES

6.3.1 By the terms of the Construction Manager Contract, the Construction Manager is obligated to prepare and furnish to the Principal Representative and the Architect/Engineer, Estimates of Construction Cost for the construction, and a Guaranteed Maximum Price proposal. The Construction Manager in preparing its Estimates of Construction Cost and providing the Guaranteed Maximum Price, shall consult with the Architect/Engineer to determine what materials, equipment, components systems and types of construction are to be included in the Contract Documents, to recommend reasonable adjustments in the scope of the construction, and to include in the Contract Documents reasonable alternate items for bid so as to permit the adjustment of the Estimate of Construction Cost to the Fixed Limit of Construction Cost.

6.3.2 The Architect/Engineer shall provide reasonable cooperation to the Construction Manager in the development of Estimates of Construction Cost and the Guaranteed Maximum Price.

6.3.3 The Architect/Engineer shall promptly review the Estimate of Construction Cost and the Guaranteed Maximum Price proposal prepared and submitted by the Construction Manager, and advise the Principal Representative as to whether the Architect/Engineer concurs with each such estimate and the Guaranteed Maximum Price proposal and, if not, the reasons and details of where the Architect/Engineer disagrees.

6.4 ARCHITECT/ENGINEER COST ESTIMATES

6.4.1 The Architect/Engineer, as a design professional familiar with the construction industry, in addition to the Estimates of Construction Cost for the Project and Guaranteed Maximum Price proposal as developed by the Construction Manager, shall develop with the Schematic Design Phase its own Statement(s) of Probable Construction Cost.

6.5 FIXED LIMIT OF CONSTRUCTION COST EXCEEDED

6.5.1 It is recognized that neither the Architect/Engineer nor the Principal Representative has control over the cost of labor, materials or equipment, over the subcontractors' methods of determining bid prices, or over competitive bidding, market or negotiating conditions. Accordingly, the Architect/Engineer cannot and does not warrant or represent that bids or negotiated prices will not vary from the project budget or the Fixed Limit of Construction Cost. Nothing contained in this Article 6 shall otherwise relieve the Architect/Engineer from the responsibility of providing the services required to keep the Project within the Fixed Limit of Construction Cost for the Project. Responsibility for developing the final Statement of Probable Construction Cost and Estimate of Construction Cost, specifically the identification and resolution of all significant differences between the Statement and the Estimate, is a shared responsibility between the Architect/Engineer and the Construction Manager. Should disagreement or confusion involving overlapping or conflicting responsibilities or disagreement as to the Construction Manager's Estimate or Architect/Engineer's Statement of Probable Construction Cost arise, the question shall be submitted and the correct interpretation shall be determined by the Principal Representative consistent with paragraph 1.1.2 and the requirements of this Article 6.

6.5.2 If the Fixed Limit of Construction Cost for the Project, as established by the Principal Representative, is exceeded or projected to be exceeded by:

a) The lowest figures from responsible proposals, if any, and the Construction Manager's estimate for other elements of the Project; and/or the Architect/Engineer's Statement of Probable Construction Cost for the balance of the Project; or

b) The Construction Manager's Guaranteed Maximum Price proposal; then, in either event, the Principal Representative shall, in its sole discretion, do one of the following:

c) Revise the Project scope and quality as required to reduce the Construction Cost.

d) Give written approval for the increase in the Fixed Limit of Construction Cost for the Project;

e) Authorize rebidding or renegotiation of the Project or portions of the Project within a reasonable time;

f) Abandon the Project, terminating this Agreement in accordance with Article 9; or

6.5.3 In the case of clause 6.5.1 in the preceding paragraph, the Architect/Engineer shall, at no additional cost to the State, modify the drawings and specifications for any or all of the separate Bid Packages and/or any other appropriate items as may be necessary, to keep the cost of the Project within the Fixed Limit of Construction for the Project, UNLESS: (1) such increase is specifically attributable to a scope increase in the Project requested by the Principal Representative; or (2) the projected cost overrun occurs within the scope of an Estimate of Construction Cost or Guaranteed Maximum Price proposal furnished by the Construction Manager to the Architect/Engineer and upon which the Architect/Engineer promptly communicated in writing to the Principal Representative the Architect/Engineer's refusal to concur, together with the reasons and details therefore.

7 ARTICLE 7 OWNERSHIP OF DOCUMENTS

7.1 INSTRUMENTS OF SERVICE

7.1.1 Drawings, specifications and other documents, including those in electronic form, prepared by the Architect/Engineer and the Architect/Engineer's consultants are Instruments of Service for use solely with respect to this Project. The Architect/Engineer and the Architect/Engineer's consultants shall be deemed the authors and owners of their respective Instruments of Service and shall retain all common law, statutory and other reserved rights, including copyrights.

7.1.2 Upon execution of this Agreement, the Architect/Engineer grants to the State a perpetual nonexclusive license to reproduce and use, and permit others to reproduce and use for the State, the Architect/Engineer's Instruments of Service solely for the purposes of constructing, using and maintaining the Project or for future alterations, or additions to the Project. The Architect/Engineer shall obtain similar nonexclusive licenses from the Architect/Engineer's consultants consistent with this Agreement. If and upon the date the Architect/Engineer is adjudged in default of this Agreement, the foregoing license shall be deemed terminated and replaced by a second, nonexclusive license permitting the State to authorize other similarly credentialed design professionals to reproduce and, where permitted by law, to make changes, corrections or additions to the Instruments of Service solely for the purposes of completing, using and maintaining the project, or for future alterations, or additions to the Project.

7.1.3 Any unilateral use by the State of the Instruments of Service for completing, using, maintaining, adding to or altering the Project or facilities shall be at the State's sole risk and without liability to the Architect/Engineer and the Architect/Engineer's consultants; provided, however, that if the State's unilateral use occurs for completing, using or maintaining the Project as a result of the Architect/Engineer's breach of this Agreement, nothing in this Article shall be deemed to relieve the Architect/Engineer of liability for its own acts or omissions or breach of this Agreement.

7.2 AS-BUILT DRAWINGS/RECORD DRAWINGS

7.2.1 The Architect/Engineer and its consultants shall, upon completion of the Construction Phase, receive redline As-Built Drawings from the Construction Manager. These redline changes shall describe the built condition of the Project. This information and all of the incorporated changes directed by Bidding Addenda, Change Order/Amendment or Architect/ Engineer's Supplementary Instructions shall be incorporated by the Architect/Engineer and its consultants into a Record Drawings document provided to the Principal Representative in the form of an electro-media format and a reproducible format as agreed between the parties. The Architect/Engineer shall also provide the Principal Representative with the As-Built Drawings as received from the Construction Manager.

8 ARTICLE 8 INSURANCE

8.1 GENERAL

The Architect/Engineer shall procure and maintain all insurance requirements and limits as set forth below, at his or her own expense, for the length of time set forth in Contract requirements. The Architect/Engineer shall continue to provide evidence of such coverage to State of Colorado on an annual basis during the aforementioned period including all of the terms of the insurance and indemnification requirements of this agreement. All below insurance policies shall include a provision preventing cancellation without thirty (30) days' prior notice by certified mail. A completed Certificate of Insurance shall be filed with the Principal Representative and State

Buildings Program within ten (10) days after the date of the Notice of Award, said Certificate to specifically state the inclusion of the coverages and provisions set forth herein and shall state whether the coverage is “claims made” or “per occurrence”.

8.2 COMMERCIAL GENERAL LIABILITY INSURANCE (CGL)

This insurance must protect the Architect/Engineer from all claims for bodily injury, including death and all claims for destruction of or damage to property (other than the Work itself), arising out of or in connection with any operations under this Contract, whether such operations be by the Architect/Engineer or by any Subcontractor under him or anyone directly or indirectly employed by the Architect/Engineer or by a Subcontractor. All such insurance shall be written with limits and coverages as specified below and shall be written on an occurrence form.

General Aggregate	$1,000,000
Products – Completed Operations Aggregate	$1,000,000
Each Occurrence	$1,000,000
Personal Injury	$1,000,000

The following coverages shall be included in the CGL:

1. Additional Insured status in favor of the State of Colorado.
2. The policy shall be endorsed to be **primary and non-contributory** with any insurance maintained by Additional Insureds.
3. A waiver of Subrogation in favor of all Additional Insured parties.

8.3 AUTOMOBILE LIABILITY INSURANCE

Automobile Liability Insurance and business auto liability covering liability arising out of any auto (including owned, hired and non-owned autos).

Combined Bodily Injury and Property Damage Liability (Combined Single Limit):	$1,000,000 each accident
Coverages:	Specific waiver of subrogation

8.4 WORKERS’ COMPENSATION INSURANCE

The Architect/Engineer shall procure and maintain Workers' Compensation Insurance at his or her own expense during the life of this Contract, including occupational disease provisions for all employees per statutory requirements. Policy shall contain a waiver of subrogation in favor of the State of Colorado.

The Architect/Engineer shall also require each Subcontractor to furnish Workers' Compensation Insurance, including occupational disease provisions for all of the latter’s employees, and to the extent not furnished, the Architect/Engineer accepts full liability and responsibility for Subcontractor’s employees.

In cases where any class of employees engaged in hazardous work under this Contract at the site of the Project is not protected under the Workers’ Compensation statute, the Architect/Engineer shall provide, and shall cause each Subcontractor to provide, adequate and suitable insurance for the protection of employees not otherwise protected.

8.5 PROFESSIONAL ERRORS AND OMISSIONS LIABILITY

The Architect/Engineer promises and agrees to maintain in full force and effect an Errors and Omissions Professional Liability Insurance Policy in the amounts (indicated in the following table) as minimum coverage or such other minimum coverage as determined by the Principal Representative and approved by the State Buildings Program. The policy, including claims-made forms, shall remain in effect for the duration of this Agreement and for at least three (3) years beyond the completion and acceptance of the Work. The Architect/Engineer shall be responsible for all claims, damages, losses or expenses including attorney's fees, arising out of or resulting from the performance of Professional Services contemplated in this Agreement, provided that any such claim, damage, loss or expense is caused by any negligent act, error or omission of the Architect/Engineer, any consultant or associate thereof, or anyone directly or indirectly employed by the Architect/Engineer. The Architect/Engineer shall submit a Certificate of Insurance verifying said coverage at the signing of this Agreement and also any notices of Renewals of the said policy as they occur.

For a Fixed Limit of Construction Cost	**Minimum Coverage per Claim**	**Minimum Coverage in the Aggregate**
$999,999 and under	$250,000	$500,000
$1,000,000 to $4,999,999	$500,000	$1,000,000
$5,000,000 to $19,999,999	$1,000,000	$2,000,000
$20,000,000 and Above	$2,000,000	$2,000,000

9 ARTICLE 9 TERMINATION OR SUSPENSION OF AGREEMENT

9.1 DEFAULT

9.1.1 This Agreement may be terminated by either party upon seven (7) days written notice with copies filed with the State Buildings Program and the State Controller, should the other party fail substantially to perform in accordance with its terms through no fault of the other.

9.2 TERMINATION FOR CONVENIENCE OF STATE

9.2.1 The performance of the services under this Agreement may be terminated, in whole or from time to time in part, by the State whenever for any reason the Principal Representative shall determine that such termination is in the best interest of the State. Termination of services hereunder shall be affected by delivery to the Architect/Engineer of a Notice of Termination specifying the extent to which performance of services under this Agreement is terminated and the date upon which such termination becomes effective.

9.2.2 After receipt of the Notice of Termination, the Architect/Engineer shall exercise all reasonable diligence to accomplish the cancellation of its outstanding commitments covering personal services and extending beyond the date of such termination to the extent that they relate to the performance of any services terminated by the Notice. With respect to such canceled commitments, the Architect/Engineer agrees to:

a) Settle all outstanding liabilities and all claims arising out of such cancellation of commitments, with approval or ratification of the Principal Representative, to the extent the Principal Representative may require, which approval or ratification shall be final for all purposes of this clause, and,

b) Assign to the State, in like manner, at the time and to the extent directed by the Principal Representative, all of the rights, title, and interest of the Architect/ Engineer under the orders and subcontracts so terminated, in which case the State shall have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts.

9.2.3 The Architect/Engineer shall submit its termination claim to the Principal Representative promptly after receipt of a Notice of Termination, but in no event later than one (1) month from the effective date thereof, unless one or more extensions in writing are granted by the Principal Representative upon written request of the Architect/Engineer within such one (1) month period or authorized extension thereof. Upon failure of the Architect/Engineer to submit its termination claim within the time allowed, the Principal Representative may determine, on the basis of information available to him, the amount, if any, due to the Architect/Engineer by reason of the termination and shall thereupon pay to the Architect/Engineer the amount so determined.

9.2.4 Subject to the provisions of paragraph 9.2.3 above, the Architect/Engineer and the Principal Representative may agree upon the whole or any part of the amount or amounts to be paid to the Architect/Engineer by reason of the termination under this clause, which amount or amounts may include any reasonable cancellation charges thereby incurred by the Architect/Engineer and any reasonable loss upon outstanding commitments for personal services which he is unable to cancel. Any such agreement shall be embodied in an amendment to this Agreement and the Architect/Engineer shall be paid the agreed amount.

9.2.5 The Principal Representative under mutually agreed upon terms and conditions will make partial payments to the Architect/Engineer against costs incurred by the Architect/Engineer in connection with the termination portion of this Agreement.

9.2.6 The Architect/Engineer agrees to transfer title and deliver to the State, in the manner, at the time and to the extent, if any, directed by the Principal Representative, such information and items which, if this Agreement had been completed, would have been required to be furnished to the State, including:

a) Completed or partially completed plans, drawings, and information; and

b) Materials or equipment produced or in process or acquired in connection with the performance of the work terminated by the notice.

Other than the above, any termination inventory resulting from the termination of this Agreement may, with written approval of the Principal Representative, be sold or acquired by the Architect/Engineer under the conditions prescribed by, and at a price or prices approved by, the Principal Representative. The proceeds of any such disposition shall be applied in reduction of any payments to be made by the State to the Architect/Engineer under this Agreement or shall otherwise be credited to the price of services covered by this Agreement or paid in such other manner as the Principal Representative may direct. Pending final disposition of property arising from the termination, the Architect/Engineer agrees to take such action as may be necessary, or as the Principal Representative may direct, for the protection and preservation of the property related to this Agreement which is in the possession of the Architect/Engineer and in which the State has or may acquire an interest.

9.3 SUSPENSION

9.3.1 In the event of an occurrence of non-appropriation, including without limitation restriction, limitation, delay or retraction of appropriation, the Principal Representative may, upon the giving of seven (7) days written notice, suspend the performance of the Architect/Engineer after which the Architect/Engineer shall perform no further work and shall be due no further fees, reimbursable costs or other compensation until the Principal Representative gives notice that the period of suspension has ended. Suspension of services may be in whole or in part, as specified by the Principal Representative.

9.3.2 If the Project is suspended in whole or in part for more than three (3) months for cause not attributable to the Architect/Engineer's services, the Architect/Engineer shall be compensated for

all services performed prior to receipt of written notice from the Principal Representative of such suspension or abandonment, together with reimbursable expenses then due and all termination expenses as defined in Article 9.2. If the Project is resumed after being suspended for more than six (6) months, the Architect/Engineer's compensation shall be equitably adjusted.

10 ARTICLE 10 INTENT OF DOCUMENTS, PARTNERING AND FACILITATED NEGOTIATIONS

10.1 INTENT OF DOCUMENTS

10.1.1 In the event any disagreement exists as to the requirements of this Agreement and its exhibits, or if a conflict occurs between or within the requirements of this Agreement and its exhibits, the following order of precedence shall be followed to resolve the disagreement or conflict.

a) The Supplementary General Conditions, if any;

b) The Colorado Special Provisions, Article 11 of this Agreement;

c) Any Amendment of this Agreement;

d) All other terms of this Agreement (other than the Special Provisions); and

e) The Architect/Engineer's proposal letter.

Unless Federal Provisions are Applicable, the Colorado Special Provisions of this Agreement, Article 11, shall in all cases, and without exception, take precedence, rule and control over all other provisions of this Agreement, any exhibits or amendments.

10.2 PARTNERING

10.2.1 In recognition of the fact that conflicts, disagreements and disputes often arise during the performance of contracts, the Architect/Engineer and the Principal Representative aspire to encourage a relationship of open communication and cooperation between the employees and personnel of both, in which the objectives of the Agreement may be better achieved and issues resolved in a more fully informed atmosphere.

10.2.2 The Architect/Engineer and the Principal Representative each agree to assign an individual who shall be fully authorized to negotiate and implement a voluntary partnering plan for the purpose of facilitating open communications between them. Within thirty days (30) of contract signing, the assigned individuals shall meet to discuss development of an informal agreement to accomplish these goals.

10.2.3 The assigned individuals shall endeavor to reach an informal agreement, but shall have no such obligation. Any plans these parties voluntarily agree to implement shall result in no change to the contract amount, and no costs associated with such plan or its development shall be recoverable under any contract clause. In addition, no plan developed to facilitate open communication and cooperation shall alter, amend or waive any of the rights or duties of either party under the Agreement unless and except by written Amendment to the Agreement, nor shall anything in this clause or any subsequently developed partnering plan be deemed to create fiduciary duties between the parties unless expressly agreed in a written Amendment to the Agreement.

10.3 FACILITATED NEGOTIATIONS

10.3.1 The Architect/Engineer and Principal Representative agree to designate one or more mutually acceptable persons willing and able to facilitate negotiations and communications for the resolution of conflicts, disagreements or disputes between them at the specific request of either party with regard to any Project decision of either of them. The designation of such person(s) shall not carry any obligation to use their services except that each party agrees that if the other party requests the intervention of such person(s) with respect to any such conflict, dispute or disagreement, the non-requesting party shall participate in good faith attempts to negotiate a

resolution of the issue in dispute. If the parties cannot agree on a mutually acceptable person to serve in this capacity one shall be so appointed; provided, however, that either party may request the Office of the State Architect to appoint such a person, who, if appointed, shall be accepted for this purpose by both the Architect/Engineer and the Principal Representative.

10.3.2 The cost, if any, of the facilitative services of the person(s) so designated shall be shared if the parties so agree in any partnering plan; or in the absence of agreement the cost shall be borne by the party requesting the facilitation of negotiation.

10.3.3 Any dispute, claim, question or disagreement arising from or relating to the Agreement or an alleged breach of the Agreement may be subject to a request by either party for facilitated negotiation subject to the limitations hereafter listed, and the parties shall participate by consultation and negotiation with each other, as guided by the facilitator and with recognition of their mutual interests, in an attempt to reach an equitable solution satisfactory to both parties.

10.3.4 The obligation to participate in facilitated negotiations shall be as described above and each party's obligations shall be as follows:

a) A party shall not initiate communication with the facilitator regarding the issues in dispute; except that any request for facilitation shall be made in writing with copies sent, faxed or delivered to the other party;

b) A party shall prepare a brief written description of its position if so requested by the facilitator (who may elect to first discuss the parties' positions with each party separately in the interest of time and expense);

c) A party shall respond to any reasonable request for copies of documents requested by the facilitator, but such requests, if voluminous, may consist of an offer to allow the facilitator access to the parties' documents;

d) A party shall review any meeting agenda proposed by a facilitator and endeavor to be informed on the subjects to be discussed;

e) A party shall meet with the other party and the facilitator at a mutually acceptable place and time, or, if none can be agreed to, at the time and place designated by the facilitator for a period not to exceed four hours unless the parties agree to a longer period;

f) A party shall endeavor to assure that any facilitation meeting shall be attended by any other persons in their employ that the facilitator requests be present, if reasonably available;

g) Each party shall participate in such facilitated face-to-face negotiations of the issues in dispute through persons fully authorized to resolve the issue in dispute;

h) Each party shall be obligated to participate in negotiations requested by the other party and to perform the specific obligations described in paragraphs (1) through (10) of this Article 10, Facilitated Negotiation, no more than three times during the course of the Project;

i) Neither party shall be under any obligation to resolve any issue by facilitated negotiation, but each agrees to participate in good faith and any resolution or agreement reached shall be execute through a Supplement or Amendment to the Agreement necessary to implement their agreement; and,

j) Any discussions and documents prepared exclusively for use in the negotiations shall be deemed to be matters pertaining to settlement negotiations and shall not be subsequently available in further proceedings except to the extent of any documented agreement.

10.3.5 In accordance with State Fiscal Rules and Article 11.6, Choice of Law and Article 11.7 Binding Arbitration Prohibited, nothing in this Article 10 shall be deemed to call for arbitration or otherwise obligate the State to participate in any form of binding alternative dispute resolution.

10.3.6 A partnering plan developed as described in Article 10.2, Partnering, may modify or expand the requirements of this Article 10 but may not reduce the obligation to participate in facilitated

negotiations when applicable. In the case of small design service projects where the fees are estimated to be valued under $100,000, the requirements of this Article 10 may be deleted from this Agreement.

11 ARTICLE 11 COLORADO SPECIAL PROVISIONS

11.1 STATUTORY APPROVAL, C.R.S. § 24-30-202(1)

This contract shall not be valid until it has been approved by the Colorado State Controller or designee.

11.2 FUND AVAILABILITY, C.R.S. § 24-30-202(5.5)

Financial obligations of the State payable after the current fiscal year are contingent upon funds for that purpose being appropriated, budgeted, and otherwise made available.

11.3 GOVERNMENTAL IMMUNITY

Liability for claims for injuries to persons or property arising from the negligence of the State, its departments, boards, commissions committees, bureaus, offices, employees and officials shall be controlled and limited by the provisions of the Colorado Governmental Immunity Act, §24-10-101, et seq., C.R.S.; the Federal Tort Claims Act, 28 U.S.C. Pt. VI, Ch. 171 and 28 U.S.C. 1346(b), and the State's risk management statutes, §§24-30-1501, et seq. C.R.S. No term or condition of this Contract shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protections, or other provisions, contained in these statutes.

11.4 **I**NDEPENDENT CONTRACTOR

Architect/Engineer shall perform its duties hereunder as an independent Architect/Engineer and not as an employee. Neither Architect/Engineer nor any agent or employee of Architect/Engineer shall be deemed to be an agent or employee of the State. Contractor shall not have authorization, express or implied, to bind the State to any agreement, liability or understanding, except as expressly set forth herein. **Architect/Engineer and its employees and agents are not entitled to unemployment insurance or workers compensation benefits through the State and the State shall not pay for or otherwise provide such coverage for Architect/Engineer or any of its agents or employees. Architect/Engineer shall pay when due all applicable employment taxes and income taxes and local head taxes incurred pursuant to this Contract. Architect/Engineer shall (i) provide and keep in force workers' compensation and unemployment compensation insurance in the amounts required by law, (ii) provide proof thereof when requested by the State, and (iii) be solely responsible for its acts and those of its employees and agents.**

11.5 COMPLIANCE WITH LAW

Architect/Engineer shall comply with all applicable federal and State laws, rules, and regulations in effect or hereafter established, including, without limitation, laws applicable to discrimination and unfair employment practices.

11.6 CHOICE OF LAW, JURISDICTION, AND VENUE

Colorado law, and rules and regulations issued pursuant thereto, shall be applied in the interpretation, execution, and enforcement of this Contract. Any provision included or incorporated herein by reference which conflicts with said laws, rules, and regulations shall be null and void. All suits or actions related to this Contract shall be filed and proceedings held in the State of Colorado and exclusive venue shall be in the City and County of Denver.

11.7 PROHIBITED TERMS

Any term included in this Contract that requires the State to indemnify or hold Architect/Engineer harmless; requires the State to agree to binding arbitration; limits Architect/Engineer's liability for damages resulting from death, bodily injury, or damage to tangible property; or that conflicts

with this provision in any way shall be void ab initio. Nothing in this Contract shall be construed as a waiver of any provision of §24-106-109, C.R.S.

11.8 SOFTWARE PIRACY PROHIBITION. SOFTWARE PIRACY PROHIBITION

State or other public funds payable under this Contract shall not be used for the acquisition, operation, or maintenance of computer software in violation of federal copyright laws or applicable licensing restrictions. Architect/Engineer hereby certifies and warrants that, during the term of this Contract and any extensions, Architect/Engineer has and shall maintain in place appropriate systems and controls to prevent such improper use of public funds. If the State determines that Architect/Engineer is in violation of this provision, the State may exercise any remedy available at law or in equity or under this Contract, including, without limitation, immediate termination of this Contract and any remedy consistent with federal copyright laws or applicable licensing restrictions.

11.9 EMPLOYEE FINANCIAL INTEREST/CONFLICT OF INTEREST

C.R.S. § 24-18-201 and C.R.S. § 24-50-507

The signatories aver that to their knowledge, no employee of the State has any personal or beneficial interest whatsoever in the service or property described in this contract. Architect/Engineer has no interest and shall not acquire any interest, direct or indirect, that would conflict in any manner or degree with the performance of Architect/Engineer services and Architect/Engineer shall not employ any person having such known interests.

11.10 VENDOR OFFSET AND ERRONEOUS PAYMENTS

C.R.S. § 24-30-202(1) & C.R.S. § 24-30-202.4

Subject to §24-30-202.4(3.5), C.R.S., the State Controller may withhold payment under the State's vendor offset intercept system for debts owed to State agencies for: (i) unpaid child support debts or child support arrearages; (ii) unpaid balances of tax, accrued interest, or other charges specified in §§39-21-101, et seq., C.R.S.; (iii) unpaid loans due to the Student Loan Division of the Department of Higher Education; (iv) amounts required to be paid to the Unemployment Compensation Fund; and (v) other unpaid debts owing to the State as a result of final agency determination or judicial action. The State may also recover, at the State's discretion, payments made to Architect/Engineer in error for any reason, including, but not limited to, overpayments or improper payments, and unexpended or excess funds received by Architect/Engineer by deduction from subsequent payments under this Contract, deduction from any payment due under any other contracts, grants or agreements between the State and Architect/Engineer, or by any other appropriate method for collecting debts owed to the State.

12 ARTICLE 12 MISCELLANEOUS PROVISIONS

12.1 PROFESSIONAL ASSOCIATION PERMITTED

The Architect/Engineer may, with the prior written consent of the Principal Representative, join with him in the performance of this Agreement any other duly licensed Architect or Architects or registered Engineers with whom he may, in good faith, and enter into an association.

12.2 DISSOLUTION OF PROFESSIONAL ASSOCIATION

In the event there is dissolution of the association, other than by death of a member, the State of Colorado, acting by and through the Principal Representative, shall designate which former member shall continue with the work and may make all payments thereafter falling due in connection with the work directly to the person or persons so designated and without being required to look to the application of such payments as among the former members.

12.3 WAGE RATES, in accordance with C.R.S. § 24-30-1404 (1)

As amended, the Architect/Engineer has executed a schedule, which is attached hereto and made a part hereof by reference as **Exhibit B**, Wage Rates Schedule, and by doing so is certifying that wage rates and other factual unit costs supporting the compensation paid by the State for these professional services are accurate, complete and current.

The original contract price and any additions thereto shall be adjusted to exclude any significant sums by which the Principal Representative determines the contract price had been increased due to inaccurate, incomplete, or non-current wage rates and other factual unit costs. All such contract adjustments shall be made within one year following the end of this contract.

12.4 PUBLIC ART LAW

In recognition of the Public Art Law, C.R.S. § 24-48.5-312, as amended, if the State determines that this project is eligible for the acquisition of artworks in accordance with this law, the Architect/Engineer agrees to participate in the art selection process as an art jury member and to cooperate with and to advise the State in working with the commissioned artist(s) for this Capital Construction Project.

12.5 ASSIGNMENT

Architect/Engineer's rights and obligations under this Contract are personal and may not be transferred or assigned without the prior, written consent of the State. Any attempt at assignment or transfer without such consent shall be void. Any assignment or transfer of Architect/Engineer's rights and obligations approved by the State shall be subject to the provisions of this Contract.

12.6 SUBCONTRACTS

Architect/Engineer shall not enter into any subcontract in connection with its obligations under this Contract without the prior, written approval of the State. Architect/Engineer shall submit to the State a copy of each such subcontract upon request by the State. All subcontracts entered into by Architect/Engineer in connection with this Contract shall comply with all applicable federal and state laws and regulations, shall provide that they are governed by the laws of the State of Colorado, and shall be subject to all provisions of this Contract.

12.7 BINDING EFFECT

Except as otherwise provided in §17.A, all provisions of this Contract, including the benefits and burdens, shall extend to and be binding upon the Parties' respective successors and assigns.

12.8 AUTHORITY

Each Party represents and warrants to the other that the execution and delivery of this Contract and the performance of such Party's obligations have been duly authorized.

12.9 CAPTIONS AND REFERENCES

The captions and headings in this Contract are for convenience of reference only, and shall not be used to interpret, define, or limit its provisions. All references in this Contract to sections (whether spelled out or using the § symbol), subsections, exhibits or other attachments, are references to sections, subsections, exhibits or other attachments contained herein or incorporated as a part hereof, unless otherwise noted.

12.10 COUNTERPARTS

This Contract may be executed in multiple, identical, original counterparts, each of which shall be deemed to be an original, but all of which, taken together, shall constitute one and the same agreement.

12.11 DESIGNATED REPRESENTATIVES

The Principal Representative and the Architect/Engineer authorize the following individuals to act on their behalf as Designated Representatives and points of contact as described in paragraphs 1.2.4 and 5.1.1.

Principal Representative for the State:
Name
Department Name
Address
Address
City, State Zip
Email

Principal Representative for Contractor:
Name
Company Name
Address
Address
City, State Zip
Email

12.12 ENTIRE UNDERSTANDING

This Contract represents the complete integration of all understandings between the Parties related to the Work, and all prior representations and understandings related to the Work, oral or written, are merged into this Contract. Prior or contemporaneous additions, deletions, or other changes to this Contract shall not have any force or effect whatsoever, unless embodied herein.

12.13 DIGITAL SIGNATURES

If any signatory signs this Contract using a digital signature in accordance with the Colorado State Controller Contract, Grant and Purchase Order Policies regarding the use of digital signatures issued under the State Fiscal Rules, then any agreement or consent to use digital signatures within the electronic system through which that signatory signed shall be incorporated into this Contract by reference.

12.14 MODIFICATION

Except as otherwise provided in this Contract, any modification to this Contract shall only be effective if agreed to in a formal amendment to this Contract, properly executed and approved in accordance with applicable Colorado State law and State Fiscal Rules. Modifications permitted under this Contract, other than contract amendments, shall conform to the policies issued by the Colorado State Controller.

12.15 STATUTES, REGULATIONS, FISCAL RULES AND OTHER AUTHORITY

Any reference in this Contract to a statute, regulation, State Fiscal Rule, fiscal policy or other authority shall be interpreted to refer to such authority then current, as may have been changed or amended since the Effective Date of this Contract.

12.16 EXTERNAL TERMS AND CONDITIONS

Notwithstanding anything to the contrary herein, the State shall not be subject to any provision included in any terms, conditions, or agreements appearing on Architect/Engineer's or a Subconsultant's website or any provision incorporated into any click-through or online agreements related to the Work unless that provision is specifically referenced in this Contract.

12.17 SEVERABILITY

The invalidity or unenforceability of any provision of this Contract shall not affect the validity or enforceability of any other provision of this Contract, which shall remain in full force and effect, provided that the Parties can continue to perform their obligations under this Contract in accordance with the intent of this Contract.

12.18 SURVIVIAL AND CERTAIN CONTRACT TERMS

Any provision of this Contract that imposes an obligation on a Party after termination or expiration of this Contract shall survive the termination or expiration of this Contract and shall be enforceable by the other Party.

12.19 TAXES

The State is exempt from federal excise taxes under I.R.C. Chapter 32 (26 U.S.C., Subtitle D, Ch. 32) (Federal Excise Tax Exemption Certificate of Registry No. 84-730123K) and from State and local government sales and use taxes under §§39-26-704(1), et seq., C.R.S. (Colorado Sales Tax Exemption Identification Number 98-02565). The State shall not be liable for the payment of any excise, sales, or use taxes, regardless of whether any political subdivision of the state imposes such taxes on Architect/Engineer. Architect/Engineer shall be solely responsible for any exemptions from the collection of excise, sales or use taxes that Architect/Engineer may wish to have in place in connection with this Contract.

12.20 THIRD PARTY BENEFICIARIES

Except for the Parties' respective successors and assigns described in § 12.5, this Contract does not and is not intended to confer any rights or remedies upon any person or entity other than the Parties. Enforcement of this Contract and all rights and obligations hereunder are reserved solely to the Parties. Any services or benefits which third parties receive as a result of this Contract are incidental to this Contract, and do not create any rights for such third parties.

12.21 WAIVER

A Party's failure or delay in exercising any right, power, or privilege under this Contract, whether explicit or by lack of enforcement, shall not operate as a waiver, nor shall any single or partial exercise of any right, power, or privilege preclude any other or further exercise of such right, power, or privilege.

12.22 CORA DISCLOSURE

To the extent not prohibited by federal law, this Contract and the performance measures and standards required under §24-106-107, C.R.S., if any, are subject to public release through the CORA.

12.23 STANDARD AND MANNER OF PERFORMANCE

Architect/Engineer shall perform its obligations under this Contract in accordance with the highest standards of care, skill and diligence in Architect/Engineer's industry, trade, or profession.

12.24 LICENSES, PERMITS, AND OTHER AUTHORIZATIONS

Architect/Engineer shall secure, prior to the Effective Date, and maintain at all times during the term of this Contract, at its sole expense, all licenses, certifications, permits, and other authorizations required to perform its obligations under this Contract, and shall ensure that all employees, agents and Subconsultants secure and maintain at all times during the term of their employment, agency or subcontract, all license, certifications, permits and other authorizations required to perform their obligations in relation to this Contract.

12.25 INDEMNIFICATION

12.25.1 General Indemnification

Architect/Engineer shall indemnify, save, and hold harmless the State, its employees, agents and assignees (the "Indemnified Parties"), against any and all costs, expenses, claims, damages, liabilities, court awards and other amounts (including attorneys' fees and related costs) incurred by any of the Indemnified Parties in relation to any act or omission by Architect/Engineer, or its employees, agents, Subconsultants, or assignees in connection with this Contract.

12.25.2 Confidential Information Indemnification

Disclosure or use of State Confidential Information by Architect/Engineer in violation of §13 may be cause for legal action by third parties against Architect/Engineer, the State, or their respective agents. Architect/Engineer shall indemnify, save, and hold harmless the Indemnified Parties, against any and all claims, damages, liabilities, losses, costs, expenses (including attorneys' fees

and costs) incurred by the State in relation to any act or omission by Architect/Engineer, or its employees, agents, assigns, or Subconsultants in violation of §13.

12.25.3 Intellectual Property Indemnification

Architect/Engineer shall indemnify, save, and hold harmless the Indemnified Parties, against any and all costs, expenses, claims, damages, liabilities, and other amounts (including attorneys' fees and costs) incurred by the Indemnified Parties in relation to any claim that any Deliverable, Good or Service, software, or Work Product provided by Architect/Engineer under this Contract (collectively, "IP Deliverables"), or the use thereof, infringes a patent, copyright, trademark, trade secret, or any other intellectual property right. Architect/Engineer's obligations hereunder shall not extend to the combination of any IP Deliverables provided by Architect/Engineer with any other product, system, or method, unless the other product, system, or method is (a) provided by Architect/Engineer or Architect/Engineer's subsidiaries or affiliates; (b) specified by Architect/Engineer to work with the IP Deliverables; (c) reasonably required in order to use the IP Deliverables in its intended manner and the infringement could not have been avoided by substituting another reasonably available product, system, or method capable of performing the same function; or (d) is reasonably expected to be used in combination with the IP Deliverables.

12.25.4 Accessibility Indemnification

Architect/Engineer shall indemnify, save, and hold harmless the state, its employees, agents and assignees (collectively, the "Indemnified Parties"), against any and all costs, expenses, claims, damages, liabilities, court awards and other amounts (including attorneys' fees and related costs) incurred by any of the Indemnified Parties in relation to Architect/Engineer's failure to comply with §§24-85-101, et seq., C.R.S., or the Accessibility Standards for Individuals with a Disability as established by the Office of Information Technology pursuant to Section §24-85-103 (2.5), C.R.S.

12.26 ACCESSIBILITY

12.26.1 Architect/Engineer shall comply with and the Work Product provided under this Contract shall be in compliance with all applicable provisions of §§24-85-101, et seq., C.R.S., and the Accessibility Standards for Individuals with a Disability, as established by the Governor's Office Of Information Technology (OIT), pursuant to Section §24-85-103 (2.5), C.R.S. Architect/Engineer shall also comply with all State of Colorado technology standards related to technology accessibility and with Level AA of the most current version of the Web Content Accessibility Guidelines (WCAG), incorporated in the State of Colorado technology standards.

12.26.2 The State may require Architect/Engineer's compliance to the State's Accessibility Standards to be determined by a third party selected by the State to attest to Contractor's Work Product and software is in compliance with §§24-85-101, et seq., C.R.S., and the Accessibility Standards for Individuals with a Disability as established by the Office of Information Technology pursuant to Section §24-85-103 (2.5), C.R.S.

13 ARTICLE 13 CONFIDENTIAL INFORMATION-STATE RECORDS

13.1 CONFIDENTIALITY

Contractor shall keep confidential, and cause all Subcontractors to keep confidential, all State Records, unless those State Records are publicly available. Contractor shall not, without prior written approval of the State, use, publish, copy, disclose to any third party, or permit the use by any third party of any State Records, except as otherwise stated in this Contract, permitted by law or approved in writing by the State. Contractor shall provide for the security of all State Confidential Information in accordance with all policies promulgated by the Colorado Office of Information Security and all applicable laws, rules, policies, publications, and guidelines. If Contractor or any of its Subcontractors will or may receive the following types of data, Contractor

or its Subcontractors shall provide for the security of such data according to the following: (i) the most recently promulgated IRS Publication 1075 for all Tax Information and in accordance with the Safeguarding Requirements for Federal Tax Information attached to this Contract as an Exhibit, if applicable, (ii) the most recently updated PCI Data Security Standard from the PCI Security Standards Council for all PCI, (iii) the most recently issued version of the U.S. Department of Justice, Federal Bureau of Investigation, Criminal Justice Information Services Security Policy for all CJI, and (iv) the federal Health Insurance Portability and Accountability Act for all PHI and the HIPAA Business Associate Agreement attached to this Contract, if applicable. Contractor shall immediately forward any request or demand for State Records to the State's Principal Representative.

13.2 OTHER ENTITY ACCESS AND NONDISCLOSURE AGREEMENTS

Contractor may provide State Records to its agents, employees, assigns and Subcontractors as necessary to perform the Work, but shall restrict access to State Confidential Information to those agents, employees, assigns and Subcontractors who require access to perform their obligations under this Contract. Contractor shall ensure all such agents, employees, assigns, and Subcontractors sign agreements containing nondisclosure provisions at least as protective as those in this Contract, and that the nondisclosure provisions are in force at all times the agent, employee, assign or Subcontractor has access to any State Confidential Information. Contractor shall provide copies of those signed nondisclosure provisions to the State upon execution of the nondisclosure provisions if requested by the State.

13.3 USE, SECURITY, AND RETENTION

Contractor shall use, hold, and maintain State Confidential Information in compliance with any and all applicable laws and regulations only in facilities located within the United States, and shall maintain a secure environment that ensures confidentiality of all State Confidential Information. Contractor shall provide the State with access, subject to Contractor's reasonable security requirements, for purposes of inspecting and monitoring access and use of State Confidential Information and evaluating security control effectiveness. Upon the expiration or termination of this Contract, Contractor shall return State Records provided to Contractor or destroy such State Records and certify to the State that it has done so, as directed by the State. If Contractor is prevented by law or regulation from returning or destroying State Confidential Information, Contractor warrants it will guarantee the confidentiality of, and cease to use, such State Confidential Information.

13.4 INCIDENT NOTICE AND REMEDIATION

If Contractor becomes aware of any Incident, Contractor shall notify the State immediately and cooperate with the State regarding recovery, remediation, and the necessity to involve law enforcement, as determined by the State. Unless Contractor can establish that Contractor and its Subcontractors are not the cause or source of the Incident, Contractor shall be responsible for the cost of notifying each person who may have been impacted by the Incident. After an Incident, Contractor shall take steps to reduce the risk of incurring a similar type of Incident in the future as directed by the State, which may include, but is not limited to, developing and implementing a remediation plan that is approved by the State at no additional cost to the State. The State may adjust or direct modifications to this plan in its sole discretion, and Contractor shall make all modifications as directed by the State. If Contractor cannot produce its analysis and plan within the allotted time, the State, in its discretion, may perform such analysis and produce a remediation plan, and Contractor shall reimburse the State for the actual costs thereof. The State may, in its sole discretion and at Contractor's sole expense, require Contractor to engage the services of an independent, qualified, State-approved third party to conduct a security audit. Contractor shall provide the State with the results of such audit and evidence of Contractor's planned remediation in response to any negative findings.

13.5 DATA PROTECTION AND HANDLING

Contractor shall ensure that all State Records and Work Product in the possession of Contractor or any Subcontractors are protected and handled in accordance with the requirements of this Contract, including the requirements of any Exhibits hereto, at all times.

13.6 SAFEGUARDING PERSONAL IDENTIFIABLE INFORMATION (PII)

If Contractor or any of its Subcontractors will or may receive Personal Identifiable Information (PII) under this Contract, Contractor shall provide for the security of such PII, in a manner and form acceptable to the State, including, without limitation, State non-disclosure requirements, use of appropriate technology, security practices, computer access security, data access security, data storage encryption, data transmission encryption, security inspections, and audits. Contractor shall be a "Third-Party Service Provider" as defined in §24-73-103(1)(i), C.R.S. and shall maintain security procedures and practices consistent with §§24-73-101 et seq., C.R.S. In addition, as set forth in § 24-74-102, et. seq., C.R.S., Contractor, including, but not limited to, Contractor's employees, agents and Subcontractors, agrees not to share any PII with any third parties for the purpose of investigating for, participating in, cooperating with, or assisting with Federal immigration enforcement. If Contractor is given direct access to any State databases containing PII, Contractor shall execute, on behalf of itself and its employees, a certification as provided by the Office of the State Controller on an annual basis Contractor's duty and obligation to certify shall continue as long as Contractor has direct access to any State databases containing PII. If Contractor uses any Subcontractors to perform services requiring direct access to State databases containing PII, the Contractor shall require such Subcontractors to execute and deliver the certification to the State on an annual basis, so long as the Subcontractor has access to State databases containing PII.

STATE OF COLORADO
OFFICE OF THE STATE ARCHITECT
STATE BUILDINGS PROGRAM

ARCHITECT/ENGINEER AGREEMENT
CONSTRUCTION MANAGER/ GENERAL CONTRACTOR
(STATE FORM SC-5.2)

EXHIBIT A: ARCHITECT/ENGINEER PROPOSAL

ARCHITECT/ENGINEER PROPOSAL
(Including Design Services Schedule and Certificates of Insurance, attached)

STATE OF COLORADO
OFFICE OF THE STATE ARCHITECT
STATE BUILDINGS PROGRAM

ARCHITECT/ENGINEER AGREEMENT
CONSTRUCTION MANAGER/GENERAL CONTRACTOR
(STATE FORM SC-5.2)

EXHIBIT B: WAGE RATES SCHEDULE

WAGE RATES SCHEDULE
(Attached)

STATE OF COLORADO
OFFICE OF THE STATE ARCHITECT
STATE BUILDINGS PROGRAM

ARCHITECT/ENGINEER AGREEMENT
CONSTRUCTION MANAGER/GENERAL CONTRACTOR
(STATE FORM SC-5.2)

EXHIBIT C: APPROVED STATE BUILDING CODES

APPROVED STATE BUILDING CODES

Refer to the Office of the State Architect State Buildings Building Codes Webpage Exhibit A of the *Code Compliance Policy* dated including the Amendment to Chapter 1 of the International Building Code dated .

STATE OF COLORADO
OFFICE OF THE STATE ARCHITECT
STATE BUILDINGS PROGRAM

ARCHITECT/ENGINEER AGREEMENT
CONSTRUCTION MANAGER/GENERAL CONTRACTOR
(STATE FORM SC-5.2)

EXHIBIT D: CODE COMPLIANCE PLAN REVIEW PROCEDURES

CODE COMPLIANCE PLAN REVIEW PROCEDURES

Refer to the Office of the State Architect State Buildings Building Codes Webpage Exhibit B of the *Code Compliance Policy* dated .

STATE OF COLORADO
OFFICE OF THE STATE ARCHITECT
STATE BUILDINGS PROGRAM

ARCHITECT/ENGINEER AGREEMENT
CONSTRUCTION MANAGER/ GENERAL CONTRACTOR
(STATE FORM SC-5.2)

EXHIBIT E: DESIGN REQUIREMENTS/FACILITIES PROGRAM PLAN/SUSTAINABILITY GOALS

DESIGN REQUIREMENTS/FACILITIES PROGRAM PLAN/SUSTAINABILITY GOALS
(Attached, as applicable)

STATE OF COLORADO
OFFICE OF THE STATE ARCHITECT
STATE BUILDINGS PROGRAM

ARCHITECT/ENGINEER AGREEMENT
CONSTRUCTION MANAGER/ GENERAL CONTRACTOR
(STATE FORM SC-5.2)

SUPPLEMENTARY GENERAL CONDITIONS: FEDERAL PROVISIONS

Supplementary General Conditions Federal Provisions

SLFRF Federal Funds: Contractor Terms and Conditions Certification

SLFRF Federal Funds: Contractor Terms and Conditions

Appendix C

ACKNOWLEDGEMENT AND ATTESTATION FORM

By responding to these guidelines, the respondent(s) certify that he/she has reviewed the Agreement and its Exhibits contained herein, and is familiar with their terms and conditions and finds them expressly workable without change or modification.

I certify and declare that the foregoing is true and correct.

Subscribed on _____ at _____,
Date City
_____, State of _____,
County State

_____ _____
Applicant or Corporate Officer Signature Date

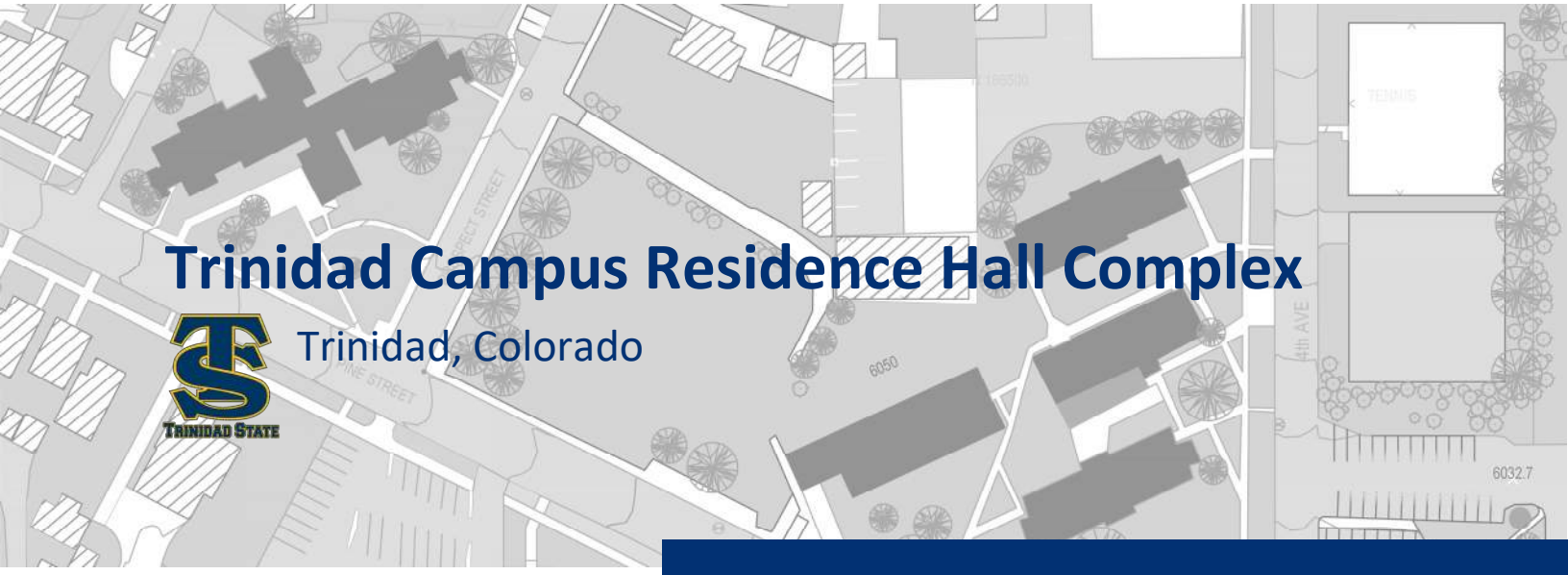
_____ _____
Witness Date

NOTE: Use full corporate name and affix corporate seal (if available).

(Seal)

Appendix D

Program Plan



Trinidad Campus Residence Hall Complex

Trinidad, Colorado

PROGRAM PLAN

Prepared for:

TRINIDAD STATE COLLEGE

FINAL August 31, 2021

HALL ARCHITECTS

IN ASSOCIATION WITH

SCHENDT ENGINEERING CORPORATION

ACKNOWLEDGMENTS

This report was prepared with the valued input from Trinidad State College Administrators and Staff. We, the Planning Team, are indebted for the College's vision and contributions.

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I. EXECUTIVE SUMMARY

The purpose of this Program Plan is to study and evaluate the physical conditions of the existing dormitory and Student Center facilities of the Residence Hall Complex and site amenities on the Trinidad Campus of Trinidad State College (TSC), and recommend building infrastructure upgrades and modernization improvements under a three-phased project implementation.

Between 2020-2021, TSC was awarded federal funds administered under the Higher Education Emergency Relief (HEERF) Program stemming from the national emergency to respond to the novel coronavirus (COVID-19) outbreak. Besides the application of funds towards defraying expenses associated with coronavirus (e.g. lost revenue, technology costs to transition to distance learning, financial aid grants), institutions are permitted to apply Institutional Portion Funds toward student support activities as well as building improvements that prevent coronavirus. The College elected to apply the specific funds (HEERF II – CRRSAA and HEERF III – ARPA) towards improving their existing 61 year-old residence hall complex at the Trinidad Campus, consisting of four dormitories – Romero Residence Hall, Johnson Residence Hall, O'Connor Residence Hall and Huggins Residence Hall, and the Student Center building. Additionally, the College has been exploring other funding resources outside of the HEERF funding, including selling the TSC President's House, with the intention to apply the proceeds towards the residence hall upgrades.

In the Summer of 2021, the firms of Hall Architects and Schendt Engineering worked with TSC Facilities, staff and administrators to understand and document the College's concerns with the condition of the residence halls and grounds. Building discomfort, aged building systems, and outdated building aesthetics were cited as the major concerns and priorities for improvement.

Interviews with the Director of Residence Halls and the Residence Hall Manager as year round building occupants were instrumental for impressions and experiences of day-to-day living conditions, as well as seasonal conditions and observations from student impressions. Interviews with veteran Facilities staff were beneficial to understanding existing building systems operations and infrastructure, specific code deficient conditions, and general building maintenance history. The firms also consulted TSC's archived as-built documentation, and recorded information from field visits. Additionally, Hall Architects' on-going work with TSC's Facilities Master Plan, building inventory and student and staff interviews aided the design teams' work process.

From this information, the Planning Team applied a holistic approach to identifying project improvements as packaged options for each of the five buildings, in consideration of budget and the Trinidad factor, work scheduling, student demographics, enrollment and growth, and individual building conditions. Two sets of projected costs were originally identified for August 2022 (the deadline for spending both the CRRSAA and ARPA funds), and August 2024 for each building by discipline. Upon TSC Leadership's review of these initial recommendations and costs and with the very specific criteria for use of the federal funds, it was determined a specific scope of work would need to be defined for three specific phases in meeting targeted goals and scheduling deadlines revolving around the real challenges of ordering mechanical and electrical equipment.

TSC's intent for the Phase I project is to specifically address improving the indoor air quality (IAQ), the air filtration as a measure to suppress coronavirus, and also improve overall thermal comfort for the two oldest dormitories, Romero Residence Hall and Johnson Residence Hall, and the Student Center to support resident students. These buildings were all built in 1960, during a period of time with no energy performance codes. Phase I design will focus on bringing mechanical cooling to the sleeping rooms and study lounges of Romero Residence Hall, Johnson Residence Hall, and the two sleeping rooms in the Student Center via an air-cooled chiller located at the Student Center's Central Facility. To facilitate the installation of the new chiller and provide the physical components of the cooling system at the existing Central Facility space, the project

will require two major equipment changes: (1) Replacing the inefficient boiler with an efficient boiler meeting current standards with a smaller footprint and an upgraded HVAC system and air filtration; and (2) Upgrading the capacity of the electrical transformer and panel boards to support the new cooling systems. These proposed equipment changes will not impact the existing Central Facility structure nor add or subtract building square footage, in meeting the ARPA criteria for use of the funds. Architectural support for these proposed mechanical upgrades will entail building a better performing exterior wall envelope by furring the wall with closed-cell rigid insulation and housing new piping and fan coil units bringing mechanical heating, cooling and ventilation that will circulate outside air through an exterior brick vent for optimal conditions. All associated work meets permissible remodeling ARPA criteria with the goal to improve air filtration to prevent the spread of COVID-19. Improving the IAQ for the two sleeping rooms in the Student Center provides dedicated quarantine space that will be healthier space to directly support those students recovering from COVID, and maintaining safe distance from healthy students, which is an approved use of both the CRRSAA and ARPA funds.

The combined federal funds available to TSC for this Phase I project is $ 2,171,625. These funds will cover both construction costs and project soft costs, which includes but is not limited to: project management services, asbestos testing and abatement, and Design-Build services. The College will also plan during this Phase I timeframe to research other fundraising options to cover additional construction costs incurred for the Phase I project, as it is anticipated that only Romero Residence Hall will receive a complete installation of fan coil units under Phase I.

The scope of work under the remaining Phases 2 and Phase 3 will continue the goals of COVID prevention: providing the complete installation of fan coil units with improved IAQ at Johnson Residence Hall; redesigning of the bathroom layouts implementing accessibility improvements at the Johnson, Romero, and O'Connor Residence Halls; providing an ADA bathroom at Huggins Residence Hall; upgrading plumbing fixtures, e.g. replacing sinks with trough sinks and sensor faucets and sensor soap dispensers as a touchless solution at all residence halls; and implementing the upgrade of mechanical and electrical infrastructure at the O'Connor and Huggins Residence Halls. Improving building energy performance with external metal trellis shades and metal screens, and storefront replacements, replacing exterior doors, signage, improving overall accessibility, adding new interior finishes, and updating recreational fields are among other improvements TSC wants to accomplish through August 2025 with successful fundraising campaigns, student bond measure and potential College reserves. An additional option being identified under this full project is the replacement of windows; this work would be incorporated under either Phase 2 or Phase 3, and subject to available funds.

Total Project Possible Costs determined for these phases are estimated at $12,000,000 for Phase II (August 2024 completion), and $ 5,504,167 for Phase III (August 2025 completion).

TSC Leadership and Facilities will be able to evaluate these costs and establish project prioritization and schedule design and construction projects accordingly. Recent developments with the anticipated growth of TSC's premiere Gunsmithing and Nursing programs and Athletics, combined with the local Trinidad housing shortage present both exciting opportunities and challenges that will impact decision-making. This Program Plan will assist the College with providing attainable solutions for improving the student housing experience, supporting TSC's core value of "Students First".

II. OVERVIEW

II.A. INSTITUTION ROLE AND PURPOSE, MISSION, VISION, CORE VALUE, CENTENNIAL GOALS

ROLE AND PURPOSE

As part of the Colorado Community College System (CCCS), Trinidad State College, or TSC, is committed to providing its students with:

- Transfer programs that qualify students for admission to four-year colleges and universities.
- Educational offerings that meet the occupational needs of students in technical and vocational fields.
- Developmental education to build basic academic skills.
- Opportunities for perpetual learning and lifelong development.
- An environment that supports learners and learning.
- A comprehensive program for assessment of student learning focused on enhancing student success.

The College offers certificate and degree programs and transfer associate degree programs, focusing on the educational needs of their service areas, which encompass the counties of Huerfano and Las Animas in southern Colorado for the Trinidad Campus.

MISSION STATEMENT

Enriching our diverse communities through quality educational experiences and lifelong learning.

VISION STATEMENT

Educate for the future.

TSC CORE VALUE

Students First.

Additionally, to honor their upcoming 100th year of existence (2025), TSC has established the following institution goals:

TRINIDAD STATE 2020-2025 CENTENNIAL GOALS

- Increase enrollment to 1500 FTE.
- Increase our graduation rate from 45% to 50%.
- Increase transfers to 250.
- Shrink our equity gap to zero.
- Build reserves to support Facilities Master Plan.

II.B. DESCRIPTION OF TSC DORMITORIES AND STUDENT CENTER

Student Housing on the Trinidad Campus
TSC's Trinidad Campus occupies over 17 acres on three established mostly residential subdivisions in the City of Trinidad. The Residence Hall Complex consists of four onsite dormitory facilities available to resident students at the Trinidad Campus, a Student Center, recreational fields and a parking lot, on approximately 4.15 acres located at the north end of campus, north of Pine Avenue. The Complex is surrounded by mostly single-family dwellings in the low density CPTreats and Terry's West Addition subdivisions. The following map, Figure A., shows the layout of the complex.

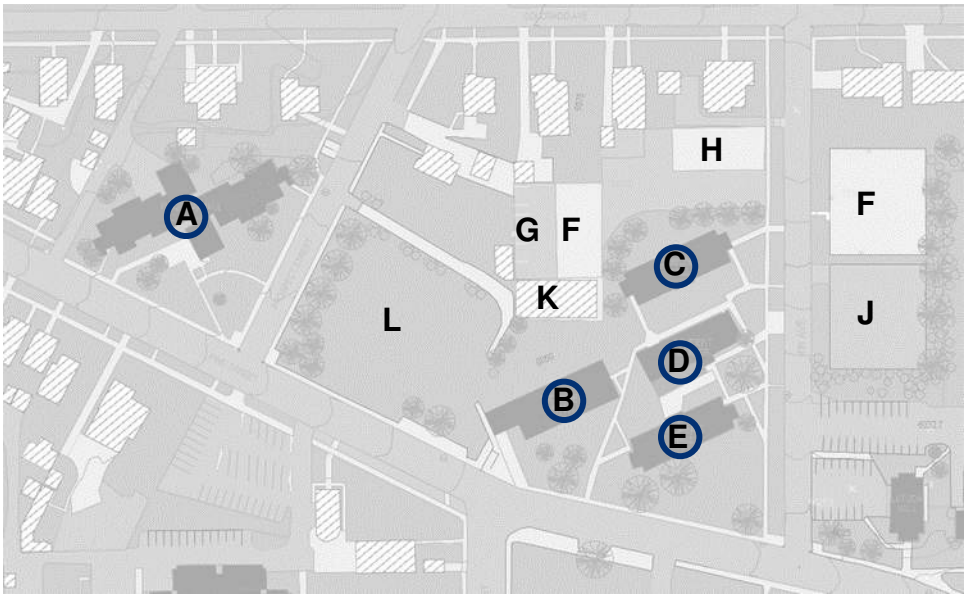


Figure A.
TSC Residence Hall Complex, Trinidad Campus

A Huggins West and East Residence Hall (Men's Dormitory, Assistant Housing Director Apartment)
B O'Connor Residence Hall (Men's Dormitory, Housing Director Apartment)
C Johnson Residence Hall (Women's Dormitory)
D Student Center (includes 2 quarantine sleeping rooms, central boiler facility)
E Romero Residence Hall (Women's Dormitory)
F Tennis Court
G Racquetball Courts (4)
H Basketball Court
J Assigned Student Parking Lot
K Sand Volleyball Pit
L Open playing field

Residence Halls
The four residence halls are briefly described below:

Huggins Residence Hall
Built in 1967, the Elizabeth Huggins Residence Hall houses up to 148 male students distributed among two - three-story building wings, "East" and 'West". In addition to double occupancy rooms and shared public bathrooms, Huggins includes an apartment for the Assistant Housing Director, offices, a large recreation room, 6 study lounge areas, laundry facilities and an upper floor outdoor deck. At 32,048 GSF, Huggins is the largest of the four residence halls.

O'Connor Residence Hall
Built in 1964, the O'Connor Residence Hall is a single occupancy type dormitory, serving up to 45 male students in the gunsmithing program in a three-story building. The O'Connor individual sleeping rooms are unique for their combination work/study/sleep design. In addition to the sleeping rooms and shared public bathrooms, O'Connor includes an apartment and office for the Housing Director, 3 study lounges, a computer lab, a large gunsmithing work lab, a storage vault, laundry facilities and an upper floor outdoor deck. At 19,987 GSF, O'Connor is the second largest residence hall.

Johnson Residence Hall
Built in 1960, the Johnson Residence Hall houses up to 92 female students in this three-story building. In addition to double occupancy rooms and shared public bathrooms with washer and dryer units, Johnson also has 3 study lounges. At 15,571 GSF, Johnson is the third largest residence hall.

Romero Residence Hall
Built in 1960, the J.M. Romero Residence Hall houses up to 64 female students in this two-story building. In addition to double occupancy rooms and shared public bathrooms with washer and dryer units, Romero also has 2 study lounges. At 10,503 GSF, Romero is the smallest residence hall.

Student Center / Central Facility
Designed to be a student lounge area and also house the boiler serving the Johnson and Romero Residence Halls, the Student Center / Central Facility was built in the same timeframe of these two dorms, 1960, which makes these three buildings the oldest of the Complex. The 3,547 GSF Student Center is a one-story building, whose interior spaces include a combination computer study lounge and recreation lounge, two public restrooms, a small kitchenette, an office, two sleeping rooms, a private bathroom, a kitchen and a dining area. Several years ago, the lounge area was converted into program space for the Massage Therapy program. Around three years ago, Massage Therapy moved to the Banta Building, opening up the space to function once again as a Student Lounge. Last year during the pandemic, the building was the campus' assigned quarantined area, limiting the building's use to infirmed students.

Recreational fields
The grounds around the dormitory buildings include open spaces that are assigned as recreational spaces for TSC students. These include a sloped grass field with a softball backstop, a sand volleyball pit, tennis courts, racquetball courts, and a basketball court. A former tennis court was recently converted into a 27-space student parking lot.

II.C. CURRENT HOUSING OCCUPANCY

The four residence halls are occupied year-round, with the majority of use in the standard academic year, which starts in late August and ends in early May. The dormitories are also available to students in summer programs offered on the Trinidad Campus. The bed capacity cited by the College Administration will vary per year, need and circumstances. The maximum potential available bed capacity is 349. Housing applies a rule of thumb formula: approximately 70% of rooms are assigned to double occupancy, and approximately 30% are assigned to single occupancy. These distributions assure single occupancy rooms for the gunsmithing program students and Resident Advisors (RA). Some rooms are assigned to a non-sleeping function, e.g. computer labs.

II.D. RELATIONSHIP TO THE FACILITIES MASTER PLAN

At this writing, Trinidad State College is preparing their ten-year Facilities Master Plan (FMP) document for submission to the State of Colorado. The FMP is studying reassigning the recreational lounge function of the Student Center to the main Student Center on campus, namely the Sullivan Student Center.

In December of 2012, Trinidad State College revised and updated their 2008 Facilities Master Plan*, originally authored by Paulien and Associates, for both their Trinidad and Alamosa campuses.

The 2012 FMP provided information on the conditions of the four dormitory facilities and the Student Center. The planning team recommended demolition of the Johnson, Romero and O'Connor Residence Halls due to their low Facilities Condition Index (FCI) ratings, and overall aged and undersized infrastructure. Only Huggins Residence Hall was retained out of the four dorm facilities. The Student Center was also recommended for demolition. A new dormitory building designed around private/semi-private rooms with more modern amenities was recommended.

The Plan also recommended a housing feasibility study to review growth, housing needs and parking needs, as well as appropriate upgrades for the renovation of the Huggins Residence Hall.

**"Trinidad State Junior College Facilities Master Plan, TSJC Staff, December 2012 (revised and updated)".*

III. JUSTIFICATION

III.A. EXISTING FACILITIES – HISTORY TIMELINE

As a prelude to the existing conditions narratives, a history of the residence hall complex is being provided for building and campus context.

History of the Residence Hall Complex
Prior to the design and construction of the first dormitory buildings, the TSC Trinidad Campus was laid out around the City of Trinidad street blocks, with the main multi-story buildings – Berg Administration, Scott Gymnasium and the Mullen Building – firmly established, anchoring the campus site. Infill buildings consisting of simple wood frame structures, including older World War II barracks, served as ancillary structures. See Figure B. below.

Figure B. View of Trinidad State College campus, Trinidad, CO *Circa late 1950s. This photograph, taken from the southeast edge of the campus, shows a predominant residential neighborhood north of Pine Street. The red arrow denotes the general area of houses that stood in place of the current Resident Hall Complex. The finished ground floors were held up higher from the street level. Source: Louden-Henritze Museum.*

All dormitory buildings and the Student Center were designed by Joseph T. Wilson, Architect. According to the 1959 as-built construction documents of the first two dormitories, Johnson and Romero Residence Halls, Johnson was designed as the Men's Dormitory, and Romero as the Women's Dormitory. The floor plans are identical except for the number of floors: Johnson is a three-story structure with 48 double occupant rooms and Romero is a two-story structure with 32 double occupant rooms. Other than the sleeping rooms, these buildings contained a centralized bathroom core with utility and storage spaces. The one-story Student Center building, included in this set of drawings, was designed to be physically connected below grade with a utility tunnel from the central boiler room of the Student Center building. The buildings were also designed to be physically connected above ground with a covered walkway structure connected to each building's entrances. These connective structures were never built. In addition to the Boiler Room, the Student Center previously contained a large lounge area and the original Housing Director apartment.

The O'Connor Dormitory was built in 1964. Its design incorporated a large exterior staircase to access the main building entrance, a new Housing Director's apartment and front office. Its corridor-sleeping room layout is similar to the Johnson and Romero design, except that there is a larger lounge type space and a kitchenette on the third floor.

The last of the four dormitories to be built, the Huggins Residence Hall was completed in 1967. It was sited a distance away from the other dorms, separated by a large grass field and Prospect Street.

Additionally, the west end of the building opens onto a residential alleyway. Huggins was designed with two distinct building wings with three sets of exit stairwells. A large lounge room and former mail office room are located right off of the building's main central entrance.

All buildings were designed before the passage of the Americans with Disabilities Act (ADA) legislation in 1990; all multi-story dorm buildings have no passenger elevators, and a number of building entrances are non-ADA compliant. A campus-wide ADA project in 2013-14 provided updated entrances and walkways at select buildings. Further citations of non-compliance in a 2017 follow up report indicated bathroom modifications with some items having been completed, while others not yet completed.

A campus-wide IT project provided new data infrastructure to the residence halls and Student Center in the late 1990s.

All buildings have been equipped with fire alarm notification systems. The buildings are non-sprinklered.

See Mechanical, Plumbing and Electrical Narratives on building infrastructure history and equipment updates.

Site information

From the original 1959 site plan, see Figure C, it is clear that the perimeter grades around the first dormitory buildings site were steep; the finished floor of Romero, or Building "A", is 19 feet above the benchmark of 100' at the corner of Pine Street and Fourth Avenue (marked by the red arrow below). Angled perimeter parking on the street was planned, but had not been executed.

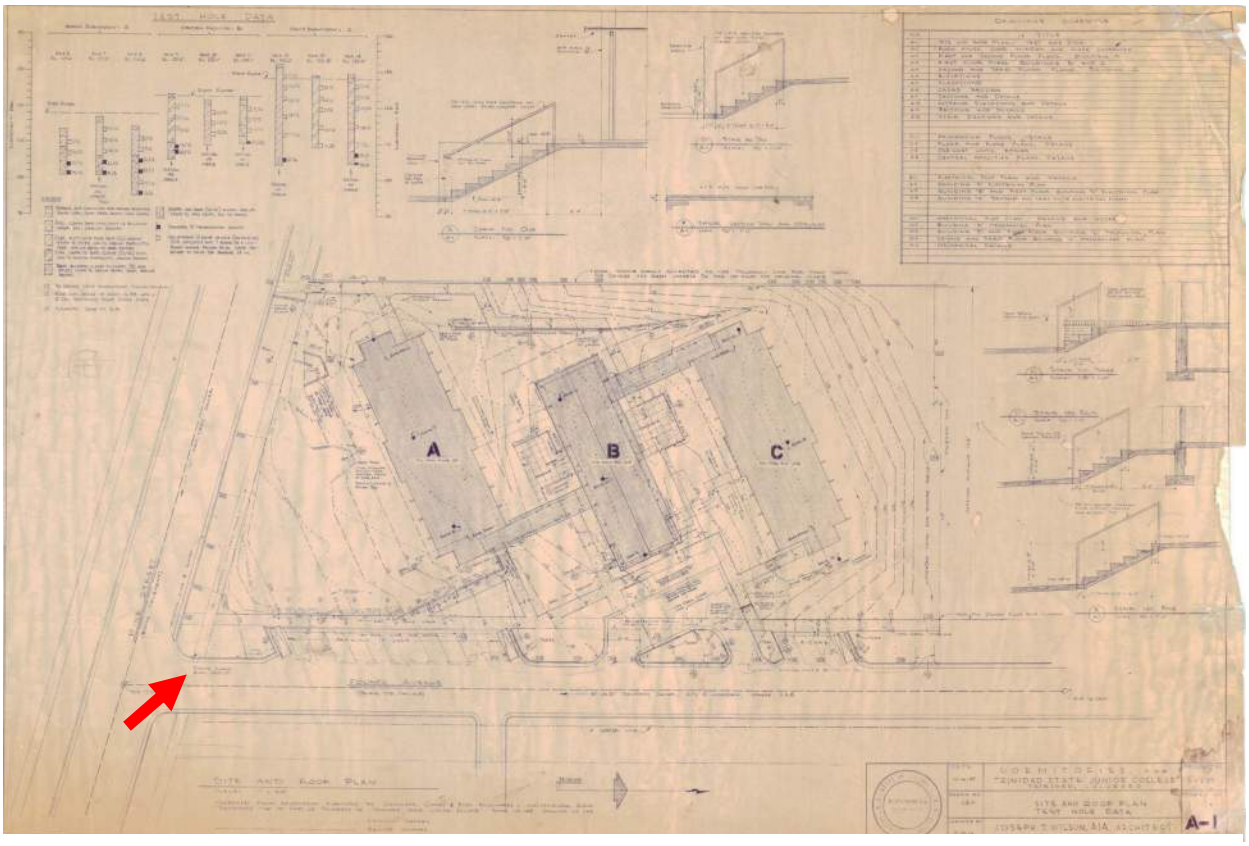


Figure C. *Sheet A-1, 1959 As-built Site Plan drawings, Joseph T. Wilson, Architect. Source: TSC.*

The 1964 drawings for the O'Connor Residence Hall development show a "Parking Area" to the north of the O'Connor building, in the area where the current tennis court and sand volleyball pit are located. Two driveways are shown connecting to a city alleyway toward Prospect Street and another toward Fourth Avenue.

The parking lot was ultimately converted into tennis courts, with the addition of racquetball courts, and the most recent addition of the sand volleyball pit. The racquetball courts are not used and have not been maintained, with apparent damaged walls. See Figure E. Additional lots were purchased around the dormitories for recreational fields, a basketball court north of Johnson and two tennis courts on the east side of Fourth Avenue. The need for parking for resident students called out in the 2012 FMP resulted in one of the tennis courts converted into a parking lot. See Figure D. The large grass area west of O'Connor has a softball backstop at one corner, and is largely a sloped field that is challenging and unsafe for field sports requiring a level field. Resident students will use the grass for incidental flag football or water activities. See Figure F.

Figure D. *View looking east to existing tennis court (left) and existing student parking lot (right). Source: Hall Architects.*

Figure E. *View looking west to existing racquetball courts northwest of O'Connor, that have not been in use, not been maintained. Source: Hall Architects.*

Figure F. *View looking east toward recreational field west of O'Connor, showing a sloped grade not suitable for most grass sports requiring a level field. Source: Hall Architects.*

II.B. ARCHITCECTURAL NARRATIVES

Building Design – Style and Materiality
The buildings of the Residence Hall Complex were designed around the Mid-Century Modern and early Brutalism architectural style eras, with an emphasis on simple yet heavy articulated forms, namely a repetition of vertical elements, and building floor plans with an economy of circulation space, particularly in the older dorm buildings. Exterior materials utilize a combination of red brick, exposed precast panels, curtainwall systems combining single paned and multi-colored metal panels and glass, and metal doors. With its multiple reflective hard wall and floor surfaces throughout employing painted brick or block, ACT and ceramic tile and sparing soft surfaces, the dorm interiors have a restrained, institutional and dated appearance.

Facilities Condition Index
The 2012 Facilities Master Plan (FMP) reported that the respective Facilities Condition Index (FCI) for the dormitory facilities were determined to be in varying ranges in the original 2008 FMP report. See Figure G.:

Huggins	81.53
Johnson	75.60
O'Connor	60.44
Romero	48.30
Student Center	Not Listed

Huggins Residence Hall
Double occupancy, male
Age: 54
Last reported* FCI: 81.53

O'Connor Residence Hall
Single occupancy, male
Age: 57
Last reported* FCI: 60.44

Romero Residence Hall
Double occupancy, female
Age: 61
Last reported* FCI: 48.30

Johnson Residence Hall
Double occupancy, female
Age: 61
Last reported* FCI: 75.60

Figure G. *Residence Hall complex site plan, building FCIs.*

Student Center
Age: 61
No FCI reported.

State Buildings has provided the following interpretations for FCIs:

99 – 95	Routine or Minor Maintenance needed
94 – 75	Major Maintenance is needed
74 – 55	Remodel is needed
54 – 35	Extensive Renovation is needed
34 – 1	Demolish, cannot be satisfactorily renovated

The primary areas of concern with the TSC Residence Hall Complex buildings are aged infrastructure, the poor temperature control throughout all buildings, lack of building cooling, lack of ADA-compliant accessibility in some public areas, single pane exterior windows at Huggins, Romero and Johnson, aging interior finishes, and asbestos concerns, which include suspicious floor tiles, piping insulation, and wall finishes, and the need for mitigation.

Specific Health / Life Safety and Code Deficiencies
From accounts given at in-person meetings, conference calls and individual interviews with TSC administrators, the Facilities directors and staff, and the College's planning documents, a number of mostly interior building deficiencies have been observed at each of the Residence Hall Complex buildings, as noted on the following plans, photographs, with accompanying narratives:

Bathroom layout concerns

- Typical toilet layout at the Johnson, Romero and O'Connor buildings have non-code-compliant aisles and stall sizes, see Figures H. and J.
- Access to bathtub area at Johnson and Romero, see Figures H. and I.
- Bathroom door – non-code compliant for accessibility – see Figure H.
- Laundry function at Johnson and Romero – location of equipment near bathroom entrance creates bottleneck condition especially with proximity to showers – see Figure H.
- Numerous ADA compliance deficiencies – See Figures H., J., and K.

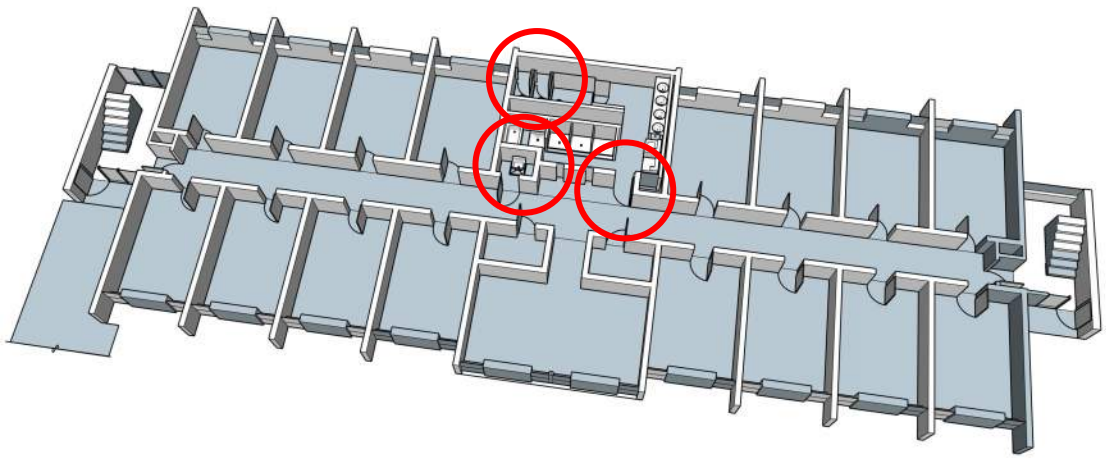


Figure H. *Johnson Residence Hall floor plan. Romero Residence Hall floor plan similar. Source: Hall Architects.*

Figure I. *Width of access to a public bathtub area measures 19". Current code minimum is 36". Source: Hall Architects*

Figure J. *Width of a standard aisle in a public bathroom measures 19" with convector. Current code minimum is 36". Source: Hall Architects*

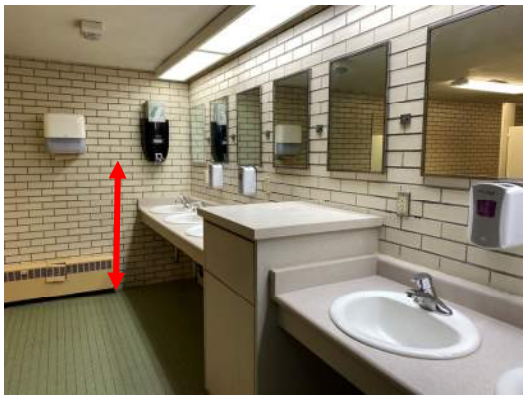


Figure K. *Plastic laminate countertops appear dated, vulnerable to delamination from high moisture environments Bottom of mirrors are set high above floor. Source: Hall Architects.*

Overall building discomfort

The buildings' original windows are single pane, with the exception of O'Connor Residence Hall, whose sleeping room windows were replaced with double pane windows under a DOLA grant in 2010. Damaged windows seals and the lack of energy performance with single pane windows lend to discomfort for building occupants over the course of a typical day, particularly with the south-facing glass conducting the heat. In addition to the windows, the exterior walls of the sleeping rooms have little R-value, having been designed in the era with no building energy performance codes.

Figure L. *Exterior guardrails at Romero Residence Hall entrance. Source: Hall Architects.*

Additional code-deficient guardrails near Romero Residence Hall Fourth Avenue entrance
Figure L. above illustrates safety concerns with the existing exterior split rail guardrails which surround a paved area near the Romero Residence Hall east entrance. The openness of the guardrail does not provide fall protection for occupants. Aesthetically, it does not provide a welcoming entrance for the dorm.

III.C. MECHANICAL AND PLUMBING NARRATIVES

Code and Reference Standards
The following codes and reference standards are currently applicable to the narratives III.C. and III.D.:

- 2018 International Building Code
- 2018 International Mechanical Code
- 2018 International Plumbing Code
- 2018 International Energy Code
- 2018 International Fuel Gas Code
- 2020 National Electric Code
- NFPA 72 Fire Alarm Systems
- ASHRAE Standard 55-2013 Thermal Environmental Conditions for Human Occupancy
- ASHRAE Standard 62.1-2013, Ventilation for Acceptable Indoor Air Quality
- ASHRAE Standard 90.1-2013, Energy Standard for Buildings
- ASHRAE Standard 189.1-2014, Design of High-Performance Green Buildings

- ASHRAE Handbooks

Existing Mechanical and Plumbing Systems Assessment
The following assessment narrative is a compilation of observations from an on-site survey on June 29, 2021, and evaluations of available existing record drawings.

Huggins Residence Hall Existing Mechanical and Plumbing Systems Assessment
The central heating plant is comprised of two 12 year-old gas-fired condensing boilers, Laars "RHEOS+" manufactured in August 2009, with input capacity of 1600 MBH (sea level) at 89.5% thermal efficiency. Each condensing boiler is vented separately with Category 4 Al29-4C stainless steel vents, routed to clear adjacent roof for code compliance between the Student Lounge 114 and boiler room. In addition, it is our understanding the hydronic water treatment has been minimal over the past several years. Consequently, a nondestructive piping condition assessment utilizing ultrasonic testing is recommended to determine if pipe thickness has been eroded enough to merit replacement.

Based on cursory observations, it appears some of the boiler room insulation may contain asbestos, including the domestic hot water storage tank. An ACM (asbestos containing material) survey is highly recommended for all 4 dormitories and the Student Center. Abatement will be required prior to any mechanical system upgrades; future mechanical project success (i.e., within budget and without change orders) may be at risk without a prior survey and abatement process.

The original 1966 record drawings indicate a domestic hot water heater, separate from hydronic heating plant. Based on site observations, domestic water is now heated through the central heating plant described above with a "side-arm" configuration to the immersion heater inside of the domestic water storage tank. Also refer to further discussion in the recommendation section.

Each dorm room is served by finned tube baseboard heat with knob-operated dampers, averaging 8 linear feet per room for the lower 2 floors and 9 linear feet of fin-tube installed in each room of the 3rd level. Each dormitory room baseboard is provided with an entering water temperature of 190°F and designed with a temperature drop of 20°F. Typically, this is an issue with condensing boiler operating temperatures. To optimize condensing boiler efficiencies to achieve advertised 95% or greater, the lower return temperature must be, approaching 80°F. Consequently, it is recommended to replace all of the hot water coils and fin tubes with design intent

The vestibule and lobby are each heated by a ceiling-mount cabinet unit heater. Lounge 145 is heated by two ducted ceiling-mounted cabinet unit heaters. The common restrooms/gang toilets, exit stairwells, and corridor alcoves are heated by recessed 6 inch deep wall-mounted convectors.

A heating and ventilating unit is located in the boiler room and equipped with a hot water coil with a fan capacity of approximately 3600 CFM. Ventilation air is provided through a sidewall 72" by 48" louver on the northeast side of the facility. Heated ventilation air is distributed for the 1st floor lounges and up a chase to serve the 2nd and 3rd student lounges. The median service life for an indoor air handling unit is 20 years according to the Commercial Energy Auditing Reference Handbook, 2008, Steve Doty, P.E., CEM.

It is noted Facilities Maintenance Staff has indicated windows are open throughout the school year for all dormitories, including days with sub-freezing temperatures reports. Staff also report significant quantity of thermal comfort complaints due to the lack of thermostatic control for each occupied space. For Huggins Hall, a single pneumatic thermostat controls temperature for groups of both 2 dorm rooms and 3 dorm rooms. Other dormitories are documented to have as many as 5 dorm rooms controlled by a single thermostat.

Each dorm room is naturally ventilated through an operable window. Calculation has not been performed to determine current IMC section 402 natural ventilation compliance regarding the operable window ratio to floor area. The dormitory rooms are not mechanically or evaporatively cooled. An evaporative cooler is suspended through exterior window of the Assistant Housing Director's apartment.

The stacked toilets and showers on the west and east sides are exhausted via rooftop exhaust fan rated for 1800 CFM each, matching the amount of ventilation air previously described for a neutrally balanced building. Original drawings indicate 300 CFM from each shower room and 450 CFM for each toilet room. It was observed the janitors' closets with chemical storage were not ventilated or exhausted, which was confirmed on the existing drawings.

The existing exterior 6" vitrified clay sewer main to the city sewer is periodically infested by roots, and additional cleanouts have been installed for improved preventive maintenance. Facilities Management also reports interior facility sewage clogging on a weekly basis. The exposed cast-iron waste piping serving restrooms above was observed to exhibit signs of corrosion on the exterior; further investigation for the condition of the pipe interior is recommended.

The existing gang/group water closets appear to have been replaced with an American Standard flush valve type wall-hung toilet rated for 1.6 gallon per flush capacity. Replacement date of the toilets were not confirmed. The existing wall hung lavatories equipped with single handled faucets, with various rated aerators ranging flowrates from 0.5 GPM to 2.2 GPM. The lavatory supplies and traps are not insulated as required for ADA compliance. The majority of the showers are equipped with institutional type fixtures with stainless steel enclosures for concealed piping. Showerhead flowrates were not verified for EPA compliance.

Please refer to photograph log included in the appendices.

O'Connor Residence Hall Existing Mechanical and Plumbing Systems Assessment

The O'Connor central heating plant is comprised of two gas-fired condensing boilers, Laars "RHEOS+" installed in 2009 (date not confirmed, but boiler nameplate in Huggins indicated manufacture date of August 2009). The boilers are sidewall vented in the existing chimney does not appear to be currently in use. Two vertical in-line 130 GPM heating water distribution pumps serve this facility.

Original record drawings indicate a Bryan Steam Corporation model no. 313-IV domestic hot water heater, separate from hydronic heating plant, which was apparently removed during the 2009 boiler plant upgrade. Based on site observations, domestic water is now heated through the central heating plant described above with a "side-arm" configuration to the immersion heater inside of the domestic water storage tank. Also , please refer to the plumbing description below.

Each dorm room is served by finned tube baseboard heat with knob-operated dampers, ranging from 8.5 to 10 linear feet per room. Each dorm room baseboard was specified 1.34 MBH per running foot of baseboard at an average water temp of 190°F. Entries and stairwells are heated by cabinet type fan-powered heaters. A heating and ventilating air handler located in the boiler room serves the laundry room above and Lounge 325 above.

Similar to Huggins Hall, Facilities Management staff receive numerous complaints regarding temperature control and observe windows open continuously. According to the original documents, a single pneumatic thermostat control serves a groups of 3 dorm rooms on one side of the corridor and 5 dorm rooms on the other side.

Each dorm room is naturally ventilated and are not mechanically or evaporatively cooled.

Gang toilets are exhausted through the original Jenn Air rooftop ventilator rated for 2030 CFM. The existing janitor's closets appear to be exhausted through a duct-mounted grille.

Observed significant lint accumulation on exterior wall. Lint is extremely flammable and lint and dirt or dust accumulation is a fire hazard.

As noted above, the water heating system source are the 2 boilers with circulation pump delivering water through an immersion heating system to the original 790 gallon domestic storage tank elevated on a steel frame.

The thermostatic mixing valve for domestic hot water system (installed in 2009) temperature gauge was observed to be "pegged" above the high limit 140°F supply temperature. It appears the manufacturer required connection between the hot water recirculation system and the domestic cold water input to the thermostatic mixing valve was omitted. Without this connection, through the recirculation pipe, recirculated hot water at peak temperature bypasses the domestic cold water feed into the thermostatic mixing valve during periods when there is no cold or hot water demand from dormitory fixtures.

Please refer to photograph log included in the appendices.

Johnson Residence Hall Existing Mechanical and Plumbing Systems
The heating source for the three-story Johnson Women's Dormitory is the central boiler plant located in the Student Center (refer to description below). Each dorm room is served by 15" high finned tube baseboard heat with dampers mounted 3" above finish floor, at an estimated 500 BTU/hr per running foot of baseboard at an average water temp of 160F. Entries and stairwells are heated by cabinet fan-powered heaters.

A single pneumatic thermostat control serves a group of 4 dorm rooms for temperature control representative of the comfort level of one occupied space. Each dorm room and residence hall ancillary spaces are naturally ventilated and are not mechanically or evaporatively cooled.

Gang toilets are exhausted through rooftop ventilator; 300 CFM from flushing fixtures zone is exhausted, and 240 CFM is exhausted from the shower area at each floor level.

The existing gang/group water closets appear to have been replaced with an American Standard flush valve type wall-hung toilet rated for 1.6 gallon per flush capacity. The existing wall hung lavatories equipped with single handled faucets, with various rated aerators ranging flowrates from 0.5 GPM to 2.2 GPM. The lavatory supplies and traps are not insulated as required for ADA compliance. The majority of plumbing fixtures in dorm gang toilets appear to be no longer ADA compliant with new building water efficiency codes and replacement is recommended.

It was observed a pair of washers and dryers are installed in the restrooms.

Please refer to photograph log included in the appendices.

Romero Residence Hall Existing Mechanical and Plumbing Systems
Mechanical systems are similar to Johnson Hall, including the heating source for the two-story Romero Women's Dormitory is the central boiler plant located in the Student Center (refer also to description below). Please refer to photograph log included in the appendices.

Student Center Existing Mechanical and Plumbing Systems
The boiler plant in the Student Center is a single gas-fired National-US Radiator Corporation boiler with a sea level input capacity of 3,350 MBH and a sea level output capacity of 3,000 MBH. The boiler plant also serves Johnson and Romero dormitories. Heating hot water is distributed by a pair of pumps in duty/standby configuration. According to the 2019 ASHRAE HVAC Applications Handbook, Table 4 from Chapter 38 Owning and Operating Costs, the median service life for a cast iron boiler is 35 years, and 20 years for a base mounted pump.

The original drawings indicate a snowmelt system serving the North and South sidewalks leaving the Student Center freeze protected with ethylene glycol. Based on Facilities Management feedback, the snowmelt system was either abandoned or removed during a subsequent sidewalk replacement project.

The Student Center is served by a single heating and ventilating unit H&V-1 located above rooms B110, B112, and B115 of the former Faculty Apartment. H&V-1 is equipped with a hot water coil with a fan capacity of approximately 5500 CFM. H&V-1 is currently equipped with an evaporative cooling module on the roof. Ventilation air is provided through a sidewall 36" by 30" louver on the north side of the facility. Heated air and ventilation is distributed from below grade through a direct-buried duct on the north side of the facility and ductwork routed through the piping tunnel on the south side. The median service life for an indoor air handling unit is 20 years according to Commercial Energy Auditing Reference Handbook, 2008, Steve Doty, P.E., CEM.

The existing pneumatic controls have exceeded their 20 year median service life approximately 40 years ago[1].

The existing water service entrance is located in the boiler room and is protected by a double check backflow preventer. The water heating system located in the boiler room is comprised of a Rudd model 500A with a 460 MBH input (not adjusted for sea level) circulating water through an immersion heating system in an elevated 10' by 4 foot diameter domestic storage tank on a steel frame above the main boiler.

The existing Student Center Lounge water closets have been replaced with an American Standard flush valve type toilet rated for 1.6 gallon per flush capacity, however, are not ADA compliant. The existing wall hung lavatories are equipped with dual handled ADA compliant faucets but the supplies and traps are not insulated as required for ADA compliance. It is recommended to replace all of the apartment toilet and kitchenette fixtures.

Existing Dormitory Fire Protection Systems
The existing residence halls are not equipped with an automatic fire protection wet pipe sprinkler system.

III.D. ELECTRICAL NARRATIVE

Huggins Residence Hall Existing Electrical Systems Assessment
A dedicated 75kVA utility transformer serves Huggins' 600A/208V/3phase main distribution panel. There are ten panelboards in the building. Capacity is insufficient to add air conditioning loads in this building. Since the original construction, the NEC requires ground fault and arc-fault protected circuits almost everywhere in a dormitory. This protection is not existing. Panelboard circuits breakers could be upgraded to provide this.

Interior lighting in all dorms appear to be upgraded or in process by TSC maintenance projects. Exterior lighting is low-pressure sodium lamps with high-glare.

The facility has an existing fire alarm system, but it is not up to current code. Ground-floor exits have pull stations and common spaces are equipped with horn/strobes. A dated Simplex Fire Alarm Control Panel (FACP) is located at the lower level lobby. All of this should be replaced and brought up to code.

[1] 2019 ASHRAE HVAC Applications Handbook, Table 4 from Chapter 38 Owning and Operating Costs

Romero, Johnson, O'Connor, and Student Center, Existing Electrical Systems Assessment
One common electrical service at the Student Center serves Romero, Johnson, and O'Connor. The utility transformer is 75kVA. The main switchboard at the Student Center is 120/208V/3phase 600A which greatly exceeds the capacity of the utility. The feeder to Romero is 125A/208V/3phase, there are two panelboards. Capacity is insufficient to add air conditioning loads in this building. The feeder to Johnson is 150A/208V/3phase, there are three panelboards. Capacity is insufficient to add air conditioning loads in this building. The feeder to O'Connor is 600A/208V/3phase, there are five panelboards. Capacity is insufficient to add air conditioning loads in this building.

Since construction, NEC requires ground fault and arc-fault protected circuits almost everywhere in a dormitory. This protection is not existing. Panelboard circuits breakers could be upgraded to provide this.

Interior lighting in all dorms appear to be upgraded or in process by TSC maintenance projects. Exterior lighting is low-pressure sodium lamps with high-glare.

The facility has an existing fire alarm system, but it is not up to current code. Common spaces have horn/strobes. A dated Fire Alarm Control Panel (FACP) is existing. All of this should be replaced and brought up to code.

IV. PLANNING NEEDS

IV.A. PLANNING ASSUMPTIONS

Campus Growth - General
For the purposes of planning, it is assumed Trinidad State College is anticipating growth for their institution in the next ten years. Some of this growth is set to occur on the Trinidad Campus with gains in the Gunsmithing program, Healthcare programs and added athletic sports. A more in-depth study on up-to date housing occupancy needs will be required as the project moves into design.

IV.B. DESIGN REQUIREMENTS

Building Performance Criteria - General
The dormitory buildings of the TSC Residence Hall Complex are classified as R-2 Dormitory Buildings, with more than 16 sleeping units per building, and are 2-3 stories high.

Applicable Performance Criteria – Phase I
The following building codes and standards are anticipated to be in effect and adopted by the State Architect's Office at the time of Architect Selection for Phase I. They are the minimum requirements to be applied to all state-owned buildings and physical facilities, including auxiliary building projects:

2018 IBC, IEBC, IMC, IECC, IFGC, IFC, IPC
2017 NEC
NFPA standards
2015 ASME Boiler and Pressure Vessel Code
2009 ICC / ANSI A117.1 Accessible and Useable Buildings and Facilities

Applicable Performance Criteria – Phases II and III
It is anticipated that the 2021 I-codes will be adopted by the State Architect's Office on July 1, 2022.

The International Existing Building Code (IEBC)
The IEBC is applied to work involving existing buildings in concert with the requirements of the International Building Code. Generally speaking, the proposed scope of work determines the applicable Level of Alteration. The work recommended for the TSC Residence Hall Complex would be considered a Level 2 Alteration per IEBC 603.1 and 604.1, as the work areas being reconfigured (mainly the bathroom areas) under the project scope do not exceed 50% of the aggregate building area.

Other IEBC code research items included the following:

- Any new interior finishes must comply with current IBC (IEBC 702.1 & 702.2); Any existing non-compliant finishes serving a work area in exits & corridors must be replaced (IEBC 802.4) and if more than 50% of a floor area is being reconfigured then all existing non-compliant finishes in the exits & corridors serving the work area must be replaced (IEBC 802.4.1)
- Any required emergency escape windows in R-2 units (below grade) required by current IBC must be installed (IEBC 702.5)
- Existing interior vertical openings connecting 2 or 3 (maximum) floors must be upgraded with a minimum of 30 min-rated construction (IEBC 802.2.1 exception 11); Existing stairways serving floors that exceed 50% work area must be upgraded to be smoke-tight (IEBC 802.2.3)

- Elevation changes greater than 30 inches require guards where none are present, or where existing guards are in danger of collapsing or otherwise judged unsafe need to have compliant guards installed (IEBC 802.5.1, & 202, 115.1)
- Fire sprinklers are required in work areas that have exits & corridors shared by more than one tenant or serve an occupant load of 30 or more, when BOTH of the following conditions occur: 1.) the work area would be required to have a sprinkler system if it was new construction under current IBC, AND 2.) the work area exceeds 50% of the floor area. (Under a level 3 alteration, fire sprinklers are flat out required everywhere that they would be required in new construction under IBC.)
- Provide an automatic fire alarm in work areas, unless they have an existing approved fire alarm system (IEBC 803.4.1); where work area exceeds 50% of floor area, fire alarms shall be provided throughout the entire floor (IEBC 803.4.2) Refer to the Electrical Narrative in Section V. “Project Description” for more information.
- Individual dwelling and sleeping units shall be provided with smoke alarms (IEBC 803.4.3) and carbon monoxide alarms (IEBC 804.1).
- Means of egress are acceptable if they are compliant to the code in which they were originally built, unless judged unsafe by the building officical (IEBC 805.2 ex. 2)
- Minimum number of exits per current IBC are required to be provided (IEBC 805.3.1; see 805.3.1.1 for allowable solutions/exceptions for existing buildings)
- Egress components serving work areas must be made compliant (IEBC 805.4 thru 805.11)
- IEBC Section 806 (General): Increased loads to any structural elements require structural upgrades to handle increased loads of 5% or more need to be replaced/upgraded unless can be demonstrated adequate through structural calculations.
- New electrical work in dwelling unit work areas must comply with current NEC (IEBC 807.3)
- Altered mechanical systems shall not provide less than ventilation values listed in IEBC 808.2, and local exhaust needs to be provided for new applicable mechanical components (IEBC 808.3). Refer to the Mechanical Narrative in Section III. “Justification” and Section V. “Project Description”.
- Minimum quantities of plumbing fixtures per current IPC must be provided when occupancy load is increased by 20% or more.
- Only newly installed components (windows, walls, etc.) under the alteration are required to comply with IECC (IEBC 810.1).

New Utilities Required

Due to the planned upgrades to the mechanical and plumbing systems, it is anticipated that upgraded electrical service will be required. Refer to the Electrical Narrative in Section V. “Project Description” for more information.

Building Construction

In view of construction costs and scheduling, planned building construction is limited to interior renovation of the bathrooms and converting one sleeping room per dormitory for needed wet rooms (accessible restroom or laundry facility) and an entrance vestibule. Minor structural supports for the enlarging of small roof canopies and trellis structures are planned with this project. Demolition work is limited to non-rated wall demolition in the bathrooms, small exterior wall openings for wall vents, small interior wall and floor openings for piping infrastructure, and increasing door openings. Exterior screens and new storefronts are planned, while interior finishes, fixtures and accessories at the bathrooms and select areas of the sleeping room and lounges area are also planned.

Building Systems

- There are temperature control distribution issues with the building, which will entail redesign and/or modification of the interior mechanical distribution system, and better thermal control of exterior walls with shading technologies. Refer to the Mechanical

Narratives in Section III. “Justification” and Section V. “Project Description” for more information on mechanical systems.

- Plumbing systems are planned to be reconfigured for the bathrooms due to the current code deficient layouts. Refer to the Plumbing Narratives in Section III. “Justification” and Section V. “Project Description” for more information on plumbing systems.
- Electrical systems, including lighting and fire alarm systems are planned to be upgraded. Refer to the Electrical Narratives in Section III. “Justification” and Section V. “Project Description” for more information on electrical systems.

IV.C. ALTERNATIVE ANALYSIS

The proposed TSC Residence Hall Complex project is critical for Trinidad State, as the dormitories serve a vital role for supporting students in their educational pursuits, and the College with its academic mission. Building maintenance is likewise critical for the efficient operation in providing a comfortable and functioning temporary residence for the building occupants. The TSC Residence Hall Complex project is the highest and best solution to address the present use of the dormitories and addressing health and life safety deficiencies.

Two alternatives are presented below for discussion. The College will continue to consider means of delivering the project in the most timely and cost effective manner.

Option One: Continued use of existing buildings and do nothing.
The impacts of this alternative will have long-term repercussions which ultimately affect growth potential for the College and its programs. Without the proper attention needed to maintain the buildings, shutdown of buildings is evitable, and the College will be required to seek alternative housing off-campus.

Option Two: Demolish some or all the existing dormitories to build new dormitories
This option can elect to save one or two existing buildings (Huggins and O’Connor), but looks to also build new dormitories. Given the current constraints of construction material and labor availability, the unpredictability of scheduling and current pricing volatility for some building products, building new may prove to be cost-prohibitive and not in the best interest for Trinidad State.

TSJC remains committed to make education opportunities accessible to all segments of its service areas and support its students. With insufficient housing, student engagement becomes difficult.

V. PROJECT DESCRIPTION

V.A. RECOMMENDED PROJECT IMPROVEMENTS

In the project scope review and evaluation stage, the Planning Team took a holistic approach to comprehend the existing buildings, building use, and infrastructure conditions, but particularly in the context of current market conditions and material and labor availability to arrive at viable solutions to meet TSC's priorities and scheduling goals. Packaged options were initially explored with price ranges. The result is select solutions within a phased implementation.

V.B. PROJECT PHASING

This project is being planned to be implemented in three phases to best address TSC's priority needs and scheduling goals. Phases I, II, and III are presented below followed by narratives.

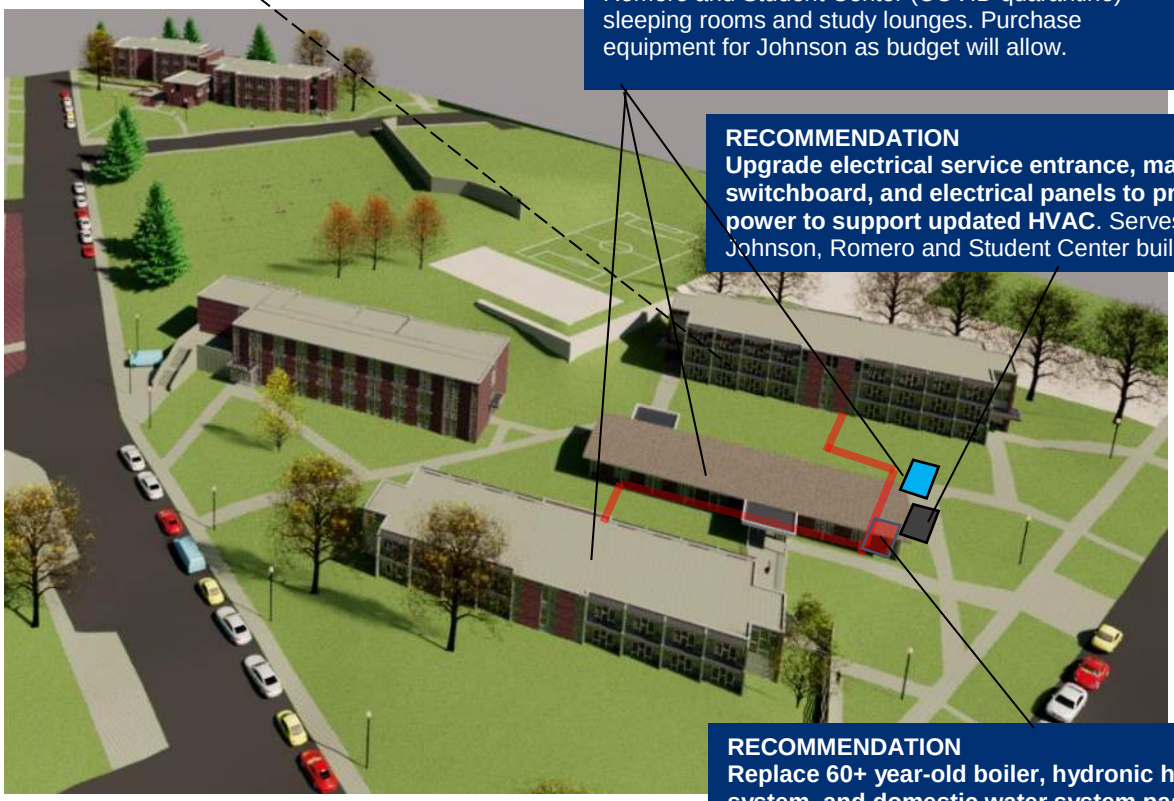


Figure M. *Phase I recommended improvements. Anticipated completion: August 22, 2022. Source: Hall Architects.*

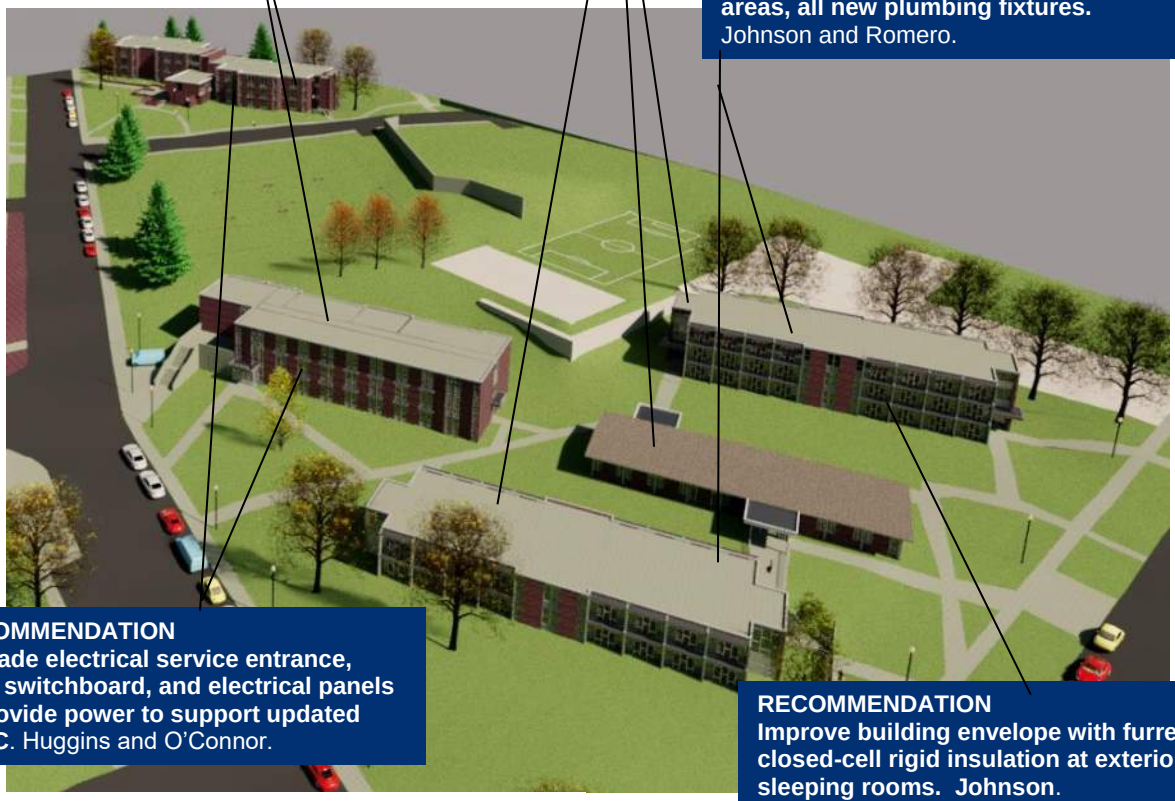
RECOMMENDATION
New air-cooled Chiller with chilled water piping distribution through existing piping trenches.

New fan coil units with cooling, heating, and ventilation through brick vent for improved IAQ and individual unit mounted or wireless wall thermostats in sleeping rooms and study lounges. New HVAC air filtration for all air moving equipment. *
Huggins and O'Connor sleeping rooms, apartments and study lounges.

RECOMMENDATION
Remove/repair exterior brick for new wall vents at exterior walls of sleeping rooms and study lounges, house new FCUs. Huggins and O'Connor.

RECOMMENDATION
Exterior sunscreens, accent roofs and new entrances, fencing. Johnson, Romero and Student Center

RECOMMENDATION
Redesigned layout of bathrooms, new laundry areas, all new plumbing fixtures.
Johnson and Romero.



RECOMMENDATION
Upgrade electrical service entrance, main switchboard, and electrical panels to provide power to support updated HVAC. Huggins and O'Connor.

RECOMMENDATION
Improve building envelope with furred wall with closed-cell rigid insulation at exterior walls of sleeping rooms. Johnson.

New flooring, wall, ceiling finishes, murals – bathrooms, laundry areas, sleeping rooms, study lounges, corridors.
Johnson and Romero.

New flooring, wall and ceiling treatments, mural, glass walls. Student Center Study Lounge

Figure N. *Phase II recommended improvements.*
Anticipated completion: August, 2024
Source: Hall Architects.

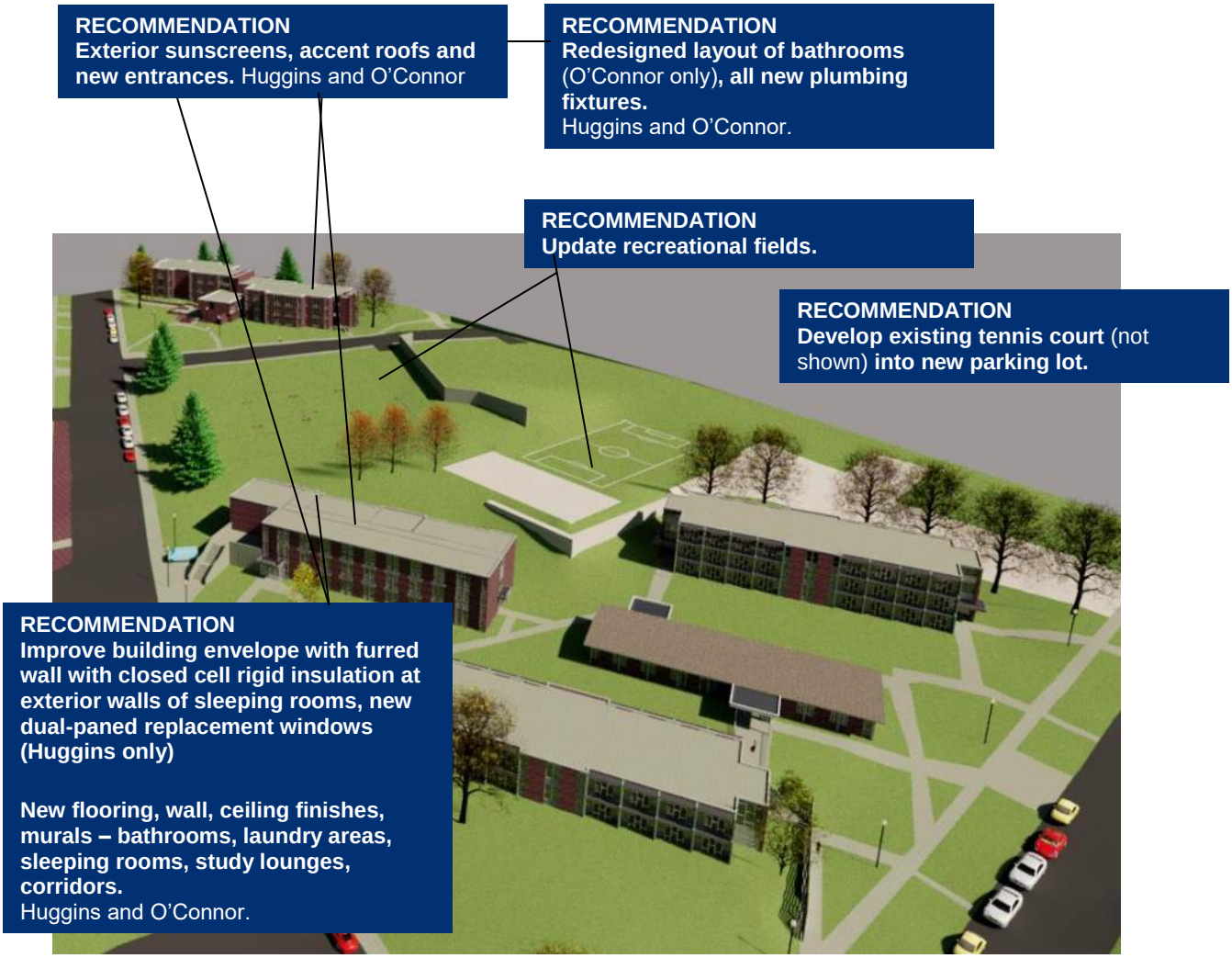


Figure O. *Phase III recommended improvements.*
Anticipated completion: August, 2025
Source: Hall Architects.

V.C. ARCHITECTURAL NARRATIVE

Modernizing
One of the top priorities for this project was to address modernizing the overall appearance of the buildings. The Planning Team looked for targeted areas to minimally provide high impact solutions without the need to reface the buildings on the exterior, focusing on contemporary aesthetics and materials, to improve student interaction, engagement and gathering. The same focus on engagement and interaction was applied to the interiors; the public spaces used on a daily basis outside of sleeping rooms, namely the bathrooms and study spaces, are being refreshed with new finishes. Select photo murals that are pleasing to the eye enhance public spaces and add a sense of well-being and comfort that are desirable in student spaces.

Highlighting Building Entrances
Wayfinding becomes a necessity in the post pandemic era, particularly with the need to address distancing. Dimensional lettering through purposeful signage to be read from a distance for visitors and residents, passers-by, keeps public movement intentional, avoids unintentional wandering into building and spaces. New public entries with modern storefronts and entrances with lighting for security invite and welcome.

Improving study experiences
Places for study should be supportive of students and their individual styles of studying. Proper acoustics to creating public, semi-private and private areas with select partitions to define these spaces are key goals. Comfortable and modern furniture help not only to attract student use but keep students engaged in their studying.

These three principles – modernizing, highlighting building entrances and improving study experiences – were applied in the architectural solutions.

V.D. MECHANICAL AND PLUMBING NARRATIVES

The Mechanical and Plumbing narratives are organized to correspond with the phased scopes of work planned for each building as part of the overall project:

Phase I: Romero Mechanical System (complete)
Johnson Mechanical System (partial)
Student Center Mechanical Systems (major equipment upgrades and addition, partial system distribution)

Phase II: Johnson Mechanical System (complete)
Huggins and O'Connor Mechanical System (complete)
Johnson and Romero Plumbing Systems

Phase III: Huggins and O'Connor Plumbing Systems

Johnson & Romero Residence Hall Mechanical Systems Upgrade Recommendations
For Phase 1, Johnson and Romero Residence Halls, the recommended basis of design is to add mechanical cooling systems for all dormitory rooms and study areas. Also, recommended is the replacement of the existing fin-tube radiation heating systems with console fan coil units. ASHRAE Standard 62.1-2004 governs the minimum ventilation air rate requirements for buildings; it is proposed to exceed the minimum ventilation air rate to improve the current indoor air quality when natural ventilation is not available due to outdoor air temperatures. In addition, a complete replacement of the existing pneumatic control systems with building automation system DDC electronic control compatible with campus BAS (Building Automation System) is recommended. Each occupied space is recommended to have individual thermostat control.

An air-cooled chiller located to the east of the Student Center adjacent to 4th Avenue is recommended to provide mechanical cooling to the residence halls. For sound control measures, an enclosure is suggested to mitigate after-hours noise. It is noted PTAC (Packaged Terminal Air-Conditioner) units, similar to AC equipment used for motel lodging, besides room noise, were not considered due to the inability of these type of units to provide adequate ventilation and to maintain positive building pressurization without supplementation of a dedicated outside air unit.

Since the funding source will not permit new construction, it will be necessary to utilize the existing mechanical space as efficiently as possible to house chilled water pumps and air control systems. Therefore, the existing 60-year-old boiler and hot water system centrally located in the Student Center (double its median service life) is recommended to be replaced with high efficiency boiler systems that typically require half the area the old cast-iron boilers use. Please refer to the Student Center Mechanical Systems Upgrade section for further detail regarding the boiler plant.

As proposed above, the basis of design is to replace all baseboard fin-tube, cabinet unit heaters, convectors, and hot water coils approaching 61 years of use, with individual room fan coils with outside fresh air intakes through brick vents. The current hot water piping distribution system is a horizontal configuration on a floor-by-floor basis, which routes hot water supply and return piping through each dorm room and its adjacent neighbor. This distribution system is illustrated well on the existing as-built drawing detail no. 2 on sheet M-2 dated 6 October 1959 from the Dormitories for Trinidad State Junior College record drawing set.

Due to Phase I budgetary and building insulation envelope concerns, a dual-temperature HVAC system is recommended which utilizes the same supply and return piping loop to supply either chilled water during the cooling season or hot water during the heating season. Although this type of system is cost-effective by expending funds on only one set of pipes and pumps, the drawbacks include an automatic changeover control from heating to cooling and vice versa during

intermediate spring and fall seasons. It is not possible to simultaneously heat and cool different rooms with a 2-pipe system, however majority of spaces are equipped with operable windows. There is potential for North exposure rooms to be excessively cool or South exposure spaces to be excessively hot during days of large temperature swings.

As discussed in the architectural section, it is proposed to remove the existing restroom countertop lavatories and replace with a 4-station wall-mounted gradient sink utilizing sensor activated faucets and soap dispensers. The solid surface wash station shall be ADA compliant and IAPMO certified ready to be installed and will not require additional supply and trap insulation for handicap accessible. It is also noted the recent CDC guidelines mandated all drinking fountains and water coolers to be turned off due to COVID-19; however, bottle fillers were the exception. The cost estimate includes ICC/ANSI A117.1 compliant two-level electric water coolers with a bottle filling station providing 50°F drinking water temperature, one for each floor. For future phases, a complete gut of the existing plumbing systems is recommended.

Regarding the plumbing systems, under Phase II, a complete gut of the existing restrooms and showers is recommended, including water closets, lavatories, mop sinks, laundry sinks, and shower fixtures. Due to the age of the existing plumbing sanitary piping systems, major modifications to the existing soil waste, drain, and vent system are recommended. New DWV piping should be service weight ductile iron soil pipe with hubless mechanical joints using heavy-duty stainless steel no-hub couplings above the floor slab. Where underground repairs are made, either service weight ductile iron pipe or schedule 40 solid-core PVC are suggested. Any space above ceilings serving as a return air plenum cannot contain PVC or other plastic piping.

All new above-grade water pipe is recommended to be type L, hard drawn copper with lead-free solder joints; below-grade shall be type K. All water piping will be insulated with fiberglass pipe insulation meeting or exceeding minimum energy conservation code requirements with 25/50 smoke/flame rating. Domestic water valves 2” and smaller shall be two piece ball valves, and 2-1/2” and larger shall be butterfly type.

For cost estimating, wall-hung elongated flushometer type water closets shall be 1.28 gallon per flush to comply with EPA Water-Sense compliance as adopted by the state of Colorado. Each toilet shall be equipped with hardwired electronic sensor operated flush valves. ADA fixtures shall be provided in accordance with Architect’s layout. Urinals shall be white vitreous china with mating wall carrier equipped with hardwired electronic sensor operated flush valves rated at 0.5 gallons per flush per EPA Water-Sense requirements.

Student Center Mechanical Systems Upgrade Recommendations

It is proposed replace the existing 61-year-old boiler system (including distribution pumps, expansion tank, boiler feed, air dirt separation, etc.) past its median service life. Redundancy of two boilers is recommended, each to be sized at minimum 60% of the total heat load. Converse to the upgrades at Huggins and O’Connor Halls, it is recommended to have a separate domestic hot water heating system with redundancy.

Provide a low profile air handler unit or blower coil to be connected to the original duct to serve the lounge and common kitchen area is recommended. It is noted the existing heating & ventilating unit installed above the ceiling is difficult to access. Original record drawings state “NOTE: SPACE LIMITATIONS ARE CRITICAL” on the equipment detail. It is proposed to closely coordinate space renovation with the architect to maximize the available space for the mechanical equipment, including the provision of a service platform to accommodate new equipment with cooling capacity. The existing ductwork is recommended to be cleaned per NADCA standards.

Replacement of the common men’s and women’s single-user restroom and apartment/quarantine area with new handicap code compliant plumbing fixtures and trim meeting the EPA mandated efficiency requirements are recommended.

Huggins Residence Hall Mechanical Systems Upgrade Recommendations

The existing condenser boiler system is entering its 12th heating season and is recommended to remain. The formation of scale on the boiler and piping reduces system efficiency. As previously noted, a new water chemical (or mechanical) treatment program is recommended, starting with a water sample. Chemical water treatment may include oxygen scavengers, sludge conditioners, amines, and pH buffers. Typical mechanical water treatment systems include using softeners, deaerators, economizers, reverse osmosis and other means.

If the boilers are operated with a 160°F or higher leaving water temperature serving terminal units with a 20°F temperature drop, the boilers are never operating at the condensing mode and most likely at 85% efficiency. It is recommended to replace all baseboard fin-tube and hot water coil approaching 55 years of use with high delta T rated equipment.

The basis of design for air conditioning systems is to provide full cooling. In order to provide cooling for all the occupied spaces in this dormitory, two different systems types are offered. The first recommendation is to provide a 4-pipe cooling system with an air-cooled chiller within sound mitigating enclosure (high cost range in reference to the cost estimate). For purposes of the cost estimation, a nominal 100 ton air-cooled chiller de-rated for altitude and 40% glycol was assumed.

For budgetary concerns, the second recommendation is a dual-temperature HVAC system which utilizes the same supply and return piping loop to supply either chilled water during the cooling season or hot water during the heating season. Please see discussion under Phase I.

For laundry dryer exhaust improvements to reduce lint accumulation and for ease of preventive maintenance, it is recommended to provide an inline lint trap at each dryer, and utilize booster fan (UL Listed DEDPV-705) with a built-in fire-stat.

As noted in the above general section, a complete gut of the existing plumbing systems is recommended. For the washroom entry into the East and West toilet/shower spaces, is proposed to remove the 6 wall hung lavatories and replace with a 4-station wall-mounted gradient sink utilizing sensor activated faucets and soap dispensers. The solid surface wash station shall be ADA compliant and IAPMO certified ready to be installed and will not require additional supply and trap insulation for handicap accessible. Showers to be upgraded as described under the general section above and per the architectural narrative.

As previously noted, CDC COVID-19 guidelines mandated nonuse of water coolers. For dormitories, a refrigerated bottle filling only station could be considered.

Regarding the plumbing systems, a complete gut of the existing restrooms and showers are recommended, including water closets, lavatories, mop sinks, laundry sinks, and shower fixtures. Due to the age of the existing plumbing sanitary piping systems, major modifications to the existing soil waste, drain, and vent system are recommended. New DWV piping should be service weight ductile iron soil pipe with hubless mechanical joints using heavy-duty stainless steel no-hub couplings above the floor slab. Where underground repairs are made, either service weight ductile iron pipe or schedule 40 solid-core PVC are suggested. Any space above ceilings serving as a return air plenum cannot contain PVC or other plastic piping. Refer also to the probable opinion of cost estimates for an itemization of plumbing fixtures to be replaced for this facility.

All new above-grade water pipe is recommended to be type L, hard drawn copper with lead-free solder joints; below-grade shall be type K. All water piping will be insulated with fiberglass pipe insulation meeting or exceeding minimum energy conservation code requirements with 25/50 smoke/flame rating. Domestic water valves 2” and smaller shall be two piece ball valves, and 2-1/2” and larger shall be butterfly type.

For cost estimating, wall-hung elongated flushometer type water closets shall be 1.28 gallon per flush to comply with EPA Water-Sense compliance as adopted by the state of Colorado. Each toilet shall be equipped with hardwired electronic sensor operated flush valves. ADA fixtures shall be provided in accordance with Architect's layout. Urinals shall be white vitreous china with mating wall carrier equipped with hardwired electronic sensor operated flush valves rated at 0.5 gallons per flush per EPA Water-Sense requirements.

O'Connor Residence Hall Mechanical Systems Upgrade Recommendations
Please refer to Huggins Hall for similar recommendations regarding the existing boilers to remain, chemical treatment, replacement of heating terminal units, etc.

As noted in the above general section, a complete gut of the existing plumbing systems is recommended. For the restroom renovation, is proposed to remove the countertop lavatories and replace with a 4-station wall-mounted gradient sink utilizing sensor activated faucets and soap dispensers. The solid surface wash station shall be ADA compliant and IAPMO certified ready to be installed and will not require additional supply and trap insulation for handicap accessible. Showers to be upgraded as described under the general section above and per the architectural narrative.

Refer also to the probable opinion of cost estimates for an itemization of plumbing fixtures and trim to be replaced for this facility.

Dormitory Fire Protection Systems
Dormitory renovation projects should be protected throughout by an approved supervised automatic sprinkler system installed in accordance with the requirements specified in NFPA 13, Installation of Sprinkler Systems, or NFPA 13R, Sprinkler Systems in Residential Occupancies Up to and Including Four Stories in Height, as appropriate and other fire codes referenced therein. Estimated opinion of construction cost ranges from $4 to $8 per square foot excluding fire main upgrades to the building and architectural elements to conceal piping.

V.D. ELECTRICAL NARRATIVES

Johnson Residence Hall Electrical Systems Upgrade Recommendations
A new electrical service for the student center would support the existing load in that building plus support cooling for the occupied space. Scope for this upgrade would be a larger utility transformer, replacement MDP, replacement panelboards, and HVAC equipment load support. Estimated construction cost is $148,000.

New exterior lighting fixtures and controls would be installed around the entire building. Estimated construction cost is $42,000.

All fire alarm are recommended to be replaced with current technology devices. As an example, a typical code compliant sleeping room should be equipped with a photoelectric smoke detector, a carbon monoxide detector (520Hz T4 signal), a strobe device and a low frequency (520Hz T3 signal) sounder. The corridors, restrooms and common areas should be equipped ADA compliant audio/visual notification devices. Exit paths should be equipped with manual pull stations. Estimated construction cost is $230,000.

Romero Residence Hall Electrical Systems Upgrade Recommendations
A new electrical service for the student center would support the existing load in that building plus support cooling for the occupied space. Scope for this upgrade would be a larger utility transformer, replacement MDP, replacement panelboards, and HVAC equipment load support. Estimated construction cost is $145,000.

New exterior lighting fixtures and controls would be installed around the entire building. Estimated construction cost is $42,000.

Similar to Johnson Hall, a fire alarm upgrade is suggested. Estimated construction cost is $177,000.

Student Center Electrical Systems Upgrade Recommendations

A new electrical service for the student center would support the existing load in that building plus support cooling for the occupied space. Scope for this upgrade would be a larger utility transformer, replacement MDP, replacement panelboards, and HVAC equipment load support. Estimated construction cost is $126,000. New exterior lighting fixtures and controls would be installed around the entire building. Estimated construction cost is $42,000.

Fire alarm upgrade is suggested. Estimated construction cost is $79,000.

Huggins Residence Hall Electrical Systems Upgrade Recommendations

All of the electrical services must be upgraded. Original services are past serviceable life and installed with poor design. New electrical transformers, distribution, and panelboards are recommended.

Exterior lighting must be upgraded for security and efficiency. Full-cutoff wall-pack LED fixtures with lighting inverter and astronomic timeclock are recommended. New exterior lighting fixtures and controls would be installed around the entire building. Estimated construction cost is $65,000.

All fire alarm are recommended to be replaced with current technology devices. As an example, a typical code compliant sleeping room should be equipped with a photoelectric smoke detector, a carbon monoxide detector (520Hz T4 signal), a strobe device and a low frequency (520Hz T3 signal) sounder. The corridors, restrooms and common areas should be equipped ADA compliant audio/visual notification devices. Exit paths should be equipped with manual pull stations. Estimated opinion of construction cost is $300,000.

O'Connor Residence Hall Electrical Systems Upgrade Recommendation

A new electrical service for the student center would support the existing load in that building plus support cooling for the occupied space. Scope for this upgrade would be a larger utility transformer, replacement MDP, replacement panelboards, and HVAC equipment load support. Estimated construction cost is $129,000.

New exterior lighting fixtures and controls would be installed around the entire building. Estimated construction cost is $52,000.

All fire alarm are recommended to be replaced with current technology devices. As an example, a typical code compliant sleeping room should be equipped with a photoelectric smoke detector, a carbon monoxide detector (520Hz T4 signal), a strobe device and a low frequency (520Hz T3 signal) sounder. The corridors, restrooms and common areas should be equipped ADA compliant audio/visual notification devices. Exit paths should be equipped with manual pull stations. Estimated construction cost is $250,000.

V.E. CONCEPTUAL PLANS AND IMAGES

Priorities

The following plans and images are organized to reflect priorities and recommendations by the Planning team.

Priority: Comfortable spaces

At a basic level, dormitory living spaces should be places that are comfortable. Thermal comfort translates into a positive experience of a space.

Solutions included:

- Sleeping rooms: improving the performance of the existing building envelope with increased R-value. Provide an interior furred wall with R-12 polyiso rigid insulation. Provide external shading devices on south-facing walls to divert sun's rays. Mimic existing architecture details in a modern vernacular.

Existing south-facing Johnson Residence Hall

***Proposed exterior treatments for Johnson Residence Hall / Romero Residence Hall** include metal trellis members anchored to precast panels and wire mesh screen panels to cover select brick surfaces and provide shade to sleeping rooms facing south. Source: Hall Architects.*

- Enhance the experience of existing study spaces and lounge areas where multiple students gather and visit with improved mechanical thermal comfort. Update material aesthetics to modern ideals. Provide a variety of furniture to suit a variety of learning styles, address private and semi-private. Take advantage of natural lighting augmented with newer LED lighting schemes. Provide glass walls for a semi-private study group room, plenty of white boards.

Existing Student Center

***Proposed interior refresh of the Student Center** includes wood clouds as both ceiling and walls, new vibrant and durable carpet tile, new furniture, new whiteboards, a glass wall to enclose a partial private study group room. The Student Center lounge spaces and all other dormitory study lounge spaces are planned to receive AC cooling. Source: Hall Architects.*

- Incorporate biophilic design by installing larger than life movable photo murals of local attractive natural scenery in high traffic interior areas to provide a sense of calm and belonging. Some worthy candidates for mural subjects include the following. Photo sources: Various online imagery:

Fisher's Peak

Trinidad Lake

Spanish Peaks

Priority: The welcoming front door, Romero Residence Hall

Defining the front door experience of a dormitory building is important in forming living space connections and establishing a sense of place. Provide dimensional metal letters above the entry with security cameras. A modern-looking metal guardrail/fencing treatment to replace an old dated fence is transformative.

Existing street-facing Romero Residence Hall entrance.

Proposed redesign of Romero Residence Hall street side entrance *includes modern fence detail that clearly directs to the entry. Source: Hall Architects.*

Priority: The welcoming front door, O'Connor Residence Hall

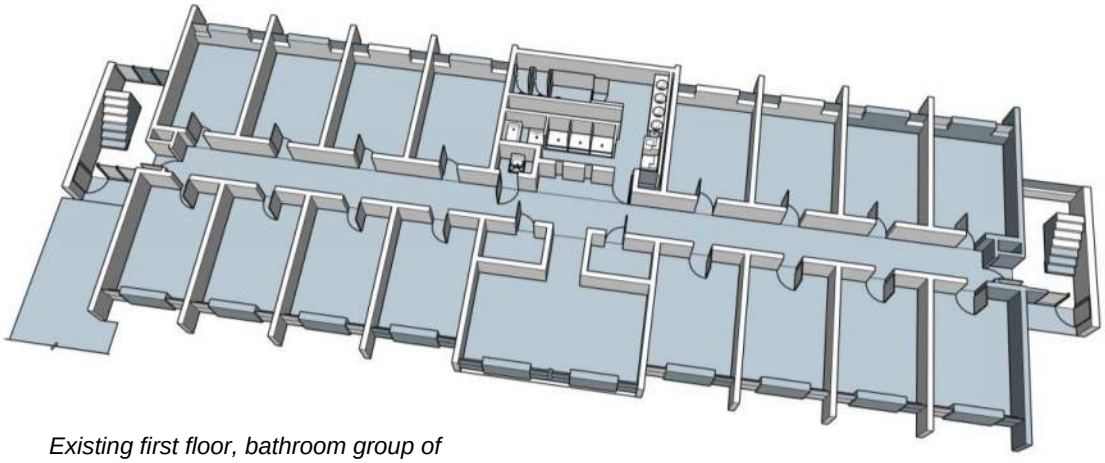
Redefine the entrances of O'Connor Residence Hall with dimensional lettering and extended canopies to give clear visibility. Provide updated exterior lighting and security cameras.

Existing O'Connor Residence Hall side entrance.

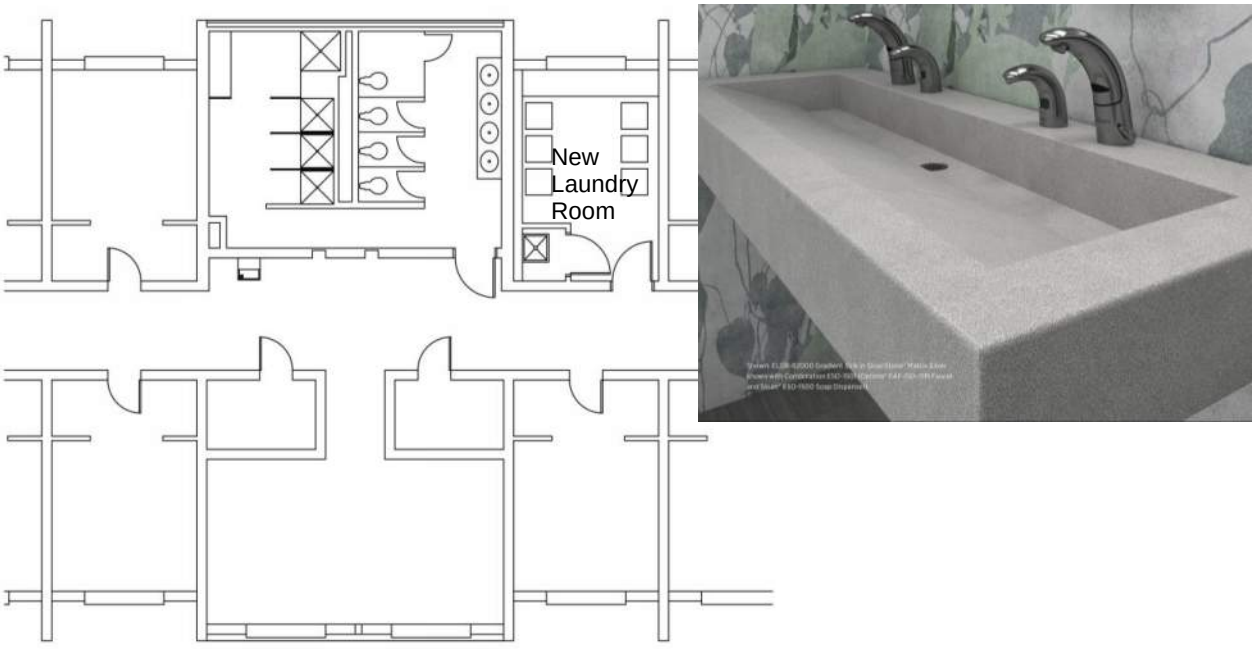
Existing O'Connor Residence Hall facing Pine Street.

***Proposed redesign of O'Connor Residence Hall Pine Street entrance** includes repurposing one dorm sleeping room for a welcoming larger entry vestibule with new glass storefront, and a small; ground level student commons area. Provides building with identifiable front door. Source: Hall Architects.*

Priority: Redesign bathroom layouts that are accessible and promote health, safety, wellness, and personal privacy – Romero and Johnson, O'Connor similar.
Demolish plumbing walls, ceilings, plumbing fixtures and floor finishes. Upgrading to modern finishes and lighting will contribute to well-being for improved sanitary conditions. Reorient plumbing walls to create proper code-compliant aisles and movement around bathroom fixtures. Move laundry function out of the bathrooms and repurpose one adjacent dorm sleeping room into a laundry room for the whole dormitory.



Existing first floor, bathroom group of Johnson Residence Hall, Romero similar. Source: Hall Architects.



***Proposed redesign of bathroom group** includes demolition of plumbing walls, floor finishes, plumbing fixtures. Utilize hygienic solid surfaces for shower partitions, trough sinks, and wall liners; employ automatic sensor faucets and soap dispensers; low maintenance epoxy flooring; improve lighting. Plan shows new consolidated laundry room. Source: Hall Architects.*

Priority: Provide outdoor open spaces that invite play and sport, student camaraderie.
The two recreational areas bordering O'Connor Residence Hall have the opportunity of being highly usable recreational spaces employing low maintenance artificial turf surfaces
.
Potential solutions:

- Replace the existing tennis court with a futsal-sized field; futsal field will provide year-round practice for TSC soccer athletes and recreation for other TSC students.
- Regrade existing grass field with level artificial surface, marked for softball and football.

Existing tennis court north of O'Connor.

Existing grass field west of O'Connor.

***Proposed redesign of grass field and tennis court** includes regrading the large field and installing artificial turf; replacing the tennis court with artificial turf for a futsal-sized field. Source: Sprinturf®.*

V.F. PROJECT POSSIBLE COST ESTIMATES

The following pages provide the estimates of project possible costs broken down by building for the architectural, mechanical, plumbing and electrical disciplines, and separate breakout options for fire protection (sprinkler system) and replacement windows.

PHASES 1 & 2 STUDENT CENTER:

TRINIDAD STATE COLLEGE - RESIDENCE HALL COMPLEX - STUDENT CENTER

Program Plan Phase - Estimate of Probable Cost
8/31/2021 DRAFT

PHASE 1 RENOVATION

	Unit Cost	Unit	Quantity	Est'd Cost	Total
					GC & Contingency mark-ups
Phase 1 Base Bid MEP Construction Total (August 2021)				**1,149,775**	
Phase 1 Base Bid Construction Total (August 2022 projected)			**5.00%**	**1,210,289**	

PHASE 2 RENOVATION

	Unit Cost	Unit	Quantity	Est'd Cost	Total
Demo lounge floor finishes	0.30	sf	1600	480	
Glass walls with slider doors	30,000.00	ls	1	28,000	
New furred wall with R12 polyiso	8.65	sf	3540	30,621	
Study lounge carpet tile	6.00	sf	1600	9,600	
Ceiling clouds	72,000.00	ls	1	72,000	
Mural "Palladium" allowance	5,000.00	ls	1	5,000	
					145,701
Exterior screen walls	100,000.00	ls	1	80,000	
					80,000
BASE RENOVATION Subtotal				225,701	
General Conditions 18%	0.18			40,626	
Contractor's Fee 8%	0.08			18,056	
			Subtotal	284,383	
18% Conceptual Design Contingency	0.18			51,189	
Phase 2 Base Bid Construction Total (August 2024)				**335,572**	48.68% GC & Contingency mark-ups
Phase 2 Base Bid MEP Construction Total (August 2024)				**315,515**	
Phase 2 Base Bid Construction Total (August 2024 projected)			**7.00%**	**696,663**	

PHASE 1 ROMERO:

TRINIDAD STATE COLLEGE - RESIDENCE HALL COMPLEX - ROMERO RESIDENCE HALL

Program Plan Phase - Estimate of Probable Cost
8/31/2021

PHASE 1 RENOVATION

	Unit Cost	Unit	Quantity	Est'd Cost	Total
First Floor					
Sawcut exterior wall for brick vents	1,265.00	ea	18	22,770	
New furred wall at FCU's only	55.00	ea	18	990	
					23,760
Second Floor					
Sawcut exterior wall for brick vents	1,265.00	ea	18	22,770	
New furred wall at FCU's only	55.00	ea	18	990	
					23,760
BASE RENOVATION Subtotal				47,520	
General Conditions 18%	0.18			8,554	
Contractor's Fee 8%	0.08			3,802	
			Subtotal	59,875	
30% Conceptual Design Contingency	0.30			17,963	
Phase 1 Base Bid Construction Total (August 2021)				**77,838**	63.80% GC & Contingency mark-ups
Phase 1 Base Bid MEP Construction Total (August 2021)				**315,000**	
Phase 1 Base Bid Construction Total (August 2022 projected)			**7.00%**	**420,336**	

PHASE 2 ROMERO:

PHASE 2 RENOVATION

	Unit Cost	Unit	Quantity	Est'd Cost	Total
First Floor					
Demo existing entrance storefront and door	366.00	ea	2	732	
Demo Janitor Closet	1.20	sf	26	31	
Demo Room 105 walls, finishes	0.65	sf	176	114	
Demo Restroom floors (for new drains), plumbing walls and ceilings, repair walls	1.20	sf	346	415	
Demo corridor & lounge ceilings	0.45	sf	1005	452	
Sawcut exterior wall for brick vents	1,265.00	ea	18	22,770	
New furred wall with R12 polyiso	8.65	sf	306	2,647	
Study lounge upgrades (paint, carpet tile, wall base, select furniture)	5,000.00	ls	1	5,000	
Restroom Upgrades (epoxy floor, solid surfaces, partitions, select tiled walls)	55,000.00	ea	1	55,000	
Room 105 converted to Laundry Room/Janitor Closet	10,200.00	ea	1	10,200	
New Corridor ceiling finish	2.25	sf	1005	2,261	
Mural "Palladium" allowance	6,500.00	ls	1	6,500	
					106,123
Second Floor					
Demo Janitor Closet	1.20	sf	26	31	
Demo Restroom floors (for new drains), plumbing walls and ceilings, repair walls	1.20		346	415	
Demo corridor & lounge ceilings	0.45	sf	1005	452	
Sawcut exterior wall for brick vents	1,265.00	ea	18	22,770	
New furred wall with R12 polyiso	8.65	sf	306	2,647	
Study lounge upgrades (paint, carpet tile, wall base, select furniture)	5,000.00	ls	1	5,000	
Restroom Upgrades (epoxy floor, solid surfaces, partitions, select tiled walls)	55,000.00	ea	1	55,000	
New Corridor ceiling finish	2.25	sf	1005	2,261	
Mural "Palladium" allowance	4,000.00	ls	1	4,000	
					92,577
Building Exterior Work					
New metal trellis structure w/ attachment to ex. precast panels	5,500.00	ea	24	132,000	
New metal screen	3,350.00	ea	48	160,800	
New additional flat roof	12,000.00	ls	2	24,000	
New dimensional letters	1,500.00	ea	2	3,000	
					319,800
BASE RENOVATION Subtotal				518,500	
General Conditions 18%	0.18			93,330	
Contractor's Fee 8%	0.08			41,480	
			Subtotal	653,310	
30% Conceptual Design Contingency	0.30			195,993	
Phase 2 Base Bid Construction Total (August 2022)				**849,303**	63.80% GC & Contingency mark-ups
Phase 2 Base Bid MEP Construction Total (August 2022)				**350,000**	
Phase 2 Base Bid Construction Total (August 2022 projected)			**7.00%**	**1,283,254**	

PHASE 1 JOHNSON:

TRINIDAD STATE COLLEGE - RESIDENCE HALL COMPLEX - JOHNSON RESIDENCE HALL

Program Plan Phase - Estimate of Probable Cost
8/31/2021

PHASE 1 RENOVATION

	Unit Cost	Unit	Quantity	Est'd Cost	Total
Phase 1 Base Bid MEP Construction Total (August 2021)				**102,600**	
Phase 1 Base Bid Construction Total (August 2022 projected)			**5.00%**	**108,000**	

PHASE 2 JOHNSON:

PHASE 2 RENOVATION

		Unit	Quantity	Est'd Cost	Total
First Floor					
Sawcut exterior wall for brick vents	1,265.00	ea	18	22,770	
New furred wall at FCU's only	55.00	ea	18	990	
					23,760
	1,265.00	ea	18	22,770	
	55.00	ea	18	990	
					23,760
	1,265.00	ea	18	22,770	
	55.00	ea	18	990	
					23,760
First Floor					
Demo existing entrance storefront and door	366.00	ea	2	732	
Demo Janitor Closet	1.20	sf	26	31	
Demo Room 105 walls, finishes	0.65	sf	176	114	
Demo Restroom floors (for new drains), plumbing walls and ceilings, repair walls	1.20	sf	346	415	
Demo corridor & lounge ceilings	0.45	sf	1005	452	
New furred wall with R12 polyiso	8.65	sf	306	2,647	
Study lounge upgrades (paint, carpet tile, wall base, select furniture)	5,000.00	ls	1	5,000	
Restroom Upgrades (epoxy floor, solid surfaces, partitions, select tiled walls)	55,000.00	ea	1	55,000	
Room 105 converted to Laundry Room/Janitor Closet	10,200.00	ea	1	10,200	
New Corridor ceiling finish	2.25	sf	1005	2,261	
Mural "Palladium" allowance	6,500.00	ls	1	6,500	
					83,353
Second Floor					
Demo Janitor Closet	1.20	sf	26	31	
Demo Restroom floors (for new drains), plumbing walls and ceilings, repair walls	1.20		346	415	
Demo corridor & lounge ceilings	0.45	sf	1005	452	
New furred wall with R12 polyiso	8.65	sf	306	2,647	
Study lounge upgrades (paint, carpet tile, wall base, select furniture)	5,000.00	ls	1	5,000	
Restroom Upgrades (epoxy floor, solid surfaces, partitions, select tiled walls)	55,000.00	ea	1	55,000	
New Corridor ceiling finish	2.25	sf	1005	2,261	
Mural "Palladium" allowance	4,000.00	ls	1	4,000	
					69,807

PHASE 2 JOHNSON (Continued):

Third Floor					
Demo Janitor Closet	1.20	sf	26	31	
Demo Restroom floors (for new drains), plumbing walls and ceilings, repair walls	1.20		346	415	
Demo corridor & lounge ceilings	0.45	sf	1005	452	
New furred wall with R12 polyiso	8.65	sf	306	2,647	
Study lounge upgrades (paint, carpet tile, wall base, select furniture)	5,000.00	ls	1	5,000	
Restroom Upgrades (epoxy floor, solid surfaces, partitions, select tiled walls)	55,000.00	ea	1	55,000	
New Corridor ceiling finish	2.25	sf	1005	2,261	
Mural "Palladium" allowance	4,000.00	ls	1	4,000	
					69,807
Building Exterior Work					
New metal trellis structure w/ attachment to ex. precast panels	5,500.00	ea	24	132,000	
New metal screen	3,350.00	ea	48	160,800	
New additional flat roof	12,000.00	ls	2	24,000	
New dimensional letters	1,500.00	ea	2	3,000	
					319,800
BASE RENOVATION Subtotal				614,047	
General Conditions 18%	0.18			110,528	
Contractor's Fee 8%	0.08			49,124	
			Subtotal	773,699	
18% Conceptual Design Contingency	0.18			139,266	
Phase 2 Base Bid Construction Total (August 2024)				**912,965**	48.68%
Phase 2 Base Bid MEP Construction Total (August 2024)				**1,500,000**	
Phase 2 Base Bid Construction Total (August 2024 projected)			**7.00%**	**2,581,872**	

PHASE 2 HUGGINS:

TRINIDAD STATE COLLEGE - RESIDENCE HALL COMPLEX - HUGGINS RESIDENCE HALL

Program Plan Phase - Estimate of Probable Cost

8/31/2021

PHASE 2 RENOVATION

	Unit Cost	Unit	Quantity	Est'd Cost	Total
First Floor					
Sawcut exterior wall for brick vents	1,265.00	ea	28	35,420	
New furred wall at FCU's only	55.00	ea	28	1,540	
					36,960
Second Floor					
Sawcut exterior wall for brick vents	1,265.00	ea	31	39,215	
New furred wall at FCU's only	55.00	ea	31	1,705	
					40,920
Third Floor					
Sawcut exterior wall for brick vents	1,265.00	ea	26	32,890	
New furred wall at FCU's only	55.00	ea	26	1,430	
					34,320
First Floor					
Demo existing entrance storefront and door	366.00	ea	3	1,098	
Demo corridor & lounge ceilings	0.45	sf	2446	1,101	
Demo lounge floor finishes	0.30	sf	924	277	
New furred wall with R12 polyiso	8.65	sf	3540	30,621	
Study lounge carpet tile	6.00	sf	924	5,544	
Converting Dorm Room 103 into accessible restroom/shower & janitor closet (solid surface shower basin, solid surface panels, ceramic tile wall finish, epoxy flooring, restroom accessories)	20,000.00	ea	1	20,000	
Corridor & lounge ceiling finish (lay-in ceiling tiles)	2.25	sf	2446	5,504	
Retrofit existing showers with solid surface panels	350.00	ea	8	2,800	
Restroom shower bulkhead w/ solid surfacing	645.00	ea	2	1,290	
Clean/Restore existing finishes	1.30	sf	10780	14,014	
New entrance doors	18,200.00	ls	1	18,200	
Mural "Palladium" allowance	6,500.00	ls	1	6,500	
					106,948
Second Floor					
Demo corridor & lounge ceilings	0.45	sf	1826	822	
Demo lounge floor finishes	0.30	sf	304	91	
New furred wall with R12 polyiso	8.65	sf	3540	30,621	
Study lounge carpet tile	6.00	sf	304	1,824	
Corridor & lounge ceiling finish (lay-in ceiling tiles)	2.25	sf	1826	4,109	
Retrofit existing showers with solid surface panels	350.00	ea	8	2,800	
Restroom shower bulkhead w/ solid surfacing	645.00	ea	2	1,290	
Apartment carpet tile	6.00	sf	912	5,472	
Clean/Restore existing finishes	1.30	sf	9506	12,358	
Mural "Palladium" allowance	4,000.00	ls	1	4,000	
					63,386
Third Floor					
Demo corridor & lounge ceilings	0.45	sf	1826	822	
Demo lounge floor finishes	0.30	sf	304	91	
New furred wall with R12 polyiso	8.65	sf	3540	30,621	
Study lounge carpet tile	6.00	sf	304	1,824	
Corridor & lounge ceiling finish (lay-in ceiling tiles)	2.25	sf	1826	4,109	
Retrofit existing showers with solid surface panels	350.00	ea	8	2,800	
Restroom shower bulkhead w/ solid surfacing	645.00	ea	2	1,290	
Clean/Restore existing finishes	1.30	sf	8336	10,837	
Mural "Palladium" allowance	4,000.00	ls	1	4,000	
					56,393
BASE RENOVATION Subtotal				226,728	
General Conditions 18%	0.18			40,811	
Contractor's Fee 8%	0.08			18,138	
			Subtotal	285,677	

PHASE 2 HUGGINS (Continued)

18% Conceptual Design Contingency	0.18		51,422	
	Phase 2 Base Bid Construction Total		**337,099**	48.68% GC & Contingency mark-ups
	Phase 2 Base Bid MEP Construction Total		**1,500,000**	
	Phase 2 Base Bid Construction Total (August 2024 projected)	**7.00%**	**1,965,696**	

PHASE 3 HUGGINS:

PHASE 3 RENOVATION

	Unit Cost	Unit	Quantity	Est'd Cost	Total
Building Exterior Work					
New metal trellis structure w/ attachment to ex. masonry wall	3,575.00	ea	21	75,075	
New metal screen	1,875.00	ea	30	56,250	
Steel accent fascia	18.00	lf	116	2,088	
New dimensional letters	1,500.00	ea	1	1,500	
					134,913
BASE RENOVATION Subtotal				134,913	
General Conditions 18%	0.18			24,284	
Contractor's Fee 8%	0.08			10,793	
			Subtotal	169,990	
18% Conceptual Design Contingency	0.18			30,598	
	Phase 3 Base Bid Construction Total			**200,589**	48.68% GC & Contingency mark-ups
	Phase 3 Base Bid MEP Construction Total			**800,000**	
	Phase 3 Base Bid Construction Total (August 2025 projected)		**7.00%**	**1,070,630**	

PHASE 2 O'CONNOR:

TRINIDAD STATE COLLEGE - RESIDENCE HALL COMPLEX - O'CONNOR RESIDENCE HALL

Program Plan Phase - Estimate of Probable Cost
8/31/2021

PHASE 2 RENOVATION

	Unit Cost	Unit	Quantity	Est'd Cost	Total
First Floor					
Demo/sawcut new entrance in exterior wall	4,000.00	ls	1	4,000	
Demo Restroom floors (for new drains), plumbing walls and ceilings, repair walls	1.20	sf	400	480	
Demo corridor ceilings	0.45	sf	768	346	
New furred wall with R12 polyiso	8.65	sf	1320	11,418	
Restroom Upgrades (epoxy floor, solid surfaces, partitions, select tiled walls)	55,000.00	ea	1	55,000	
New Corridor ceiling finish	2.25	sf	768	1,728	
New Corridor carpet tile	6.00	sf	768	4,608	
New Entry LVT flooring	5.15	sf	190	979	
New entrance doors	12,000.00	ls	1	12,000	
New entry wooden slat ceiling	34.50	sf	110	3,795	
Mural "Palladium" allowance	6,500.00	ls	1	6,500	
					100,853
Second Floor					
Demo Restroom floors (for new drains), plumbing walls and ceilings, repair walls	1.20	sf	400	480	
Demo corridor ceilings	0.45	sf	686	309	
New furred wall with R12 polyiso	8.65	sf	2568	22,213	
Restroom Upgrades (epoxy floor, solid surfaces, partitions, select tiled walls)	55,000.00	ea	1	55,000	
New Corridor ceiling finish	2.25	sf	686	1,544	
New Corridor carpet tile	6.00	sf	768	4,608	
New Housing Director apartment carpet tile	6.00	sf	911	5,466	
New Housing Director kitchen LVT flooring	5.15	sf	151	778	
Mural "Palladium" allowance	4,000.00	ls	1	4,000	
					94,397
Third Floor					
Demo Restroom floors (for new drains), plumbing walls and ceilings, repair walls	1.20	sf	400	480	
Demo corridor ceilings	0.45	sf	686	309	
New furred wall with R12 polyiso	8.65	sf	2568	22,213	
Restroom Upgrades (epoxy floor, solid surfaces, partitions, select tiled walls)	55,000.00	ea	1	55,000	
New Corridor ceiling finish	2.25	sf	686	1,544	
New Corridor carpet tile	6.00	sf	768	4,608	
New Lounge carpet tile	6.00	sf	593	3,558	
New Lounge kitchenette LVT flooring	5.15	sf	41	211	
Mural "Palladium" allowance	4,000.00	ls	1	4,000	
					91,923
BASE RENOVATION Subtotal				287,173	
General Conditions 18%	0.18			51,691	
Contractor's Fee 8%	0.08			22,974	
			Subtotal	361,838	
18% Conceptual Design Contingency	0.18			65,131	
Phase 2 Base Bid Construction Total				**426,968**	48.68% GC & Contingency mark-ups
Phase 2 Base Bid MEP Construction Total				**1,416,504**	
Phase 2 Base Bid Construction Total (August 2024 projected)			**7.00%**	**1,972,515**	

PHASE 3 O'CONNOR:

PHASE 3 RENOVATION

	Unit Cost	Unit	Quantity	Est'd Cost	Total
Building Exterior Work					
New metal trellis structure w/ attachment to ex. masonry wall	3,575.00	ea	14	50,050	
New metal screen (cont. 3 stories)	4,550.00	ea	6	27,300	
New additional flat roof	6,750.00	ls	2	13,500	
New dimensional letters	1,500.00	ea	2	3,000	
					93,850
BASE RENOVATION Subtotal				381,023	
General Conditions 18%	0.18			68,584	
Contractor's Fee 8%	0.08			30,482	
			Subtotal	480,089	
18% Conceptual Design Contingency	0.18			86,416	
Phase 3 Base Bid Construction Total				**566,505**	48.68% GC & Contingency mark-ups
Phase 3 Base Bid MEP Construction Total				**800,000**	
Phase 3 Base Bid Construction Total (August 2025 projected)			**7.00%**	**1,462,161**	

PHASE 3 SITE IMPROVEMENTS:

TRINIDAD STATE COLLEGE - RESIDENCE HALL COMPLEX - SITE IMPROVEMENTS

Program Plan Phase - Estimate of Probable Cost

8/31/2021

PHASE 3 RENOVATION

	Unit Cost	Unit	Quantity	Est'd Cost	Total
Site improvements					
New football field and softball field, incl. grading, retaining wall	500,000.00	ls	1	500,000	
New futsal field	150,000.00	ls	1	150,000	
New parking lot, incl. security features	350,000.00	ls	1	350,000	
					1,000,000
BASE RENOVATION Subtotal				1,000,000	
General Conditions 18%	0.18			180,000	
Contractor's Fee 8%	0.08			80,000	
			Subtotal	1,260,000	
18% Conceptual Design Contingency	0.18			226,800	
Phase 3 Base Bid Construction Total				**1,486,800**	48.68% GC & Contingency mark-ups
Phase 3 Base Bid MEP Construction Total				**150,000**	
Phase 3 Base Bid Construction Total (August 2025 projected)			**7.00%**	**1,751,376**	

PHASE I SUMMARY – August 2022

Construction Costs		1,738,625
Student Center	1,210,289	
Romero	420,336	
Johnson	108,000	
Project Soft Costs*		433,000
TOTAL PHASE I COSTS		**$ 2,171,625**

PHASE II SUMMARY – August 2024

Construction Costs		8,500,000
Student Center	696,663	
Romero	1,283,254	
Johnson	2,581,872	
Huggins	1,965,696	
O'Connor	1,972,515	
Project Soft Costs*		3,500,000
TOTAL PHASE II COSTS		**$ 12,000,000**

PHASE III SUMMARY – August 2025

Construction Costs		4,284,167
Huggins	1,070,630	
O'Connor	1,462,161	
Site Improvements	1,751,376	
Project Soft Costs*		1,220,000
TOTAL PHASE III COSTS		**$ 5,504,167**

*PROJECT SOFT COSTS as documented in State Building form SC4.1:

Phase I: It is anticipated that Phase I will involve soft costs to include, but not be limited to Project Management services, Electrical Engineering Design to design the electrical upgrade equipment, Design Build services, Code Review/Inspection, Asbestos Testing and Abatement, Advertisements, Commissioning and Contingency.

Phase II: It is anticipated that Phase II will involve soft costs to include, but not be limited to Project Management services, A/E services to design Phases II and III, Code Review/Inspection, Asbestos Testing and Abatement, Advertisements, Commissioning, Furniture for 3 Buildings, and Contingency.

Phase III: It is anticipated that Phase III will involve soft costs to include, but not be limited to Project Management services, A/E services, Code Review/Inspection, Advertisements, Furniture for 2 Buildings, and Contingency.

FIRE PROTECTION OPTION:

Though fire protection in the form of fire sprinkler systems is not a mandatory requirement under the IEBC based on the limited extents of improvement, this Program Plan highly recommends planning for fire sprinkler improvements particularly for the residence halls. The table below gives a breakout of the mechanical costs* for fire sprinkler systems per building for Fiscal Year 2022.

*Architectural costs associated with fire sprinkler installation can range from $1.25 – $2.00 per square foot in addition to the mechanical.

Trinidad State College - Residence Hall Program Planning
Fire Sprinkler Systems Opinion of Probable Cost Estimate (FY 2022)

Building/Residence	Area	LOW	$/SF	$/sf	$/SF	HIGH	$/SF	$/sf
Huggins Hall	32,050 sf	$128,200	$ 93	$4	$ 134	$256,400	$ 8	$8
O'Connor Hall	20,000 sf	$80,000	$ 68	$4	$ 141	$160,000	$ 8	$8
Johnson Hall	15,750 sf	$63,000	$ 72	$4	$ 141	$126,000	$ 8	$8
Romero Hall	10,500 sf	$42,000	$ 164	$4	$ 145	$84,000	$ 8	$8
Totals	**78,300 sf**	**$313,200**	**$ 4.00**		**$ -**	**$626,432**	**$ 8.00**	

NOTE: Does not include city main upgrades and sitework beyond 5' of building perimeter. Student Center not included.

REPLACEMENT WINDOW OPTION (excludes O'Connor):

This scope is being identified as an option to the project, and can be incorporated within Phase 2 or 3. They are listed in 2021 dollars, and do not include Owner's Construction Contingency, A/E fees, Code/Review nor any other incidental costs.

Romero: $ 524,387
Johnson: $ 799,598
Huggins: $1,441,341

VI. APPENDICES - SUPPORTING DOCUMENTS

i. Photo Log – Schendt Engineering
ii. Ruskin Brick Vent Cut Sheet – recommended by Schendt Engineering

APPENDIX E– EXISTING CONDITIONS

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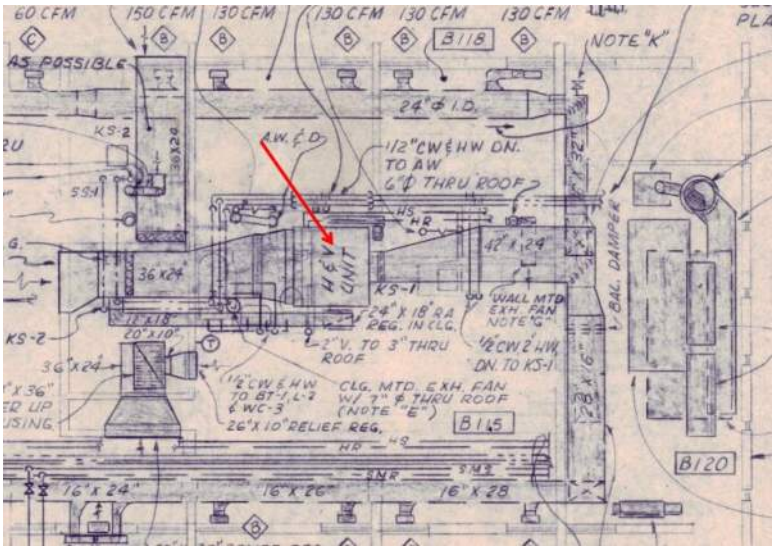

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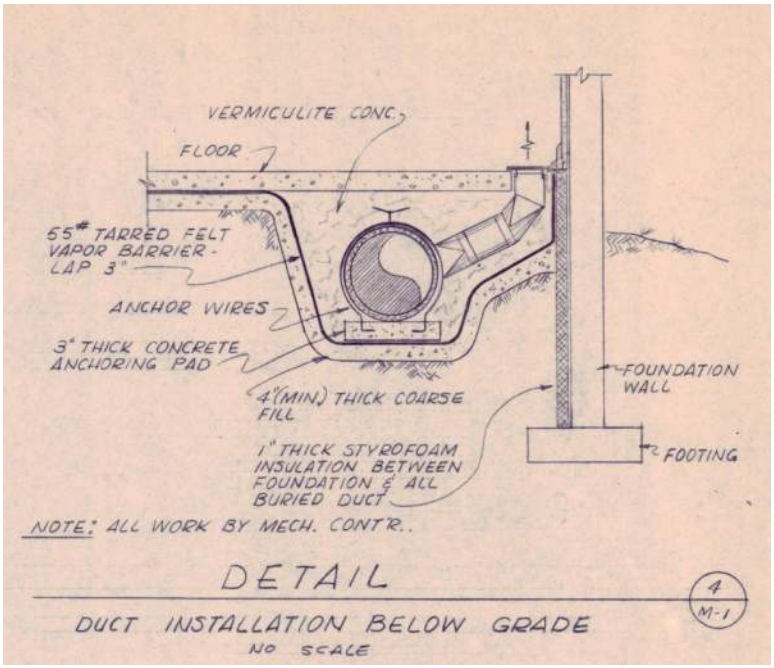
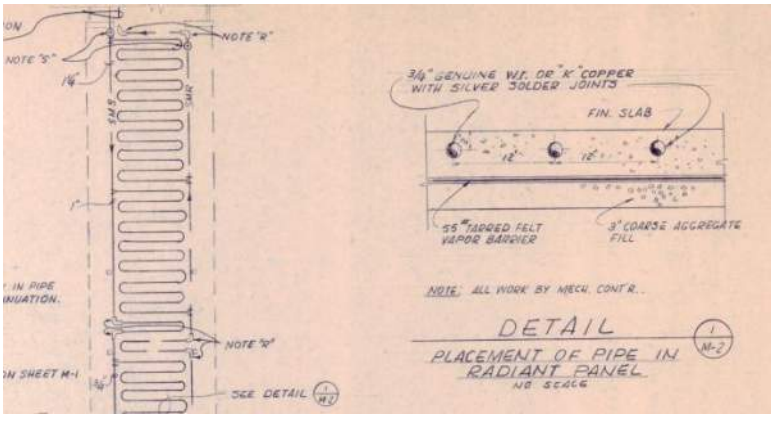


Figure 2: Underground duct detail from 1959 record drawings



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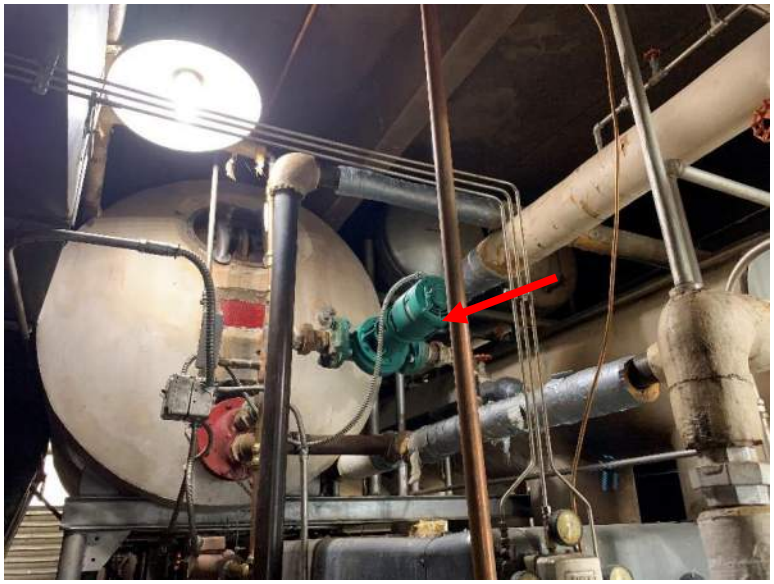

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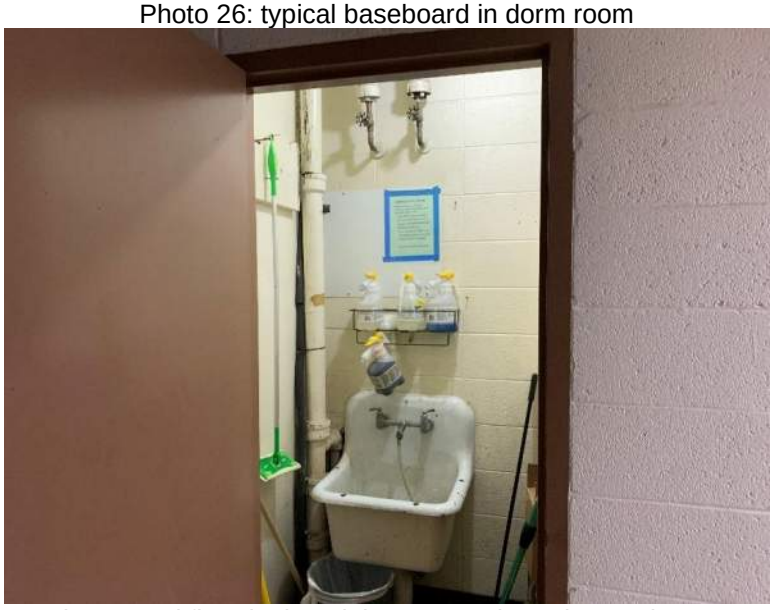
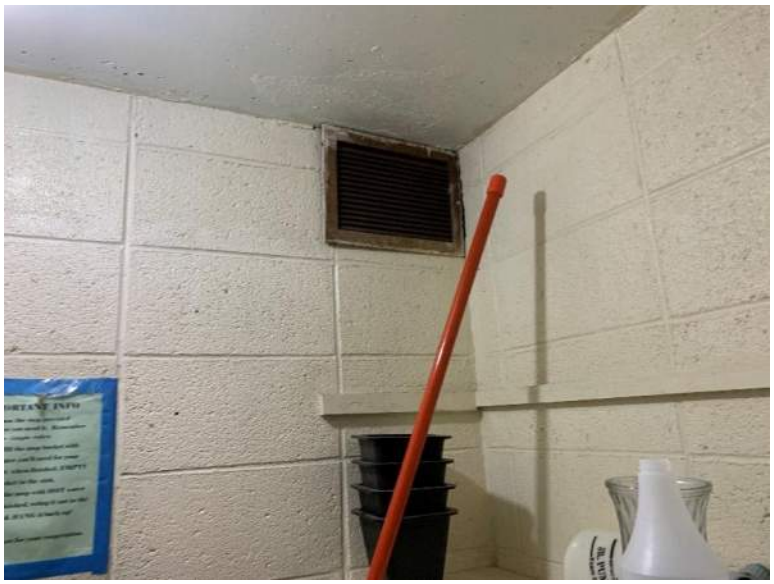


Photo 27: Johnson 3rd floor janitor sink, vent stack, and water hammer arresters



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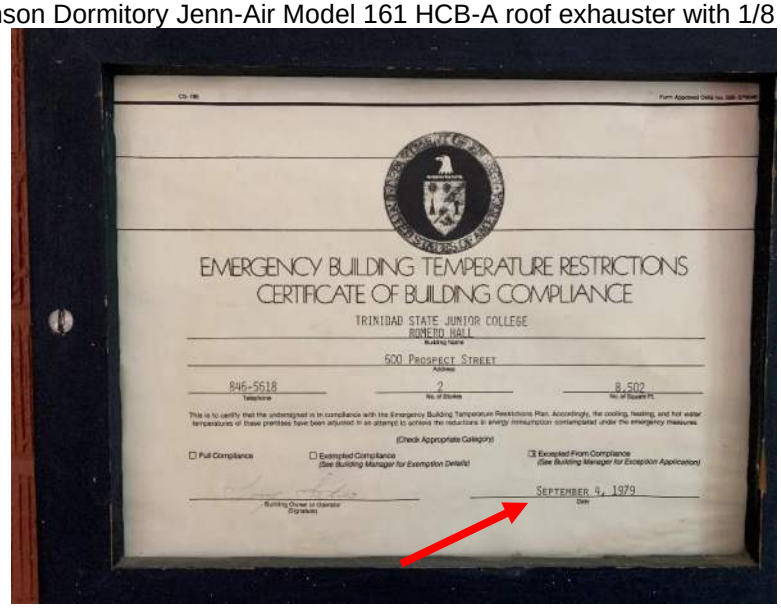

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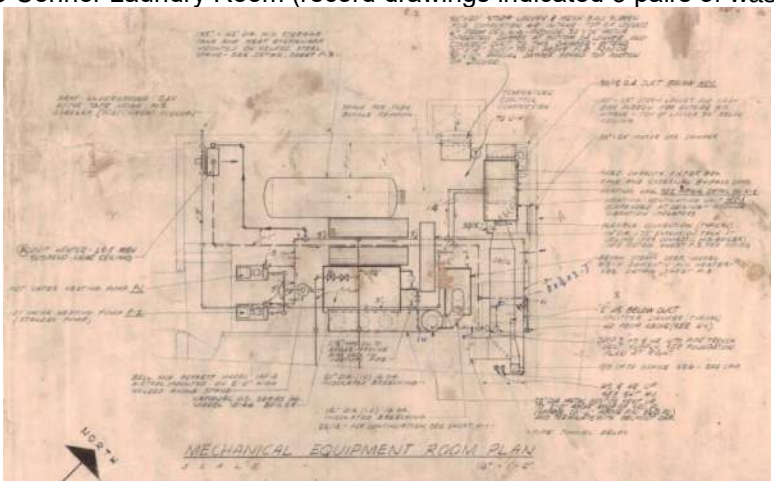

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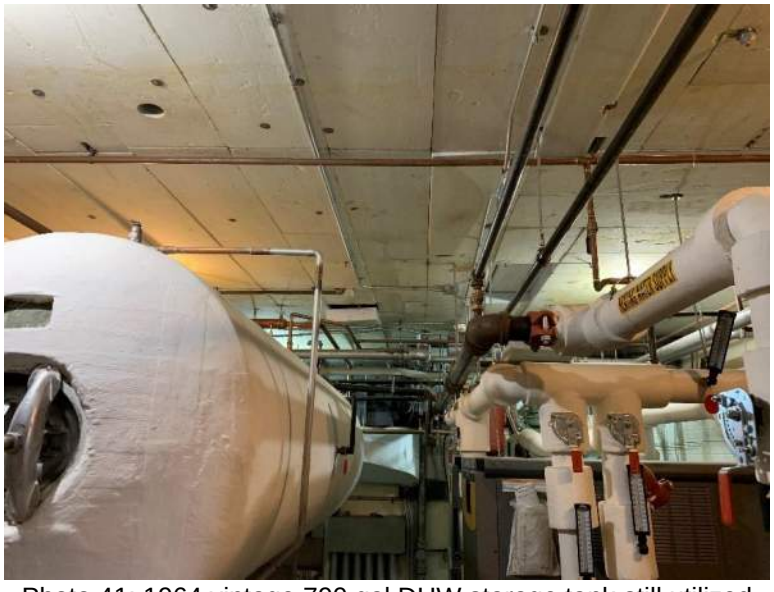

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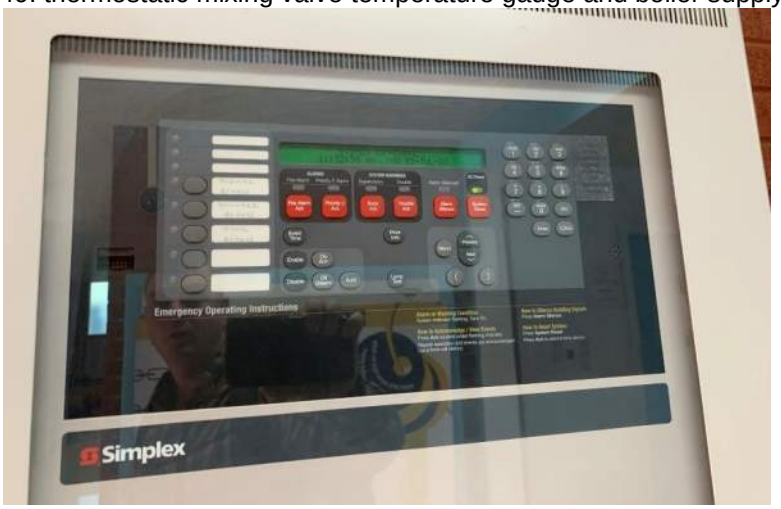

Photo 50: Huggins fire alarm system

Photo 51: Typical LED fluorescent tube replacement

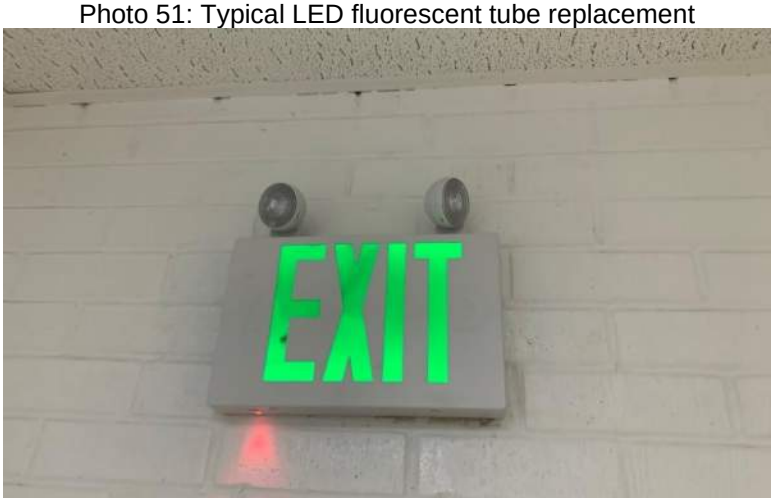

Photo 52: typical LED exit signage with emergency egress heads

Photo 53: Suspect hard-cast ACM insulation elbows

Photo 54: Typical fire alarm pull station cabled via surface mounted raceway

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Photo 62: Lint accumulation at dryer vent

Photo 63: Existing original Huggins Hall domestic water storage tank

Photo 64: nonfunctional water closet

RUSKIN®

3900 Dr. Greaves Rd. • Kansas City, MO 64030 • (816) 761-7476 • FAX (816) 765-8955

BV100
EXTRUDED ALUMINUM BRICK VENTS

STANDARD CONSTRUCTION

FRAME
6063T5 extruded aluminum, .100" nominal wall thickness. Standard frame depth is 4" (102). 1/8" (3) mortar ribs on top and bottom of frame add 1/4" (6) to nominal height. Optional 15/16" (33) deep flange frame height and width does not include 1" (25) face flange.

BLADES
6063T5 extruded aluminum, .100" minimum wall thickness at 48° angle. Blades overlap for optimum visual screening.

SCREEN
18 x 16 mesh aluminum insect screen.

FINISH
204-R1 clear anodize.

STANDARD SIZES

8 1/8" x 2 3/8" (206 x 61)
8 1/8" x 4 3/4" (206 x 121)
8 1/8" x 7 3/4" (206 x 197)
12" x 2 3/8" (305 x 61)
12" x 4 3/4" (305 x 121)
12" x 7 3/4" (305 x 197)
15 5/8" x 7 3/4" (397 x 197)
16 1/2" x 2 3/8" (419 x 61)
16 1/2" x 4 3/4" (419 x 121)
16 1/2" x 7 3/4" (419 x 197)
24" x 2 3/8" (610 x 61)
24" x 4 3/4" (610 x 121)
24" x 7 3/4" (610 x 197)

FEATURES

Ruskin's BV100 brick vents offer superior venting at minimum cost. Standard features include:

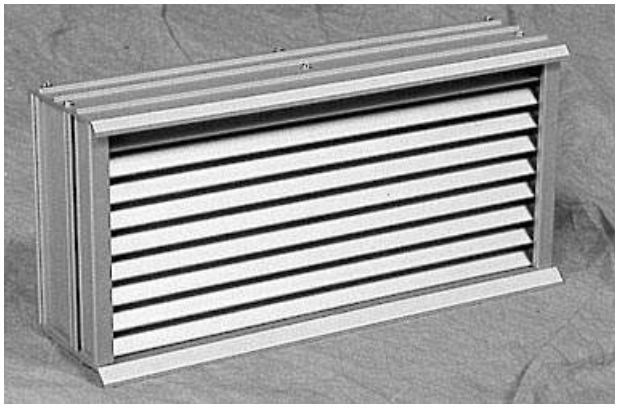
- Minimum 39% free area for desired venting.
- Continuous weepage at bottom and a high, rear water stop give optimum water penetration protection.
- Aluminum construction for long life and corrosion resistance.
- Continuous blades without mullions for attractive appearance.

VARIATIONS

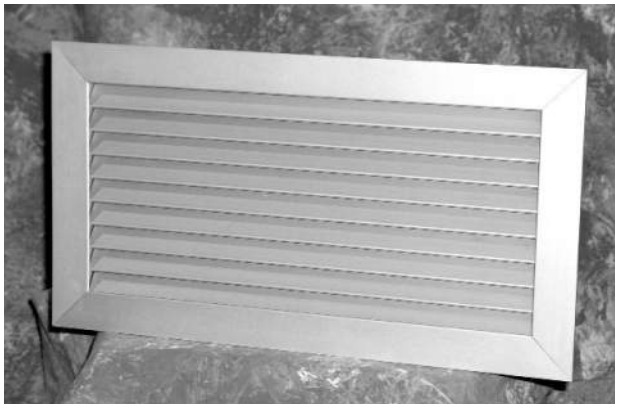
Variations to standard design are available. Some variations are at additional cost.

- 15/16" (32.5) deep flange frame for renovation applications.
- .063 aluminum duct to 18" (457) in length.
- Exterior operated damper.
- Other finishes:
  – Medium or dark bronze anodize
  – Baked enamel in snow white, black, statuary bronze, or brick red
  – Colors and finishes to match Ruskin louvers (Consult Ruskin).

NOTE: Dimensions shown in parenthesis ( ) indicate millimeters.



BV100
Standard Frame 4" (102) deep



BV100
Flange Frame 15/16" (32.5) deep

SUGGESTED SPECIFICATION

Furnish and install where indicated on drawings Ruskin brick vents Model BV100. Frame and blade construction shall be .100 nominal 6063T5 extruded aluminum. Vents are supplied with 18 x 16 mesh aluminum insect screen. Finish shall be clear 204-R1 clear anodize (or other as specified).

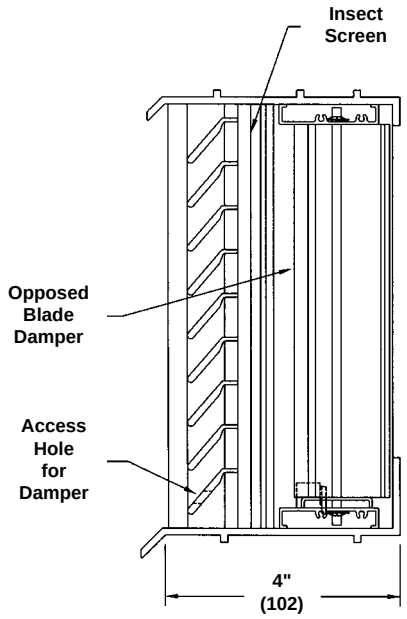
QTY.	MODEL	SIZE		FRAME		VARIATIONS
		A-WIDE	B-HIGH	STD.	FL.	

JOB **LOCATION**

CONTRACTOR

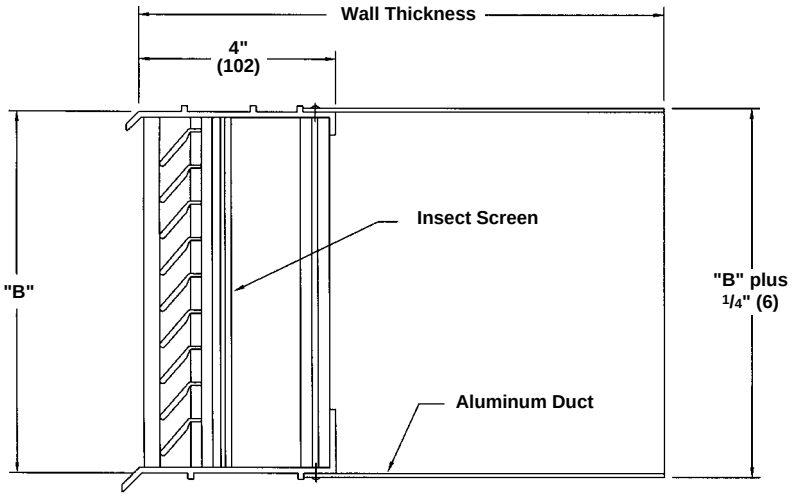
BV100 BRICK VENT OPTIONS

Exterior Operated Damper Option

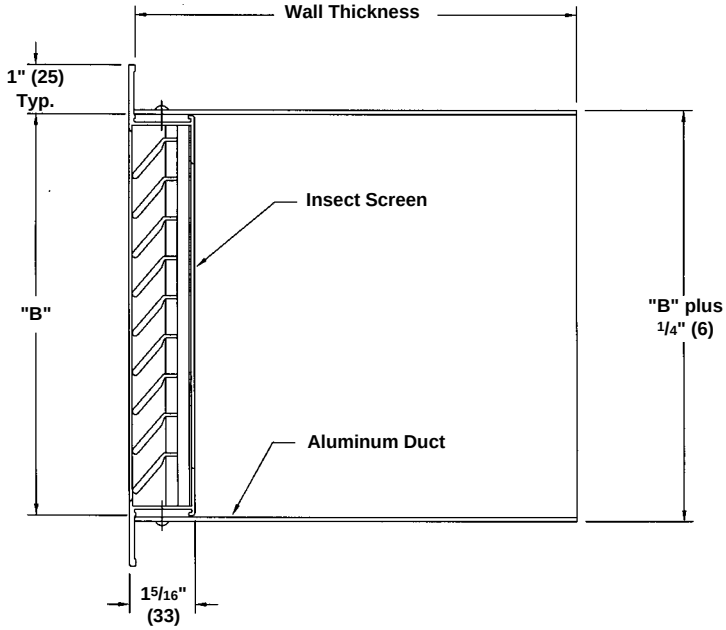


Standard Frame

Straight Duct Option to 18" (457) in Length



Standard Frame



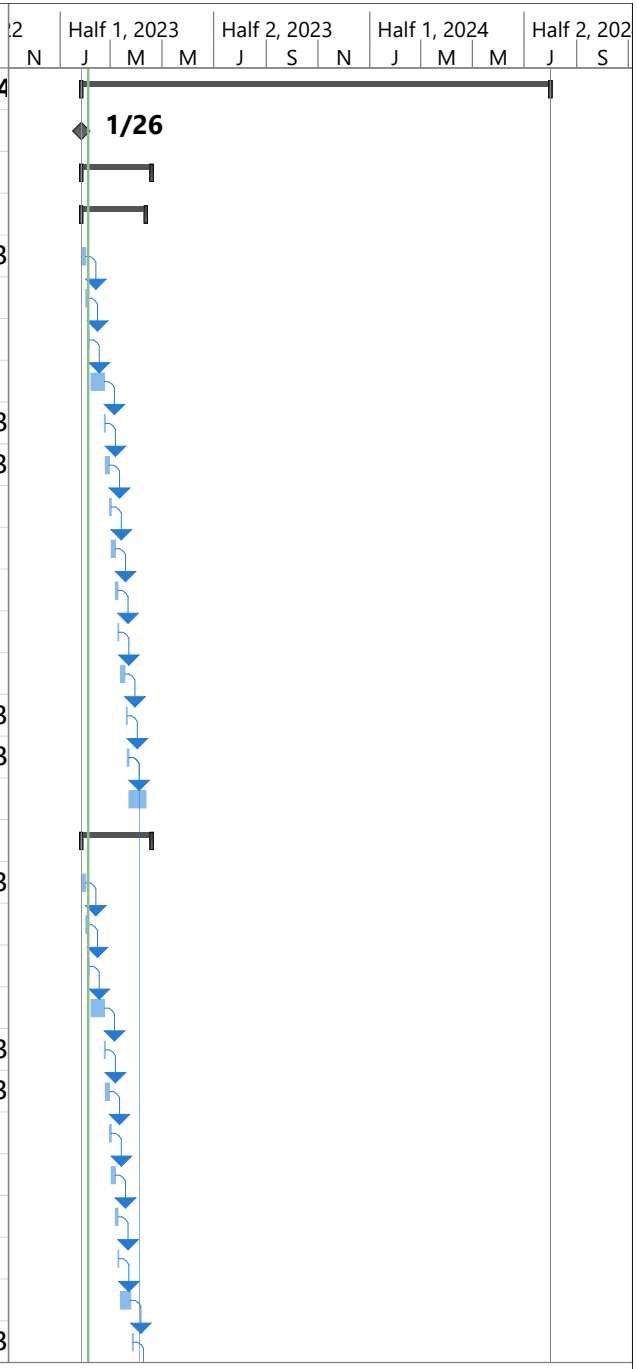
Flange Frame

RUSKIN®
3900 Dr. Greaves Rd.
Kansas City, MO 64030
(816) 761-7476
FAX (816) 765-8955
www.ruskin.com

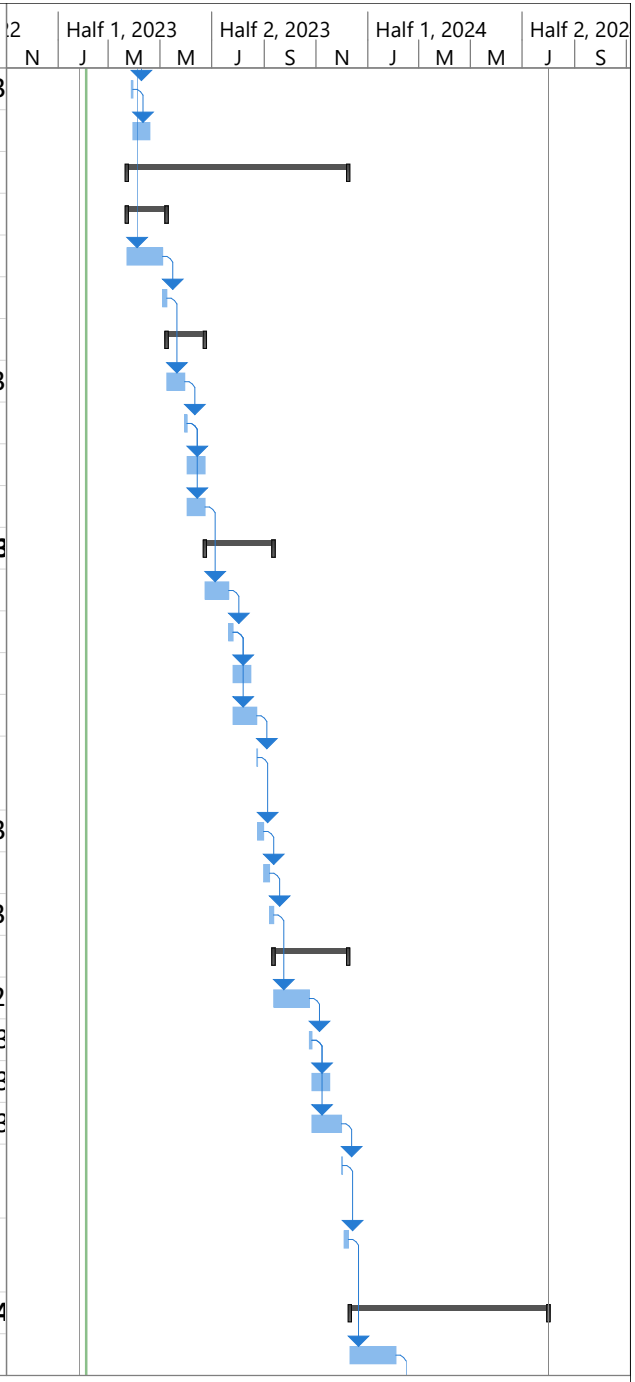
Appendix E

Project Schedule

ID	Task Mode	Task Name	Duration	Start	Finish
1		**Romero - Phase II**	**395 days**	**Thu 1/26/23**	**Wed 7/31/24**
2		Project Start	0 days	Thu 1/26/23	Thu 1/26/23
3		**Bidding**	**59 days**	**Thu 1/26/23**	**Tue 4/18/23**
4		**A/E RFP**	**54 days**	**Thu 1/26/23**	**Tue 4/11/23**
5		Drafting	3 days	Thu 1/26/23	Mon 1/30/23
6		OSA Review	2 days	Tue 1/31/23	Wed 2/1/23
7		Finalize RFP	2 days	Thu 2/2/23	Fri 2/3/23
8		Advertisement	12 days	Mon 2/6/23	Tue 2/21/23
9		Presubmittal Conference	1 day	Wed 2/22/23	Wed 2/22/23
10		Clarifications Due	3 days	Thu 2/23/23	Mon 2/27/23
11		Clarification Reponses	2 days	Tue 2/28/23	Wed 3/1/23
12		Submittals Due	3 days	Thu 3/2/23	Mon 3/6/23
13		Evaluate Quals	3 days	Tue 3/7/23	Thu 3/9/23
14		Notify/Post Short-Listed Bidders	1 day	Fri 3/10/23	Fri 3/10/23
15		A/E Prep for Interviews	5 days	Mon 3/13/23	Fri 3/17/23
16		Interviews	1 day	Mon 3/20/23	Mon 3/20/23
17		Notify Selected Consultant	2 days	Tue 3/21/23	Wed 3/22/23
18		Contracting	14 days	Thu 3/23/23	Tue 4/11/23
19		**CMGC RFP**	**59 days**	**Thu 1/26/23**	**Tue 4/18/23**
20		Drafting	3 days	Thu 1/26/23	Mon 1/30/23
21		OSA Review	2 days	Tue 1/31/23	Wed 2/1/23
22		Finalize RFP	2 days	Thu 2/2/23	Fri 2/3/23
23		Advertisement	12 days	Mon 2/6/23	Tue 2/21/23
24		Presubmittal Conference	1 day	Wed 2/22/23	Wed 2/22/23
25		Clarifications Due	3 days	Thu 2/23/23	Mon 2/27/23
26		Clarificaitons Responses	2 days	Tue 2/28/23	Wed 3/1/23
27		Submittals Due	3 days	Thu 3/2/23	Mon 3/6/23
28		Evaluate Quals	3 days	Tue 3/7/23	Thu 3/9/23
29		Notify/Post Short-Listed Bidders	1 day	Fri 3/10/23	Fri 3/10/23
30		Sealed Proposals Due	10 days	Mon 3/13/23	Fri 3/24/23
31		Interviews	1 day	Mon 3/27/23	Mon 3/27/23



ID	Task Mode	Task Name	Duration	Start	Finish
32		Notify Selected Consultant	2 days	Tue 3/28/23	Wed 3/29/23
33		Contracting	14 days	Thu 3/30/23	Tue 4/18/23
34		**Design/Estimating**	**187 days**	**Thu 3/23/23**	**Fri 12/8/23**
35		**Programming**	**33 days**	**Thu 3/23/23**	**Mon 5/8/23**
36		Program Development	30 days	Thu 3/23/23	Wed 5/3/23
37		Programming Acceptance	3 days	Thu 5/4/23	Mon 5/8/23
38		**SDs**	**33 days**	**Tue 5/9/23**	**Thu 6/22/23**
39		Drafting	15 days	Tue 5/9/23	Mon 5/29/23
40		SD Acceptance	3 days	Tue 5/30/23	Thu 6/1/23
41		Cost Etimator	15 days	Fri 6/2/23	Thu 6/22/23
42		CMGC Estimate	15 days	Fri 6/2/23	Thu 6/22/23
43		**DDs**	**57 days**	**Fri 6/23/23**	**Mon 9/11/23**
44		Drafting	20 days	Fri 6/23/23	Thu 7/20/23
45		DD Acceptance	3 days	Fri 7/21/23	Tue 7/25/23
46		Cost Estimator	15 days	Wed 7/26/23	Tue 8/15/23
47		CMGC Estimate	20 days	Wed 7/26/23	Tue 8/22/23
48		CMGC GMP Ammendment Submitted	1 day	Wed 8/23/23	Wed 8/23/23
49		GMP Ammendment Review	5 days	Thu 8/24/23	Wed 8/30/23
50		HOLD VE	5 days	Thu 8/31/23	Wed 9/6/23
51		GMP Ammendment Acceptance	3 days	Thu 9/7/23	Mon 9/11/23
52		**CDs**	**64 days**	**Tue 9/12/23**	**Fri 12/8/23**
53		Drafting	30 days	Tue 9/12/23	Mon 10/23/2
54		CD Acceptance	3 days	Tue 10/24/23	Thu 10/26/23
55		Cost Estimator	15 days	Fri 10/27/23	Thu 11/16/23
56		CMGC Estimate	25 days	Fri 10/27/23	Thu 11/30/23
57		Cost of Work Ammendment Submitted	1 day	Fri 12/1/23	Fri 12/1/23
58		Cost of Work Ammendment Executed	5 days	Mon 12/4/23	Fri 12/8/23
59		**Construction**	**168 days**	**Mon 12/11/2**	**Wed 7/31/24**
60		Procurement	40 days	Mon 12/11/2	Fri 2/2/24



ID	Task Mode	Task Name	Duration	Start	Finish
61		On Site Work	127 days	Mon 2/5/24	Tue 7/30/24
62		Substantial Completion	1 day	Wed 7/31/24	Wed 7/31/24